GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS)

KUMBAKONAM – 612 001

Affiliated to Bharathidasan University

DST - CURIE Sponsored Institution

IV Cycle of Accreditation

Estd. 1963   📞 0435 – 2401391   ✉ principal@gcwk.ac.in

CRITERION II – TEACHING - LEARNING AND EVALUATION

2.3 Teaching - Learning Process

2.3.3 Academic Calendar and Teaching plans by the Institution

TEACHING PLANS

2022-2023

பாடத்திட்ட அமைவு

பேரா முனைவா பசுதன

வகுப்பு   இளங்கலை முதலாமாண்டு   தாள் குறியீடு   U21LLC101

பருவம் முதல் பருவம   தாள் இக்கால இலக்கியம்

நோக்கம் :இக்கால இலக்கியப் படைப்பாளிகளின் படைப்புகள் வழி அவற்றின் சமூகப்பார்வை, மனிதநேயம் பண்பாடுபற்றிய புதிய சிந்தனைகளை அறிமுகப் படுத்துதல்.

வ.எண்	பயிற்றும் முறைகள்	வகுப்புப் பங்கீடு(அலகு)	மொத்தம்
1	கரும்பலகையின் வழி Chak& Talk	அலகுவாரியாக13 மணிநேரம்	75
2	வரைபடம் புலனம் வழி	தேவையான அலகிற்கு	03
3	வகுப்புத்தேர்வுவாய்மொழி,எழுத்துவழி	5தேர்வு 5 அலகு	05
4	கருத்தரங்கம்,கலந்துரையாடல்	5 அலகுகள் (1வகுப்பு நேரம்)	05
5	இறுதியதிப்பீடுதிருப்புதல் தேர்வு	02	02
	Per week credit 4	மொத்தம்	90

வ.எண்	வாரவாரியானவகுப்பு	பயிற்றுவகுப்புகள்- மொத்தம்
1	06	90

1

பாடத்திட்டம்,பயிற்றுமுறை,மதிப்பீடும் முறை

வ.எண்	அலகுவாரியாக	வகுப்பு	வரைபடம்	தேர்வு	கருத்தரங்கம்	திருப்புதல் தேர்வு
1	**கவிதை** **பாரதியார் பாடல்கள்** கண்ணன் என் தோழன் கண்ணன் என் தந்தை கண்ணன் என் சேவகன் கண்ணன் என் குழந்தை **பாரதிதாசன்** தமிழின் இனியை எந்நாளோ? **கவிக்கோ அப்துல் ரகுமான்** பால்வீதி	02 02 02 03 06	---	01	01	01
2	**பெண்ணின் பெருமை** பெண் ஆண் - பெண்ணின் முதன்மை—பெண்ணுரிமை—பெண் வளர்ப்பு - இறைவழி இயற்கை அறம் - திருமணம் - இன்பவாழ்வு—பிள்ளைப் பேறு— பெண்ணலம் - பதியிலார் கைம்மை—பெண்மை— தாய்மை - இறைமை	03 02 03 02 05	---	01	01	---

3	**சிறுகதை**					
	சிறுகதை அறிமுகம்	03				
	பொய்யிருப்புமீது நெத்துணி	03				
	அறுவனளி யார?	03	01	01	01	01
	செல்வாலது.தேவதையின் துயரம், போர் ஒடிப்போச்சு, சந்தரபெர்படகல் சோறு.	03				
	அப்பாவும் மகளும், ஊசல்.	03				
4	**நாடகம்**					
	நாடகம் அறிமுகம்	02				
	ரெளத்திரம் பழகு	13	01	01	01	...
5	**புதினம்**					
	புதினம் அறிமுகம்	04	...	01	01	01
	ஊருக்குள் ஒருபுரட்சி	11				
		60	02	05	05	03

தேர்வுவிபரம்

தேர்வு: 5 தேர்வுகள்
25 மதிப்பெண்கள்
பிரிவு அ: 10X1=10
பிரிவு ஆ: 1X5=05
பிரிவு இ: 1X10=10
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25
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Incharge staff	**Hod**	**IQAC Co - Ordinator**

3

பாடத்திட்ட அமைவு

பொறா முனைவர் நா. சதயா

வகுப்பு : முதுகலை முதலாமாண்டு

பருவம் முதல் பருவம்

நோக்கம் மனித வரலாற்றின் பண்பாடு குறித்த செய்திகளை அறிதல்

வ.எண்	பயிற்றும் முறைகள்	வகுப்புப் பங்கீடு(அலகு)	மொத்தம்
1	கரும்பலகையின் வழி Chak& Talk	அலகுவாரியாக12 மணிநேரம்	60
2	வரைபடம் புலனம் வழி	தேவையான.அலகிற்கு	03
3	வகுப்புத்தேர்வுவாய்மொழி.எழுத்துவழி	5தேர்வு 5 அலகு	05
4	கருத்தரங்கம்.கலந்துரையாடல்	5 அலகுகள் (1வகுப்பு நேரம்)	05
5	இறுதிமதிப்பீந்திதிருப்புதல் தேர்வு	02	02
	Per week credit 4	மொத்தம்	75

வ.எண்	வாரவாரியானவகுப்பு	பயிற்றுவகுப்புகள்- மொத்தம்
1	05	75

பாடத்திட்டம்,பயிற்றுமுறை,மதிப்பிடும் முறை

வ.எண்	அலகுவாரியாக	வகுப்பு	வரைபடம்	தேர்வு	கருத்தரங்கம்	திருப்புதல் தேர்வு
1	மானுவியலின் தோற்றம் வளர்ச்சி, அறிஞர்களின் கருத்து இந்தியாவில் மானுடவியல் வளர்ச்சி அறிவொளிக்காலச் சிந்தனைகள்	03 03 03 03	01	01	01	
3	அமைப்பியல் பண்பாட்டு அமைப்பியல் மானுடவியலில் குடும்பம், திருமணம்,உறவுமுறை, உணவு,விளையாட்டு,கலைகள் சமுதாயம் சமயநம்பிக்கைகள்,அரசியல் முறைகள்	03 03 03 03	01	01	01	
4	மானுடவியல் - வரலாறும் சங்ககாலமும் தாய்வழிச் சமூகம் - இனக்குழு-வேளாண் ஆயர் பாணர் - சங்க இலக்கியத்தில் தலையாடை - காப்பியம் காலமானுடவியல்- சமயமானுடவியல்- இக்காலமானுடவியல்	03 03 03 03	01	01	--	01
5	பண்பாட்டுமாற்றம் - கண்டுபிடிப்புகள் - நவீனமயமாக்கல் - தொழில் மயமாதல் - மானுடவியல் சட்டங்கள்	03 03 03 03	---	01	01	01
		(60)	04	04	04	03

தேர்வுவிபரம்

தேர்வு 5 தேர்வுகள்

25 மதிப்பெண்கள்

பிரிவு அ 10X1=10

பிரிவு ஆ 1X5=05

பிரிவு இ 1X10=10

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25

Incharge staff   Hod   IQAC Co - Ordinator

5

பாடத்திட்ட அமைவு

ஆசிரியர் முனைவர் ப.செந்திலகுமாரி

வகுப்பு முதுகலை இரண்டாமாண்டு

பருவம் மூன்றாம் பருவம்

வருடம்: 2022-2023

தாள் குறியீடு : P21TA3MBE3:2

தாள் சோழநாட்டியல்

நோக்கம் : 1.மாணவர்கள் தாம் வாழ்கின்ற பகுதிசார்ந்த வரலாற்று சிறப்புகளை அறிதல்
2.சோழநாட்டின் சிறப்பை உணர்தல்

வ.எண்	பயிற்றும் முறைகள்	வகுப்புப் பங்கீடு(அலகு)	மொத்தம்
1	கருப்பலகையின் வழி Chalk& Talk	அலகுவாரியாக15 மணிநேரம்	75
2	வரைபடம் புலனம் வழி	தேவையானஅலகிற்கு	02
3	வகுப்புத்தேர்வுவாய்மொழி.எழுத்துவழி	5தேர்வு 5 அலகு	05
4	கருத்தரங்கம்.கலந்துரையாடல்	5 அலகுகள் (1வகுப்பு நேரம்)	06
5	இறுதிமதிப்பீடுதிருப்புதல் தேர்வு	02	02
	Per week credit 6	மொத்தம்	90

வ.எண்	வாரவாரியானவகுப்பு	பயிற்றுவகுப்புகள்- மொத்தம்
1	06	90

6

பாடத்திட்டம்,பயிற்றுமுறை,மதிப்பிடும் முறை

வ.எண்	அலகுவாரியாக	வகுப்பு	வரைபடம்	தேர்வு	கருத்தரங்கம்	திருப்புதல் தேர்வு
1	சோழநாட்டின் புவியமைப்பு —	04				
	சோழநாட்டின் எல்லை	03				
		03				
	சோழநாட்டின் சமூகநிலை	05	01	01	01	
2	சோழர்களின் அரசியல் நிர்வாகம் - சங்ககாலச் சோழராட்சி - பிற்காலச் சோழராட்சி	05				
		05				
		05	01	01	03	
3	சோழநாட்டு இலக்கியங்கள் சங்க இலக்கியங்கள் வழி சோழர் பெருமைகாப்பியங்கள்வழிச் சோழர் பெருமை சிற்றிலக்கியங்கள் வழி சோழர் பெருமை	05				
		05				
		05	01	02	02	
4	சோழர் காலகலைகள் - கட்டடக்கலை -சிற்பக்கலை - ஓவியக்கலை	05				
		05				
		05	...	01	01	...
5	சோழநாட்டுப் புலவர்கள் - உரையாசிரியர்கள் - திறனாய்வாளர்கள்	05				
		05				
		05	..	...	...	
		75	03	05	07	

தேர்வு விபரம்

தேர்வு: 5 தேர்வுகள்
25 மதிப்பெண்கள்
பிரிவு அ: 10X1=10
பிரிவு ஆ:1X5=05
பிரிவு இ: 1X10=10
25

Incharge staff   Hod   **IQAC Co - Ordinator**

பாடத்திட்டஅமைவு

பெயர்:முனைவர் து.அசோகன் வருடம்: 2022-2023

வகுப்பு: முதுகலை இரண்டாயாண்டு தாள் குறியீடு: P20TAC311

பருவம்: மூன்றாம் பருவம் தாள்: தொல் (பொருள்)

நோக்கம்: 1.தொன்மைத் தமிழரின் வாழ்வியல் கோட்பாடுகளை எடுத்துரைத்தல்.

2. நாகரிகம் பண்பாட்டின் மேன்மையை எடுத்துரைத்தல்

வ.எண்	பயிற்றும் முறைகள்	வகுப்புப் பங்கீடு(அலகு)	மொத்தம்
1	கரும்பலகை	ஒருஅலகிற்கு 15 மணிநேரம்(5 அலகு)	75
2	வரைபடம் புலனம்	தேவையானஅளவு	03
3	வகுப்புத்தேர்வு	சிறுதேர்வுகள்	05
4	கருத்தரங்கம் கலந்துரையாடல்	சிறுசிறுகுழுவாகப் பிரித்துக் கலந்துரையாடல்	05
5	இறுதிமதிப்பீடுதிருப்புதல் தேர்வு	02	02
		மொத்தம்	90

வ.எண்	வாரவாரியானவகுப்பு	பயிற்றுவகுப்புகள்- மொத்தம்
1	06	90

பாடத்திட்டம், பயிற்றுமுறை, மதிப்பிடும் முறை

வ.எண்	அலகுவாரியாக	வகுப்பு	வரைபடம்	தேர்வு	கருத்தரங்கம்	திருப்புதல் தேர்வு
1	**அகத்திணையியல்** 1.அகத்திணை ஏழு 2.முதல் உரிகருப்பொருள் உடன்போக்கு 3.உள்ளுறைஉவமம்	06 07 02	01	01	01	01
2	**புறத்திணையியல்** 1.வெட்சிமுதல் ஏழுதிணைவிளக்கம் 2.துறைகள் விளக்கம் 3.பேர் பற்றியசிந்தனைகள்	05 05 05	---	01	01	---
3	**களவியல்** **தலைவன் தலைவி** 1.உள்ளப்புணர்ச்சி 2.தலைவன் கூற்று 3.தலைவி கூற்று 4.பிரிவுகள் 5.வாயில்கள்	05 03 03 02 02	01	01	01	01
4	**கற்பியல்** 1.எண்வகைத் திருமணம் 2.தலைவன் கூற்று 3.தலைவி கூற்று 4.தோழி கூற்று 5.இல்வாழ்வின் பயன்	03 03 03 03 03	---	01	01	---
5	**பொருளியல்** 1.அறத்தொடுநிற்றல் 2.புலவி 3.இறைச்சி 4.உள்ளுறை உவமம் வகை	04 04 04 03	---	01	01	01
		75	02	05	05	03

தேர்வுவிபரம்

தேர்வு: 5 தேர்வுகள்

25 மதிப்பெண்கள்

பிரிவு அ: 1X10=10

பிரிவு ஆ: 1X10=05

பிரிவு இ: 1X10=10

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25

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Incharge Staff

Hod

IQAC Co - Ordinator

பாடத்திட்ட அமைவு

பெயர்:முனைவர் தி.லெட்சுமி   வருடம்: 2022-2023

வகுப்பு: முதுகலை முதலாமாண்டு   தாள் குறியீடு : P21TAC205

பருவம்: இரண்டாம்பருவம்   தாள்: சிற்றிலக்கியம்

நோக்கம்:: 1. இலக்கியவரலாற்றுப் பின்னணியில் தமிழ் சிற்றிலக்கியங்களின்   வளர்ச்சிப் போக்குகளைஅறிதல்.
    2. தமிழ்ச் சிற்றிலக்கியங்களின் அமைப்பையும் உள்ளடக்கத்தையும் பற்றி அறிதல்
    3. தமிழ்ச் சிற்றிலக்கியங்களின் சிலபகுதிகளைப் பாடமாகக் கற்பதன் மூலம் உள்ளடக்கம், இலக்கிய வெளிப்பாட்டு நெறி ஆகியவற்றை அறிந்து பயிற்சியும்,திறனாய்வுத் திறனும் பெறுதல்.

வ.எ ண்	பயிற்றும் முறைகள்	வகுப்புப் பங்கீடு(அலகு)	மொத்தம்
1	கரும்பலகையின் வழி Chak& Talk	அலகுவாரியாக13மணி நேரம்	65
2	வரைபடம் புலனம் வழி	தேவையானஅலகிற்கு	02
3	வகுப்புத்தேர்வுவாய்மொழி,எழுத்துவழி	5தேர்வு 5 அலகு	04
4	கருத்தரங்கம்,கலந்துரையாடல்	5 அலகுகள் (1வகுப்பு நேரம்)	02
5	இறுதிமதிப்பீடுதிருப்புதல் தேர்வு	02	02
	Per week credit 5	மொத்தம்	75

வ.எண்	வாரவாரியானவகுப்பு	பயிற்றுவகுப்புகள்- மொத்தம்
1	05	75

பாடத்திட்டம்,பயிற்றுமுறை,மதிப்பிடும் முறை

வ.எண்	அலகுவாரியாக	வகுப்பு	வரைபடம்	தேர்வு	கருத்தரங்கம்	திருப்புதல் தேர்வு
1	பாட்டியல் நூல்கள் சிற்றிலக்கிய இலக்கணங்கள்- தோற்றமும் வளர்ச்சியும் - பெயர்பெறும் முறை,பொருளமைதி- கட்டமைப்பு-	02 04 03 04	01	---	01	---
2	குற்றாலக் குறவஞ்சி– வசந்தவல்லிவருகைபந்தாடலின் சிறப்பு முக்கூடற்பள்ளு - நாட்டுவளம் - நகர்வளம் நந்திக் கலம்பகம் - முதல் 20 பாடல்கள்	04 05 04	---	01	---	---
3	பிள்ளைத்தமிழ் - திருச்செந்தூர் பிள்ளைத்தமிழ் .தமிழ்விடுதூது –முதல் 25 கண்ணிகள் .தண்டலையார் சதகம் - முதல் - 10 பாடல்கள்	02 03 04 04	---	---	01	01
4	.மூவருலா–முழுவதும் தக்கயாகப்பரணி– கோயிலை பாடியது	06 07	01	01	---	---
5	.அற்புதத் திருவந்தாதி– முதல் 20 பாடல்கள் முத்தொள்ளாயிரம் - முழுவதும்	06 07	01	01	--	01
		65	03	03	02	02

தேர்வுவிபரம்

தேர்வு: 5 தேர்வுகள்

25 மதிப்பெண்கள்

பிரிவு .அ: 10X1=10

பிரிவு .ஆ:1X5=05

பிரிவு இ: 1X10=10

25

Incharge Staff   **Hod**   **IQAC Co - Ordinator**

பாடத்திட்டஅமைவு

பெயர்:முனைவா. ச.மகாலெட்சுமி

வகுப்பு: இளங்கலைத்தமிழ் மூன்றாமாண்டு

வருடம்: 2022-2023

தாள் குறியீடு: SBPTT

பருவம்:V தாள்: பணித்தேர்வுத்தமிழ்

நோக்கம்:பணித்தேர்வு எழுதுவதற்குப் பயிற்சி அளித்தல்

வாரவாரியானவகுப்பு		பயிற்றுவகுப்புகள்-மொத்தம்	
2		30	
வ.எண்	பயிற்றும் முறைகள்	வகுப்பப் பங்கீடு(அலகு)	மொத்தம்
1.	கரும்பலகைகருபேச்சு Chalk & Talk	ஒவ்வொருஅலகிற்கும் 4மணிநேரம் (5 அலகுகள்)	20
2.	வரைபடம் இபுலனம்வழி	தேவைப்படும் அலகிற்குமட்டும்	01
3.	வகுப்புத்தேர்வு	5- தேர்வு 5-அலகு	05
4.	கருத்தரங்கம்-கலந்துரையாடல்	5-அலகுகள்	02
5.	இறுதிமதிப்பீடுதிருப்புதல் தேர்வு	2	02
	வாரத்தின் மொத்தமணிநேரம் -2	தரப்புள்ளி -6 மொத்தம்-	30

பாடத்திட்டம் பயிற்றுமுறை மதிப்பிடும் முறை

அலகுவாரியாக

வரிசை எண்	பாடத்திட்டம்- அலகுவாரியாக	வகுப்பு	வரைபடம்	தேர்வு	கருத்தரங்கம்	திருப்புதல்
1.	அலகு-1 மொழியின் இன்றியமையாமைபேச்சு,எழுத்துெ மாழித் தோற்றம் வளர்ச்சி திருந்திய,திருந்தாமொழிகள் தமிழில் பிறமொழிகள்கலப்புதமிழின் செல்வாக்கு	02 01 01	--	02	-	-
2	அலகு-2-முதல் ,சார்பெழுத்துக்கள் , பெயர் முதலானசொற்கள் .வினைமுற்றுவினையெச்சம். யாப்புறுப்புகள் ,பாக்களின் வகைகள் உவமை,தற்குறிப்பேற்றம் .வஞ்சப்புகழ்ச்சிஅணி	02 01 01	-	02	01	-
3.	அலகு-3 ஆற்றுப்படை நூல்கள் எட்டுதொகை.கபிலா ,பரணர் ,பாடல்கள் -நீதி நூல்கள்	02 01 01	01	01	-	-

4.	அலகு-4 இரட்டைக் காப்பியங்கள் இராமாயணம் .இயேசுகாவியம்பன்னிருதிருமுறைகள் -பன்னிரு ஆழ்வார்கள்- புனைகதை,நாடகம் இகவிதை,புதுக்கவிதை	03 01	.	01		
5.	அலகு-5மக்கள் தகவல் தொடர்பியல் வானொலி,தொலைக்காட்சிமுதலானவை இதழ்கள் .தகவல் பரிமாற்றம் இணையதளம் .கணினிபயிற்சி	02 01 01		01	01	

தேர்வுவிபரம் 15- மதிபெண்கள்

பகுதி -அ (5X15=75) --மதிப்பெண்கள்

திட்டக்கட்டுரை -10 மதிப்பெண்கள் தேவைப்படும் அலகுகளில் ஆசிரியர் முடிவுசெய்வது.

திருப்புதல் தேர்வு – பருவத் தேர்வுமாதிர ॊஅடிப்படையில் கேட்கப்படும்.

Incharge Staff   **Hod**   **IQAC Co - Ordinator**

GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) - KUMBAKONAM

DEPARTMENT OF <mark>ENGLISH</mark>

Teaching Plan

Name(s) of the Staff.T.SUDHA

Programme: I B.Sc CHEMISTRY &BOTANY(E/m &T/M)

Academic Year: <mark>2022-2023</mark>

Semester: I Semester

Course Code: U211E1

Course Title: English For Communication-I (Short Stories)

Objectives:

➢ To enable students to discuss content of the story and structure in depth. To develop students' performance skills in relation to story-telling.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	13 hours per unit (for 5 units)	65
Text Book Assignment	1 hour per unit(for 5 units)	05
Story Telling	2 hours for 5 units	02
Evaluation –Class Tests (CT)	1 test per unit(for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Vocabulary lists (written)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hours (Rehearsal)	03
Hours per week 6	Credit 6	Total 90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30
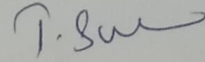
SL. NO	HOURS	UNIT -CONTENT	MODE OF TEACHING			
			L	CT/CW	S	FE
Unit-I						
1	3	Little Girls Wiser Than Men-Leo Tolstoy	L			
2	4	Valiant Vicky-Flora Annie Steel	L			
3	6	Parts of Speech-Noun, Pronoun, Adjective	L			
Unit-II						
4	3	The Selfish Giant-Oscar Wilde	L			
5	4	My Lord, The Baby-Rabindranath Tagore	L			
6	6	Parts of Speech-Verb, Adverb	L			
Unit – III						
7	4	After Twenty Years- O Henry	L			
8	4	The Conjurer's Revenge-Stephen Leacock	L			
9	5	Parts of Speech-Prepositions, Articles	L			
Unit – IV						
10	4	An Astrologer's Day- R.K.Narayan	L			
11	4	The Tiger in the Tunnel-Ruskin Bond	L			
12	5	Parts of Speech-Conjunction, Interjection	L			
Unit – V						
13	5	The Four Brothers-Walter de la Mare	L			
14	4	Karma-Khushwant Singh	L			
15	4	Sentence Pattern	L			
Seminar						
1	5	UNIT-I,UNIT-II,UNIT-III,UNIT-IV&UNIT-V			S	
Class Test						
1	5	UNIT-I,UNIT-II,UNIT-III,UNIT-IV&UNIT-V		CT		
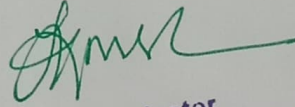
		Text Book Assignment				
1	5	UNT-I, UNIT -II,UNIT-III,UNIT-IV &UNIT-V		CW		
		Story Telling				
1	2	UNT-I, UNIT -II,UNIT-III,UNIT-IV &UNIT-V		CW		
		Vocabulary lists(written)				
1	5	UNT-I, UNIT -II,UNIT-III,UNIT-IV &UNIT-V		CW		
		Final Evaluation (FE)				
1	3	Entire course				FE

Head of the Department

Member(s)

Signature of the Staff

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OF ENGLISH

Teaching Plan

Name of the Staff: Mrs. C.Thenmozhi

Programme : M.A English   Academic Year : 2022 - 2023

Semester : I semester   Course Code : P21ELC101

Course Title : Modern Literature 1 (1400 -1660)

Objectives:

To expose students to the evaluation of English poetry in the age of Chaucer

To introduce the students to the characteristics of metaphysical poetry

To makes students learn the origin of English essays

Teaching Methodology		Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]		13 hrs per unit (for 5 units)	65
Evaluation – Class Tests (CT)		2 hr per unit (for 5 units)	10
Seminar/problem solving/class work(S)		1 hour per unit(for 5 units)	05
Final Evaluation (FE)		10 hrs (Rehearsal)	10
Hrs per week	6	Credit	4	Total	90

SL.NO	HOUR	UNIT –CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	3	Introduction to Geoffrey Chaucer	L			
2	5	The Prologue to the Canterbury Tales	L			
3	2	Introduction to Edmund Spencer	L			
4	3	Epithalamion	L			
		UNIT –II				
5	4	John Donne - "The Flea"	L			
6	4	Andrew Marvell - " To His Coy Mistress"	L			
7	2	Geroge Herbert - "The Pulley"	L			
8	3	Henry Vaughan - "The Retreat"	L			
		UNIT III				
9	2	Introduction to Francis Bacon	L			
10	2	Of Truth	L			
11	2	Of Great Place	L			
12	2	Of Parents and Children	L			
13	3	The Bible	L			
14	2	Chapters 5to 7 from the Gospel of Matthew	L			
		UNIT IV				
15	6	Christopher Marlowe - The Jew of Malta	L			
16	7	John Webster - The White Devil	L			
		UNIT V				
17	6	Ben Jonson - Every Man in His Humour	L			
18	7	Thomas Kyd - The Spanish Tragedy	L			
		Seminar				
1	5	UNIT I TO UNIT V			S	
		Class Test				
1	10	UNIT I-UNIT V		CT		
		Final Evaluation (FE)				
1	10	Entire course				FE

Head of the Department

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

Signature of the Staff Member

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OF ENGLISH

Teaching Plan

Name of the Staff : Mrs.C.Thenmozhi

Programme : M.A English   Academic Year : 2022 - 2023

Semester : II semester   Course Code : P21ELC205

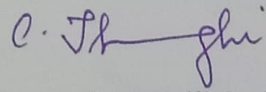Course Title : Modern Literature III

Objectives:

To make the students appreciate the characteristics of the novels of Scott

Teaching Methodology			Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]			11 hrs per unit (for 5 units)	60
Evaluation –Class Tests (CT)			2 hr per unit (for 5 units)	10
Seminar/problem solving/class work(S)			2 hour per unit(for 5 units)	10
Group discussion			1 hr per unit for 5 units	05
Final Evaluation (FE)			5 hrs (Rehearsal)	05
Hrs per week	6	Credit	5 Total	90
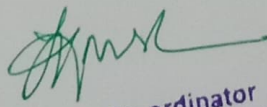
SL.NO	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	4	William Wordsworth : Ode to the Intimation of Immortality	L			
2	4	S.T.Coleridge : Rime of the Ancient Mariner	L			
3	2	Walter Scott : Lochinvar	L			
		Unit-II,				
4	3	John Keats : Ode to a Nightingale	L			
5	4	P.B.Shelley : The Cloud	L			
6	3	Lord Byron : Youth and Age	L			
		Unit – III				
7	5	Charles Lamb : A Dissertation Upon a Roast Pig	L			
8	5	William Hazlitt : On Reading Old Books	L			
		UNIT –IV				
9	3	P.B Shelley : Prometheus	L			
		UNIT –V				
15	4	Jane Austen : Emma	L			
16	3	Walter Scott : Ivanhoe	L			
		ACTIVITIES				
17	3	UNIT-I		CT		
18	3	UNIT-II		CT		
19	4	UNIT-III,IV and V		CT		
20	10	UNIT I, II, III, IV and V			S	
21	5	Entire paper (Final Evaluation)				FE

Head of the Department

Signature of the Staff Member

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OF ENGLISH

Teaching Plan

Name of the Staff: Mrs. C.Thenmozhi

Programme : M.A English

Academic Year : 2022 - 2023

Semester : III semester

Course Code : P18ELC312

Course Title : CC XII   New Literature in English

Objectives:

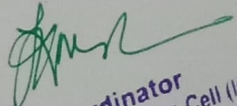To make students familiarize with writers of new literatures

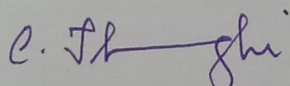To enable students to appreciate the values of literatures of different nations

Teaching Methodology		Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]		10hrs per unit (for 2 units)	20
Evaluation –Class Tests (CT)		1hrs (for 2 units)	2
Seminar/problem solving/class work(S)		2 hour per unit (for 2 units)	4
Group Discussion		1 hour per unit (for 2 units)	2
Final Evaluation (FE)		hrs (Rehearsal)	2
Hrs per week	2	Credit 6	Total 30

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT - CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	2	Africa – David Diop	L			
2	2	Telephone Conversation – Wole Soyinka	L			
3	3	Fire at Murdering Hut – Judith Wright	L			
4	3	Australia – A.D.Hope	L			
		Unit-II				
5	2	A January Morning – Archibald Lampman	L			
6	2	The Canadian Authors Meet – F.R.Scott	L			
7	3	Journey to the Interior – Margaret Atwood	L			
8	3	Leonard Cohen - If It Were Spring	L			
		Seminar				
9	4	Unit I – II			S	
		Class Test				
10	2	Unit I – II		CT		
		Group Discussion				
11	4	Unit I – II				
		Final Evaluation (FE)				
12	2	Entire course				FE

Head of the Department

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

Signature of the Staff Member

Teaching Plan

Name of the Staff: Mrs. C.Thenmozhi

Programme : M.A English

Academic Year : 2022 - 2023

Semester : III semester

Course Code : P21EL4MBE4:2

Course Title : Women's Writing in English

Objectives:

It aims to expose students to a substantial body of knowledge about the social construction of gender in various cultural contexts from a variety of disciplinary perspectives.
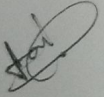
It also provides students with the analytic tools for understanding the lives and experiences of women in various cultural contexts.
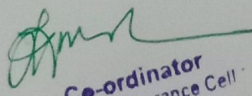
Teaching Methodology			Distribution of hours/Unit		Total Hours of Instruction
Traditional Chalk and Talk Method [L]			12 hrs per unit (for 5 units)		60
Evaluation – Class Tests (CT)			2 hrs (for 5 units)		10
Seminar/problem solving/class work(S)			2 hour per unit (for 5 units)		10
Group Discussion			1 hour per unit (for 5 units)		5
Final Evaluation (FE)			5 hrs (Rehearsal)		5
Hrs per week	2	Credit	6	Total	90
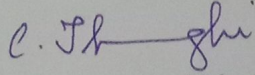
Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT - CONTENT	L	CT	S	FE
		Unit-I				
1	5	Anne Bradstreet- The Prologue	L			
2	5	Anne Sexton- Pain for a Daughter	L			
3	5	Marianne More- Poetry	L			
4	5	Adrienne Rich- Aunt Jennifer's Tigers	L			
		Unit-II				
5	10	Virginia Woolf- A Room of One's Own	L			
		Unit-III				
6	10	Lorraine Hansberry- A Raisin in the Sun	L			
		Unit-IV				
7	10	Toni Morrison - Beloved	L			
		Unit-V				
8	10	Shashi Deshpande - That Long Silence	L			
		Seminar				
9	10	Unit I – V			S	
		Class Test				
10	10	Unit I – V		CT		
		Group Discussion				
11	5	Unit I – V				
		Final Evaluation (FE)				
12	5	Entire course				FE

Head of the Department

Co-ordinator
Internal Quality Assurance Cell
Govt. College for Women
Kumbakonam- 612 001

Signature of the Staff Member

GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) - KUMBAKONAM

DEPARTMENT OF ENGLISH

Teaching Plan

Name(s) of the Staff: A. VASANTHI

Programme: II B.A. English- (Shift-II)   Academic Year: 2022-2023

Semester: III Semester   Course Code: U21EL3A4

Course Title: History of English Literature II

Objectives:
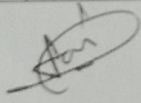
> ➤ To familiarize students with the history and life and works of British writers. To provide students a basic understanding of all the literary periods and its major writers.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hours per unit (for 5 units)	60
Creative Writing (Translation)	2 hours for 5 units	02
Evaluation –Class Tests (CT)	1 test per unit(for 5 units)	05
Translation- Assignment	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hours (Rehearsal)	03
Hours per week 5	Credit 3	Total 75

Hours per week	Total Hours of Instruction
5	75
5	75
4	60
2	30

SL.NO	HOURS	UNIT -CONTENT	MODE OF TEACHING			
			L	CT/CW	S	FE
Unit-I						
1	4	Introduction to HEL II	L			
2	4	Introduction to the Romantic Age	L			
3	2	The Age of Wordsworth	L			
4	2	The Age of Wordsworth	L			
Unit-II						
5	3	The Older poets	L			
6	3	The Age of Tennyson	L			
7	3	The Age of Tennyson	L			
8	3	Recap of all the seen writers	L			
Unit-III						
9	4	Introducation to the political and social background of Hardy Age	L			
10	3	Introduction to Hardy and other major writers	L			
11	3	The Age of Hardy	L			
12	2	Recap of the Age of Hardy	L			
Unit-IV						
13	3	Introduction to the 20th century literature	L			
14	5	Impact of social and political background of the age	L			
15	5	The Modern Age				
Unit-V						
16	6	Introduction to postmodern period	L			
17	6	Postmodern British Literature	L			
Creative Writing						
1	2	UNIT-I,UNIT-II,UNIT-III,UNIT-IV&UNIT-V		CW		
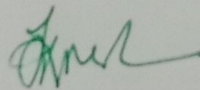
		Class Test				
1	5	UNIT-I,UNIT-II,UNIT-III,UNIT-IV&UNIT-V		CT		
		Translation-Assignment				
1	5	UNIT-I,UNIT-II,UNIT-III,UNIT-IV&UNIT-V		CW		
		Final Evaluation (FE)				
1	3	Entire course				FE

Head of the Department

Member(s)

Signature of the Staff

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

Teaching Plan

Name(s) of the Staff: Dr.G.Kamatchi

Programme: III B.A English Literature   Academic Year: 2022-2023

Course Code: 18ELC508

Semester: V semester

Course Title: Principles of Literary Criticism

Objectives: To help students to approach the literary texts from different perspectives.
It also provides a conceptual framework of various critical theories through different ages that
compliment and contradict one another.
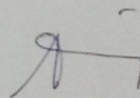
Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	10hrs per unit (for 5 units)	50
Evaluation –Class Tests (CT)	1 hr per unit (for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Tutorial	1 hour per unit(for 5units)	05
Reading aloud	3hrs for 5 units	03
Group discussion	1 hr per unit for 5 units	05
Final Evaluation (FE)	3 hrs (Rehearsal)	02

Hrs per week	5	Credit	3	Total	75

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit-I						
1	3	Introduction to Literary Theory	L			
2	3	Introduction to Literary History	L			
3	3	Introduction to Literary Criticism	L			
4	1	Applications of Literary Theory in Literature	L			
Unit-II						
5	2	Classical Criticism-Plato	L			
6	2	Classical Criticism-Aristotle	L			
7	2	Classical Criticism-Horace	L			
8	2	Classical Criticism-Quintilian	L			
9	2	Classical Criticism-Longinus	L			
Unit – III						
10	1	Critical Theories-Philip Sidney	L			
11	2	Critical Theories- Dryden	L			
12	2	Critical Theories-Dr.Johnson	L			
13	2	Critical Theories- Coleridge	L			
14	1	Critical Theories- Arnold	L			
15	2	Critical Theories-T.S.Eliot	L			
UNIT -IV						
16	5	Moralistic approach	L			
17	5	Psychological approach	L			
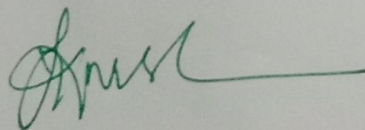
UNIT V							
18	4	Archetypal approach	L				
19	4	Sociological approach	L				
20	2	Formalistic approach	L				
ACTIVITIES							
11	1	UNIT-I		CT			
12	1	UNIT-II		CT			
13	3	UNIT-III,IV and V		CT			
14	5	UNIT I, II, III, IV and V			S		
15	3	Entire paper (Final Evaluation)				FE	

Head of the Department

Signature of the Staff Member(s)

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OF ENGLISH

Teaching Plan

Name(s) of the Staff: C.TAMILARASI

Programme: II M.A English Literature   Academic Year: 2022-2023

Semester: II semester   CourseCode: P21EL2MBE2:3

SCourse Title: Ethics

Objectives:

> ➤ To appreciate human values.
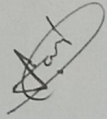
Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	14 hrs per unit (for 5 units)	70
ICT Enabled Lectures [I]	--------	-----
Practical Demonstration[P]	--------	-----
Tutorial (T)	1 hour per unit(for 2 units)	02
Field visit (FV)	-----	-----
Group discussion		
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	2 hour per unit(for 5 units)	10
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week 6 Credit	5 Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
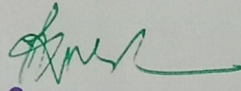
			MODE OF TEACHING			
SL.NO	HOUR	UNIT -CONTENT	L	CT	S	FE
		Unit-I				
1	13	The Book of Job from *'The Bible'*	L			
		Unit-II				
2	15	The Book of Job from *'The Bible'*	L			
		Unit – III				
3	13	MarcusAurelius : Meditations	L			
		Unit – IV				
4	02	Chapter 6: The Goodness of the Help to Domestic Life	L			
6	02	Chapter 8: The Possession of Love	L			
6	03	Chapter 10: The Utterance of Pleasant Words (From G.U.Pope's Translation of Thirukkural)				
7	03	Chapter 11: : The Knowledge of Benefits Conferred: Gratitude				
8	03	Chapter 14: The Knowledge of Benefits Conferred: Gratitude				
		Unit – V				
9	13	SwamiVivekananda : Our Women	L			
		Seminar				
1	2	UNIT-I Chapter 6 to 10 (The Book of Job)			S	
2	2	UNIT-II Chapter 20 to 25 (The Book of Job)			S	

3	2	UNIT-III Book 3 (MarcusAurelius : Meditations)			S	
4	2	UNIT – IV Chapter 8: The Possession of Love			S	
5	2	UNIT-V SwamiVivekananda : Our Women (Life of Women in Olden Days			S	
Class Test						
1	5	UNIT I- &UNIT V		CT		
Final Evaluation (FE)						
1	3	Entire course				FE

Head of the Department

C. Tamilarasi

Signature of the Staff Member(s)

GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) - KUMBAKONAM

DEPARTMENT OF ENGLISH

Teaching Plan

Name(s) of the Staff: T·SUDHA

Programme:	II B.A., English- (Shift-II)	Academic Year:	2022-2023
Semester:	IV Semester	Course Code:	U21EL4A6

Course Title: Women's Writing in English
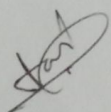
Objectives:

> To make students aware of the history and the growth of Indian Writing in English. To introduc students to the rich literary tradition in Indian Writing in English.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	13 hours per unit (for 5 units)	30
Text Book Assignment	1 hour per unit(for 5 units)	05
Group Discussion	1 hour for 5 units	05
Evaluation –Class Tests (CT)	1 test per unit(for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Tutorial	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	5hours (Rehearsal)	05
Hours per week	4	Credit	3	Total	60

Hours per week	Total Hours of Instruction
6	90
4	60
4	60
2	30
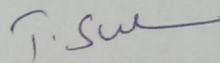
SL. NO	HOURS	UNIT -CONTENT	MODE OF TEACHING			
			L	CT/ CW	S	FE
		Unit-I				
1	7	Emily Dickinson: " I Cannot live with You" "I'm Wife : I have finished that"	L			
2	6	Sylvia Plath: 'Lady Lazarus' Eunice De Souza: 'Advice to Women', 'Bequest'	L			
		Unit-II				
3	6	Introduction to Mary Wolstonecrft	L			
4	7	Mary Wollstonecraft: 'A Vindication of the Rights of Woman'	L			
		Unit – III				
5	6	Introduction to African American litt.	L			
6	7	Lorraine Hansberry: 'A Raisin in the Sun'	L			
		Unit – IV				
7	10	Introduction to Alice Walker Alice Walker: 'The Colour Purple'	L			
		Unit – V				
8	10	Charlotte Perkins Gilman: 'The Yellow Wallpaper'	L			
		Seminar				
1	5	UNIT-I,UNIT-II,UNIT-III,UNIT-IV&UNIT-V			S	
		Class Test				
1	5	UNIT-I,UNIT-II,UNIT-III,UNIT-IV&UNIT-V		CT		
		Text Book Assignment				
1	5	UNT-I, UNIT -II,UNIT-III,UNIT-IV &UNIT-V		CW		

		Group Discussion				
I	2	UNT-I, UNIT -II,UNIT-III,UNIT-IV &UNIT-V		CW		
		Tutorial				
I	5	UNT-I, UNIT -II,UNIT-III,UNIT-IV &UNIT-V		CW		
		Final Evaluation (FE)				
I	3	Entire course				FE
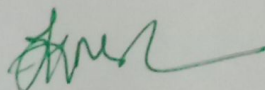
Head of the Department

Signature of the Staff

Member(s)

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (AUTONOMOUS) - KUMBAKONAM

DEPARTMENT OF ENGLISH

Teaching Plan

Name(s) of the Staff: K.GOWRI

Programme: III B.A., English- (Shift-II) Academic Year: 2022-2023

Semester: VI Semester Course Code: 18ELC611

Course Title: Indian Writing In English
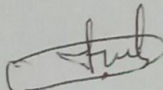
Objectives:

> ➤ To make students aware of the history and the growth of Indian Writing in English. To introduce students to the rich literary tradition in Indian Writing in English.
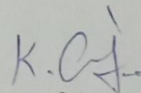
Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	13 hours per unit (for 5 units)	65
Text Book Assignment	1 hour per unit(for 5 units)	05
Group Discussion	2 hours for 5 units	02
Evaluation –Class Tests (CT)	1 test per unit(for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Tutorial	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hours (Rehearsal)	03
Hours per week	6	Credit	5	Total	90
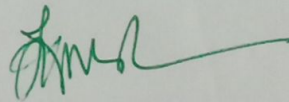
Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO	HOURS	UNIT -CONTENT	MODE OF TEACHING			
			L	CT/ CW	S	FE
Unit-I						
1	7	Henry Derozio : "The Harp of India"	L			
2	6	Sarojini Naidu : "Love and Death"	L			
Unit-II						
3	6	Nissim Ezekiel :"Poet, Lover, Birdwatcher"	L			
4	7	A.K.Ramanujan : "Of Mothers, Among Other Things"	L			
Unit – III						
5	6	M. K. Gandhi :"Playing the English Gentleman" (Chapter 15 from The Story of My Experiments with Truth)	L			
6	7	A. P. J. Abdul Kalam: "The Power of Prayer"	L			
Unit – IV						
7	13	Vijay Tendulkar : Kamala	L			
Unit – V						
8	13	Arundati Roy : God of Small Things	L			
Seminar						
1	5	UNIT-I,UNIT-II,UNIT-III,UNIT-IV&UNIT-V			S	
Class Test						
1	5	UNIT-I,UNIT-II,UNIT-III,UNIT-IV&UNIT-V		CT		
Text Book Assignment						
1	5	UNT-I, UNIT -II,UNIT-III,UNIT-IV &UNIT-V		CW		

		Group Discussion				
1	2	UNT-I, UNIT -II,UNIT-III,UNIT-IV &UNIT-V		CW		
		Tutorial				
1	5	UNT-I, UNIT -II,UNIT-III,UNIT-IV &UNIT-V		CW		
		Final Evaluation (FE)				
1	3	Entire course				FE

Head of the Department

Signature of the Staff Member(s)

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

Teaching Plan

Name(s) of the Staff: Mrs. M. Ananthalakshmi

Programme: I B.A ECONOMICS   Academic Year: 2022-2023

Semester: II   Semester   Course Code:U21ECC203

Course Title: MICRO ECONOMICS -II

Objectives: 1.To enable the students to know about the various forms of market structure and its

price determination

2.To study the theories of distribution and factor pricing

Teaching Methodology	Distribution of hours/Unit		Total Hours of Instruction
Traditional Chalk and Talk Method [L]	15 hrs per unit (for 5 units)		75
Evaluation –Class Tests (CT)	1 hrs (for 5 units)		03
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)		05
Creating awareness about the latest developments of Numerical methods in current research sector (CA)	1 hour per unit(for 5 units)		05
Final Evaluation (FE)	3 hrs (Rehearsal)		02
Hrs per week	6	Credit	6	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit-I						
1	3	Meaning and forms of market	L			
2	3	Marshal's General theory of value	L			
3	3	Time element	L			
4	3	Equilibrium of firm and Industry	L			
5	3	Objectives of the firm	L			
Unit-II						
6	3	Definition of perfect competition	L			
7	3	Features- Price output determination	L			
8	3	Monopoly-definition and meaning of monopoly	L			
9	3	Kinds of monopoly-Price determination	L			
10	3	Comparison between perfect competition and monopoly	L			
Unit – III						
11	3	Meaning and features of monopolistic competition	L			
12	3	Price determination under monopoly	L			
13	3	Oligopoly	L			
14	3	Definition of oligopoly	L			
15	3	Features of oligopoly	L			
16	3	Price and output determination under oligopoly	L			
Unit – IV						
17	3	Marginal productivity theory of distribution	L			
18	3	Modern theory of distribution	L			
19	3	Ricardian theory of rent	L			
20	3	Quasi-Rent	L			

21	3	Modern theory of Rent	L				

Unit – V							
22	3	Theories of wages- subsistence theory of wages	L				
23	3	Wage Fund Theory-Modern theory of wage	L				
24	3	Theories of loanable fund theory	L				
25	3	Classical theory of interest-Keynes liquidity theory of interest	L				
26	3	Theories of profit-Dynamic theory of profit-The innovation theory of profit	L				

Seminar/Creating Awareness							
1	1	UNIT-I Equilibrium of firm and Industry			S		
2	1	UNIT-II kinds of monopoly			S		
3	1	UNIT-III Features of monopolistic competition			S		
4	1	UNIT – IV Modern theory of distribution			S		
5	1	UNIT-V subsistence theory of wages			S		

Class Test							
1	3	UNIT I-UNIT III and UNIT-V		CT			

Final Evaluation (FE)							
1	2	Entire course				F	

S. Puja Prm

Head of the Department

M. Ananthalakshm

Signature of the Staff Member(s)

IQAC - CO-ORDINATOR.

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff   : Mrs. N. VIJAYASUNDARI

Programme   : I B.A. Economics   Academic Year : 2022-2023

Semester   : II   Course Code : U21EC2A3

Course Title   : PRINCIPLES OF COMMERCE

Objectives :

1. To make the students study about rules and types of data classification.
2. To make the students learn the basic and elementary tools in statistics such as correlation and regression analysis

Teaching Methodology	Distribution of hours/Unit		Total Hours of Instruction
Traditional Chalk and Talk Method (L)	15 hrs per unit (for 5 units)		75
Evaluation – Class Tests (CT)	1 hrs (for 5 units)		5
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)		5
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)		3
Final Evaluation (FE)	3 hrs (Rehearsal)		2
Hrs per Week	6	Credit	6	Total	90

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit – I Introduction of Fundamentals						
1.	3	Fundamentals of Commerce	L			
2.	3	Forms of Business organizations	L			
3.	3	Sole Proprietorship, Partnership, Company, Co operative	L			
4.	3	Public and Joint Enterprises	L			
5.	3	Types of Business Combination	L			
UNIT – II Banks						
6.	3	Banks	L			
7.	3	Definition, kinds of banks	L			
8.	3	Central Bank, objectives, Functions	L			
9.	3	Commercial Banks- Nationalized Banks	L			
10.	2	Private sector banks and Regional rural banks- Co-operative bank and its functions	L			
UNIT – III Supply chain Management						
11.	3	Wholesale and retail business	L			
12.	3	Supply chain management, General and Special shops	L			
13.	3	General and Special Shops	L			
14.	3	Chain Stores, Multiple Shops	L			
15.	3	Mail order sales, Departmental stores	L			
16.	3	Super market A to Z shops	L			
UNIT – IV Insurance and Mutual Funds						
17.	3	Insurance	L			
18.	3	Kinds of Insurance	L			
19.	3	Life, Fire, Marine	L			
20.	3	Deposit insurance	L			
21.	3	Insurance against theft and loss of profit	L			

		UNIT – V Advertisement				
22.	3	Advertisement	L			
23.	3	Objectives	L			
24.	3	Uses of Media	L			
25.	3	Importance	L			
26.	3	Merits and demerits of Media	L			
		Seminar / Creating Awareness			S	
1.	1	Unit – I			S	
2.	1	Unit – II			S	
3.	1	Unit – III			S	
4.	1	Unit – IV			S	
5.	1	Unit – V			S	
		Class Test and Five year planning				
1	3	Unit-I, II, III, IV and Unit - V		CT		
		Final Evaluation (FE)				FE
1	2	Entire Course				FE

S. Rajalaxmi

Head of the Department

N. Vijaya Sri

Signature of the Staff Member(s)

IQAC - Co-ordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff   : Mrs. M. Ananthalakshmi

Programme   : I. B.A. Economics   Academic Year : 2022-2023

Semester   : I semester   Course Code : U21ECC101

Course Title   : MICRO ECONOMICS - I

Objectives :

1. To make the students study about rules and types of data classification.
2. To make the students learn the basic and elementary tools in statistics such as correlation and regression analysis

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method (L)	15 hrs per unit (for 5 units)	75
Evaluation – Class Tests (CT)	1 hrs (for 5 units)	5
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)	5
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)	3
Final Evaluation (FE)	3 hrs (Rehearsal)	2
Hrs per Week 6 Credit 6 Total		90

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit – I Nature and Scope				
1.	3	Definition	L			
2.	3	Scope of Economics Static and Dynamic analysis	L			
3.	3	Inductive and Deductive methods	L			
4.	3	Micro and Macro Economics	L			
5.	3	Importance and Limitations of Micro Economics	L			
		UNIT – II Cardinal Analysis of Consumer Behavior				
6.	3	Meaning of Utility	L			
7.	3	Cardinal and Ordinal, Total and Marginal Utility,	L			
8.	3	The Law of Diminishing Marginal Utility and Equi-marginal Utility	L			
9.	3	Consumer Equilibrium Law of Demand Elasticity of Demand	L			
10.	3	Consumer Surplus	L			
		UNIT – III Ordinal Analysis of Consumer Behavior				
11.	3	Indifference Curve	L			
12.	3	Meaning - Properties	L			
13.	3	Marginal Rate of Substitution	L			
14.	3	Consumer Equilibrium Price	L			
15.	3	Income and Substitution Effects, Critical Appraisal	L			
		UNIT – IV Theory of Production				
16.	3	Factors of Production, Features	L			
17.	3	Production Function Concept and Meaning	L			
18.	3	Law of Variable Proportions	L			
19.	3	Law of Return to scale	L			
20.	3	Iso - Quants Meaning properties, producer's Equilibrium	L			

		UNIT – V Cost and Revenue				
23.	3	Concepts of Cost, Short run and long run cost	L			
24.	3	Total cost, Marginal Cost, Average Cost, Fixed cost and Variable cost	L			
25.	3	Derivation of Long run cost curve	L			
26.	3	Revenue concepts Total Revenge, Marginal Revenue and Average Revenue	L			
27.	3	Relation between AR and MR	L			
		Seminar / Creating Awareness				
1.	1	Unit – I			S	
2.	1	Unit – II			S	
3.	1	Unit – III			S	
4.	1	Unit – IV			S	
5.	1	Unit – V			S	
		Class Test and Five year planning				
1	5	Unit - I, II, III, IV and V		CT		
		Final Evaluation (FE)				
1	5	Entire Course				FE

Head of the Department

Signature of the Staff Member(s)

IQAC - CO-ORDINATOR.

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff   : Mrs. M. Ananthalakshmi

Programme   : II B.A. Economics   Academic Year : 2022-2023

Semester   : IV semester   Course Code : 18EC4A5

Course Title   : Statistical Methods - II

Objectives :

1. To make the students study about the rules and types of data classification.
2. To make the students learn the basic and elementary tools in statistics such as correlation and regression analysis.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method (L)	13 hrs per unit (for 5 units)	65
Evaluation – Class Tests (CT)	1 hrs (for 5 units)	3
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)	3
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)	2
Final Evaluation (FE)	3 hrs (Rehearsal)	2
Hrs per Week 5 Credit 5	Total	75

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit – I Measures of central Tendencies						
1.	2	Arithmetic mean	L			
2.	3	Median mode	L			
3.	3	Harmonic mean	L			
4.	2	Geometric mean	L			
5.	3	Relationship between different averages	L			
UNIT – II Measures of Dispersion						
6.	2	Properties of good measure of variation	L			
7.	3	Range –Merits and demerits	L			
8.	3	Quartile deviation Merits and demerits	L			
9.	3	Standard deviation – merits and demerits	L			
10.	3	Co- efficient of variation and Lorenz curve	L			
UNIT – III Skewness and Kurtosis						
11.	2	Skewness – meanings	L			
12.	2	Types of skewness	L			
13.	2	Karlpearson measures of skewness	L			
14.	3	Bowley measures of skewness	L			
15.	2	Kurtosis – meaning	L			
16.	2	Measures of kurtosis	L			
UNIT – IV Correlation Analysis						
17.	3	Types of correlation	L			
18.	3	Scatter diagram- graphic method	L			
19.	2	Karlpearson's co – efficient of correlation	L			
20.	3	Co – efficient of determination	L			
21.	2	Speraman's rank correlation	L			
UNIT – V Regression Analysis						
22.	3	Meaning and uses	L			
23.	2	Correletion vs Regression analysis	L			

24.	2	Two regression lines	L			
25.	2	Regression co – efficient	L			
26.	3	Merits and demerits of regression	L			
Seminar / Creating Awareness						
1.	1	Unit – I Arithmetic mean			S	
2.	1	Unit – II Standard deviation merits and demerits			S	
3.	1	Unit – III Karlpearson measures of skewness			S	
4.	1	Unit – IV Karlpearson's co – efficient of correlation			S	
5.	1	Unit – V Correlation vs regression			S	
Class Test and Five year planning						
1	3	Unit – I , Unit – II and Unit – III		CT		
Final Evaluation (FE)						
1	2	Entire Course				FE

Head of the Department

Signature of the Staff Member(s)

IQAC - CO-ORDINATOR.

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001.

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff   : Mrs. N. VIJAYASUNDARI

Programme   : II B.A. Economics   Academic Year : 2022-2023

Semester   : III   Course Code : U21ECC305

Course Title   : LABOUR ECONOMICS

Objectives :

1. To make the students study about rules and types of data classification.
2. To make the students learn the basic and elementary tools in statistics such as correlation and regression analysis

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method (L)	13 hrs per unit (for 5 units)	65
Evaluation – Class Tests (CT)	1 hrs (for 5 units)	3
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)	3
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)	2
Final Evaluation (FE)	3 hrs (Rehearsal)	2
Hrs per Week	5	Credit	5	Total	75

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit – I Meaning of Labour						
1.	2	Labour, Meaning, Characteristics of labour	L			
2.	3	Migratory Character, Causes for migration, absenteeism, Measures to reduce absenteeism	L			
3.	3	Labour turnover	L			
4.	2	Measurement, difficulties in measurement	L			
5.	3	Causes for low labour turnover	L			
UNIT – II Wage concept						
6.	2	Wages Real wages and nominal wages	L			
7.	3	Factors affecting real wages	L			
8.	3	Causes for wage differences	L			
9.	3	Methods of wage payments	L			
10.	3	Living wage, minimum wage and fair wage	L			
UNIT – III Industrial Disputes						
11.	2	Industrial Disputes	L			
12.	2	Forms of Industrial Disputes	L			
13.	2	Effects of Industrial disputes	L			
14.	3	Prevention of industrial disputes	L			
15.	2	Methods for the settlement of industrial disputes	L			
UNIT – IV Trade Union						
16.	3	Trade union, Meaning, Objectives	L			
17.	3	Structure of trade union in India	L			
18.	2	Functions of trade union	L			
19.	3	Factors affecting the growth of trade unions	L			
20.	2	Growth of trade unions in India - ILO-Aim-functions	L			
UNIT – V Social Securities						
22.	3	Social security, Benefits provide under social	L			

		security					
23.	2	Social security measures in India	L				
24.	2	Working conditions, Hours of work	L				
25.	2	Occupational hazards	L				
26.	3	Housing conditions, Workers education	L				
Seminar / Creating Awareness							
1.	1	Unit – I			S		
2.	1	Unit – II			S		
3.	1	Unit – III			S		
4.	1	Unit – IV			S		
5.	1	Unit – V			S		
Class Test and Five year planning							
1	3	Unit I, III and Unit V		CT			
Final Evaluation (FE)							
1	2	Entire Course				FE	

Head of the Department

Signature of the Staff Member(s)

IQAC-Co-ordinator

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff : Mrs. D. Mekala

Programme : II year NMEC   Academic Year : 2022-2023

Semester : IV semester   Course Code : U21NME2:1

Course Title : Economics of Insurance

Objectives :

1. To create knowledge about basic concepts of insurance.
2. To Impart knowledge about insurance agent and Information technology.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method (L)	4 hrs per unit (for 5 units)	20
Evaluation – Class Tests (CT)	1 hrs (for 5 units)	3
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)	3
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)	2
Final Evaluation (FE)	3 hrs (Rehearsal)	2
Hrs per Week 2	Credit 2	Total 30

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit – I Meaning and Importance						
1.	1	Meaning and Features of insurance	L			
2.	1	Characteristics of insurance	L			
3.	1	Importance of insurance	L			
4.	1	Principles and functions of insurance	L			
UNIT – II Insurances organization						
5.	1	Kinds of insurance	L			
6.	1	Types of insurance organizations	L			
7.	1	Types and kinds of insurance	L			
8.	1	Insurance organization in India Case study – IRDA certification	L			
UNIT – III Life Insurance						
9.	1	Life Insurance Policy	L			
10.	1	Kinds of Life insurance policies	L			
11.	1	Advantages of life insurance policies	L			
12.	1	Difference between life and non – life insurance policies – performance of private companies	L			
UNIT – IV Other Insurance						
13.	1	Health and Fire Insurance	L			
14.	1	Property and marine insurance	L			
15.	1	Personal accident insurance Fidelity insurance – workmen's compensation insurance	L			
16.	1	Automobile insurance – Crop Insurance	L			
UNIT – V Insurance Salesmanship						
17.	1	Insurance Agent – Definition		L		
18..	1	Characteristics of salesmanship		L		
19.	1	Qualities of development officers and insurance agents		L		
20.	1	Usage of Information technology		L		

		Seminar / Creating Awareness				
1.	1	Unit – I Characteristics and importance of insurance			S	
2.	1	Unit – II Types of insurance organization			S	
3.	1	Unit – III Kinds and Advantages of life insurance policy			S	
4.	1	Unit – IV Health, Fire and accident insurance policy			S	
5.	1	Unit – V Characteristics and qualities of Insurance salesmanship			S	
		Class Test				
1	3	Unit – III – Unit – IV and Unit – V		CT		
		Final Evaluation (FE)				
1	2	Entire Course				FE

Head of the Department

Signature of the Staff Member(s)

IQAC Co-ordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff   : Mrs. D. Mekala

Programme   : II B.A. Economics

Semester   : IV semester

Course Title   : INTERNATIONAL ECONOMICS

Academic Year : 2022-2023

Course Code : U21ECC406

Objectives :

1. To create knowledge about basic concepts of insurance.
2. To Impart knowledge about insurance agent and Information technology.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method (L)	15 hrs per unit (for 5 units)	75
Evaluation – Class Tests (CT)	1 hrs (for 5 units)	5
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)	5
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)	3
Final Evaluation (FE)	3 hrs (Rehearsal)	2
Hrs per Week	6	Credit	6	Total	90

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit – I Theory of International Trade				
1.	3	Theories of Absolute Advantage	L			
2.	3	Comparative advantage and opportunity costs Heckscher	L			
3.	3	Ohlin Theory of Trade	L			
4.	3	Leontief Paradox	L			
5.	3	Kravis and Linder Theory of Trade	L			
		UNIT – II Gains from Trade, Terms of Trade and Theory of Intervention				
6.	3	Sources of Gain	L			
7.	3	Factors determining size of gain	L			
8.	3	Criteria of measuring gains from trade	L			
9.	3	Concepts of terms of trade	L			
10.	2	Factors deciding terms of trade	L			
11.	1	Theory of interventions	L			
		UNIT – III Balance Payment				
12.	3	Meaning and structure of balance of payments	L			
13.	3	Disequilibrium in balance of payments Measures to correct deficit in balance of payments Theories of foreign exchange	L			
14.	3	The Mint parity theory	L			
15.	3	The purchasing power parity theory	L			
16.	3	Balance of payment theory Causes of changes in the exchange rate				
		UNIT – IV International Trade and Financial institutions				
17.	3	Bretton woods system, the breakdown of the Bretton Woods systems,	L			
18.	3	The present international monetary systems	L			
19.	3	Role of WTO.	L			
20.	3	UNCTAD. IMF,	L			
21.	3	World bank and Asian development bank. SAARC.G-20. Regional Co-Operation	L			

		UNIT – V Trade Policies in India				
17.	3	Foreign trade since independence	L			
18.	3	Direction and composition of India's Foreign trade	L			
19.	3	Balance payment crisis	L			
20.	3	Balance of payments since the new economic reforms of 1991	L			
21.	3	Recent export and import policies	L			
		Seminar / Creating Awareness				
1.	1	Unit – I			S	
2.	1	Unit – II			S	
3.	1	Unit – III			S	
4.	1	Unit – IV			S	
5.	1	Unit – V			S	
		Class Test				
1	5	Unit – I, Unit – II, Unit – III, Unit – IV and Unit – V		CT		
		Final Evaluation (FE)				
1	5	Entire Course				FE

Head of the Department

Signature of the Staff Member(s)

IQAC Co-ordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff : Mrs. S.P. Balasangeetha

Programme : II. B.A. Economics   Academic Year : 2022-2023

Semester : IV   Course Code : U21EC4A5

Course Title : Mathematical Methods For Economics - II

Objectives :

1. To gain sound knowledge on the principle of public Finance.
2. To understand roles of different governments.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method (L)	13 hrs per unit (for 5 units)	65
Evaluation – Class Tests (CT)	1 hrs (for 5 units)	3
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)	3
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)	2
Final Evaluation (FE)	3 hrs (Rehearsal)	2
Hrs per Week	5	Credit	5	Total	75

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit – I Differentiation						
1.	2	Functions of Two or more Variables, First and second order simple and partial derivatives	L			
2.	3	Total differential, Partial elasticity values and growth rates, Economic applications of partial derivatives	L			
3.	3	Marginal utility, Marginal rate of substitution, Marginal productivity, Marginal rate of technical substitution	L			
4.	3	Input elasticities, Elasticity of substitution, Euler's theorem	L			
5.	3	Properties of homogenous production function, cob, douglas and CES function	L			
UNIT – II Optimization in Economics						
6.	2	First and second order conditions for maximum and minimum of $Y = f(x)$ and $Z = f(X, Y)$	L			
7.	3	Maximum revenue,	L			
8.	3	Minimum average cost	L			
9.	3	Maximum profit of a firm	L			
10.	3	Monopoly with tax and price discrimination	L			
11.	3.	Duopoly and game theory	L			
UNIT – III Constrained Optimization						
12.	2	Lagrange's multiplier method, First and Second order conditions	L			
13.	2	Consumer equilibrium, Slutsky equation, Producer equilibrium	L	'		
14.	2	Least cost combination of inputs, Expansion path	L			
15.	2	Minimizing cost with output constraint	L			
16.	2	Maximizing profit with output constraints	L			

		Unit - IV Applications of Integration				
17.	3	Basic rules and methods of integration	L			
18.	3	Deriving total from marginal values	L			
19.	2	Consumer's surplus and producer's surplus	L	.		
		UNIT – V Dynamic Analysis				
22.	3	First order differential equations	L			
23.	2	Harrod domar and solow growth models	L			
24.	2	Capital expansion model	L			
25.	2	Linear and exact difference equations	L			
26.	3	Cob, Web model	L			
		Seminar / Creating Awareness				
1.	1	Differentiation input Elasticities, Elasticity of substitution Euler's theorem			S	
2.	1	Optimization in Economics Minimum Revenue			S	
3.	1	Constrained optimization minimizing cost with output constraint			S	
4.	1	Applications of integration Basic rules and methods of integration			S	
5.	1	Dynamic Analysis capital expansion Model			S	
		Class Test and creating awareness				
1	3	Unit -I, IV and V		CT		
		Final Evaluation (FE)				
1	2	Entire Course				FE

S.Rமி

Head of the Department

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Signature of the Staff Member(s)

IQAC Co-ordinator

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

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GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff : Mrs. M. Ananthalakshmi

Programme : II B.A. Economics   Academic Year : 2022-2023

Semester : I Semester   Course Code : U21EC1A1

Course Title : STATISTICAL METHODS - I

Objectives :

1. To make the students study about rules and types of data classification.
2. To make the students learn the basic and elementary tools in statistics such as correlation and regression analysis

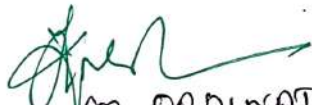| Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method (L)	13 hrs per unit (for 5 units)	65
Evaluation – Class Tests (CT)	1 hrs (for 5 units)	3
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)	3
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)	2
Final Evaluation (FE)	3 hrs (Rehearsal)	2
Hrs per Week	5	Credit	5	Total	75

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit – I Meaning and Definition						
1.	2	Introduction	L			
2.	3	Definition	L			
3.	3	Its relations with other Sciences	L			
4.	2	Functions	L			
5.	3	Limitations	L			
UNIT – II Data Collection						
6.	2	Collection of Data	L			
7.	3	Primary and Secondary Sources	L			
8.	3	Methods of Collection primary data	L			
9.	3	Precautions in the use of Secondary data	L			
10.	2	Framing a Questionnaire.	L			
UNIT – III Sampling Designs						
11.	2	Sampling Designs	L			
12.	2	Census and Sample method, Merits and demerits	L			
13.	2	Essentials of sampling	L			
14.	3	Methods of sampling Merits and demarits	L			
15.	2	Statistical error	L			
16.	2	Measurements of errors	L			
UNIT – IV Classification & Tabulation						
17.	3	Classification & Tabulation	L			
18.	3	Rules and Types	L			
19.	2	Frequency Distribution	L			
20.	3	Tabulation parts, Rules	L			
21.	2	Types of Tables	L			
UNIT – V Diagrams & Graphs						
22.	3	Diagrams & Graphs Rules for making diagram	L			

23.	2	Types of Diagrams	L			
24.	3	Graphic presentation, general rules	L			
25.	2	Difference between graphs and diagrams	L			
26.	3	Histogram Frequency polygon frequency curve	L			
Seminar / Creating Awareness						
1.	1	Unit – I			S	
2.	1	Unit – II			S	
3.	1	Unit – III			S	
4.	1	Unit – IV			S	
5.	1	Unit – V			S	
Class Test and Five year planning						
1	3	Unit - I, III and Unit - V		CT		
Final Evaluation (FE)						
1	2	Entire Course				FE

S Rajaram

Head of the Department

M. Ananthalakshmi

Signature of the Staff Member(s)

IQAC - CO-ORDINATOR.

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

Teaching Plan

Name(s) of the Staff: N.VIJAYASUNDARI

Programme: III B.A ECONOMICS   Academic Year: 2022-2023

Semester: VI   semester   Course Code:18ECC613

Course Title: Personnel management

Objectives: 1.To enable the students to know about the meaning,scope,principles and functions of personnel management

2.To make the students to study about the man power planning ,job analysis,motivation and leadership of personnel management

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	15 hrs per unit (for 5 units)	75
Evaluation –Class Tests (CT)	1 hrs (for 5 units)	03
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of Numerical methods in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	02
Hrs per week	6	Credit	6	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit-I						
1	3	Meaning and definition of personnel management	L			
2	3	Characteristics-scope-objectives	L			
3	3	Principles	L			
4	3	Functions-managerial and operative functions	L			
5	3	problems	L			
Unit-II						
6	3	Meaning –definition of manpower planning	L			
7	3	Importance of manpower planning	L			
8.. .	3	Characteristics- objectives-needs-Factors influencing manpower planning	L			
9	3	Internal and external factors	L			
10	3	Steps involved in manpower planning-Limitations	L			
Unit – III						
11	3	Recruitment	L			
12	3	Selection and placementof personnel	L			
13	3	Job analysis-job description-job specification	L			
14	3	Job evaluation-interviews and Tests	L			
15	3	Promotion- Transfer	L			
16	3	Training and methods of training	L			
Unit – IV						
17	3	Motivation – meaning-definition	L			
18	3	Nature and characteristics of motivation	L			
19	3	Importance-Theories of motivation	L			

20	3	Maslow's Need Hierarchy Theory-Mc.Gregor's X and Y theories	L			
21	3	Herbler's two factor theory-Vroom's expectancy theory	L			
Unit – V						
22	3	Concept of Leadership	L			
23	3	Characteristics of leadership	L			
24	3	Importance- Qualities-Functions	L			
25	3	Typesof leadership-Theories of leadership	L			
26	3	Traits theory- Behavioural theory- Situational theory	L			
Seminar/Creating Awareness						
1	1	UNIT-I characteristics of personnel management			S	
2	1	UNIT-II Importance of manpower planning			S	
3	1	UNIT-III Job analysis			S	
4	1	UNIT – IV Vroom's Expectancy theory			S	
5	1	UNIT-V Importance of leadership			S	
Class Test						
1	3	UNIT I-UNIT III and UNIT-V		CT		
Final Evaluation (FE)						
1	2	Entire course				F

S.Rajath.....
Head of the Department

N. Vijay .....
Signature of the Staff Member(s)

IQAC - Co-ordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff : Mrs. N. VIJAYASUNDARI

Programme : III B.A. Economics   Academic Year : 2022-2023

Semester : V   Course Code : 18ECC510

Course Title : CAPITAL MARKET

Objectives :

1. To make the students study about rules and types of data classification.
2. To make the students learn the basic and elementary tools in statistics such as correlation and regression analysis

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method (L)	13 hrs per unit (for 5 units)	65
Evaluation – Class Tests (CT)	1 hrs (for 5 units)	3
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)	3
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)	2
Final Evaluation (FE)	3 hrs (Rehearsal)	2
Hrs per Week	5	Credit	5	Total	75

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit – I Functions and importance						
1.	2	Capital Market, Definition, Features, Concepts, Functions, Structures	L			
2.	3	Importance and Growth of Capital Market in India	L			
3.	3	Money markets, definition, Features	L			
4.	2	Capital market vs money market	L			
5.	3	Role of Commercial banks	L			
UNIT – II Corporate securities						
6.	2	Long term sources, Corporate securities	L			
7.	2	Equity shares, Merits and Demerits	L			
8.	3	Preference shares, Merits and Demerits	L			
9.	3	Debentures and Bonds, Convertible and Non-Convertible Debentures , Full and partly convertible debentures	L			
10.	3	Company deposits	L			
UNIT – III Financial Institutions						
11.	3	Financial Institutions	L			
12.	3	LIC, UTI, IDBI, SIDBI, SFCs	L			
13.	1	Mutual Funds	L			
14.	3	Open and Close ended Mutual Funds	L			
15.	3	Global Depositary Receipts	L			
UNIT – IV Primary Markets and Secondary Market						
16.	2	Public issues of shares, Primary market, Secondary market	L			
17.	3	Issue of shares at Par and at Premium	L			
18.	2	Right issue of shares, Issue of Bonus Shares	L			
19.	2	Underwriting of Shares	L			
20.	2	Merchant Banks Foreign Institutional investors	L			

		UNIT – V Stock Exchange				
22.	3	Stock exchange, Meaning Definition, Characteristics, Functions	L			
23.	3	Listing of securities	L			
24.	2	Dealers in stock exchange	L			
25..	2	Securities and exchange board of India (SEBI) Functions	L			
26.	3	Powers and Performance	L			
		Seminar / Creating Awareness				
1.	1	Unit – I			S	
2.	1	Unit – II			S	
3.	1	Unit – III			S	
4.	1	Unit – IV			S	
5.	1	Unit – V			S	
		Class Test and Five year planning				
1	3	Unit II, III and Unit V		CT		
		Final Evaluation (FE)				
1	2	Entire Course				FE

S. Rajapani
Head of the Department

N. Vijaysri
Signature of the Staff Member(s)

IQAC – Co-ordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff   : Mrs. D. Mekala

Programme   : III B.A. Economics   Academic Year : 2022-2023

Semester   : VI semester   Course Code : 18EC6EC4:1

Course Title   : Rural Industrialization

Objectives :

1. To make the students to know about the meaning of Rural Industrialization.
2. To study the role of Rural Industrialization and its major steps taken for its development.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method (L)	13 hrs per unit (for 5 units)	65
Evaluation – Class Tests (CT)	1 hrs (for 5 units)	3
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)	3
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)	2
Final Evaluation (FE)	3 hrs (Rehearsal)	2
Hrs per Week 5 Credit	5 Total	75

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit – I Meaning and Role of Industrialization				
1.	2	Introduction of Rural Industries	L			
2.	3	Meaning of Rural Industrialization, urban Industrialization	L			
3.	3	Comparison of Rural and Urban Industries	L			
4.	2	Various Reasons of Rural Industrialization	L			
5.	3	Role of Rural Industrialization	L			
		UNIT – II Types of Rural Industries				
6.	2	Introduction – cottage Industries definition	L			
7.	3	Features of Cottage and small scale industries	L			
8.	3	Difference between small scale and cottage Industries	L			
9.	2	Agro based industries – Khadhi and Village Industries	L			
10.	3	Handicrafts, Handloom Industry – Sericulture – Coir Industry	L			
		UNIT – III Sources of Finance				
11.	2	Types of Industrial Finance	L			
12.	2	Drawbacks of Small scale Industries	L			
13.	2	Drawbacks of cottage Industries	L			
14.	3	Various sources of Finance	L			
15.	2	Institutional sources of Finance	L			
16.	2	Non – Institutional sources of Finance	L			
		UNIT – IV Problems of Rural Industries				
17.	3	Problems of Rural Industries – Introduction	L			
18.	3	Problems of Locations and Raw Materials	L			
19.	2	Problems of Skilled labour and capital	L			
20.	3	Problems of Entrepreneurship and Technology	L			
21.	2	Problems of marketing and Infrastructure undue concentration	L			

		UNIT – V Government Policy Towards Rural Industries				
22.	3	Governments policy introduction	L			
23.	3	Views of Gandhi on rural Industries	L			
24.	2	Industrial policy of 1991 with reference to rural Industries	L			
25.	2	Rural Industries and five year planning	L			
26.	3	Government measures and programmes for the promotion of rural Industries	L			
		Seminar / Creating Awareness				
1.	1	Unit – I Comparison of Rural and urban Industries Role of Rural Industrialization			S	
2.	1	Unit – II Features of cottage and small scale Industries			S	
3.	1	Unit – III Sources of Finance Institutional and non Institutional sources of Finance			S	
4.	1	Unit – IV Various Problems of Rural Industries			S	
5.	1	Unit – V Industrial policy of 1991 Rural Industries and five year planning			S	
		Class Test and Five year planning				
1	3	Unit – II – Unit – III and Unit – V		CT		
		Final Evaluation (FE)				
1	2	Entire Course				FE

8. Raj...

Head of the Department

D. Mol...

Signature of the Staff Member(s)

IQAC Co-Ordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff   : Mrs. D. Mekala

Programme   : III B.A. Economics   Academic Year : 2022-2023

Semester   : V Semester   Course Code : 18ECC509

Course Title   : Environomics

Objectives :

1. To make the students to know about the meaning of Rural Industrialization.
2. To study the role of Rural Industrialization and its major steps taken for its development.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method (L)	13 hrs per unit (for 5 units)	65
Evaluation – Class Tests (CT)	1 hrs (for 5 units)	3
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)	3
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)	2
Final Evaluation (FE)	3 hrs (Rehearsal)	2
Hrs per Week	5	Credit	5	Total	75

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit – I Meaning of Environment						
1.	2	Meaning of environment	L			
2.	3	Economics and environment	L			
3.	3	Transformation curve, Scope and significance of Environomics	L			
4.	2	Tragedy of commons, An analysis	L			
5.	3	Taj mahal, river Ganes, Marina Beach and Public parks	L			
UNIT – II Basic Theories of environomics						
6.	2	Market failure and externality	L			
7.	2	Types of externality	L			
8.	3	Perfect competition and externality	L			
9.	3	Imperfect competition and externality	L			
10.	3	Imperfect competition and externality	L			
UNIT – III Environmental problems and protection						
11.	3	Types of Pollution	L			
12.	3	Air, water	L			
13.	1	Noise Pollution				
14.	3	Pollution Control and Environmental protection	L			
15.	3	Solid Waste management b kumbakonam municipality	L			
UNIT – IV Environmental Education and Law						
16.	2	Environmental awareness, Education through environmental movements, Silent valley movement, Narmada Movement.	L			
17.	3	Fundamental Right, Legal policy and environmental protection, issues relating to science & technology.	L			
18.	2	The water (Prevention and control of Pollution) Act, 1974	L			

19.	2	Air (Prevention and control of pollution) Act, 1981	L			
20.	2	The environment (Protection) Act 1986	L			
21.	2	The forest conservation act.	L			
		UNIT – V Current Environmental Issues				
23.	3	Global Warming	L			
24.	3	Green House Effect	L			
25.	2	Ozone depletion	L			
26.	2	Acid rain	L			
27.	3	Deforestation, wild life conservation	L			
		Seminar / Creating Awareness				
1.	1	Unit – I			S	
2.	1	Unit – II			S	
3.	1	Unit – III			S	
4.	1	Unit – IV			S	
5.	1	Unit – V			S	
		Class Test and Five year planning				
1	3	Unit - I, Unit-II and Unit - IV		CT		
		Final Evaluation (FE)				
1	2	Entire Course				FE

Head of the Department

Signature of the Staff Member(s)

Kum................ 612 001

IQAC Co-ordinator

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH   DEPARTMENT OF ECONOMICS

Teaching Plan

Name(s) of the Staff: Dr. P.Veerachamy

Programme: I MA Economics

Academic Year: 2022-2023

Semester: II   semester

Course Code: P21ECC206

Course Title: MACRO ECONOMIC ANALYSIS - II

Objectives: 1. To Make The Students understanding the important of macroeconomic concepts .

2. To trained students in analyzing economic problems with the help of theoretical foundations

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	15 hrs per unit (for 5 units)	75
Evaluation –Class Tests (CT)	1 hrs (for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of Numerical methods in current research sector (CA)	1 hour per unit(for 5 units)	02
Final Evaluation (FE)	3 hrs (Rehearsal)	03

Hrs per week	6	Credit	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit-I						
1	3	Post Keynesian approach to demand for money	L			
2	3	Patinkin and real balance effect	L			
3	4	Approaches of baumol –tobin-frideman and the quantity theory	L			
4	2	Crisis in Keynesian economics	L			
5	3	The revival of monetarism	L			
Unit-II						
6	3	Supply of money – definition – determination of money supply	L			
7	3	Central bank and high powered money	L			
8	3	Commercial banks and credit creations	L			
9	2	Control of money supply	L			
10	4	Instruments of credit control	L			
Unit – III						
12	2	Meaning - role of non banking financial intermediaries	L			
13	3	Radcliffe committee	L			
14	3	Roll and regulation of NBFI	L			
15	2	Development of NBFI in india and the control of RBI	L			
16	3	NBFI vs commercial banks	L			
17	2	Tobin – Gurley And Shaw theory	L			
Unit – IV						
18	3	Inflation - causes	L			
19	2	Types and effects of inflation	L			
20	4	Inflation and unemployment	L			

			L			
21	4	Philips curve – deflation				
22	2	Stagflation – friedman philips arguments (long run)	L			

Unit – V

			L			
23	3	Objectives of macro economic policy				
24	3	Monetary policy	L			
25	3	Fiscal policy	L			
26	3	Tools and problems	L			
27	3	Monetarism vs Keynesianism	L			

Seminar

					S	
1	1	UNIT-I Friedman and quantity theory				
2	1	UNIT-II determination of money supply			S	
3	1	UNIT-III role of non banking financial intermediaries			S	
4	1	UNIT – IV inflation and deflation			S	
5	1	UNIT-V monetary and fiscal policy			S	

Class Test

				CT		
1	5	UNIT I-UNIT V				

Final Evaluation (FE)

						FE
1	3	Entire course				

Head of the Department

Signature of the Staff Member(s)

IQAC coordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ECONOMICS

TEACHING PLAN

Name of the Staff   : Mrs. S.P. Balasangeetha

Programme   : I M.A. Economics   Academic Year : 2022-2023

Semester   : II   Course Code : P21ECC207

Course Title   : Fiscal Economics

Objectives :

1. To gain sound knowledge on the principle of public Finance.
2. To understand roles of different governments.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method (L)	13 hrs per unit (for 5 units)	65
Evaluation – Class Tests (CT)	1 hrs (for 5 units)	3
Seminar/ Problem solving / Class Work(s)	1 hour per unit (for 5 units)	3
Creating awareness about the latest development of Numerical methods in current research sector (CA)	1 hour per unit (for 5 units)	2
Final Evaluation (FE)	3 hrs (Rehearsal)	2
Hrs per Week	5	Credit	5	Total	75

Hours per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL. NO.	HOUR	UNIT – CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit – I Public Revenue				
1.	2	Classifications : Adam smith, Dalton and Taylor	L			
2.	3	Principles of taxation – principle of equity, cost of service theory, Benefit principle ability to pay theory	L			
3.	3	Income tax	L			
4.	2	GST	L			
5.	3	Tax and Non – Tax revenue of the government of India	L			
		UNIT – II Public Expenditure				
6.	2	Reason for the growth of public expenditure	L			
7.	3	Wagner's and Musgrave's views on public expenditure, peacock – wiseman and colin clark hypothesis	L			
8.	3	Plan and non – plan expenditure of the government of Indian	L			
9.	3	Effects of public expenditure	L			
10.	3	Controls – public expenditure	L			
		UNIT – III Public Debt				
11.	2	Concept of dept	L			
12.	2	Public dept management	L			
13.	2	Definition – objectives	L			
14.	3	Principles of public dept management	L			
15.	2	Methods of repayment	L			
16.	2	Public dept in India since in dependence	L			
		UNIT – IV Budget				
17.	3	Budget concept	L			
18.	3	Classification – process	L			
19.	2	Concepts of zero base budgeting	L			

No.	Hrs	Topic	L	CT	S	FE
20.	3	Recent union budget in India	L			
21.	2	Deficit financing : concept – objectives Measures	L			
		UNIT – V Financial Relations and fiscal policy				
22.	3	Federal Finance	L			
23.	2	Concepts – principles – problems	L			
24.	2	Finance commission; features – functions – Recommendations – Finance commissions	L			
25.	2	Recent finance commission	L			
26.	3	Fiscal policy ; objective – Instruments – Role of Fiscal policy in India	L	,		
		Seminar / Creating Awareness				
1.	1	Public Revenue			S	
2.	1	Public Debt methods of repayment			S	
3.	1	Budget Concept			S	
4.	1	Public expenditure controls			S	
5.	1	Budget classification			S	
		Class Test and creating awareness				
1	3	Unit - I, III		CT		
		Final Evaluation (FE)				
1	2	Entire Course				FE

Head of the Department

Signature of the Staff Member(s)

IQAC Co-ordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH   DEPARTMENT OF ECONOMICS

Teaching Plan

Name(s) of the Staff: Dr. P.Veerachamy

Programme: I MA Economics

Semester: I semester

Academic Year: 2022-2023

Course Code: P21ECC101

Course Title: MACRO ECONOMIC ANALYSIS -1

Objectives: 1. To make the students understanding the important of macroeconomic concepts.

2. To train students in analyzing economic problems with the help of theoretical foundations

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	15 hrs per unit (for 5 units)	75
Evaluation –Class Tests (CT)	1 hrs (for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of Numerical methods in current research sector (CA)	1 hour per unit(for 5 units)	02
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit-I						
1	3	Meaning ,Nature and scope of Macro economics	L			

2	3	Importance and Limitations of Macro Economics	L			
3	4	Circular flow of income in Two ,Three and Four sector Economy	L			
4	2	Economic Welfare Analysis	L			
5	3	National Income Analysis: Concepts ,Methods and Difficulties	L			
		Unit-II				
6	3	Classical Theory –J.B Say's Law of Market	L			
7	3	Wages and Employment - Pigou"s version	L			
8	3	Keynesian Theory of Employment	L			
9	4	Principles of Effective Demand and Aggregate demand Function	L			
10	2	Aggregate Supply functions	L			
		Unit – III				
12	2	Consumption function - Concepts	L			
13	3	Keynes Physiological law of Consumption	L			
14	2	Factor's influencing Consumption	L			
15	4	Theories: Absolute income and Relative Income	L			
16	2	Permanent Income Hypothesis	L			
17	2	Life Cycle Hypothesis	L			
		Unit – IV				
18	3	Concepts - Types , Marginal efficiency of investment	L			
19	2	Marginal efficiency of Capital	L			
20	3	Factors affecting MEC-Relationship between MEC and MEI	L			
21	4	Multiplier-Theories of Multiplier :Dynamic, Balanced Budget	L			

22	3	Foreign trade multiplier, Principles of Acceleration-Super Multiplier	L			
		Unit – V				
23	3	Product Market Equilibrium	L			
24	3	IS Curve-Derivation of IS Curve-Slope of IS Cure-Shift in IS Curve	L			
25	3	Money Market Equilibrium	L			
26	3	Derivation of LM Curve-Slope and Shift in general equilibrium of Product	L			
27	3	Money Market- Changes in General Equlibrium	L			
		Seminar				
1	1	UNIT-I T National Income Analysis			S	
2	1	UNIT-II Theories of Employment			S	
3	1	UNIT-III Life cycle Hypothesis			S	
4	1	UNIT – IV Balanced Budget and Multipler			S	
5	1	UNIT-V Product Market equliprium			S	
		Class Test				
1	5	UNIT I-UNIT V		CT		
		Final Evaluation (FE)				
1	3	Entire course				FE

Head of the Department

IQAC coordinator

Signature of the Staff Member(s)

PRINCIPAL

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH   DEPARTMENT OF ECONOMICS

Teaching Plan

Name(s) of the Staff: Dr. P.Veerachamy

Programme: II MA Economics

Semester: IV Semester

Academic Year: 2022-2023

Course Code:P21EC4MBE4:1

Course Title: ENVIRONMENTAL ECONOMICS

Objectives: 1. To learn the importance of environment for the economic system

2. The flow of resources between the two systems and the consequences of pollution to

human welfare

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	15 hrs per unit (for 5 units)	75
Evaluation –Class Tests (CT)	1 hrs (for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of Numerical methods in current research sector (CA)	1 hour per unit(for 5 units)	02
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	4	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	3	Nature and scope of Environmental Economics	L			

2	3	Basic concepts of environmental economics	L				
3	4	Environmental segments-Ecology -Eco system	L				
4	2	Organization and structure of eco-system	L				
5	3	Relationship between environment and the economy	L				
Unit-II							
6	3	Efficiency in a private economy	L				
7	3	Theory of material balance model-spillover effects	L				
8	3	Externalities Efficiency and social welfare	L				
9	4	Internalization of externalities-solutions to the externalities-Environmental as a public good	L				
10	2	Government failure and environmental damage	L				
Unit – III							
12	2	Risk of a deteriorating environment	L				
13	3	Natural resources and their conservation	L				
14	2	Population and environmental quality	L				
15	4	Economic growth and environmental quality	L				
16	2	Retarding impacts –Green house effect	L				
17	2	Acid rain –Climate change	L				
Unit – IV							
18	3	Meaning of Pollution-Types of pollution – Soil ,Air, water and Noise -causes	L				
19	2	Impacts of human health, animals and vegetation	L				
20	3	Recycling of waste –Pollution and resource use	L				
21	4	Cost benefit analysis of pollution control	L				
22	3	Direct and indirect methods of pollution control	L				

		Unit – V				
23	5	Basic approaches to environmental policy	L			
24	5	Distributive effects of environmental policy	L			
25	5	law and environmental protection in india	L			
		Seminar				
1	1	UNIT-I T Environmental Segments			S	
2	1	UNIT-II Theories of public good			S	
3	1	UNIT-III Natural Resources And Their Conservation			S	
4	1	UNIT – IV Environmental Pollution			S	
5	1	UNIT-V Environmental Policies			S	
		Class Test				
1	5	UNIT I-UNIT V		CT		
		Final Evaluation (FE)				
1	3	Entire course				FE

Head of the Department

Signature of the Staff Member(s)

IQAC coordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH   DEPARTMENT OF ECONOMICS

Teaching Plan

Name(s) of the Staff: Dr. P.Veerachamy

Programme: I I MA Economics   Academic Year: 2022-2023

Semester: III   semester   Course Code: P21ECC309

Course Title: INTERNATIONAL ECONOMICS

Objectives: 1. To acquire basic knowledge about international trade and trade issues .

2. To understanding of the key concepts and practical applications of international trade

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	15 hrs per unit (for 5 units)	75
Evaluation –Class Tests (CT)	1 hrs (for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of Numerical methods in current research sector (CA)	1 hour per unit(for 5 units)	02
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week 6	Credit 5	Total 90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	3	Theories of absolute advantage	L			

2	3	Comparative advantage and opportunities cost	L				
3	4	Heckscher and ohlin theory of trade	L				
4	2	Leontief paradox	L				
5	3	Kravis and linder theory of trade	L				
Unit-II							
6	3	Sources of gain	L				
7	3	Factors determining size of gain - Criteria of measuring gains from trade	L				
8	3	Concepts of terms of trade	L				
9	2	Factors deciding terms of trade	L				
10	4	Theory of interventions – Tariff, Quota	L				
Unit – III							
12	2	Balance of payments - meaning and structure	L				
13	3	Disequilibrium in balance of payments – measures to correct deficit in balance of payments	L				
14	3	Theories of foreign exchange – the mint parity theory	L				
15	2	The purchasing power parity theory	L				
16	3	balance of payment theory	L				
17	2	Causes of changes in the exchange rates	L				
Unit – IV							
18	3	Bretton woods systems – the breakdown of the bretton woods system	L				
19	2	The present international monetary systems	L				
20	4	Role of WTO, UNCTAD, IMF, World Bank	L				
21	4	Asian Development Bank And SAARC	L				
22	2	G20 regional cooperation	L				

		Unit – V				
23	3	Foreign trade since independence	L			
24	3	Direction and compositions of india's foreign trades	L			
25	3	Balance of payments crisis	L			
26	3	Balance of payments since the new economic reforms 1991	L			
27	3	Recent export and import policy	L			
		Seminar				
1	1	UNIT-I T David ricardo comparative cost theory			S	
2	1	UNIT-II terms of trade			S	
3	1	UNIT-III Balance Of Payment S			S	
4	1	UNIT – IV Asian development banks			S	
5	1	UNIT-V Trade Policies In India			S	
		Class Test				
1	5	UNIT I-UNIT V		CT		
		Final Evaluation (FE)				
1	3	Entire course				FE

Head of the Department

IQAC coordinator

Signature of the Staff Member(s)

POST GRADUATE AND RESEARCH DEPARTMENT OF COMMERCE

Teaching Plan

Name(s) of the Staff: R.ANUSUYA

Programme: B.COM

Academic Year: 2022-23

Semester: II semester

Course Code: U21CO2A3

Course Title: MARKETING MANAGEMENT

Objectives:
- To provide basic knowledge of concepts, principles, tools and techniques of marketing

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hours per unit	60
ICT Enabled Lectures [I]	----	----
Practical Demonstration[P]	----	---
Tutorial (T)	----	----
Field visit (FV)	----	----
Group discussion	----	----
Evaluation –Class Tests (CT)	1 hours per unit	5
Seminar/problem solving/class work(S)	5 hours per unit	5
Creating awareness about the latest developments of quantum commerce in current research sector (CA)	-----	----
Final Evaluation (FE)	1 hours per unit	5

Hrs per week	6	Credit	5	Total	75

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT –CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		UNIT –I:				
1	2	Introduction, Meaning, definition	L			
2	2	Evaluation of marketing concept	L			
3	2	Features of marketing	L			
4	3	Functions of marketing	L			
5	3	Market segmentation	L			

			UNIT - II:				
6	2		Buyer behavior: determination of consumer buying behaviour	L			
7	3		Product, classification of product, product policy.				
8	3		Product mix, factors influencing, product mix, major product mix.	L			
				L			
9	2		Product life cycle, product development.				
10	2		Product diversification, elimination.	L			
				L			
			UNIT - III:				
12	2		Introducing price, objectives.				
13	3		Factors determining pricing.	L			
14	3		Producers for pricing determination.	L			
15	2		Pricing policy.	L			
16	2		kinds of pricing	L			
				L			
			UNIT - IV:				
17	2		Promotion, channels of distribution, kinds of middle man.	L			
18	2		Services rented by wholesaler and retailer.				
19	2		Form of promotion, sales promotion.	L			
20	3		Personal selling, publicity public reaction.	L			
21	3		Advertising, media, advantage and disadvantage.	L			
				L			
			UNIT - V:				
22	2		Modern marketing, E marketing, business model associated with E marketing.	L			
23	2		Web site associated with E marketing.				
24	3		E marketing benefits and limitation, scope of E marketing.	L			
				L			
25	3		Green marketing digital marketing.				
26	2		Online marketing.	L			
				L			
			Seminar				
1	1		Unit 1: function of marketing				
2	1		Unit 2: product life cycle, new product development.			S	
3	1		Unit 3: Kinds of pricing.			S	
4	1		Unit 4: Personal selling, sales promotion.			S	
5	1		E marketing benefits, limitation, online marketing.			S	
						S	
			Class Test				
1	5		Unit 1 – Unit 2				
					C.T		
			Final Evaluation (FE)				
1	5		Entire course				
							F.E

Head of the Department

Signature of the Staff Member(s)

Teaching Plan

Name(s) of the Staff: R.Anusuya

Programme: Commerce

Semester: VI

Academic Year   2022-2023

Course Code: 18CO6EC5-2

Course Title: E- Commerce

Objectives:

- To enable the students become familiar with the mechanism for conducting business transactions through electronic modes.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	14 hrs per unit (for 5 units)	70
ICT Enabled Lectures [I]	---	----
Practical Demonstration[P]	-----	----
Tutorial (T)	-----	----
Field visit (FV)	-----	----
Group discussion	-----	----
Evaluation –Class Tests (CT)	5 UNIT	5
Seminar/problem solving/class work(S)	5 UNIT	10
Creating awareness	---	----
Final Evaluation (FE)	5 HRS PER UNIT	5

Hrs per week	5	Credit	5	Total	90
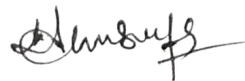
Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT –CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		UNIT1				
1	4	Introduction to e-commerce – meaning - definition	L			
2	4	Features – advantages of e – commerce to organization	L			
3	4	Limitations of e- commerce	L			
4	3	E- Business VS E- commerce – supply chain management.	L			
		Unit – 2				
5	3	Electronic payment system – introduction	L			
6	4	Traditional payment system – internet based payment system.	L			
7	3	Electronic fund transfer , automated clearing house.	L			
8	4	Digital cash – E- Cash E- Chequs	L			
		Unit –3				
9	4	Electronic money- Benefit of e- money	L			
10	3	Gateways – introduction – process	L			
11	4	Advantages and disadvantages	L			
12	3	Protocol- working of the SET protocol	L			
		Unit – 4				
13	3	Applications of e –commerce – Introduction	L			
14	3	Business to business	L			
15	3	Online – travel services	L			
16	4	Online career industry , online banking.	L			
		Unit – 5				
17	4	Virtual organization – concept – principles	L			
18	4	Advantages – Disadvantages	L			
19	4	Types of E- Business	L			
20	4	Pure C2C business models.	L			
		Seminar				
1	2	UNIT IFeatures – advantages of e – commerce to organization			S	
2	2	UNIT II Traditional payment system – internet based payment system			S	
3	2	UNIT IIIGateways – introduction - process			S	
4	2	UNIT-IVOnline – travel services			S	
5	2	Virtual organization – concept – principles			S	
		Class Test				
1	5	UNIT 1-UNIT 5		CT		
		Final Evaluation (FE)				
1	3	ENTIRE COURSE				FE

Head of the Department

Signature of the Staff Member(s)

Dr. W. JAYAS... ...n.,M.Phil.,Ph.D.,
Associate Profes... ...merce,
Go...nment College fo... ...omous),
Kumbakonam - ...

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF COMMERCE

Teaching Plan

Name(s) of the Staff: Dr. M. Maheswari

Programme: B.com

Academic Year: 2022-23

Course Code:U21COC406

Semester: IV semester

Course Title: COST ACCOUNTING

Objectives:To know the uses, methods and importance of cost accounting

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hour per unit (for 5 units)	60
ICT Enabled Lectures [I]	-----	-----
Practical Demonstration[P]	-----	-----
Tutorial (T)	-----	----
Field visit (FV)	-----	-----
Group discussion		
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	(for 5 units)	22
Creating awareness about the latest developments in current research sector (CA)	-------	---
Final Evaluation (FE)	3 hrs (Rehearsal)	03
	Hrs per week	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT –CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		UNIT-1 COST ACCOUNTING				
1	2	Cost accounting Definition, Scope and nature of cost accounting	L			
2	3	Cost concepts, Classification				
3	3	Objectives and advantages of cost concepts	L			
4	3	Difference between Financial accounting and Cost accounting	L			
5	2	Cost sheets(excluding tenders and quotation)	L			
			L			
		UNIT - II: MATERIALS CONTROL				
6	2	Meaning and Objectives of Material control				
7	3	Levels of stock, Bin card, Perpetual Inventory	L			
8	3	ABC Analysis, EOQ, Stores Ledger, Pricing of Material issues	L			
			L			
9	3	FIFO, LIFO				
10	2	Simple average and Weighted average.	L			
			L			
		UNIT - III: LABOUR COST				
12	2	Labour cost, Meaning and Definition				
13	2	Methods of remuneration and Incentive schemes	L			
14	2	Taylor's plan and Merricks plan	L			
15	3	Halsey and Rowan plan	L			
16	2	Labour Turnover types and causes	L			
17	2	Labour turnover remedies	L			
			L			
		UNIT - IV: OVERHEADS				
18	2	Overheads classification, allocation, appointment	L			
19	3	Primary and Secondary distribution	L			
20	2	Repeated distribution method	L			
21	3	Simultaneous equation method	L			
22	3	Machine hour rate	L			
		UNIT - V: JOB COSTING				
23	3	Job Costing	L			
24	3	Contract costing(Simple problems)	L			
25	2	Process costing	L			
26	2	Batch costing	L			
27	3	Batch costing	L			
		PROBLEM SOLVING				
1	1	UNIT-I			S	
2	1	UNIT-II			S	
3	1	UNIT-III			S	
4	1	UNIT – IV			S	
5	1	UNIT-V			S	
		Class Test				
1	5	UNIT I-UNIT V		CT		
		Final Evaluation (FE)				
1	3	Entire course				FE

Head of the Department

Dr. W. JAYAS... ...V.Com.,M.Phil.,Ph.D ...
...ce,
...s),

Co-ordinator
Internal Quality ... ...
Govt College for ...
Kumbakonam...

Signature of the Staff Member(s)

Teaching Plan

Name(s) of the Staff: Dr. M. Maheswari

Programme: B.com

Semester: III Semester

Academic Year: 2022-23
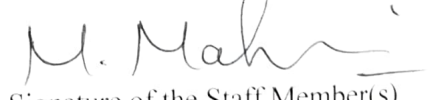
Course Code:P21COC312

Course Title: RESEARCH METHODOLOGY

Objectives:

• To give students a broad understanding of research methodology, including qualitative and quantitative methods

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hour per unit (for 5 units)	60
ICT Enabled Lectures [I]	-----	-----
Practical Demonstration[P]	-----	-----
Tutorial (T)	-----	----
Field visit (FV)	-----	-----
Group discussion		
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	(for 5 units)	20
Creating awareness about the latest developments in current research sector (CA)	-------	---
Final Evaluation (FE)	5hrs (Rehearsal)	05
Hrs per week	5	Total	90	Total	

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT –CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		UNIT-I RESEARCH IN BUSINESS				
1	2	Meaning and definition of Research in business	L			
2	3	Nature and Scope of Research	L			
3	3	Objectives and qualities of research	L			
4	3	Methods of Research	L			
5	2	Techniques of Research	L			

			L	S	CT	FE
UNIT - II: RESEARCH DESIGN						
	2	Meaning and definition of Research Design				
	3	Features of Research Design	L			
8	3	Formulation of Research problem	L			
9	3	Testing of Hypothesis	L			
10	2	Testing of Hypothesis.	L			
			L			
UNIT – III: DATA COLLECTION						
11	2	Methods of Data collection				
12	2	Primary and secondary data, Observation	L			
13	2	Interview Questionnaire & Schedule	L			
14	3	Attitude measurement and scales	L			
15	2	Sample and Sampling methods, Types	L			
16	2	Random and Non-Random	L			
			L			
UNIT – IV: CORRELATION						
17	2	Correlation and Regression				
			L			
18	3	Hypothesis, Testing of hypothesis				
19	2	Type-I and Type-II errors, Level of Significance	L			
20	3	Chi-Square	L			
21	3	ANOVA	L			
			L			
UNIT - V: REPORT WRITING						
22	3	Report Writing and presentation steps in report writing				
23	3	Substance of Report	L			
24	2	Format of Report	L			
25	2	Importance of foot note and Bibliography	L			
26	3	Index vs bibliography	L			
			L			
Seminar						
1	1	UNIT-I Nature of research				
2	1	UNIT-II Formulation of Research problem		S		
3	1	UNIT-III Sample and Sampling methods		S		
4	1	UNIT – IV Testing of hypothesis		S		
5	1	UNIT-V Format of Reports		S		
				S		
Class Test						
1	5	UNIT I-UNIT V				
					CT	
Final Evaluation (FE)						
1	3	Entire course				
						FE

Head of the Department

Signature of the Staff Member(s)

Dr. W. JAYASEELI, M.Com., M.Ph...
...Professor of Commerce,
...for Women (Auto...mo...
... - 612 001.

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

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Teaching Plan

Name(s) of the Staff: Mrs.M.BANUMATHI

Programme: BCOM

Academic Year: 2022-23

Course Code: **U21COC304**

Semester: III semester

Course Title: PARTNERSHIP ACCOUNTING

Objectives:

- To help the students to prepare the accounts at the time of admission retirement and insolvency

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	(for 5 units)	60
ICT Enabled Lectures [I]		-----
Practical Demonstration[P]	-----	-----
Tutorial (T)	3 hour per unit(for 5 units)	......
Field visit (FV)	-----	-----
Group discussion		
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	(for 5 units)	22
Creating awareness about the latest developments of quantum physics in current research sector (CA)	----------------	
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	5	Credit	4	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT –CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		UNIT I : PARTNERSHIP DEED AND BASIC CONCEPTS				
1	2	Definition of Partnership – Partnership Deed: Rules applicable in the absence of partnership deed ; adjustments in accounts	L			
2	2	Interest on capital – Interest on drawings	L			
3	3	Capital accounts of partners – fixed capital method.;	L			
4	3	fluctuating capital method	L			
5	3	Final accounts of partnership	I			

		III. ADMISSION OF A PARTNER				
7	2	Admission : Adjustments in profit sharing ratio – Adjustment of Goodwill,	L			
8	2	Methods of valuation of Goodwill –				
9	3	Revaluation of Assets and Liabilities –	L			
10	3	Adjustments of Capital	L			
		Preparation of Balance Sheet.	L			
			L			
		UNIT - III: RETIREMENT OF A PATNER				
12	3	Retirement – Revaluation , capital account				
13	2	Balance sheet	L			
14	3	retirement cum admission	L			
15	3	Death of a partner	L			
16	4	Join Life Policy	L			
			L			
		UNIT - IV: DISSOLUTION OF A FIRM				
17	3	Dissolution of firm				
18	2	Piecemeal distribution	L			
19	2	Proportionate capital method.	L			
20	3	Garner Vs Murray	L			
21	3	Insolvency of partner/partners	L			
		Statement of affairs & deficiency accounts	L			
		UNIT - V: SALE OF PARTNERSHIP				
22	1	Purchase consideration				
23	1	Goodwill valuation	L			
24	3	Realisation and capital accounts	L			
25	2	Cash / bank accounts	L			
			L			
		PROBLEM SOLVING AND CLASS WORK				
1	3	UNIT-I Final accounts of partnership				
2	5	UNIT-II Admission of partners			CW	
3	5	UNIT-III Retirement of partners			CW	
4	5	UNIT – IV Dissolution of a firm			CW	
5	4	UNIT-V Sale of partnership			CW	
					CW	
		Class Test				
1	5	UNIT I-UNIT V				
				CT		
		Final Evaluation (FE)				
1	3	Entire course				
						FE

Head of the Department

Signature of the Staff Member(s)

Dr. W. JAYASEELI, M.Com., M.Phil., ...
Professor of Commerce,
...Women (Autonomous)
- 512 001.

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College, ...
Kumbakonam-612 001.

Teaching Plan

Name(s) of the Staff: Mrs.M.RAJA RAJESWARI

Programme: BCOM

Academic Year: 2022-23

Course Code: U21COC102

Semester: I semester

Course Title: BUSINESS COMMUNICATION

Objectives:
- To develop the necessary communication skill required for a business situation among the students.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hrs per unit (for 5 units)	60
ICT Enabled Lectures [I]		-----
Practical Demonstration[P]	-----	-----
Tutorial (T)	-----	-----
Field visit (FV)	-----	-----
Group discussion		
Evaluation –Class Tests (CT)	1 test per unit (for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments in current research sector (CA)	------	----
Final Evaluation (FE)	5 hrs (Rehearsal)	05
Hrs per week	5	Credit	4	Total	75

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT –CONTENT	L	CT	S	FE
		MODE OF TEACHING				
		UNIT –I:				
1	2	Communication – Introduction – Objectives	L			
2	3	Characteristics – Need Barriers	L			
3	2	Importance of commercial correspondence – Functions of commercial correspondence	L			
4	3	Appearance of Business Letter- Qualities of a Good Business letter	L			
5	2	Format of Business Letter	L			
		UNIT – II				
6	2	Trade enquiry – Replies,	L			
7	3	offers and quotations	L			
8	2	Status Enquiries. Orders	L			
9	3	Execution	L			
10	2	Cancellation	L			
		UNIT – III				
12	3	Complaint	L			
13	3	and their Adjustments	L			
14	3	Circular letters	L			
15	3	Collection letters	L			
		UNIT – IV				
16	4	Application for Situation	L			
17	4	Banking correspondence	L			
18	4	Export and Import Trade correspondence.	L			
		UNIT – V				
19	2	Electronic communication: Internet —-	L			
22	3	World Wide Web - E mail	L			
23	3	Voice Mail – SMS – Whatsapp	L			
24	2	Video Conferencing	L			
25	2	Interactive Voice response system (IRVS)	L			
		Seminar				
1	1	UNIT-I Appearance of Business Letter			S	
2	1	UNIT-II offers and quotations			S	
3	1	UNIT-III Collection letters			S	
4	1	UNIT – IV Export Trade correspondence			S	
5	1	UNIT-V Voice Mail – SMS – Whatsapp			S	
		Class Test				
1	5	UNIT I-UNIT V		CT		
		Final Evaluation (FE)				
1	5	Entire course				FE

Head of the Department

Signature of the Staff Member(s)

Co-ordinator
Internal Quality Assurance Cell-IQAC
Govt. College for Women (A)
Kumbakonam- 612 001

Dr. W. JAYASEELI, M.Com.,M.Phil.,Ph.D
Associate Professor of Commerce,
Government College for Women
Kumbakonam -

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF MATHEMATICS

Teaching Plan

Name(s) of the Staff: Dr.G.Amuda

Programme: M.Sc MATHEMATICS   Academic Year: 2022-2023

Semester: I semester   Course Code: P21MC103

Course Title: Graph Theory

Objectives:

1.To introduce the basic concepts of Graph Theory.

2. To give applications of Graph Theory .

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	13 hrs per unit (for 5 units)	65
ICT Enabled Lectures [I]	-----	-----
Practical Demonstration[P]		-----
Tutorial (T)	1 hour per unit(for 2 units)	02
Field visit (FV)	-----	-----
Group discussion		05
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of quantum physics in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I Graphs, Sub graphs and Trees				
1	2	Introduction and Basic Definition The definition and some examples	L			
2	3	Graphs and simple graphs – Graph Isomorphism	L			
3	3	The Incidence and Adjacency Matrices – Sub graphs	L			
4	3	Vertex Degrees – Paths and Connection – Cycles – Trees	L			
5	2	Cut Edges and Bonds – Cut Vertices	L			
		Unit-II Connectivity, Euler Tours and Hamilton Cycle				
6	2	Connectivity, Euler Tours and Hamilton Cycle	L			
7	3	Connectivity – Blocks	L			
8	3	Euler Tours	L			
9	3	Hamilton Cycles	L			
10	2	Hamilton Cycles and theorems	L			
		Unit – III Matching, Edge Colorings				
12	2	Matching, Edge Colorings	L			
13	2	Matching – Matching and Coverings in Bipartite Graphs	L			
14	2	Matching – Matching and Coverings in Bipartite Graphs and theorems	L			
15	3	Edge Chromatic Number	L			
16	2	Vizing's Theorem	L			
17	2	Application of Vizing's Theorem	L			
		Unit – IV Independent sets and Cliques, Vertex Colorings				

18	2	Independent sets and Cliques, Vertex Colorings	L			
19	3	Independent sets – Ramsey's Theorem	L			
20	2	Chromatic Number	L			
21	3	Brook's Theorem	L			
22	3	Chromatic Polynomials	L			
		Unit – V Planar graphs				
23	3	Plane and Planar Graphs	L			
24	3	Dual graphs-Euler's Formula	L			
25	2	The Five – Color theorem and the four	L			
26	2	Color Conjecture	L			
27	3	Color Conjecture and theorems	L			
		Seminar				
1	1	UNIT-I Cut Edges and Bonds – Cut Vertices			S	
2	1	UNIT-II Hamilton Cycles and theorems			S	
3	1	UNIT –III Vizing's Theorem			S	
4	1	UNIT – IV Brook's Theorem			S	
5	1	UNIT-V The Five – Color theorem and the four			S	
		Class Test				
1	5	UNIT I - UNIT V		CT		
		Final Evaluation (FE)				
1	3	Entire course				FE

S. Rajkumari
Head of the Department

Signature of the Staff Member(s)

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF MATHEMATICS

Teaching Plan

Name(s) of the Staff: Mrs.J.Indira

Programme: B.SC., MATHEMATICS(E.M)   Academic Year: 2022-2023

Semester: I semester   Course Code: U21MC203

Course Title: Analytical Geometry 3D And Trigonometry

Objectives:

1. Expose various concept of Analytical geometry of 3D.
2. Be able to understand properties of straight lines and spheres.Solve trigonometry equation and applications.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	13 hrs per unit (for 5 units)	65
ICT Enabled Lectures [I]	-----	-----
Practical Demonstration[P]		-----
Tutorial (T)	1 hour per unit(for 2 units)	02
Field visit (FV)	-----	-----
Group discussion		05
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT –CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	2	Introduction	L			
2	3	Coplanar lines	L			
3	3	Skew lines	L			
4	3	Base of the lines of the shortest distance	L			
5	2	The definition and some examples	L			
		Unit-II				
6	2	Sphere	L			
7	3	Standard equation	L			
8	3	Length of a tangent from any point	L			
9	3	Sphere passing through a given circle	L			
10	2	Intersection of two sphere	L			
		Unit – III				
12	2	Expansions of $\sin(n\theta)$, $\cos(n\theta)$, $\tan(n\theta)$	L			
13	2	Expansions of $\sin^n\theta$, $\cos^n\theta$	L			
14	2	Expansions of $\sin(\theta)$ in powers of θ.	L			
15	3	Expansions of $\cos(\theta)$ in powers of θ.	L			
16	2	Expansions of $\tan(\theta)$ in powers of θ.	L			
17	2	Based problems in $\sin(\theta)$, $\cos(\theta)$ andl,km $\tan(\theta)$	L			
		Unit – IV				
18	2	Hyperbolic functions	L			
19	3	Explain hyperbolic function	L			
20	2	Explain circular trigonometric functions	L			
21	3	Relation between hyperbolic and circular trigonometric functions	L			
22	3	Inverse Hyperbolic Functions	L			

		Unit – V				
23	3	Logarithm of a complex number	L			
24	3	Summation of Trigonometric series	L			
25	2	Difference method	L			
26	2	Angles in arithmetic progression method	L			
27	3	Gregory's Series.	L			
		Seminar				
1	1	UNIT-I Coplanar lines			S	
2	1	UNIT-II Sphere passing through a given circle			S	
3	1	UNIT –III Expansions of sin(0), cos(0), tan(0)			S	
4	1	UNIT – IV Inverse Hyperbolic Functions			S	
5	1	UNIT-V Logarithm of a complex number			S	
		Class Test				
1	5	UNIT I - UNIT V		CT		
		Final Evaluation (FE)				
1	3	Entire course				FE

S. Rajkumari
Head of the Department

Signature of the Staff Member(s)

Co-ordinator
Internal Quality Assurance Cell (IQAC)
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Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM
POST GRADUATE AND RESEARCH DEPARTMENT OF PHYSICS
Teaching Plan

Name(s) of the Staff:Dr. I.Kalaiarasi

Programme: B.Sc Physics   Academic Year: 2022-2023

                                          Course Code::   U21PHC101
Semester: I semester

Course Title: CC-I   PROPERTIES OF MATTER
AND SOUND
Objectives:

- To understand the basic principles of elasticity and bending of beams.

- To understand properties of liquids and propagation of sound waves.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	16hrs per unit (for 5 units)	80
Evaluation –Class Tests (CT)	5 test per unit	05
Ice breaking / Creating awareness about the study ofproperties of matter and sound which is of great value in day to day life. (CA)	1 hour per /concept	02
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		UNIT - I: ELASTICITY				
1	3	Introduction-Stress - Strain diagram - Elastic moduli.	L			
2	3	Work done per unit volume in shearing - Relation between elastic constants .	L			
3	4	Poisson's Ratio- Expression for Poisson's ratio in terms of elastic constants.	L			
4	3	Twisting couple on a wire - Work done in twisting.	L			
5	3	Torsional Pendulum –Determination of Rigidity modulus of a wire.	L			
		UNIT - II: BENDING OF BEAMS				
6	3	Bending of beams-Expression for bending moment.	L			
7	4	Cantilever - expression for depression -Young's modulus - cantilever oscillation - expression for period of oscillation.	L			
8	3	Uniform bending - expression for elevation - measurement of Young's modulus - pin and microscope.	L			
9	3	Non Uniform bending - expression for depression.	L			
10	3	Determination of Young's modulus byusing Koenig's method.	L			
		UNIT - III: SURFACE TENSION				
11	2	Surface tension - surface energy.	L			
12	3	Excess of pressure over curved surfaces-Variation of surface tension with temperature.	L			
13	3	Jaeger's experiment - Surface tension by capillary rise method.	L			
14	3	Low pressure - Production and measurement of low pressure.	L			
15	3	Gaede moleculer pump and its applications	L			
16	2	Kundsen's absolute gauge - Detection of leakage.	L			
		UNIT - IV: VISCOSITY				

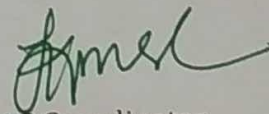| 17	3	Viscous force- Streamlined motion - Turbulent motion.	L			
18	3	Coefficient of viscosity and its Dimensions.	L			
19	3	Rate of flow of liquid in a capillary tube.	L			
20	4	Poiseuille's formula–Determination of coefficient of viscosity of liquid.	L			
21	3	Stoke's Experiment-Terminal Velocity	L			
		UNIT - V: SOUND				
22	3	Free and damped oscillations - origin of sound - Material medium.	L			
23	3	Velocity of longitudinal waves in gases- Newton's formula for velocity of sound.	L			
24	3	Effect of pressure, temperature and density of medium- Wind and humidity on velocity of sound.	L			
25	4	Velocity of sound in waterandair - Beats - Helmholtz resonator - velocity of transverse waves in strings.	L			
26	3	Reverberation time - Sabine's formula	L			
		Class Test				
1	5	UNIT I-UNIT V		CT		
		Final Evaluation (FE)				
1	3	Entire course				FE

J.Kalai'aran

Signature of the Faculty

HOD

IQAC Coordinator

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GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF PHYSICS

Teaching Plan

Name(s) of the Staff: Mrs. T.Rathna

Programme: B.Sc., Computer science Shift -I   Academic Year: 2022-2023

Semester: III–semester   Course Code: U213AAPH1

Course Title: APPLIED PHYSICS I

Objectives:

- ☐ To understand the Mathematical expression for Guass law and its applications.
- ☐ To study the nature of various magnetic materials.

Teaching Methodology		Distribution of hours/Unit		Total Hours of Instruction
Traditional Chalk and Talk Method [L]		13 hrs per unit (for 5 units)		65
Evaluation –Class Tests (CT)		1 hour per unit (for 5 units)		05
Seminar/problem solving/class work(S)		1 hour Per unit (for 5 units)		02
Final Evaluation (FE)		3 hrs (Rehearsal)		03
Hrs per week	5 hrs	credits	4	Total	75
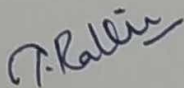
Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT –CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I Electrostatics				
1	1	Introduction to electrostatics	L			
2	3	Gauss's theorem and its applications	L			

3	3	Principle of capacitor series and parallel	L			
4	3	Energy of a charged capacitor	L			
5	3	Loss of energy due to sharing of charges	L			
Unit-II Magnetostatics						
6	2	Introduction to Magnetostatics – magnetic field , magnetic flux density	L			
7	2	Magnetization – permeability – susceptibility	L			
8	2	Relation between Magnetization, permeability, susceptibility	L			
9	2	Magnetic potential, Properties of diamagnetic materials	L			
10	2	Properties of Para, Ferro magnetic materials	L			
11	3	Hysteresis – B- H curve using Ballistic galvanometer method	L			
Unit – III Current Electricity						
12	3	Laplace's law – magnetic field intensity due to a straight conductor carrying current	L			
13	3	Magnetic field intensity due to circular coil and solenoid - force between parallel conductors	L			
14	3	Ohm's law – Kirchoff's first and second law-	L			
15	2	Wheatstone's bridge, Carey foster's bridge				
16	2	Potentiometer - measurement of current	L			
Unit – IV Electromagnetic induction						
17	3	Introduction – laws of electromagnetic induction	L			
18	2	Eddy current and its uses	L			
19	3	Determination of self induction – Anderson's method	L			

20	3	Determination of mutual inductance- coefficient of coupling	L			
21	2	Transformer theory	L			
		Unit – V alternating current				
22	2	Introduction to Ac current and its importance	L			
23	3	AC circuit with double components - Measurement of current and voltage	L			
24	3	Power in an AC circuit – Power factor derivation	L			
25	3	Wattless current – Choke – series and parallel resonance circuit	L			
26	2	Oscillatory discharge of a condenser	L			
		Class Test				
1	1	Gauss theorem and its applications		CT		
2	1	Relation between Magnetization, permeability, susceptibility		CT		
3	1	Wheatstone's bridge, Carey foster's bridge		CT		
4	1	Determination of self induction – Anderson's method		CT		
5	1	Oscillatory discharge of a condenser		CT		
		Class Work				
1	1	Ohm's law – Kirchoff's first and second law-			S	
2	1	Eddy current and its uses			S	
		Final Evaluation (FE)				

1	3	Entire course				FE

Signature of the Faculty

HOD

IQAC Coordinator

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Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF PHYSICS

Teaching Plan

Name(s) of the Staff: Dr.T.Thilagavathi

Programme: II M.Sc Physics   Academic Year: 2022--2023

Semester: III semester   Course Code: P21PHC311

Course Title: CC- XI -Nuclear and Particle Physics

Objectives:

- · To introduce the fundamental characteristics of nucleus,nuclear reactions and radioactive decay.

- To impact knowledge about various classification of elementary particles.
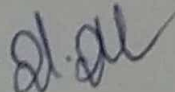
Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	13 hrs per unit (for 5 units)	65
ICT Enabled Lectures [I]	-----	-----
Practical Demonstration[P]	1 hour per unit(for 5 units)	05
Tutorial (T)	1 hour per unit(for 2 units)	02
Field visit (FV)	-----	-----
Group discussion		
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of quantum physics in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	5	Total	90
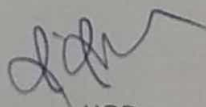
Hours per week	Total Hours of Instruction
6	90
5	75
4	60
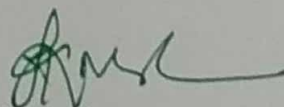
SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I: Nuclear Properties , Two body problems and Nucleart forces				
1	2	Basic ideas of Nuclear size, mass,charge distribution, spin and parity	L			
2	3	Binding energy, semi empirical mass formula,Nuclear stability,	L			
3	3	Mass parabola of the nucleus, Ground state of Deutron,meson theory of exchange forces	L			
4	2	Scattering cross section, Neutron	L			
5	3	Proton scattering at low energies.	L			
		Unit-II : RADIOACTIVE DECAYS				
6	2	Alpha emission, giger, Nuttal law, Gamow"s theory Neutrino hypothesis	L			
7	3	Fermi theory of beta decay, Curie point, Energies of beta spectrum selection rules	L			
8	2	Non conversation of parity,	L			
9	3	Gamma emission selection rules, Transition probability	L			
10	3	Internal conversion, Nuclear isomerism.	L			
		Unit – III : NUCLEAR MODELS				
11	2	Consevation of energy, Q-values of nuclear reaction	L			
12	3	Energetic of nuclear reaction, Reciprocity theorem	L			
13	3	Breit wigner formula, Compound nucleus	L			
14	3	Resonance theory, Collective model	L			
15	2	Optical model	L			
		Unit – NUCLEAR REACTORS				
16	3	Characteristics fo fission, Mass distribution of fragments, Fission cross section	L			

17	3	Energy in fission, Bohr wheeler theory of nuclear Fission	L				
18	2	Fission reactors, Generation of electric power	L				
19	3	Fast breeder reactor , Basic fusion process, Charaacteristics of fusion	L				
20	2	Laser fusion, Plasma confinement	L				
		UNIT-V ELEMENTARY PARTICLES					
21	1	Building blocks of nucleus, Nucleons, leptons, mesons, baryons, hyperons, strange hadrons	L				
22	2	Classification of fundamental forces and elementary particles, Basic conservation laws	L				
23	2	Quantum numbers, Gell, Mann,Nishijima formula, invariance under time reveals(T) charge conjugation(c) and parity(P)	L				
24	2	CPT theorem, Parity and conservation in weak interaction	L				
25	3	SU(3) symmetry, Meson Octer, Basic Quarks.	L				
		Class Test					
1	5	Test 1:Nuclear Properties Test 2: Gawmow's theory Test 3: Collective model,Optical model Test 4: Bohr Wheeler theory of nuclear fission Test 5: Basic conservation law		CT			
		Final Evaluation (FE)					
1	3	Entire course					FE

Signature of the Faculty   HOD   IQAC Coordinator

Dr. R. RADHA,
Associate Professor,
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Kumbakonam - 612 001

Co-ordinator
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Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM
POST GRADUATE AND RESEARCH DEPARTMENT OF PHYSICS
TEACHING PLAN

Name(s) of the Staff	: Dr.S.RENUKA,
Programme	: M.Sc Physics
Academic Year	: 2022-2023
Semester	: IV semester
Course Code	:P21PHC413

Course Title   : CCXIII: CONDENSED MATTER PHYSICS

OBJECTIVES:

- ➢ To relate crystal structure to symmetry, recognize the correspondencebetween real and reciprocal space.
- ➢ Acquire knowledge of the behavior of electrons in solids based on classicaland quantum theories.
- ➢ To become familiar with the different types of magnetism and magnetismbased phenomenon.
- ➢ To develop an understanding of the dielectric properties and ordering ofdipoles in ferroelectrics.
- ➢ To get familiarized with different types of modern engineering materials.
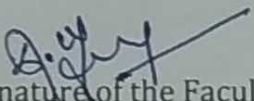
Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	15 hrs per unit (for 5 units)	75
Evaluation –Class Tests (CT)	5 test per unit	5
Seminar(S)	1 hour per unit (for 5 units)	5
Creating awareness about the latest developments of Solid state physics in current research sector (CA)	1 hour per unit (for 2 units)	2
Final Evaluation (FE)	3 hrs (Rehearsal)	3
Hrs per week 6	Credit 5	Total 90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30
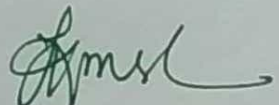
SL.NO	HRS.	UNIT -CONTENT	Lecture (L)	Class Test (CT)	Seminar (S)	Final Evaluation (FE)	Creating awareness (CA)
						MODE OF TEACHING	
UNIT-I: CRYSTAL STRUCTURE AND DEFECTS
1	2	Crystal lattice-Primitive and unit cell	L				
2	2	Seven classes of crystals, Bravias lattice	L				
3	3	Miller indices, Reciprocal lattice	L				
4	2	Structure -SC, BCC	L				
5	2	FCC and HCP	L				
6	2	Lattice defects-Point, Line and plane defects,Schottky and Frenkel defects	L				
7	2	Vacancies- Colourcentres, Edge and screw dislocation, Grain boundaries	L				
Seminar (S)
8	1	FCC and HCP			S		
Class Test (CT)
9	1	Unit I: Lattice Vibrations and Thermal Properties		CT			
UNIT-II: FREE ELECTRON THEORY AND ENERGY BANDS
10	3	Energy levels and density of orbitals-Fermi Dirac Distribution	L				
11	2	Free electron gas in three dimensions, Heat capacity of electron gas	L				
12	2	Electrical conductivity and ohm's law, Motion in magnetic field	L				
13	2	Hall effect	L				
14	2	Thermal conductivity of metals, Nearly free electron model	L				
15	2	Kroneig Penny model	L				
16	2	Semiconductors-Band gap, Effective mass, Intrinsic carrier concentration	L				
Seminar (S)
17	1	Hall effect			S		
Class Test (CT)
18	1	Unit-II: Free electron theory and energy bands		CT			
UNIT-III: MAGNETISM
19	2	Weiss theory of Paramagnetism, Quantum theory of paramagnetism	L				
20	2	Langevin's theory of Diamagnetism, Weiss theory of paramagnetism,	L				
21	2	Demagnetization of a paramagnetic salt, Paramagnetic susceptibility of conduction electrons	L				

22	1	Temperature dependence, Weiss molecular field theory	L				
23	2	Hund's rules	L				
24	2	Ferromagnetic order, Curie point and the exchange integral, Temperature dependence of saturation magnetization	L				
25	1	Magnons, Antiferromagnetic order	L				
26	3	Ferromagnetic domains, Origin of domains and hysteresis, Introduction of Ferrites	L				
Seminar (S)							
27	1	Ferromagnetic domains			S		
Class Test (CT)							
28	1	Unit III: Magnetism		CT			
UNIT-IV:DIELECTRICS AND FERROELECTRICS							
29	2	Macroscopic electric field	L				
30	2	Local electric field at an atom, Dielectric constant and polarizability	L				
31	2	Types of Polarizability	L				
32	2	Temperature and frequency dependency	L				
33	2	Determination of Dielectric constant	L				
34	2	Clausius-Mossotti equation	L				
35	1	Ferroelectric materials	L				
36	2	Ferroelectric Domains, Polarization Catastrope	L				
Seminar (S)							
37	1	Types of Polarizability			S		
Class Test (CT)							
38	1	Unit IV: Dielectrics and Ferroelectrics		CT			
UNIT V:MODERN ENGINEERING MATERIALS							
39	2	Polymer, Ceramics, Super strong materials, Elactrets and Cermets	L				
40	1	Nuclear Engineering materials	L				
41	2	Thermoelectric materials	L				
42	2	Metallic Glasses	L				
43	2	Fibre reinforced Plastics	L				
44	2	Metal matrix composites	L				
45	1	High temperature materials	L				
46	3	Soft and Hard Magnetic materials-Basic idea of Nanomaterials	L				
Seminar (S)							
47	1	High temperature materials			S		
Class Test (CT)							

48	1	Unit V:Modern Engineering materials	CT			
		Creating awareness (CA)				
49	2	Creating awareness about the latest developments of Condensed Matter Physics in current research sector (CA)				CA
		Final Evaluation (FE)				
50	3	Unit I To Unit V			FE	

Signature of the Faculty   HOD   IQAC Coordinator

Dr. R. RADHA,
Associate Professor,
Centre for Nonlinear Science(CeNSc),
PG & Research Department of Physics,
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Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF PHYSICS

Teaching Plan

Name(s) of the Staff: Mrs. T.Rathna

Programme:	B.Sc., physics	Academic Year:	2022-2023
Semester:	VI semester	Course Code : 18PH6EC5	

Course Title: Computer programming – C
LANGUAGE

Objectives:

☐ To understand the basic concept of c programming.

☐ To study the Arrays and string function

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	13 hrs per unit (for 5 units)	65
Evaluation –Class Tests (CT)	1 hrs per units (for unit 5)	05
Seminar(S)	1 hrs (for 5 units)	01
Creating Awarness(CA)	1 hour per unit(for 5 units)	01
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	5hrs	credits	5		Total	75

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I DATA TYPES,OPERATORS AND EXPRESSIONS				

1.	2	History of c	L				
2	2	Basic structure of c programs	L				
3	2	Keywords and identifiers	L				
4	2	Constants, variables,Datatypes,Declaration of variables,assigning variables					
5	2	Operators ,Classification of operators	L				
6	3	Precedence and Associativity of operaters	L				

Unit-II I/O,CONTROL STATEMENTS AND ARRAYS

7	2	Introduction to Library functions and control statements	L				
8	2	Gets,puts ,getchar ,putchar function	L				
9	2	Formatted input and output statements	L				
10	2	Decision making with if, simple if, if ...else,nested if ...else,else if ladder					
11	2	Swith ,goto, break,continue,while..do, while ,for statement	L				
12	3	Declaration of one,two dimensional array, Character strings	L				

Unit – III FUNCTION AND STRUCTURE

13	2	Introduction to function	L				
14	2	Types of function	L				
15	2	Local and Global variables	L				
16	2	Recursion ,Storage classes					
17	3	Structure ,Declaring structure variables,Accessing structure member	L				
18	2	Structure intialization	L				

Unit – IV P0INTERS,FILES AND PREPROCESSORDUCTO

19	1	Introduction to pointers	L				

20	2	Initialization of pointers	L			
21	2	Types of pointers	L			
22	3	Files in c and declaration	L			
23	2	Random access file				
24	3	Functions used with random files	L			
Unit – V PROGRAMS						
25	3	Solving Quadratic equations	L			
26	3	Newton raphson method	L			
27	2	Finding the smallest and largest element in array	L			
28	2	Ascending and Descending order	L			
27	3	Addition/Subraction/Multiplication of two matrics	L			
Seminar						
1	1	UNIT-I to V			S	
Creating Awarness						
1	1	Creating awareness about higher studies/Current trends in Science & Technology	CA			
Class Test						

1	5	UNIT I- Operators UNIT II- Formatted input and output statements UNIT III- Structure ,Declaring structure variables,Accessing structure member UNIT IV- Types of pointers UNIT V- C Program Newton raphson method		CT		
		Final Evaluation (FE)				
1	3	Entire course				FE

Signature of the Faculty

HQD

IQAC Coordinator

Dr. R. RADHA,
Associate Professor
Centre for Nonlinear Science(CeNSc),
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GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF PHYSICS

Teaching Plan

Name(s) of the Staff: B.JEEVA

Programme: M.Sc Physics

Semester: II semester

Academic Year: 2022-2023

Course Code:P21PHC206

Course Title: CC-VI QUANTUM MECHANICS

Objectives:

- ☐ To understand the Schrodinger equation and operator formalisms.
- ☐ To study the dynamics of the quantum particle and the wave equation in the relativistic situation
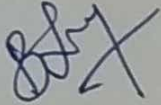
Teaching Methodology		Distribution of hours/Unit		Total Hours of Instruction
Traditional Chalk and Talk Method [L]		13 hrs per unit (for 5 units)		65
Evaluation –Class Tests (CT)		1 hrs (for 5 units)		05
Ice Breaking and Creating awareness		Ice Breaking		01
		Creating Awareness		01
Final Evaluation (FE)		3 hrs (Rehearsal)		03
Hrs per week	5	Credit	5	Total	75

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

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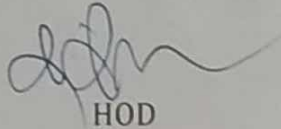
SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	2	The Schrödinger Equation and Stationary States: Statistical interpretation	L			
2	3	Normalization of the wave function	L			
3	3	probability current density	L			
4	3	Expectation values and Ehrenfest's theorem Time independent Schrödinger equation	L			
5	2	Time independent Schrödinger equation stationary states and Boundary conditions- finite potential	L			
		Unit-II General Formulation				
6	2	Linear operators – Dynamical variables – eigenfunction and eigen values scalar product	L			
7	3	orthogonality – Expansion and completeness of eigen functions – Hermitian operators – Commutators of operators	L			
8	3	Commutation rules and Uncertainity principle ,Postulates of Quantum Mechanics ,Dirac notations – Bra and Ket notations	L			
9	3	Relationship between Kets and wave functions – Matrix representation of an operator – Unitary transformation	L			
10	2	The Schrödinger picture – Heisenberg Picture – Interaction picture – Parity operator	L			
		Unit – III Angular Momentum and Matrix Representation				
12	2	Orbital angular momentum – Commutation relations	L			
13	2	Eigen values – Matrix representation of angular momentum	L			

14	2	Matrix representation of angular momentum Matrices corresponding to j=2	L			
15	3	Pauli spin matrices – Addition of angular momenta	L			
16	2	Scattering theory: The scattering cross section	L			
17	2	Methods of partial waves Green function – Born approximation	L			
Unit – IV Approximation Methods						
18	2	Time independent perturbations Non-degenerate case: First and second order perturbations	L			
19	3	Degenerate case: Zeeman effect – Stark effect., Variational method – WKB Quantization rule	L			
20	2	Time dependent perturbation theory – First order perturbation	L			
21	3	Constant perturbation – Harmonic perturbation – Transition probability	L			
22	3	Fermi's Golden rule – Adiabatic approximation – Sudden approximation.	L			
Unit – V Relativistic Wave Equation						
23	3	Klein-Gordon equation for a free particle	L			
24	3	an electromagnetic field	L			
25	2	Dirac Hamiltonian	L			
26	2	Dirac matrices – spin of the Dirac particle –	L			
27	3	Negative states	L			
Ice Breaking and Creating Awareness						
1	1	Ice Breaking	IB			
2	1	Creating awareness about higher studies/Current trends in Science & Technology	CT			
Class Test						
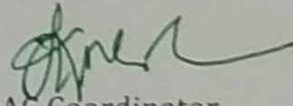
1	5	UNIT I-UNIT V		CT		.
		Final Evaluation (FE)				
1	3	Entire course				FE

Signature of the Faculty   HOD   IQAC Coordinator

Dr. R. RADHA,
Associate Professor
Centre for Nonlinear Science (CeNSc),
PG & Research Department of Physics,
Government College for Women (Autonomous),
Kumbakonam - 612 001

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A),
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF CHEMISTRY

Teaching Plan

Name of the Staff: A.ANITHA

Programme: III B.Sc., Chemistry   Academic Year: 2022-2023

Semester: V semester   Course Code: 18CH5EC3

Course Title: ANALYTICAL CHEMISTRY

Objectives:

> To develop some understanding of the professional and safety responsibilities residing in working on chemical analysis
> To provide an understanding of chemical methods employed for elemental and compound analysis.

Teaching Methodology		Distribution of hours/Unit		Total Hours of Instruction
Traditional Chalk and Talk Method [L]		13 hrs per unit (for 5 units)		65
Evaluation –Class Tests (CT)		5 test per unit		05
Seminar/problem solving/class work(S)		1 hour per unit(for 5 units)		03
Final Evaluation (FE)		3 hrs (Rehearsal)		02
Hrs per week	5	Credit	5	Total	75
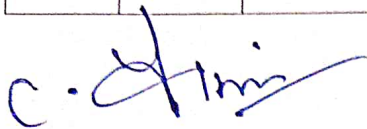
Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30
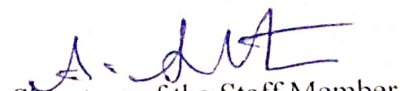
SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	2	Laboratory hygiene and safety	L			
2	3	Simple first aid procedure for accidents, acid in eye, alkali in eye, acid burns , alkali burns, bromine burns,	L			
3	3	Poison , inhalation of gases, cut by glasses and heat burns. Data of analysis.	L			
4	2	Errors in chemical analysis, classification of errors. determinant errors, instrumental errors, personal errors, constant errors and proportional errors.	L			
5	3	Precision, accuracy and rejection of data questioned. Significant figures. mean deviation and standard deviation. Curve fitting. Method of least squares – definitions only.	L			
		Unit-II				
6	3	Separation and Purification Techniques: General Principle involved in the separation of precipitates.	L			
7	2	Solvent extraction	L			
8	3	Chromotography: Principles Involved in the adsorption, partition and ion exchange, paper, thin layer, column, gas-liquid chromatography	L			
9	3	Desiccants, Vaccum drying, Distillation, fractional distillation, steam distillation, azeotropic distillation,	L			
10	2	crystallization and sublimation – principles and techniques	L			
		Unit – III				
12	3	Principles involved in thermogravimetric analysis and differential analysis – instrumentation.	L			
13	2	Characteristic of TGA ($CaC_2O_4 H_2O$, $CUSO_4 5H_2O$) and DTA Curves ($CaC_2O_4 H_2O$).	L			
14	2	Factors affecting TGA and DTA curves	L			
15	2	Analytical Electro Chemistry	L			

	16	2	Electrolytic separation.	L				
	17	2	Principles of electro deposition Electrogravimetry (estimation of copper and silver only)	L				

Unit – IV

	18	3	Laws of colorimetry – instrumentation. Nessler's, photoelectric colorimetric method	L				
	19	2	operation and applications.	L				
	20	2	Basic principles of flame photometry – Atomic absorption – Spectrophotometry	L				
	21	3	Estimation of Na, K and Ca. Estimation of Ni, Cu and Fe.	L				
	22	3	Techniques in Kinetics Principles and techniques used to follow the kinetics of ordinary and elementary treatment of fast – photo chemical reactions.	L				

Unit – V

	23	3	Elementary features of BASIC and C programming	L				
	24	3	Structure, data types, variable, constants, keywords, operators, expressions and library functions	L				
	25	2	Conversion of celcius temperature to Kelvin temperature. Conversion of celcius to Fahrenheit and viceversa	L				
	26	2	Application of Beer Lambert law. Molecular weights from atomic weight.	L				
	27	3	Average, RMS. And most probable velocities of gas molecules. Rate constant for a first order reaction Bohr radius	L				

Seminar

1		1	UNIT-I Storage and handling of corrosive, flammable, explosive , toxic, carcinogenic and poisonous chemicals.			S		
2		1	UNIT-II Electrophoresis— Application			S		

3	1	UNIT-III Thermometric titration of HCl Vs NaOH			S	
		Class Test				
1	5	UNIT I- & UNIT V			CT	
		Final Evaluation (FE)				
1	3	Entire course				FE

Head of the Department

Signature of the Staff Member

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF CHEMISTRY

Teaching Plan

Name of the Staff: Mrs. U. Nithya

Programme: II MSc., Chemistry   Academic Year: 2022-2023

Semester: III semester   Course Code: P18CHC310

Course Title: Organic Spectroscopy

Objectives:

　　　　*students should gain experience in interpreting NMR data in order to establish structure for unknown organic molecules.
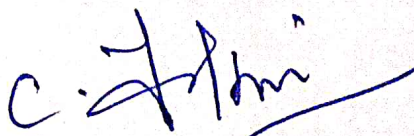
　　　　*students able to understand detection and identification of free radicals in solid, liquid or gaseous state in esr spectroscopy.

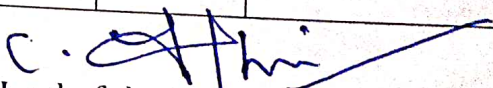| Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	11 hrs per unit (for 5 units)	55
Evaluation –Class Tests (CT)	1hrs(for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of chemical methods in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	5hrs (Rehearsal)	05
Hrs per week	6	Credit	5	Total	75
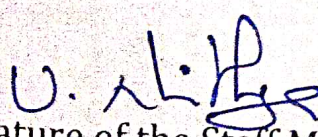
Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT –CONTENT	L	CT	S	FE
				MODE OF TEACHING		
full: **Unit-I UV AND IR SPECTROSCOPY**						
1	2	UV and visible spectroscopy, Types of electronic transitions	L			
2	2	Chromophores and auxochromes, factors influencing position and intensity of absorption	L			
3	2	Absorption spectra of alpha and beta unsaturated carbonyl compounds	L			
4	2	Woodward-Fieser rules, IR vibrational frequencies and factors affecting them	L			
5	3	Identification of functional groups,intra and inter molecular hydrogen bonding ,finger print region, ligand stretching vibrations	L			
full: **Unit-II Molecular and Raman Spectra**						
6	2	Origin of molecular spectra,rotational spectra rigid and non rigid rotors	L			
7	2	Effect of isotopic substitutions, harmonic and non harmonic oscillators	L			
8	2	Hot bands, vibrational – rotational spectra P,Q,R branches, electronic spectra of di atomic molecule	L			
9	2	Potential energy curves, Frank condon principle. Raman spectra Selection rules	L			
10	3	Rotational raman spectra and vibrational raman spectra, mutual exclusion principle	L			
full: **Unit – III NMR- Spectroscopy**						
11	2	Nuclear spin, magnetic moment of a nucleus, nuclear energy levels in the presence of magnetic field	L			
12	2	Macroscopic magnetization, basic principles of NMR experiments CW and FT NMR	L			
13	2	H^1 NMR .chemical shift and coupling constant	L			
14	1	H^1 NMR spectra of simple molecules	L			
15	2	AX and AB Spin system	L			
16	2	Spin decoupling Nuclear overhauser effect , Chemical exchange	L			
full: **Unit – IV 13 C NMR and 2D NMR Spectroscopy**						
17	2	^{13}C NMR proton decoupled and off resonance spectra	L			
18	2	Factors influencing ^{13}C NMR Chemical shift	L			
19	2	^{13}C NMR spectra of simple organic molecules,	L			

20	3	basic principles of 2- dimensional NMR spectroscopy	L				
21	2	HOMOCOSY, NOESY their applications	L				

Unit – V Mass Spectroscopy

22	2	Principle, measurement techniques EI,CI,FD,FAB,SIMS	L				
23	2	Presentation of spectral data, molecular ions, Isotopic ions, fragment ions	L				
24	2	Odd and even electron types, rearrangement ions, factors affecting cleavage patterns	L				
25	2	Mass spectra of hydrocarbons, alcohols, phenols	L				
26	3	Mass spectra of aldehydes, ketones, acids , amines and their derivatives	L				

Seminar

1	1	UNIT-I Absorption spectra of dienes, polyenes				S	
2	1	UNIT-II fundamental vibrations and overtones				S	
3	1	UNIT-III factors influencing chemical shift and vicinal proton				S	
4	1	UNIT – IV HOMOCOSY, NOESY Spectra				S	
5	1	UNIT-V Mclafferty rearrangement and Retro Diels Alder fragmentation				S	

Class Test

1	5	UNIT I-UNIT V			CT		

Final Evaluation (FE)

1	5	Entire course					FE

C.

Head of the Department

Signature of the Staff Member

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF CHEMISTRY

Teaching Plan

Name of the Staff: Mrs.P.Vasanthi

Programme: M.Sc Chemistry   Academic Year: 2022-2023

Semester: III semester   Course Code:P21CHC309

Course Title: Inorganic chemistry

Objectives:

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	13 hrs per unit (for 5 units)	65
Evaluation –Class Tests (CT)	1 hrs (for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of Numerical methods in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03

Hrs per week	6	Credit	5	Total	75

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

	SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
				L	CT	S	FE
			Unit-I Electronic Spectroscopy				
	1	2	Introduction about electronic spectroscopy.Explanation about Microstates, terms and energy levels for d1-d10 ions in cubic and square fields.	L			
	2	3	Intensity of bands.Group theoretical approach to selection rules. Effect of distortion and apin -orbit coupling on spectra.	L			
	3	3	Evaluation of 10Dq and beta for octahedral complexes of cobalt and nickel.	L			
	4	2	Applications to simple coordination compounds. Charge transfer spectra.electronic spectra of [Ru (bipy)3]2+.	L			
	5	3	Optical rotatory dispersion and circular dichroism and magnetic circular dichroism-application to metal complexes.	L			
			Unit-II Infrared and Raman spectroscopy				
	6	2	Vibrations in simple molecules (H_2O,Co_2) and their symmetric notation for molecular vibrations.	L			
	7	3	Group vibrations and the limitations -combined uses of IR and Raman spectroscopy in the structural elucidation of simple molecules like N_2O, ClF_3,NO_3,ClO_4.	L			
	8	2	Effect of coordination on ligand vibrations.uses of groups vibrations in the structural elucidation on ligand vibrations. uses of groups vibrations in the structural elucidation of metal complexes of urea,thiourea,cyanide,thiocyanate and dimethyl sulfoxide	L			
	9	3	Effect of isotropic substitution on the vibrational spectra of molecules.vibrational spectra of metal carbonyls with reference to the nature of bonding.	L			
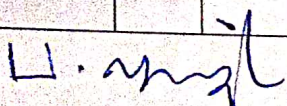
10	3	Geometry and number of C-O streching vibrations. Applications of Raman spectroscopy.resonance Raman spectroscopy	L					

Unit – III NMR Spectroscopy

12	2	Examples for different spin systems. Chemical shifts and coupling constants involving different nuclei(1H,19F,31P,13C)	L					
13	3	Interpretation and applications to inorganic compounds.	L					
14	2	Effect of quarupolar nuclei (2H, 10B, 11B)on the 1HNMR spectra	L					
15	3	Systems with chemical exchange. Evaluation of thermodynamic parameters in simple systems.	L					
16	2	Study of fluxional behavior of molecules.	L					
17	2	NMR of paramagnetic molecules. Isotopic shifs contact and pseudo contact interactions. Lanthanide shift reagents.	L					

Unit – IV EPR Spectroscopy and Magnetic properties

18	3	Theory of EPR spectroscopy. Spin densities and McConnenell relationship.	L					
19	3	Factors affecting the magnitude of g and A tensors in metal species	L					
20	2	Zero field splitting and kramers degeneracy. Spectra of V(II),Mn, Fe,Co,Ni,Cu complexes .Applications of EPR to a few biological molecules Containing Cu(II)and Fe(III)ions.	L					
21	3	Magnetic properties. Types of magnetism -dia- ,para-,ferro-, and antiferromagnetism	L					
22	2	Magnetic properties of free ions, first order zeemsn .effect,second order zeeman effect,states<<<KT- determination of magnetic and their applications to the elucidation of structures of inorganic compooinds.	L					

Unit – V Mossbauer spectroscopy

23	3	T	L					

24	3	Introduction about mossbauer spectroscopy .Isomer shifts.quadrupole splitting.	L				
25	2	Magnetic interactions.applications to iron and tin compounds.	L				
26	2	NQR spectroscopy -characteristics of quadrupolar nucleus.effects of field gradient and magnetic Field upon quadrupolar energy levels.	L				
27	3	NQR transitions.Applications of NQR spectroscopy.	L				

Seminar

1	1	UNIT-I magnetic circular dichroism-application to metal complexes.			S		
2	1	Unit -IIuses of groups vibrations in the structural elucidation of metal complexes of urea,thiourea,cyanide,thiocyanate and dimethyl sulfoxide			S		
3	1	UNIT-III NMR of paramagnetic molecules. Isotopic shifs contact and pseudo contact interactions. Lanthanide shift reagents.			S		
4	1	UNIT – IV Magnetic properties of free ions, first order zeemsn effect,second order zeeman effect,states<<<KT-			S		
5	1	UNIT-V NQR transitions.Applications of NQR spectroscopy.			S		

Class Test

| 1 | 5 | UNIT I-UNIT V | | CT | | | |

Final Evaluation (FE)

| 1 | 3 | Entire course | | | | | FE |

C. ꙮhꙮ

Head of the Department

Signature of the Staff Member

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF CHEMISTRY

Teaching Plan

Name of the Staff: Dr.M.Kiruthiga

Programme: **II B.Sc BOTANY**   Academic Year: **2022-2023**

Semester: IV semester   Course Code:U214ACH3

Course Title: ALLIED CHEMISTRY

Objectives: To Know about the various theories of Co-ordination compounds

To understand about the synthetic polymers
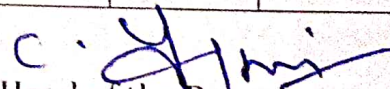
To know the fundamentals of photochemistry and surface chemistry
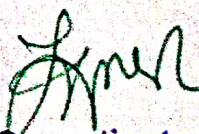
Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	9hrs per unit (for 5 units)	45
Evaluation –Class Tests (CT)	1 hrs (for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 3 units)	03
Creating awareness about the latest developments of surface and photochemistry in current research sector (CA)	1 hour 3 units(for3,4,5 units)	05
Final Evaluation (FE)	2hrs (Rehearsal)	02
Hrs per week	4	Credit	3	Total	60
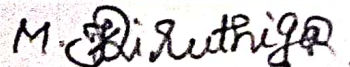
Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	2	Coordination chemistry-Nomenclature of mononuclear complexes-Werner,Sidwick and Pauling's theries.	L			
2	2	Chelation and its industrial importance to EDTA.	L			
3	1	Biological role of heamoglobin and cholorophyll	L			
4	2	**Metallic Bond**-Electrngas,Pauling and Band theories	L			
5	2	Semiconductors-intrinsic,n-type and p-type.Applications of Semiconductors.	L			
		UNIT-II				
6	2	**Aromatic compounds**-structure,stability,resonance and aromaticity of Benzene.Typical substitution reaction -Nitration	L			
7	1	Naphthalene synthesis,Properties and uses	L			
8	2	**Aminoacids and proteins**-Aminiacids-classification based on structure and essential and non essential.	L			
9	2	Aminoacids-Preparation and properties - peptides(elementary treatment)	L			
10	2	Proteins-classification based on physical properties and biological functions.structure of proteins-primary and secondary (Elementary treatment)	L			
		Unit – III				
11	2	**Synthetic polymers**-Teflon,Alkyl and Epoxy resins,Poly esters-genernal treatment only.	L			
12	2	Furan,Thiophene Preparation, properties	L			
13	2	Pyrrole and Pyridine Preparation and properties	L			
14	1	Basic properties of pyridine	L			
15	2	Basic properties of pyrrole	L			
		Unit – IV				

16	2	Surface chemistry -Emulsions preparation,Properties and Applications	L				
17	2	Gels preparations, Properties and applications	L				
18	1	Electrophoresis	L				
19	2	Chromatography-Column chromatography	L				
20	2	Photochemistry – Laws of photochemistry and applications.	L				

Unit – V

21	2	Electrochemistry-specific and Equvalent conductivities-their determination -effect of dilution on conductivity.	L				
22	2	An elementary idea about Ionic theory-Oswald's dilution law.kohlrauschlaw,conductometric titrations	L				
23	2	P^H and Buffers-Importance of P^{H}andBuffersinliving systems- P^{H}determination by colorimetric.	L				
24	1	Catalysis-Catalyst-Introduction,types and applications.	L				
25	2	Mechanism of catalysisImportance of Enzyme in Biological system	L				

Seminar

1	1	UNIT-I Application of complexes in qualitative and quantitative analysis			S	
2	1	UNIT-II Typical substitution reaction – Halogenation,Alkylation			S	
4	1	UNIT – IV Paper and Thin layer chromatography			S	

Class Test

1	5	UNIT I-UNIT V		CT	

Final Evaluation (FE)

1	3	Entire course				FE

C.

Head of the Department

Signature of the Staff Member M. Eli Ruthiga

Co-ordinater
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM
POST GRADUATE AND RESEARCH DEPARTMENT OF CHEMISTRY
Teaching Plan

Name of the Staff: Mrs.K.Indhira

Programme: M.Sc., Chemistry   Academic Year: 2022-2023

Semester: II semester   Course Code: P22CH2ED

Course Title: EDC-Food and nutrition

Objectives:

This course aims in making the student to understand about carbohydrates and proteins

This course facilitates the students to inculcate many information about milk, fat, protein and analysing the food quality
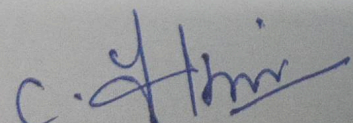
Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	5hrs per unit (for 5 units)	25
Evaluation –Class Tests (CT)	1 hour	01
Seminar/problem solving/class work(S)	1 hour	01
Creating awareness about the latest developments of chemicalmethods in current research sector (CA)		
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	5	Total	30

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit-I Carbohydrates						
1	1	Classification, available polysaccharides	L			
2	1	Unavailable carbohydrates disaccharides fats fibres in diets	L			
3	1	Digestion and absorption	L			
4	1	Regulation of blood glucose	L			
5	1	Insufficient adrenaline	L			
Unit-II Proteins						
6	1	Sources and chemical nature	L			
7	1	Amino acids, nitrogen balance, factors affecting nitrogen balance	L			
8	1	Physiological needs, dietary sources	L			
9	1	Biological tests	L			
10	1	Requirements and protein deficiency	L			
Unit -III Fats, electrolytes and minerals						
12	1	Visible fats,phosspholipids digestion and absorption, essential of fatty acids and minerals	L			
13	1	Dietary needs for fat salt, sodium and potassium salt water balance,sodium -importance and efficiency and potassium -importance and deficiency	L			
14	1	Minerals intake absorption and substances assisting absorption for recommended intake.	L			
15	1	Trace elements- iodine, physiology sources propylactic therapeutic uses.	L			
16	1	Fluorine-prevention of dental carriers fluorosis in man	L			
		Fluoride and osteoporosis opposition to fluoridation of water Pb-Hg-hazards				
Unit – IV Milk and milk products						

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit-I Carbohydrates						
1	1	Classification, available polysaccharides	L			
2	1	Unavailable carbohydrates disaccharides fats fibres in diets	L			
3	1	Digestion and absorption	L			
4	1	Regulation of blood glucose	L			
5	1	Insufficient adrenaline	L			
Unit-II Proteins						
6	1	Sources and chemical nature	L			
7	1	Amino acids, nitrogen balance, factors affecting nitrogen balance	L			
8	1	Physiological needs, dietary sources	L			
9	1	Biological tests	L			
10	1	Requirements and protein deficiency	L			
Unit -III Fats, electrolytes and minerals						
12	1	Visible fats,phosspholipids digestion and absorption, essential of fatty acids and minerals	L			
13	1	Dietary needs for fat salt, sodium and potassium salt water balance,sodium -importance and efficiency and potassium -importance and deficiency	L			
14	1	Minerals intake absorption and substances assisting absorption for recommended intake.	L			
15	1	Trace elements- iodine, physiology sources propylactic therapeutic uses.	L			
16	1	Fluorine-prevention of dental carriers fluorosis in man	L			
		Fluoride and osteoporosis opposition to fluoridation of water Pb-Hg-hazards				
Unit – IV Milk and milk products						

18	1	Composition of milk flavour and Aroma of milk	L			
19	1	Physical properties of milk	L			
20	1	Effect of heat on milk -pasteurisation , homgenesation.	L			
21	1	Milk products- cream milk	L			
22	1	Ice cream ,milk powder	L			

Unit – V Food and nutrients

23	1	Classification of food- cereals,wheat	L			
24	1	Distribution of nutrients in food -grains, flour, starches, invalid food	L			
25	1	Sugar syrups, nutritive value of vegetablesand fruits	L			
26	1	Nutrient properties of meat,fish oil of sea food, novel protein foods	L			
27	1	Food adulteration of various food using simple qualitative tests	L			

Seminar

28	1	Importance of trace elements -fluorine iodine			S	

Class Test

29	1	UNIT I-UNIT V		CT		

Final Evaluation (FE)

30	3	Entire course				FE

Head of the Department

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

Signature of the Staff Member

TEACHING PLAN	
Course Title	**DOCUMENT PREPARATION SYSTEM - LATEX**
Course Code	**P21CS1SE1**

Course Structure	**Periods/week**		**Credits**	
	2		4	
Programme	II B.Sc (Computer Science)		**Semester**	IV
Course Coordinator	**S.Sheela, Assistant Professor of Computer Science**			
Course Objective	To inculcate professional training required to become a scholar in Computer Science.			

Teaching Methodology	Distribution of Hours/Unit	Total No. of Instruction
Traditional Chalk and Talk Method(L)	2 hrs per unit(for 5 units)	10
ICT Enabled Lectures (I)	1 hr per unit (for 3 units)	3
Practical Demonstration	1 hr per unit(for 5 units)	5
Quiz/ Group Discussion (Q/GD)	1 hr (for 5 units)	1
Evaluation - Class Tests(CT)	1 hr per unit(for 5 units)	5
Seminar/ Problem Solving/Class Work(S)	1 hrs per unit(for 5 units)	5
Final Evaluation (FE)	1 Hr (Rehearsal)	1
Total		**30**

Hours Per Week	Total Hours of Instruction
6	90
5	75
4	60
2	30

S.No	No. of Lectures	Unit -Content	Mode of Teaching						Q/GD
			L	P	CT	S	I	FE	
Unit - I									
1	1	Installation of Latex in different operating systems	L						
2	1	Create & Title the Latex Document	L						
3	1	basic layout of Latex documents		P					
4	1	Document Structure:					I		
5	1	section, subsection and paragraph				S			
7	1	Class Test			CT				
Unit II									
1	2	Latex packages: Installing, including and purpose of packages.	L						
2	1	Latex Math and equations		P					
3	1	Inline math, equations, fractions					I		
4	1	matrices scaling of parenthesis, Brackets etc.				S			
9	1	Class test			CT				
I CIA EXAMINATION									
UNIT - III									
1	2	Latex image: caption, position and multiple images	L						
2	1	Latex table of contents-List of figures		P					
3	2	Depth, Spacing etc.,				S			
4	1	Bibliography, Footnotes.					I		
8	1	Quiz							Q
9	1	Class Test			CT				
Unit -IV									
1	2	Special Pages, Special documents	L						

2	1	Font Families, styles, and sizes, Colors: Font, text background and page background		P					
4	1	Special characters and symbols				S			
9	1	Class Test			CT				

II CIA EXAMINATION
Unit - V

1	2	Hyperlinks, Automatic plot Generation, Automatic table generation	L						
2	1	Drawing graphs, circuit diagrams, Advanced circuit diagrams		P					
3	1	source code highlighting, Lists				S			
9	1	Class Test			CT				
10	1	Quiz(for 5 units)							Q

MODEL EXAMINATION

	5	Final Evaluation 5 units)	(for					FE	

Text Book: 1. Learning Latex- David Francis Griffiths & Desmond Higham. SIAM publisher, 1997 2.Latex Beginners Guide- Stefan Kottwitz, Packt publishing Ltd.

Head of the Department

Signature of the Staff Incharge

IQAC Coordinator

Government College for Women (A), Kumbakonam
PG & Research Department of Computer Science
Academic Year 2022 - 2023
Odd Semester
Teaching Plan

Name(s) of the Staff: **P. JAYALAKSHMI**

Programme: I M.Sc Computer Science   Academic Year: 2022-2023

Semester: I Semester   Course Code: P17CSC101

Course Title: **Mathematical Foundations**

Objectives:
➢ To know the applications of graph theory, computer representations of graph, fundamental ideas of mathematical logic, concepts of set theory and Boolean algebra.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hrs per unit (for 5 units)	60
ICT Enabled Lectures [I]	1 hour per unit (for 5 units)	05
Practical Demonstration[P]	1 hour per unit(for 5 units)	05
Tutorial (T)	1 hour per unit(for 2 units)	02
Field visit (FV)	-----	-----
Group discussion		
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of quantum physics in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING				
			L	I	CT	S	FE
		Unit-I					
1	2	Mathematical Logic , Introduction, Statements and Notations , Connectives, Negation , Conjunction , Disjunction, Statement Formulas and Truth Tables , Logical Capabilities of Programming Languages	L				
2	3	Conditional and Biconditional, Well-Formed Formulas Tautologies , Equivalence of Formulas, Duality Law	L				
3	3	Tautological Implications, Formulas With Distinct Truth Table, Functionality Complete Sets of Connectives, Two-State Devices and Statement Logic		I			
4	3	Normal Forms, Disjunctive Normal Forms, Conjunctive Normal Forms, Principle Disjunctive Normal Form, Principle Conjunctive Normal Forms, Ordering and Uniqueness of Normal Forms, Completely Parenthesized Infix Notation and Polish Notation.	L				
5	2	The theory of inference for the statement calculus, validity using truth tables, rules of inference, consistency of premises and indirect method of proof, automatic theorem proving.	L				
		Unit-II					
6	2	Set Theory, Introduction, Basic Concepts of Set Theory	L				
7	3	Notation, Inclusion and Equality of Sets, The Power Set and Some Operations on Sets	L				
8	3	Venn Diagrams, Some Basic Set Identities, The Principle of Specification		I			
9	3	Ordered Pairs, and n-tuples, Cartesian Products, Representation of Discrete Structures, Data Structures	L				
10	2	Storage Structures, Sequential Allocation, Pointers and Linked Allocation	L				
11	2	An Application of Bit Represented Sets.					
		Unit – III					
12	2	Relations and ordering, Relations, Properties of Binary Relations In a Set	L				
13	2	Relation Matrix and The Graph of a Relation, Partition and Covering of a Set		I			
14	2	Equivalence Relations , Compatibility Relations, Composition of Binary Relations Partial Ordering	L				
15	3	Partially Ordered Set: Representation and Associated Terminology	L				
16	2	Functions, Definition and Introduction, Composition of Functions, Inverse functions	L				

17	2	Binary and n-ary Operation, Characteristics Function of a Set Hashing Functions	L				
		Unit – IV					
18	3	Introduction: What is Graph, Application of Graph		I			
19	3	Finite and Infinite Graph, Incidence and Degree, Isolated Vertex, Pendant Vertex	L				
20	2	Null Graph, Isomorphism, Subgraphs, Walks, Paths and Circuit	L				
21	2	Operation of Graphs, Trees	L				
22	3	Some Properties Of Trees and Pendant Vertices in a Tree.	L				
		Unit – V					
23	3	Cut Sets-Fundamental Circuits and Cut Sets	L				
24	3	Incidence Matrix	L				
25	2	Circuit Matrix		I			
26	2	Cut-Set Matrix	L				
27	3	Path Matrix-Adjacency Matrix	L				
		Seminar					
1	1	UNIT-I Normal Forms				S	
2	1	UNIT-II Storage Structures - Sequential Allocation - Pointers and Linked Allocation				S	
3	1	UNIT-III Relations and ordering-Relations-Properties of Binary Relations In a Set				S	
4	1	UNIT – IV Operation of Graphs				S	
5	1	UNIT-V Adjacency Matrix and Incidence Matrix				S	
		Class Test					
1	5	UNIT III- &UNIT V			CT		
		Final Evaluation (FE)					
1	3	Entire course					FE

Head of the Department

Signature of the Staff Incharge

IQAC Coordinator

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

Government College for Women (A), Kumbakonam
PG & Research Department of Computer Science
Academic Year 2022 - 2023
Even Semester
Teaching Plan

Name of the Staff: **Mrs. E. Suganthi**

Programme: III B.Sc., Computer Science   Academic Year :   2022-2023

Semester: VI Semester   Course Code:

Course Title: XIV – PHP Scripting Languages

Objectives:
 ➢ To understand server side scripting

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hrs per unit (for 5 units)	60
ICT Enabled Lectures [I]	1 hrs per unit (for 5 units)	05
Practical Demonstration[P]	1 hour per unit(for 5 units)	05
Tutorial (T)	1 hour per unit(for 2 units)	02
Field visit (FV)	-----	-----
Group discussion		
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of quantum physics in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING				
			L	I	CT	S	FE
		Unit-I					
1	2	Introduction to XHTML	L				
2	3	Introduction – Editing XHTML – First XHTML example- W3C XHTML validation service		I			
3	3	Headings – Linking c- Images – Special characters and horizontal rules	L				
4	3	Lists , Tables and Forms	L				
5	2	Internal linking – Meta elements – Web resources	L				
		Unit-II					
6	2	JavaScript : Introduction to Scripting	L				
7	3	JavaScript Control statements – Control structures – if selection statement – if- else selection statement – while repetition statement –	L				
8	3	Assignment operators – Increment and Decrement operators – for repetition statement – Examples using for statement –		I			
9	3	Switch multiple - selection statement – do – while repetition statement –	L				
10	2	break and continue statements – labeled break and continue statements – Logical operators –	L				
11	2	Functions – Arrays.					
		Unit – III					
12	2	Essentials of PHP and -.	L				
13	2	PHP Operators		I			
14	2	PHP Flow Control	L				
15	3	Strings in PHP	L				
16	2	PHP Arrays	L				
17	2		L				
		Unit – IV					
18	2	Creating Functions	L				
19	3	Reading Data in Web Pages	L				
20	2	PHP Browser		I			
21	3	Handling Power	L				
22	3	Validation functions	L				
		Unit – V					
23	3	File Handling —, and	L				

24	3	Working with Databases	L					
25	2	Queries in PHP		I				
26	2	Sessions, Cookies	L					
27	3	FTP Functions	L					
Seminar								
1	1	UNIT-I Lists , Tables and Forms				S	
2	1	UNIT-II JavaScript Control statements				S	
3	1	UNIT-III Strings in PHP				S	
4	1	UNIT – IV Handling Power				S	
5	1	UNIT-V Sessions, Cookies				S	
Class Test								
1	5	UNIT I- & UNIT V			CT		
Final Evaluation (FE)								
1	3	Entire course					FE

Head of the Department

Signature of the Staff Incharge

IQAC Coordinator

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

Government College for Women (A), Kumbakonam
PG & Research Department of Computer Science
Academic Year 2022 - 2023
Even Semester
Teaching Plan

Name of the Staff: **G. SOBIYA**

Programme: III B.Sc., Computer Science

Semester: VI

Course Title: XIV – Database Systems

Academic Year: 2022-2023

Course Code: U20CSC613

Objectives:
> To understand server side scripting

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hrs per unit (for 5 units)	60
ICT Enabled Lectures [I]	1 hrs per unit (for 5 units)	05
Practical Demonstration[P]	1 hour per unit(for 5 units)	05
Tutorial (T)	1 hour per unit(for 2 units)	02
Field visit (FV)	-----	-----
Group discussion		
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of quantum physics in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03

Hrs per week	6	Credit	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING				
			L	I	CT	S	FE
		Unit-I					
1	2	Introduction : Database	L				
2	3	Database Design : Overview of the design Process	L				
3	3	ER Model, Constraints,		I			
4	3	Removing Redundant Attributes in Entity sets	L				
5	2	ER Diagram - Reduction to Relational Schema.	L				
		Unit-II					
6	2	Relational Database – Introduction to Relational Model – Introduction to SQL	L				
7	3	Intermediate SQL – Formal Relational Query Language : Relational Algebra.		I			
8	3	Database Design : Features of good relational design – Atomic domains & First Normal Forms	L				
9	3	Decomposition using functional dependencies	L				
10	2	Algorithms for decomposition	L				
11	2	Decomposition using multi value dependency.					
		Unit – III					
12	2	Storage and File Structure : Overview of Physical Storage Media – File Organization	L				
13	2	Organization of Records in Files	L				
14	2	Data Dictionary Storage – Indexing and Hashing : Basic Concepts		I			
15	3	Ordered Indices – B+ Tree Index Files	L				
16	2	B- Tree Index Files - Static Hashing – Dynamic Hashing.	L				
		Unit – IV					
18	2	Transaction : Transaction Concept – Simple Transaction model	L				
19	3	Storage structure – Transaction Atomicity & durability. Transaction isolation.		I			
20	2	Serializability - Concurrency Control: Lock Based Protocols	L				
21	3	Timestamp Based Protocols – Validation Based Protocols.	L				
22	3	Recovery System : Failure Classification	L				
23	3	Recovery and Atomicity – Recovery Algorithms.					
		Unit – V					
23	3	PL/SQL : PL/ SQL Blocks		I			
24	3	How PL/SQL Works – Integrating SQL in a PL/SQL Program	L				

25	2	Triggers – Stored Procedures and Functions	L				
26	2	Packages – Cursors	L				
27	3	Transactions.	L				
Seminar							
1	1	UNIT-I Database Design				S	
2	1	UNIT-II Formal Relational Query Language : Relational Algebra.				S	
3	1	UNIT-III Organization of Records in Files				S	
4	1	UNIT-IV Timestamp Based Protocols				S	
5	1	UNIT-V Stored Procedures and Functions				S	
Class Test							
1	5	UNIT I - UNIT V			CT		
Final Evaluation (FE)							
1	3	Entire course					FE

Head of the Department

Signature of the Staff Incharge

IQAC Coordinator

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

Teaching Plan

Name(s) of the Staff: Dr.S.GEETHA

Programme: B.Sc. GEOGRAPHY

Semester: III SEMESTER

Academic Year: 2022-2023 NOVEMBER

Course Code:U213AG4

Course Title: STATISTICS I

Objectives:

> To learn abount basic concepts of statistics

> To learn about the quantitative skills of ststistics

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	10 hrs per unit (for 5 units)	50
ICT Enabled Lectures [I]	-----	-----
Practical Demonstration[P]	----	----
Tutorial (T)	1 hour per unit(for 5 units)	05
Field visit (FV)	---	---
Group discussion	2 hours	2
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the importance Tourism Development in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week 5	Credit 4	Total 75

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

Unit wise Teaching and Evaluation Plan

Unit Wise Topics	L	I	P	T	FV	CT	SA	C	FE
Unit-I Nature and scope of statistics	3								
Limitations of statistics	3								
Uses of statistics in geography	2			1					
Collection of data	2						1		
Class Test						1	1		
Unit- II classification of data,tabulation of data	3								
Frequency distributions	3	1	1						
Diagrammatic and graphical representation of data	2						1		
Data usages	2								
Class test						1	1	1	
Unit – III measures of central tendency	3								
Arithmetic and geometric mean	3								
Harmonic mean ,median,mode	2						1		
Properties and limitations	2	1	1						
Class test						1	1	1	
Unit-IV measures of dispersion	3								
Range,quartile deviation	3			1					
Mean deviation,standard deviation	2								
Coefficient of variation	2						1		

Class test | | 1 | 1

Unit – V skewness and kurtosis | 4

Coefficient of skewness | 3 | 1

Bowleys method,karl pearson method | 3

Class Test | | 1 | 1 | 1
Rehearsal Examination | | | | 3
Total Hours | | | | 75
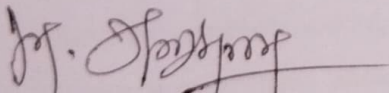
Components of Students' Evaluation for Continuous Internal Assessment:
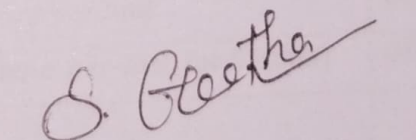
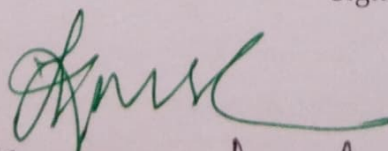| TEST	SECTION A	SECTION B	SECTION C	TOTAL
I	10X1 = 10 Marks	4X5=20 Marks	2X10=20 Marks	50
II	10X1 = 10 Marks	4X5=20 Marks	2X10=20 Marks	50
III	20X1 = 20 Marks	5X5=25 Marks	3X10=30 Marks	75
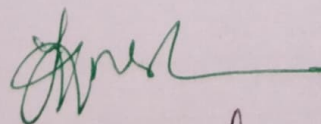
Assignment Topic I: for 10 marks: uses of statistics in geography

Assignment Topic II for 10 marks:collection of data

Assignment Topic III for 10 mark: measures of central tendency

Head of the Department

Signature of the Staff Member(s)

IQAC Coordinator.

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OF GEOGRAPHY

Teaching Plan

Name(s) of the Staff: Dr.V.KALYANI

Programme: M.Sc., APPLIED GEOGRAPHY   Academic Year: 2022-2023   NOVEMBER

Semester: III SEMESTER   Course Code:P21GC310

Course Title: Research Methodology in Geography

Objectives:

> To understand the significances, types and methods of Geographical Research.

> To learn about Research Planning, Design, data processing and report writing.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	13 hrs per unit (for 5 units)	65
ICT Enabled Lectures [I]	-----	-----
Practical Demonstration[P]	----	----
Tutorial (T)	1 hour per unit(for 5 units)	05
Field visit (FV)	2 hours	02
Group discussion		
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the importance Tourism Development in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week 6	Credit 5 Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60

Unit wise Teaching and Evaluation Plan

Unit Wise Topics	L	I	P	T	FV	CT	SA	CA	FE
Unit-I Research: Meaning, Objectives	4								
Significance of Research	3								
Research and Scientific Methods	3			1					
Types and Methods of Research	3						1		
Class Test						1		1	
Unit- II Logic in Research, Hypothesis	4								
Concepts and Facts	3	1	1						
Principles of Geographical Research	3						1		
Class test	3					1		1	1
Unit – III Data Acquisition, Analysis	4								
Collection of Data, Sources of Data	3								
Sampling Methods	3						1		
Structure of Data data base, Data Transformation	3	1	1						
Class test						1		1	1
Unit-IV Research Design- Literature Survey	4								
Selection of the Topic	3			1					
Statement of the Problem, Formulation of Hypothesis	3								
Testing of Hypothesis	3						1		

Class test		1	1

Unit – V Organization of Thesis: Reference 5
Materials, Drafting of Thesis, Plagiarism

Abstract and Synopsis, Bibliography, Research 4   1
Papers and Journal Publications

Project proposal writing   4

Class Test		1	1	1
Rehearsal Examination				3
Total Hours				90
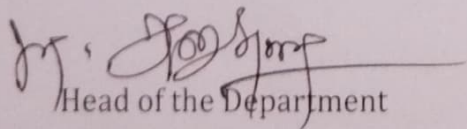
Components of Students' Evaluation for Continuous Internal Assessment:
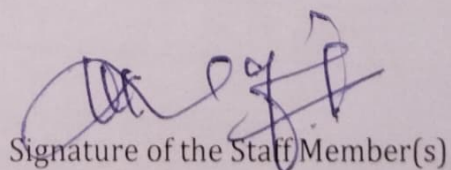
TEST	SECTION A	SECTION B	SECTION C	TOTAL
I	10X1 = 10 Marks	4X5=20 Marks	2X10=20 Marks	50
II	10X1 = 10 Marks	4X5=20 Marks	2X10=20 Marks	50
III	20X1 = 20 Marks	5X5=25 Marks	3X10=30 Marks	75

Assignment Topic I: for 10 marks: Types of Research

Assignment Topic II for 10 marks: Collection of Data

Assignment Topic III for 10 mark: Research Design, Testing of Hypothesis

Head of the Department   Signature of the Staff Member(s)

IQAC Coordinator.

DEPARTMENT OF GEOGRAPHY

Teaching Plan

Name(s) of the Staff: Dr.G. RENUGADEVI

Programme:	M.Sc GEOGRAPHY	Academic Year:	2022-2023
Semester:	IV semester	Course Code:	

Course Title: ENVIRONMENTAL GEOGRAPHY-P21G1MBE1:1

Objectives:

❖   To understand the components of ecosystem and explore man and environment relationship.

❖   To learn about natural and man induced disruptions in the ecosystem

❖   To explore climate change and its implications on ecosystems

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	134hrs per unit (for 5 units)	70
ICT Enabled Lectures [I]	-----	-----
Practical Demonstration[P]	1 hour per unit(for 5 units)	-----
Tutorial (T)	1 hour per unit(for 2 units)	02
Field visit (FV)	-----	-----
Group discussion		
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of quantum physics in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

Unit wise Teaching and Evaluation Plan

Unit Wise Topics	L	I	P	T	FV	CT	S	CA	FE
Unit-IEnvironment – Elements and Types	3								
Man and environment relationships	3								
Determinism – Possibilism	3			1					
Changing nature of concept lithosphere	3					1			
Hydrosphere, biosphere,multi disciplinary approach	2								
Class Test					1			1	
Unit- II Concept of Ecosystem – Forms and functions of Ecosystem	3								
Classification of Ecosystem forest Ecosystem, grassland Ecosystem	3								
Classification of Ecosystem : marine and mountain ecosystem	3					1			
Biomass – food web – food pyramid	2								
Nutrient cycle , biodiversity and its types	3								
Class test					1		1		1
Unit – III Natural disruptions of the ecosystem – Natural hazards – landslide,	2								
Natural disruptions of the ecosystem – , earthquake, volcano, floods and droughts	2								
Pollution	2					1			
Ozone Depletion	3								
Human interference on ecosystem – Population growth and its impact	3								
Man's modifications of the biosphere , agriculture ,Green Revolution	2								
Class test					1		1	1	
Unit – IV Environmental planning and management	3								

Topic	Hours		
Objectives and strategies Environmental planning	3	1	
Natural resource management and conservation (land, water and forest)	2		
Sustainable development concept - need, problems and strategies	3		1
EIA principles and procedures	3		
Class test		1	1
Unit – V Climate change - causes and consequences	3		
Stockholm conference, Earth summits and Round tables and Kyoto Protocol	3		
World climate data monitoring programme	2		
Environment related policies and programme in India	3		1
Environment Governance	2		
Class Test		1	1
Rehearsal Examination			1
			3
Total Hours			9

Components of Students' Evaluation for Continuous Internal Assessment:

Test 1 : for 40 marks : Section A [10 X 1 = 10 marks] ; Section B [2 X 5 = 10 marks];
Section C [2X10 =200 marks]

Test 2 : for 40 marks : Section A [10 X 1 = 10 marks] ; Section B [2 X 5 = 10 marks];
Section C [2X10 =200 marks]

Test 3 : for 40 marks : Section A [10 X 1 = 10 marks] ; Section B [2 X 5 = 10 marks];
Section C [2X10 =200 marks]
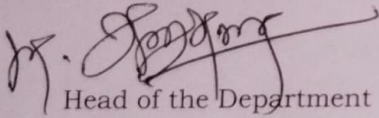
Note: The question paper pattern for these three tests may be decided by the teacher concerned and accordingly the details should be given.
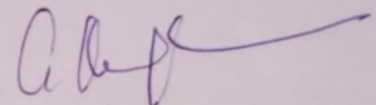
Assignment Topic I for 10 marks: Multi disciplinary approach in *ENVIRONMENTAL GEOGRAPH*
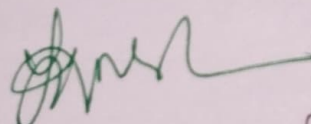
Assignment Topic II for 10 marks: Causes and consequenses of Ozone Depletion

Assignment Topic III for 10 marks: Environment policies and programme in India

Rehearsal Examination: 75 marks as per end semester question paper pattern.

Head of the Department

Signature of the Staff Member(s)

IQAC Coordinator.

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A) KUMBAKONAM

DEPARTMENT OF GEOGRAPHY

Teaching Plan

Name(s) of the Staff: **S. MAHESWARI**, Lecturer in Geography

Programme: M.Sc. APPLIED GEOGRAPHY   Academic Year: 2022-2023

Semester: IV semester   Course Code: P21G4MBE4:2

Course Title: **MBEC-IV-GEOGRAPHY OF ECONOMIC ACTIVITIES**

Objectives:

> To make understand varying sets of conditions associated with location, production, distribution, consumption, exchange of resources and spatial organization of economic activities across the world.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hours per unit (for 5 units)	60
ICT Enabled Lectures [I]	---	---
Practical Demonstration[P]	---	---
Tutorial (T)	1 hour per unit(for 3 units)	03
Field visit (FV)	---	---
Group discussion (GD)	1 hour per unit (for 5 units)	05
Class Quiz Offered (CQ)	1 hour per unit (for 5 units)	05
Evaluation –Class Tests (CT)	1 test per unit (for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit (for 5 units)	05
Creating awareness about the latest developments of practical models (CA)	1 hour per unit (for 5 units)	05
Final Evaluation (FE)	2 hrs (Rehearsal)	02
Hrs per week	6	Credit	4	Total	**90**

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
3	54
2	30

Unit wise Teaching and Evaluation Plan

Unit Wise Topics	L	I	T	FV	GD	CQ	CT	S	CA	FE
UNIT-I										
Introduction and factors affecting spatial organization of economic activities	2								1	
Types of economic activities, primary activities in world	3							1		
Secondary activities in world	3	1								
Tertiary and quaternary activities in world	4									
Class Final Evaluation					1	1	1			
UNIT-II										
Natural resources: Introduction and its types	3									
Distribution of renewable and non-renewable resources in World and its associated problems	5							1		
Resource management World energy crises in developed countries	4								1	
Class Final Evaluation					1	1	1			
UNIT-III										
Industries: Classification, bases and characteristics in World	2									
Factors of industrial localization	2									
Concepts and Theories : Weber, Hoover Models	3	1								
Models and Theories: August Lonch, Pres and Smith	3							1		
World Industrial Region	2								1	
Class Final Evaluation					1	1	1			
UNIT-IV										
Models of transportation and transport cost	2							1		
Accessibility and connectivity measures and indices, Comparative cost advantages	3								1	
Models: Spatial flow gravity and allocation	3									
Concept and ideas: Edward Ullman and Hurst	4									
Class Final Evaluation					1	1	1			
UNIT-V										
Distribution and Growth of Information and communication technology in World	3	1								
World Trade Organization	2								1	
Globalization and Liberalization	4									
World Trade pattern and Its problems and prospects	3							1		
Class Final Evaluation					1	1	1			
Rehearsal Examination										2
Total Hours										90

Components of Students' Evaluation for Continuous Internal Assessment:

TEST	SECTION A	SECTION B	SECTION C	TOTAL
I	10 X 1 = 10 marks	2 X 5 = 10 marks	2 X 10 =20 marks	40
II	10 X 1 = 10 marks	2 X 5 = 10 marks	2 X 10 =20 marks	40
III	10 X 1 = 10 marks	2 X 5 = 10 marks	2 X 10 =20 marks	40
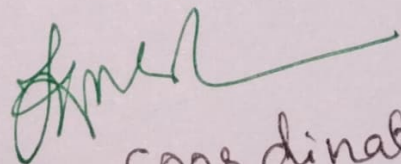
Assignment Topic I for 10 marks: Types of Economic Activities in World

Assignment Topic II for 10 marks: Various Theories of Industrial Model
Assignment Topic III for 10 marks: World Trade Organization and World Trade Patterns

Head of the Department

Signature of the Staff Member(s)

IQAC Coordinator.

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OF BOTANY

Name(s) of the Staff: Dr. R.RADHAKRISHNAN

Programme: B.Sc Botany   Academic Year: 2022-2023

Semester: V semester   Course Code: U21BOC509

Course Title: Cell and Molecular Biology

Objectives:

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hrs per unit (for 5 units)	60
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	5 test per unit	05
Final Evaluation (FE)	5 hrs (Rehearsal)	05
Hrs per week	5	Credit	5	Total	75

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	2	Basic principles of microscopy	L			
2	3	Differentiating features of Prokaryotic and Eukaryotic cells –	L			
3	3	Ultra structure and functions of plasma membrane	L			
4	2	Ultra structure of cell organelles – Plastids, Mitochondria, Golgi bodies, Endoplasmic Reticulum, Lysosomes	L			
5	3	Cell Inclusions.	L			
		Unit-II				
6	2	Nucleolus - Structure of euchromatin and heterochromatin	L			
7	3	Special types of chromosomes	L			
8	2	Lamp brush chromosomes and polytene chromosomes	L			
9	3	Cell cycle, Cell Division:	L			
10	3	Mitosis and meiosis.	L			
		Unit – III				
12	2	Nucleic acids – DNA and RNA	L			
13	3	Features – Griffith Experiment	L			
14	2	Structure, properties (C-Value Paradox) & replication of DNA	L			
15	3	Hershey and Chase experiment	L			
16	2	RNA – Structure	L			

17	2	Functions of rRNA, mRNA and tRNA.	L			

Unit – IV

18	3	Gene regulation in Prokaryotes (Lac operon concept) and Eukaryotes	L			
19	3	Initiation, Elongation and termination	L			
20	2	Transcription and Translation.	L			
21	3	Gene regulation in prokaryotes	L			
22	2	*prokaryotes and eukaryotes – Differences.*	L			

Unit – V

23	3	Chloroplast and mitochondrial genome organization	L			
24	3	Microbial genetics – PCR	L			
25	2	Basic mechanism of signal transduction	L			
26	2	principles of cell communication	L			
27	3	Programmed Cell Death (PCD)..	L			

Seminar

1	1	UNIT-I Differentiating features of Prokaryotic and Eukaryotic cells –			S	
2	1	UNIT-II Cell cycle, Cell Division:			S	
3	1	UNIT-III Structure, properties (C-Value Paradox) & replication of DNA			S	
4	1	UNIT – IV Gene regulation in prokaryotes			S	
5	1	UNIT-V Microbial genetics – PCR			S	

Class Test

					CT		
1	5	UNIT I-UNIT IV			CT		

Final Evaluation (FE)

							FE
1	3	Entire course					FE

Head of the Department

Signature of the Staff Member(s)

IQAC- Co-ordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OF BOTANY

Name(s) of the Staff: Dr.R.RADHAKRISHNAN

Programme: B.Sc Botany   Academic Year: 2022-2023

Semester: IV semester   Course Code: U21BOC614

Course Title: Plant Ecology and Conservation.

Objectives:

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	15 hrs per unit (for 5 units)	75
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	5 test per unit	05
Final Evaluation (FE)	5 hrs (Rehearsal)	05
Hrs per week	6	Credit	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit-I						
1	2	General Ecology	L			
2	3	Approaches to the study of Ecology, Autecology Synecology	L			
3	3	Plant environment	L			
4	2	Plant environment – climatic, edaphic and Biotic factor,	L			
5	3	Grazing and browsing, by humans –deforestation, Agriculture), Allelopathy	L			
Unit-II						
6	2	Ecosystem	L			
7	3	Components abiotic-biotic-autotrophic producers	L			
8	2	Heterotroophic consumers, biomass-ecological pyramids, Productivity	L			
9	3	Primary, secondary & gross; food chain	L			
10	3	Food web & energy flow – pond ecosystem	L			
Unit – III						
12	2	Vegetation – Units of vegetation – formation, association, consociation,	L			
13	3	Development of vegetation	L			
14	2	Migration – colonization, ecesis	L			
15	3	Methods of study of vegetation (Quadrat & transect	L			
16	2	Plant succession – Hydrosere&xerosere.	L			

| 17 | 2 | Ecological classification of Plants; Morphological and anatomical features of plants and their correlation to the habitat. Floristic studies | L | | | | |

Unit – IV Plant Protection and Disease management

18	3	Pollution and its control: Air pollution, Radiation pollution,	L				
19	3	Noise pollution, Thermal pollution	L				
20	2	Soil pollution: Industrial, agrochemicals	L				
21	3	Water pollution	L				
22	2	Industrial effluents. Marine pollution.	L				

Unit – V Methods of Plant Protection

23	3	Phytogeography-Approaches to Phytogeography – Climate of India & its climatic zones, Botanical regions (provinces) of India	L				
24	3	Climate of India & its climatic zones, Botanical regions (provinces) of India	L				
25	2	Vegetational types of Tamil Nadu: Evergreen, deciduous, scrub & Mangrove, Continuous and discontinuous distribution.	L				
26	2	Endemism. *In situ* and *ex situ* conservation.	L				
27	3	Application of remote sensing in conservation.	L				

Seminar

1	1	UNIT-I General Ecology			S	
2	1	UNIT-II Primary, secondary & gross; food chain			S	
3	1	UNIT-III Development of vegetation			S	

						S	
4	1	**UNIT – IV** Pollution and its control: Air pollution, Radiation pollution,					
						S	
5	1	**UNIT-V** Endemism. *In situ* and *ex situ* conservation					
		Class Test					
					CT		
1	5	UNIT I					
		Final Evaluation (FE)					
							FE
1	3	Entire course					

Head of the Department

Signature of the Staff Member(s)

IQAC Co-ordinator

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OFDEPARTMENT OF BOTANY

Teaching Plan

Name(s) of the Staff: Dr B.Bhavani

Programme: UG-BOTANY   Academic Year: 2022-2023

Semester: V semester   Course Code:SBBH

Course Title: Bio resources and human welfare

Objectives:

1. Students to learn about the uses of microorganisms eg Single cell protein, Antioxidants, Vitamins, Enzyme.
2. To know about the plant sources like Coffee, Poppy, Cotton, Oil, and Rubber.
3. Understand the Traditional Medicines and their Economic Importance.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	13 hrs per unit (for 5 units)	65
Evaluation –Class Tests (CT)	1 hrs (for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of Numerical methods in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	5	Total	75

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit-I -Useful products from microorganisms					
1	2	Single cell proteins from fungi (yeast)	L			
2	3	Alage (Spirulina)	L			
3	3	Antioxidants from Dunaliellasalina	L			
4	2	Vitamins, Enzymes	L			
5	3	Antibioics and Alcohol	L			
Unit-II- Useful products form Gymnosperms					
6	2	Useful products form Gynosperms)	L			
7	3	Wood (Pine)	L			
8	2	Drugs (Turpentine)	L			
9	3	Drugs (Taxol)	L			
10	3	Drugs (Ephedrine)	L			
Unit – III - Study of plants for the source					
12	2	Application of the following products,beverage (coffee)	L			
13	3	narcotics (poppy)	L			
14	2	fiber (Cotton)	L			
15	3	oil-seeds (sesame),	L			
16	2	latex (rubber)	L			
17	2	Economic importance	L			
Unit – IV Importance and application areas					
18	3	Biomass production - food	L			
19	3	Bio-fertilizers	L			
20	2	Environmental Biotechnology	L			

21	3	Waste treatment – solid (compost)		L			
22	2	sewage treatment (domestic sewage).		L			
		Unit – V - Traditional and economically important					
23	3	Traditional and economically important		L			
24	3	Important wood plant species of India.		L			
25	2	Economically important wood plant species of India. Acacia, Albizjia,		L			
26	2	Economically important wood plant species of India. Bambusa, Dalberigia.		L			
27	3	Economically important wood plant species of Terminalia		L			
		Seminar					
1	1	UNIT-I Vitamins				S	
2	1	UNIT-II Useful products form Gynosperms)				S	
3	1	UNIT-III Plants for the source and application of the following products				S	
4	1	UNIT – IV Bio-fertilizers use				S	
5	1	UNIT-V Traditional and economically important plant species of India.				S	
		Class Test					
1	5	UNIT I-UNIT V				CT	
		Final Evaluation (FE)					
1	3	Entire course					FE

Head of the Department

Signature of the Staff Member

IQAC - Coordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OFDEPARTMENT OF BOTANY

Teaching Plan

Name(s) of the Staff: Dr B.Bhavani

Programme: UG-BOTANY

Semester: V semester

Academic Year: 2022-2023

Course Code: **18BOC508**

Course Title: **GENETICS, BIOSTATISTICS**
                     AND EVOLUTION

Objectives:

1. To study Mendelian genetics, recombination of chromosomes, structure and function of genes and their various units
2. To educate on mutation
3. To impart knowledge on biostatistics and its applications biological experiments
         To understand the mechanism of evolution and study of population genetics

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	13 hrs per unit (for 5 units)	65
Evaluation –Class Tests (CT)	1 hrs (for 5 units)	05
Seminar/problem solving/class work(S)	1 hour per unit(for 5 units)	05
Creating awareness about the latest developments of Numerical methods in current research sector (CA)	1 hour per unit(for 5 units)	05
Final Evaluation (FE)	3 hrs (Rehearsal)	03
Hrs per week	6	Credit	5	Total	75

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I - Mendel's laws				
1	2	Mendel's laws, Monohybrid	L			
2	3	Dihybrid, back cross and test cross	L			
3	3	Allelic interactions: Incomplete dominance	L			
4	2	co-dominance – complementary factor hypothesis	L			
5	3	Non-allelic interaction – Lethal factor, Multiple factor hypothesis	L			
		Unit-II- Recombination				
6	2	Linkage &crossing over in *Lathyrusodoratus*	L			
7	3	Eye colour in *Drosophila* colour blindness in man	L			
8	2	Cytoplasmic inheritance.	L			
9	3	Sex determination in plants and *Drosophila*.	L			
10	3	Functional units of gene – cistron, recon, muton, codon and operon concept	L			
		Unit – III – Biostatistics Definition				
12	2	Sampling techniques: Sample	L			
13	3	Random and non – random sampling techniques	L			
14	2	Data – Types of data	L			
15	3	Presentation of data	L			
16	2	Graphical methods: Histogram,	L			
17	2	Graphical methods: Bar and Pie diagrams.	L			
		Unit – IV Mean, median and mode				

18	3	Mean, median and mode	L			
19	3	Measures of dispersion – range,	L			
20	2	Standard Deviation	L			
21	3	Standard Error	L			
22	2	Correlation and its types	L			
Unit – V - Evolution						
23	3	Evolutionary concepts – Theories of Lamarck	L			
24	3	Charles Darwin	L			
25	2	Modern synthetic theories	L			
26	2	Population genetics	L			
27	3	Factors affecting gene frequencies.	L			
Seminar						
1	1	UNIT-I Vitamins			S	
2	1	UNIT-II Useful products form Gynosperms)			S	
3	1	UNIT-III Plants for the source and application of the following products			S	
4	1	UNIT – IV Bio-fertilizers use			S	
5	1	UNIT-V Traditional and economically important plant species of India.			S	
Class Test						
1	5	UNIT I-UNIT V			CT	
Final Evaluation (FE)						
1	3	Entire course				FE

Head of the Department

Signature of the Staff Member

IQAC coordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OF BOTANY

Name(s) of the Staff: Mrs. B.Bhavani

Programme: B.Sc Botany   Academic Year: 2022-2023

Semester: V semester   Course Code: U21BOC511

Course Title: Morphology, Taxonomy and Economic Botany

Objectives:

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hrs per unit (for 5 units)	60
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	5 test per unit	05
Final Evaluation (FE)	5 hrs (Rehearsal)	05
Hrs per week	6	Total	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	2	Morphology: vegetative, floral and fruit parts	L			
2	3	Inflorescence – Types – racemose, cymose, mixed and special types.	L			
3	3	Fruit - simple, fleshy, dry dehiscent	L			
4	2	Dry indehiscent,	L			
5	3	Aregate and multiple fruits.	L			
		Unit-II				
6	2	Binomial nomenclature – ICBN rules – taxonomic types.	L			
7	3	Systems of Classification – Bentham and Hooker classification – Merits and demerits.	L			
8	2	Phylogenetic classification – anatomical, embryological	L			
9	3	Biochemical and palynological eveidence for taxonomy, numerical taxonomy,	L			
10	3	Herbarium techniques.	L			
		Unit – III				
12	2	A detailed study of the following families with their economic importance	L			
13	3	Annonaceae, Capparidaceae,	L			
14	2	Tiliaceae, Rutaceae,	L			
15	3	Anacardiaceae, Leguminosae	L			
16	2	(Papilionaceae, Cesalpinaceae and Mimosaceae)	L			
17	2	Economic Cucurbitaceae.	L			
			L	CT	S	FE

Unit – IV

18	3	A detailed study of the following families with their economic importance	L				
19	3	Rubiaceae, Asteraceae,	L				
20	2	Apocynaceae, Asclepiadaceae	L				
21	3	Solanaceae, Verbenaceae,	L				
22	2	Euphorbiaceae, Orchidaceae and Poaceae.	L				

Unit – V

23	3	Economic Botany: A brief study of the following economically important plants:	L				
24	3	Food – Cereals (*Oryza sativa, Eleusinecoracana*); Pulses – Black gram (*Phaseolusmungo*),	L				
25	2	Edible – Gingelly oil (*Sesamumindicum*); Root tu Tapioca (*Manihotesculenta*); Sugar – Sug (*Saccharumofficinarum*).	L				
26	2	Fibres – Textiles (*Gossypium*); Others– Crot Agave.	L				
27	3	Medicinal Plants – *Ocimum, Phyllanthus, Solanun* Forest Products – Timber: Teak (*Tectonagrandis* (*Artocarpusheterophyllus*). Tannins, Gums, F Turpentine.	L				

Seminar

1	1	UNIT-I Inflorescence – Types – racemose, cymose, mixed and special types.				S	
2	1	UNIT-II Systems of Classification – Bentham and Hooker classification – Merits and demerits.				S	

3	1	UNIT-III A detailed study of the following families with their economic importance			S	
4	1	UNIT – IV Economic importance Rubiaceae, Asteraceae,			S	
5	1	UNIT-V Food – Cereals (*Oryza sativa, Eleusinecoracana*); Pulses – Black gram (*Phaseolusmungo*),			S	
		Class Test				
1	5	UNIT I-UNIT V		CT		
		Final Evaluation (FE)				
1	3	Entire course				FE

Head of the Department

Signature of the Staff Member(s)

IQAC – co ordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OF BOTANY

Name(s) of the Staff: Mrs. C.MAHESHWARI

Programme: B.Sc Botany

Semester: III semester

Course Title: Bryophytes, Pteridophytes,
Gymnosperms and Paleobotany
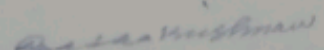
Academic Year: 2022-2023

Course Code: U21BOC305

Objectives:

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	15 hrs per unit (for 5 units)	75
Evaluation –Class Tests (CT)	5 test per unit	05
Seminar/problem solving/class work(S)	5 test per unit	05
Final Evaluation (FE)	5 hrs (Rehearsal)	05
Hrs per week	6	Credit	5	Total	90
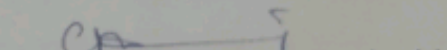
Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30
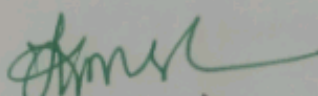
SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I Bryophytes				
1	2	General characteristics	L			
2	3	Classification – Liverworts (Stotler et. al., 2009), hornworts (Renzaglia et al., 2009) and Mosses (Goffinet et al., 2009);	L			
3	3	Morphology, Structure,	L			
4	2	Reproduction and life history of the following genera:	L			
5	3	*Riccia, Marchantia, Anthoceros, Polytrichum* and *Funaria.*	L			
		Unit-II Pteridophytes				
6	2	General characteristics and classification by Smith,	L			
7	3	Morphology, Structure	L			
8	2	Reproduction and life	L			
9	3	Psilotum, Lycopodium	L			
10	3	*Selaginella* and *Equisetum.*	L			
		Unit – III Pteridophytes				
12	2	General characteristics	L			
13	3	Ecology and significance	L			
14	2	Life cycle of Rhizopus (Zygomycota) Penicillium	L			
15	3	Alternaria (Ascomycota)	L			
16	2	Puccinia, Agaricus Basidiomycota	L			

17	2	Economic importance.	L			

Unit – IV Gymnosperms

18	3	General characteristics and classification of Gymnosperms by Sporne;	L			
19	3	Morphology,	L			
20	2	Classification, Marsilea;	L			
21	3	structure, mode of reproduction and life-history of the following genera	L			
22	2	*Cycas, Pinus* and *Gnetum.*	L			

Unit – V Paleobotany

23	3	Fossils and methods of fossilization –	L			
24	3	Geological time–scale – an elementary knowledge of the computation of the age of fossils –	L			
25	2	– Radio-Carbon dating technique. Contributions of Birbal sahni	L			
26	2	A brief study of the following fossil plants: a) Rhynia, b) Lepidodendron,	L			
27	3	c) Pentoxylon and d) Williamsonia.	L			

Seminar

1	1	UNIT-I Classification – Liverworts (Stotler et. al., 2009), hornworts (Renzaglia et al., 2009) and Mosses (Goffinet et al., 2009);			S	
2	1	UNIT-II General characteristics, ecology and significance,			S	
3	1	UNIT-III Economic importance.			S	

4	1	UNIT – IV structure, mode of reproduction and life-history of the following genera			S	
5	1	UNIT-V Geological time-scale – an elementary knowledge of the computation of the age of fossils –			S	
		Class Test				
1	5	UNIT I-UNIT V		CT		
		Final Evaluation (FE)				
1	3	Entire course				FE

Head of the Department   Signature of the Staff Member(s)

IQAC Co-ordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OF BOTANY

Name(s) of the Staff: Mrs. C.MAHESHWARI

Programme: B.Sc Botany   Academic Year: 2022-2023

Semester: V semester   Course Code: U21BOC511

Course Title: Morphology, Taxonomy and Economic Botany

Objectives:

Teaching Methodology	Distribution of hours/Unit		Total Hours of Instruction
Traditional Chalk and Talk Method [L]	12 hrs per unit (for 5 units)		60
Evaluation –Class Tests (CT)	5 test per unit		05
Seminar/problem solving/class work(S)	5 test per unit		05
Final Evaluation (FE)	5 hrs (Rehearsal)		05
Hrs per week	6	Total	5	Total	90

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	2	Morphology: vegetative, floral and fruit parts	L			
2	3	Inflorescence – Types – racemose, cymose, mixed and special types.	L			
3	3	Fruit - simple, fleshy, dry dehiscent	L			
4	2	Dry indehiscent,	L			
5	3	Aregate and multiple fruits.	L			
		Unit-II				
6	2	Binomial nomenclature – ICBN rules – taxonomic types.	L			
7	3	Systems of Classification – Bentham and Hooker classification – Merits and demerits.	L			
8	2	Phylogenetic classification – anatomical, embryological	L			
9	3	Biochemical and palynological eveidence for taxonomy, numerical taxonomy,	L			
10	3	Herbarium techniques.	L			
		Unit – III				
12	2	A detailed study of the following families with their economic importance	L			
13	3	Annonaceae, Capparidaceae,	L			
14	2	Tiliaceae, Rutaceae,	L			
15	3	Anacardiaceae, Leguminosae	L			
16	2	(Papilionaceae, Cesalpinaceae and Mimosaceae)	L			

17	2	Economic Cucurbitaceae.	L			
		Unit – IV				
18	3	A detailed study of the following families with their economic importance	L			
19	3	Rubiaceae, Asteraceae,	L			
20	2	Apocynaceae, Asclepiadaceae	L			
21	3	Solanaceae, Verbenaceae,	L			
22	2	Euphorbiaceae, Orchidaceae and Poaceae.	L			
		Unit – V				
23	3	Economic Botany: A brief study of the following economically important plants:	L			
24	3	Food – Cereals (*Oryza sativa, Eleusinecoracana*); Pulses – Black gram (*Phaseolusmungo*),	L			
25	2	Edible – Gingelly oil (*Sesamumindicum*); Root tubers – Tapioca (*Manihotesculenta*); Sugar – Sugarcane (*Saccharumofficinarum*).				
26	2	Fibres – Textiles (*Gossypium*); Others– *Crotalaria, Agave*.				
27	3	Medicinal Plants – *Ocimum, Phyllanthus, Solanum*.L Forest Products – Timber: Teak (*Tectonagrandis*), Jack (*Artocarpusheterophyllus*). Tannins, Gums, Resins, Turpentine.				
		Seminar				
1	1	UNIT-I Inflorescence – Types – racemose, cymose, mixed and special types.			S	

2	1	UNIT-II Systems of Classification – Bentham and Hooker classification – Merits and demerits.				S	
3	1	UNIT-III A detailed study of the following families with their economic importance				S	
4	1	UNIT – IV Economic importance Rubiaceae, Asteraceae,				S	
5	1	UNIT-V Food – Cereals (*Oryza sativa,* *Eleusinecoracana*); Pulses – Black gram (*Phaseolusmungo*),				S	
		Class Test					
1	5	UNIT I-UNIT V			CT		
		Final Evaluation (FE)					
1	3	Entire course					FE

Head of the Department

Signature of the Staff Member(s)

IQAC - coordinator

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

DEPARTMENT OF BOTANY

Name(s) of the Staff: Dr. C.MAHESHWARI

Programme: B.Sc Botany

Semester: IV semester

Academic Year: 2022-2023

Course Code: U21BOC407

Course Title: Anatomy and Embryology and microtechque

Objectives:

Teaching Methodology			Distribution of hours/Unit		Total Hours of Instruction
Traditional Chalk and Talk Method [L]			15 hrs per unit (for 5 units)		75
Evaluation –Class Tests (CT)			5 test per unit		05
Seminar/problem solving/class work(S)			5 test per unit		05
Final Evaluation (FE)			5 hrs (Rehearsal)		05
Hrs per week	5	Total	5	Total	75

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

SL.NO	HOUR	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	2	Anatomy: Plant tissue	L			
2	3	Classification, Meristems, definition, differentiation, redifferentation and dedifferentation	L			
3	3	Classification of meristems- apical meristems	L			
4	2	lateral meristerms intercalary meristem,	L			
5	3	Concepts of apical meristem theories, apical cell theory, Tunica – Corpus and Histogen theory.	L			
		Unit-II				
6	2	Epidermal tissue system	L			
7	3	Stomatal types. Permanent tissue	L			
8	2	Parenchyma, collenchyma and sclerenchyma.	L			
9	3	Complex Permanent Tissues:	L			
10	3	Phloem – Components, Ontogeny and Phylogeny. Laticifer types.	L			
		Unit – III				
12	2	Primary structure of root, stem and leaf in dicots and monocots.	L			
13	3	Normal Secondary growth in stem and root- annual rings –.	L			
14	2	Heart Wood, sapwood	L			
15	3	Anomalous secondary growth in dicot stems:	L			

16	2	*Nyctanthes* and *Boerhaavia* and monocot stem	L			
17	2	*Dracaena*.Nodal anatomy – uni and trilacunar types.	L			

Unit – IV Plant Protection and Disease management

18	3	Embryology – Structure and development of anther.	L			
19	3	Microsporogenesis; Microgametogenesis	L			
20	2	Ultrastructure of pollen wall –	L			
21	3	structure, development and types of ovules, megasprogenesis, Megagametogenis (*Polygonum* type of embryosac development),	L			
22	2	Fertilization. Endosperm types, Development of embryo – dicot and Monocot. Basic concepts of apomixis, apospory, Polyembryony and Parthenogenesis	L			

Unit – V Methods of Plant Protection

23	3	Micrometry	L			
24	3	Fixation, dehydration,	L			
25	2	Embedding, hand sectioning, microtome sectioning,	L			
26	2	Stain types, staining and mounting	L			
27	3	Preparation of double staining using saffranin and fast green..	L			

Seminar

1	1	UNIT-I Classification, Meristems, definition,			S	
2	1	UNIT-II Stomatal types. Permanent tissue			S	
3	1	UNIT-III Primary structure of root, stem and leaf in dicots and monocots.			S	

4	1	UNIT – IV Microsporogenesis; Microgametogenesis			S	
5	1	UNIT-V Fixation, dehydration,			S	
Class Test						
1	5	UNIT II		CT		
Final Evaluation (FE)						
1	3	Entire course				FE

Head of the Department

Signature of the Staff Member(s)

IQAC- co-ordinator

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM
POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY
Teaching Plan

Name of the Staff: Dr.M.Govindarajan

Programme: B.Sc., ZOOLOGY   **Academic Year:** 2022-23   (ODD SEM)

Semester: I semester   **Course Code:** U21ZC101
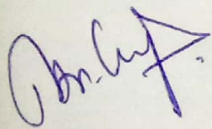
Course title: Invertebrate

Objectives: To make thorough understanding on kingdom classification, general characters and special functions with special reference to various major and minor, phylum of invertebrata such as Protozoa, Cnidaria, and Platyhelminthes along with general topics.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	-	-
ICT Enabled Lectures [I]	11 hrs per unit (for 2.0 units)	22
Practical Demonstration[P]	-	-
Tutorial (T)	-	-
Field visit (FV)	-	-
Group discussion	1 hour per unit (for 2 units)	-
Evaluation –Class Tests (CT)	1 test per unit (for 2 units)	2
Seminar/problem solving/class work(S)	1 hour per unit (for 2 units)	2
Creating (CA)	1 hour per unit (for 2 units)	2
Final Evaluation (FE)	2 hrs (Rehearsal)	2

Hrs per week	2	Credit	5	Total	30

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

Sl. No.	Hour	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
Unit-I						
1	2	Animal Kingdom: Classification, taxonomy and nomenclature.	L			
2	4	Phylum: Protozoa – General characters and classification up to class level with suitable examples.	L			
3	7	Detailed Study: Paramecium. General Topics: 1. Human Protozoan Diseases: Amebiasis, Leishmaneosis and Malaria	L			
Unit-III						
	1	Phylum:Platyhelminthes – General characters	L			
	1	Classification up to class level with suitable examples.	L			
	5	Detailed Study: Liver fluke	L			
	2	General Topics: 1. Parasitic adaptation in helminthes.	L			
Seminar						
	1	UNIT-I Phylum: Protozoa – General characters and classification			S	
	1	UNIT-III Phylum:Platyhelminthes – General characters				
Class Test						
	1	UNIT-I Human Protozoan Diseases:		CT		
	1	UNIT –III Parasitic adaptation in helminthes.		CT		
Creating (CA)						
	2	Creating awareness for higher studies			CA	
Final Evaluation (FE)						
	2	Entire course				FE
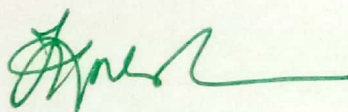
Head of the Department

Signature of the Staff Member(s)

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 901

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM
POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY
Teaching Plan

Name of the Staff: Dr.M.Govindarajan

Programme: B.Sc., ZOOLOGY   **Academic Year:** 2022-23   (ODD SEM)
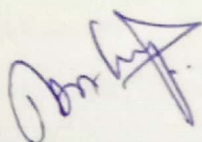
Semester: III semester   **Course Code:** U21ZC305

Course title: Cell Biology

Objectives: To understand the structure and functions of cellular organelles.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	-	-
ICT Enabled Lectures [I]	10 hrs per unit (for 1.5 units)	15
Practical Demonstration[P]	-	-
Tutorial (T)	-	-
Field visit (FV)	-	-
Group discussion	1 hour per unit (for 1.5 units)	-
Evaluation –Class Tests (CT)	1 test per unit (for 1.5 units)	1.5
Seminar/problem solving/class work(S)	1 hour per unit (for 1.5 units)	1.5
Creating (CA)	1 hour per unit (for 1.5 units)	2
Final Evaluation (FE)	2 hrs (Rehearsal)	2

Hrs per week	2	Credit	5	Total	30

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30
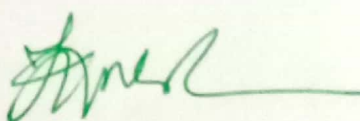
Sl. No.	Hour	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-III				
1	3	Ultra structure and functions of Endoplasmic reticulum.	L			
2	3	Ultra structure and functions of ribosomes	L			
3	3	Ultra structure and functions of mitochondria.	L			
4	3	Ultra structure and functions of Lysosome.				
		Unit-II				
5	2	Ultra Structure of Golgi complex.	L			
6	1	Functions of Golgi complex	L			
		Seminar				
	1	UNIT-III			S	
	1	UNIT-II				
		Class Test				
	1	UNIT-III		CT		
	1	UNIT-II		CT		
		Creating Awareness (CA)				
	1	Creating awareness for higher studies			CA	
		Final Evaluation (FE)				
	2	Entire course				FE

Head of the Department

Signature of the Staff Member(s)

Teaching Plan

Name of the Staff: Dr.M.Govindarajan

Programme: B.Sc., ZOOLOGY   **Academic Year:** 2022-23   (ODD SEM)

Semester: V semester   **Course Code:** 18ZC507

Course title: Evolution

Objectives: To understand the scientific principles and concepts of animal evolution by means of their evidences and animal distribution.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	-	-
ICT Enabled Lectures [I]	11 hrs per unit (for 2.0 units)	22
Practical Demonstration[P]	-	-
Tutorial (T)	-	-
Field visit (FV)	-	-
Group discussion	1 hour per unit (for 2 units)	-
Evaluation –Class Tests (CT)	1 test per unit (for 2 units)	2
Seminar/problem solving/class work(S)	1 hour per unit (for 2 units)	2
Creating (CA)	1 hour per unit (for 2 units)	2
Final Evaluation (FE)	2 hrs (Rehearsal)	2

Hrs per week	2	Credit	5		Total	30

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

Sl. No.	Hour	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-IV				
1	4	Structural and numerical changes of gene mutation	L			
2	4	Structural and numerical changes of Chromosomal mutations	L			
3	3	Population Genetics: Hardy Weinberg principle, Factors affecting Hardy Weinberg equilibrium	L			
		Unit-V				
4	4	Animal distribution – continuous and discontinuous.	L			
5	3	Evolution of horse.	L			
6	4	Human evolution – Biological and Cultural evolution of man	L			
		Seminar				
7	1	UNIT-IV			S	
8	1	UNIT-V			S	
		Class Test				
9	1	UNIT-IV		CT		
10	1	UNIT-V		CT		
		Creating Awareness (CA)				
11	2	Creating awareness for higher studies			CA	
		Final Evaluation (FE)				
12	2	Entire course				FE

Head of the Department

Signature of the Staff Member(s)

Teaching Plan

Name of the Staff: Dr.M.Govindarajan

Programme: B.Sc., ZOOLOGY   **Academic Year:** 2021-22   (ODD SEM)

Semester: I semester   **Course Code:** P21ZC103

Course title: Genetics

Objectives: To inculcate the present perspective on the development of animal embryos of various taxonomic groups through experimental analysis using modern biological tools.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	11 hrs per unit (for 2 units)	22
ICT Enabled Lectures [I]	-	-
Practical Demonstration[P]	-	-
Tutorial (T)	1 hour per unit(for 2 units)	-
Field visit (FV)	-	-
Group discussion	-	-
Evaluation –Class Tests (CT)	1 test per unit	2
Seminar/problem solving/class work(S)	1 hour per unit (for 2 units)	2
Creating (CA)	1 hour per unit (for 2 units)	2
Final Evaluation (FE)	2 hrs (Rehearsal)	2

Hrs per week	2	Credit	5	Total	30

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

Sl. No.	Hour	UNIT -CONTENT	L	CT	S	FE
			MODE OF TEACHING			
		Unit-IV				
1	3	**Mutation:** Types – Chromosomal mutation: Numerical and structural changes in chromosomes	L			
2	3	Edward's syndrome, Cri du chat syndrome, Klinefelter's syndrome and Turner syndrome.	L			
3	3	Molecular basis of gene mutation, Spontaneous and Induced mutation	L			
4	2	DNA repair mechanism.	L			
		Unit-III				
6	6	**Sex determination:** Grasshopper, Bonellia, Free-martin (Cattle), Pigeon, Sacculina.	L			
7	5	Microbial Genetics: Methods of gene transfer: Transformation, conjugation, sex-duction and transduction.				
		Class Test				
8	1	UNIT-IV		CT		
9	1	UNIT-III		CT		
		Seminar				
10	1	Unit IV			S	
11	1	Unit III			S	
		Creating awareness				
12	2	Creating awareness for higher studies			CA	
		Final Evaluation (FE)				
13	2	Entire course				FE

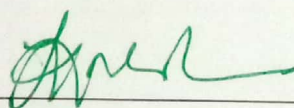Head of the Department

HEAD OF THE DEPARTMENT OF ZOOLOGY
GOVT. COLLEGE FOR WOMEN
KUMBAKONAM

Signature of the Staff Member

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM
POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY
Teaching Plan

Name of the Staff: Dr.M.Govindarajan

Programme: B.Sc., ZOOLOGY   **Academic Year:** 2021-22   (ODD SEM)

Semester: III semester   **Course Code:** P21ZC309

Course title: Developmental Biology and Evolution

Objectives: To inculcate the present perspective on the development of animal embryos of various taxonomic groups through experimental analysis using modern biological tools.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	11 hrs per unit (for 2 units)	22
ICT Enabled Lectures [I]	-	-
Practical Demonstration[P]	-	-
Tutorial (T)	1 hour per unit(for 2 units)	-
Field visit (FV)	-	-
Group discussion	-	-
Evaluation –Class Tests (CT)	1 test per unit	2
Seminar/problem solving/class work(S)	1 hour per unit (for 2 units)	2
Creating (CA)	1 hour per unit (for 2 units)	2
Final Evaluation (FE)	2 hrs (Rehearsal)	2

Hrs per week	2	Credit	5	Total	30

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

Sl. No.	Hour	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-I				
1	1	Aim and scope of Developmental Biology	L			
2	3	Spermatogenesis	L			
3	3	Oogenesis	L			
4	2	Tupes of egg	L			
5	2	Polarity and gradient.	L			
		Unit-II				
6	3	**Fertilization:** Physiological events and Biochemical changes during fertilization.	L			
7	2	**Parthenogenesis**: Types, Natural and Artificial-significances.				
8	3	**Cleavage:** Types of cleavage- peculiarities - chemical changes - patterns of cleavage - planes of cleavage, Role of egg cortex in sea urchin.				
9	3	Embryonic induction of lens and competence. Differentiation - Types and levels; Homeotic genes; Nuclear transplantation experiment	L			
		Class Test				
10	1	UNIT-I Spermatogenesis and Oogenesis		CT		
11	1	UNIT-II Cleavage - Patterns of cleavage		CT		
12	1	Unit I			S	
13	1	Unit II			S	
14	2	Creating awareness for higher studies			CA	
		Final Evaluation (FE)				
15	2	Entire course				FE

HEAD OF Head of the Department
GOVT. COLLEGE FOR WOMEN,
KUMBAKONAM.

Signature of the Staff Member

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM
POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY
Teaching Plan

Name of the Staff: Dr.M.Govindarajan

Programme: B.Sc., ZOOLOGY

Semester: IV semester

Academic Year: 2022-23   (EVEN SEM)

Course Code: U21ZC407

Course title: Environmental Biology
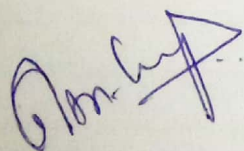
Objectives: In order to acquire a comprehensive understanding of the Environment, it is essential to delve into its fundamental principles, definition, and scope. Additionally, exploring the sources of pollution and strategies for wildlife conservation is crucial.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	-	-
ICT Enabled Lectures [I]	11 hrs per unit (for 2 units)	22
Practical Demonstration[P]	-	-
Tutorial (T)	-	-
Field visit (FV)	-	-
Group discussion	1 hour per unit (for 2 units)	-
Evaluation –Class Tests (CT)	1 test per unit (for 2 units)	2
Seminar/problem solving/class work(S)	1 hour per unit (for 2 units)	2
Creating (CA)	1 hour per unit (for 2 units)	2
Final Evaluation (FE)	2 hrs (Rehearsal)	2

Hrs per week	2	Credit	5	Total	30

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

Sl. No.	Hour	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-IV				
1	2	Habitat characteristics of fauna and its adaptation in rivers.	L			
2	2	Habitat characteristics of fauna and its adaptation in muddy.	L			
3	2	Habitat characteristics of fauna and its adaptation in rocky.	L			
4	2	Habitat characteristics of fauna and its adaptation mangroves.	L			
5	1	Habitat characteristics of fauna and its adaptation in estuaries.	L			
6	1	Habitat characteristics of fauna and its adaptation in deep sea and forest.	L			
7	1	Habitat characteristics of fauna and its adaptation in desert and cave.	L			
		Unit-V				
8	2	Sources and effects of air pollution.	L			
9	2	Sources and effects of water pollution.	L			
10	2	Sources and effects of soil pollution.	L			
11	2	Sources and effects of noise pollution.	L			
12	2	Wild life and conservation - IUCN categorization, *in situ* and *ex situ* conservation.	L			
13	1	Bio accumulation, bio magnification and bio remediation.	L			
		Seminar				
14	1	UNIT-IV			S	
15	1	UNIT-V			S	
		Class Test				
16	1	UNIT-IV		CT		
17	1	UNIT-V		CT		
		Creating Awareness (CA)				
18	2	Creating awareness for higher studies			CA	
		Final Evaluation (FE)				
19	2	Entire course				FE

Head of the Department

Signature of the Staff Member(s)

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM
POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY
Teaching Plan

Name of the Staff: Dr.M.Govindarajan

Programme: B.Sc., ZOOLOGY

Semester: VI semester

Academic Year: 2022-23   (EVEN SEM)

Course Code: U21ZC613

Course title: Genetics and Molecular Biology

Objectives: To comprehend the knowledge on the fine structure of genetic materials their regulation and action and to know the molecular aspects of DNA – fine structure, transcription, and translation.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	-	-
ICT Enabled Lectures [l]	11 hrs per unit (for 1.5 units)	18
Practical Demonstration[P]	-	-
Tutorial (T)	-	-
Field visit (FV)	-	-
Group discussion	1 hour per unit (for 1.5 units)	-
Evaluation –Class Tests (CT)	1 test per unit (for 1.5 units)	1.5
Seminar/problem solving/class work(S)	1 hour per unit (for 1.5 units)	1.5
Creating Awareness(CA)	1 hour per unit (for 1 units)	1
Final Evaluation (FE)	1 hr (Rehearsal)	1

Hrs per week	2	Credit	5	Total	23

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

Sl. No.	Hour	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-II				
1	2	Sex determination in Man.	L			
2	2	Sex determination in drosophila.	L			
3	1	Sex determination in Bonellia.	L			
4	2	Sex linked inheritance, Sex limited and Sex influenced inheritance	L			
		Unit-V				
5	4	Transcription - Genetic Code - Translation.	L			
6	4	Gene expression and regulation in prokaryotes.	L			
7	3	Lac operon model	L			
		Seminar				
8	.5	UNIT-II			S	
9	1	UNIT-V			S	
		Class Test				
10	.5	UNIT-II		CT		
11	1	UNIT-V		CT		
		Creating Awareness (CA)				
12	1	Creating awareness for higher studies			CA	
		Final Evaluation (FE)				
13	1	Entire course				FE

Head of the Department ZOOLOGY

HEAD OF THE DEPARTMENT OF ZOOLOGY
GOVT. COLLEGE FOR WOMEN.
KUMBAKONAM

M.

Signature of the Staff Member(s)

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 901

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY

Teaching Plan

Name of the Staff: Dr.M.Govindarajan

Programme: M.Sc., ZOOLOGY   **Academic Year:** 2021-22   (EVEN SEM)
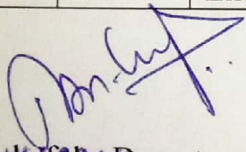
Semester: II semester   **Course Code:** P21ZC207

Course title: Immunology

Objectives: To inculcate basic and current knowledge on the immune system. To learn the structure and functions of immune system.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	11 hrs per unit (for 2 units)	22
ICT Enabled Lectures [I]	-	-
Practical Demonstration[P]	-	-
Tutorial (T)	1 hour per unit(for 2 units)	-
Field visit (FV)	-	-
Group discussion	-	-
Evaluation –Class Tests (CT)	1 test per unit	2
Seminar/problem solving/class work(S)	1 hour per unit (for 2 units)	2
Creating (CA)	1 hour per unit (for 2 units)	2
Final Evaluation (FE)	2 hrs (Rehearsal)	2

Hrs per week	2	Credit	5	Total	30

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30
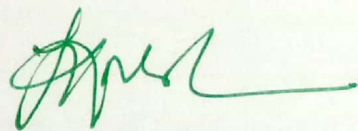
Sl. No.	Hour	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-III				
1	3	**Antigen - Antibody reaction:** Immune complex, Binding forces, Types of Antigen-antibody reactions - precipitations, Agglutinations, cytolysis, complement fixation, opsonisation.	L			
2	4	Complements (Classical and Alternate pathways)	L			
3	2	Cytokines	L			
4	2	Cell mediated Immune response	L			
		Unit-IV				
5	4	**Hyper sensitivity:** Types and Mechanism of anaphylaxis.	L			
6	3	Auto immunity - Causes, Auto immune disease - pernicious anemia, Rheumatoid arthritis, Graves disease	L			
7	4	Transplantation Immunology - Types of graft, Mechanism of Allograft rejection, Graft versus Host reaction, Prevention of graft rejection	L			
		Class Test				
8	1	UNIT-III		CT		
9	1	UNIT-IV		CT		
		Seminar				
10	1	Unit III			S	
11	1	Unit IV			S	
		Creating awareness				
12	2	Creating awareness for higher studies			CA	
		Final Evaluation (FE)				
13	2	Entire course				FE

Head of the Department

Signature of the Staff Member

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM
POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY
Teaching Plan

Name of the Staff: Dr.M.Govindarajan

Programme: M.Sc., ZOOLOGY   **Academic Year:** 2021-22   (EVEN SEM)

Semester: II semester   **Course Code:** P21Z2EC24
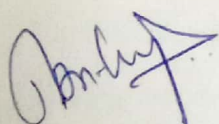
Course title: Entomology

Objectives: To obtain a wide knowledge on types of insect and their morphology, anatomy and physiology of insects and their management system. To know the risks of vector insects.

Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	11 hrs per unit (for 2 units)	22
ICT Enabled Lectures [I]	-	-
Practical Demonstration[P]	-	-
Tutorial (T)	1 hour per unit(for 2 units)	-
Field visit (FV)	-	-
Group discussion	-	-
Evaluation –Class Tests (CT)	1 test per unit	2
Seminar/problem solving/class work(S)	1 hour per unit (for 2 units)	2
Creating (CA)	1 hour per unit (for 2 units)	2
Final Evaluation (FE)	2 hrs (Rehearsal)	2
Hrs per week	2	Credit	5	Total	30

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30
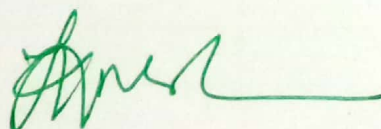
Sl. No.	Hour	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-II				
1	4	Mouth parts of Insects- biting and chewing type, chewing and lapping type, piercing and sucking type, sponging type, siphoning type	L			
2	4	Classification of insects based on types of metamorphosis, hormonal control of metamorphosis	L			
3	3	Reproduction in Insects: Reproductive cycle, other types of reproduction – parthenogenesis, viviparity, polyembryony; life span of insects.	L			
		Unit-III				
4	6	Medical Entomology – direct effects of medical pests, indirect effects of medical pests;	L			
5	5	Insects affecting health of man – damage and control of mosquitoes, house flies, bed bug, lice and fleas	L			
		Class Test				
6	1	UNIT-I		CT		
7	1	UNIT-II		CT		
8	1	Unit I			S	
9	1	Unit II			S	
10	2	Creating awareness for higher studies			CA	
		Final Evaluation (FE)				
11	2	Entire course				FE

HEAD OF Head of the Department ZOOLOGY
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KUMBAKONAM.

Signature of the Staff Member

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women (A)
Kumbakonam- 612 001

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM
POST GRADUATE AND RESEARCH DEPARTMENT OF ZOOLOGY
Teaching Plan

Name of the Staff: Dr.M.Govindarajan

Programme: M.Sc., ZOOLOGY   **Academic Year:** 2021-22   (EVEN SEM)

Semester: IV semester   **Course Code:** P21ZC413

Course title: Ecology and Ethology

Objectives: To know the sources of pollution and their impact on environment.

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Teaching Methodology	Distribution of hours/Unit	Total Hours of Instruction
Traditional Chalk and Talk Method [L]	11 hrs per unit (for 1 unit)	11
ICT Enabled Lectures [I]	-	-
Practical Demonstration[P]	-	-
Tutorial (T)	1 hour per unit(for 2 unit)	-
Field visit (FV)	-	-
Group discussion	-	-
Evaluation –Class Tests (CT)	1 test per unit	1
Seminar/problem solving/class work(S)	1 hour per unit (for 1 unit)	1
Creating (CA)	1 hour per unit (for 1 unit)	1
Final Evaluation (FE)	1hr (Rehearsal)	1

Hrs per week	2	Credit	5	Total	15

Hours per week	Total Hours of Instruction
6	90
5	75
4	60
2	30

Sl. No.	Hour	UNIT -CONTENT	MODE OF TEACHING			
			L	CT	S	FE
		Unit-II				
1	2	Source, effects and control measures of air pollution	L			
2	1	Source, effects and control measures of water pollution	L			
3	1	Source, effects and control measures of soil pollution	L			
4	1	Source, effects and control measures of noice pollution	L			
5	1	Source, effects and control measures of thermal pollution	L			
6	1	Source, effects and control measures of radiation pollution	L			
7	1	Source, effects and control measures of plastic pollution	L			
8	1	Source, effects and control measures of pesticide pollution	L			
9	1	Acid Rain- Green house effect- Ozone and its importance- Global warming.	L			
10	1	Environmental Impact Assessment – Need, Methods	L			
		Class Test				
10	1	UNIT-II		CT		
11	1	Unit II			S	
12	1	Creating awareness for higher studies			CA	
		Final Evaluation (FE)				
13	1	Entire course				FE

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M.
Signature of the Staff Member

Co-ordinator
Internal Quality Assurance Cell (IQAC)
Govt. College for Women
Kumbakonam- 612 001

Teaching plan 2022 – 2023 Odd Semester

Name of the staff: **Dr. G. Priya**

MAJOR BASED ELECTIVE COURSE-I
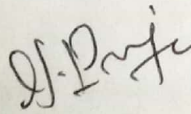
BEE KEEPING
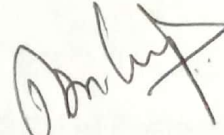
THEORY HOURS :5 **PRACTICAL HOURS:** **EXAM HOURS** :3		**COURSE CODE** :P21Z1MBE1:3 **CREDITS** :4 **MARKS** : ESE-75/CIA-25	
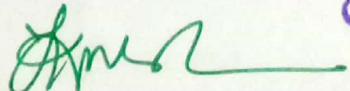
UNIT - III

Apiary-care and Management-Artificial beehives-different types-construction of space frames- selection of sites-catching and transforming a Colony-Handling and maintenance of the Colony- Instruments employed in Apiary.

Portions to be completed	Tentative Schedule	Teaching methodology to be applied	Learning strategies	Assessment
Apiary-care	July I week	Lecture	Notes writing	Assignment
Apiary- Management	July II week	Lecture	Notes writing	Test
Artificial beehives	July III week	Powerpoint presentation	Disscussion	Test
construction of space frames	July IV week	Lecture	Notes writing	Test
selection of sites-catching	August I week	Lecture	Notes writing	Test
transforming a Colony-Handling	August II week	You tube videos http:/www.youtube.com/@agriculturaldevelopmenttru8788	Disscussion	-
maintenance of the Colony	August III week	Lecture	Notes writing	Test
Instruments employed in Apiary	August IV week	Lecture	Notes writing	Test

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Internal Quality Assurance Cell (IQAC)
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CORE COURSE V - BIOCHEMISTRY
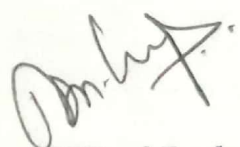
THEORY HOURS 5 PRACTICAL HOURS: EXAM HOURS 3	COURSE CODE : P21ZC205 CREDITS 5 MARKS : ESE-75/CIA-25
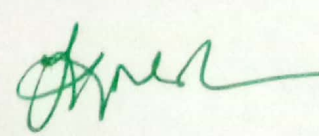
UNIT - V

Enzymes -Nomenclature and classification, chemical nature and properties of enzyme, factors affecting enzyme activity, Active site, Enzyme inhibition, Enzyme specificity, Mechanism of enzyme action-MichaelisMenten Hypothesis.Regulation of enzyme activity, Non protein enzymes -coenzymes and Iso enzyme. Hormones: Biochemical classification.

Portions to be completed	Tentative Schedule	Teaching methodology to be applied	Learning strategies	Assessment
Enzymes -Nomenclature and classification	July I week	Lecture	Notes writing	Assignment
chemical nature and properties	July II week	Lecture	Notes writing	Test
factors affecting enzyme activity	July III week	Powerpoint presentation	Disscussion	Test
Active site, Enzyme inhibition	July IV week	Powerpoint presentation	Disscussion	Test
Enzyme specificity	August I week	Powerpoint presentation	Disscussion	Test
MichaelisMenten Hypothesis	August II week	Youtube videos http://youtube.com@studysmartly8096	Discussion	Test
Regulation of enzyme activity	August III week	Lecture	Notes writing	Test
Non proteinenzymes	August IV week	Lecture	Notes writing	Test
coenzymes and Iso enzyme	September Iweek	Seminar	Notes writing	Seminar presentation skill
Hormones: Biochemical classification.	September II week	Lecture	Notes writing	Test

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MAJOR BASED ELECTIVE COURSE III
BIOSTATISTICS AND RESEARCH METHODOLOGY

THEORY HOURS	6	COURSE CODE	:P21Z3MBE3:1
PRACTICAL HOURS:		CREDITS	4
EXAM HOURS	3	MARKS	: ESE-75/CIA-25

UNIT - II

Skewness and kurtosis, measures of skewness, Karl-Pearson's coefficient of skewness, Bowley's measures of skewness, types of coefficient of skewness, types of kurtosis, Correlation analysis (Karl-Pearson's)- types and methods, Regression analysis - regression line and regression equation

Portions to be completed	Tentative Schedule	Teaching methodology to be applied	Learning strategies	Assessment
measures of Skewness	July I week	Lecture	Notes writing	Assignment
Karl-Pearson's coefficient of skewness	July II week	Lecture	Workout Model problems	Test
Karl-Pearson's coefficient of skewness	July III week	Powerpoint presentation	Disscussion	Test
Bowley'smeasures of skewness	July IV week	Powerpoint presentation	Disscussion	Test
Bowley'smeasures of skewness	August I week	Lecture	Workout Model problems	Assignment
types of coefficient of skewness	August II week	Lecture	Notes writing	Test
types of kurtosis	August III week	Lecture	Notes writing	Test
Correlation analysis	August IV week	Lecture	Workout Model problems	Test
types and methods	September Iweek	Seminar	Notes writing	Seminar presentation skill
Correlation	SeptemberII week	Lecture	Notes writing	Test
regression line and regression equation	September IIIweek	Lecture	Notes writing	Test
Regression analysis	September IVweek	Lecture	Workout Model problems	Test
Revision &Class test	October Onwards	-	-	-

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INVERTEBRATA

Theory Hours	: 6	Course Code	:U20ZC101
Practical Hours	: --	Credits	:5
Exam Hours	: 3	Marks	:100

UNIT – I

Animal Kingdom: Classification, taxonomy and nomenclature.
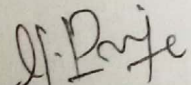
Phylum: Protozoa – General characters and classification up to class level with suitable examples.
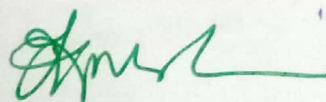
Detailed Study: Paramecium.

Phylum: Porifera and Cnidaria - General characters and classification up to class level with suitable examples.
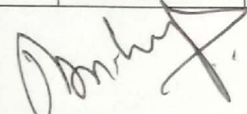
General Topics: 1. Canal system in Porifera

Portions to be completed	Tentative Schedule	Teaching methodology to be applied	Learning strategies	Assessment
Classification	August I week	Lecture	Notes writing	Assignment
taxonomy	August II week	Lecture	Notes writing	Test
taxonomy and nomenclature	August III week	Lecture	Notes writing	Test
Protozoa – General characters	August IV week	Lecture	Notes writing	Test
classification	September Iweek	Lecture	Notes writing	Test
Paramecium External features	SeptemberII week	Powerpoint presentation	Disscussion	Test
Nutrition&Locomotion	September IIIweek	Lecture	Notes writing	Test
Reproduction	September IVweek	http:www.7activestudio.com	Discussion	Discussion
Reproduction continuation	October Iweek	Seminar	Notes writing	Seminar presentation skill
Porifera and Cnidaria - General characters	October IIweek	Lecture	Notes writing	Test
Porifera and Cnidaria classification	October IIIweek	-	Notes writing	Test
Revision	October IVweek	Disscussion	Disscussion	Disscussion

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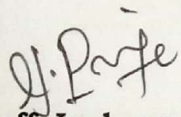
MAJOR BASED ELECTIVE COURSE I
BIOSTATISTICS
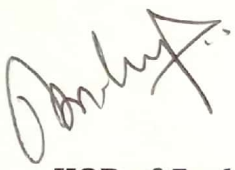
Theory Hours	: 5	Course Code	:U20Z5EC1
Practical Hours	: --	Credits	:4
Exam Hours	: 3	Marks	:100
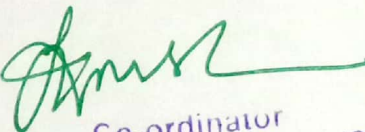
UNIT - II

Processing of data: classification and tabulation of data. Presentation of Data. Diagramatic (Bar and Pie) and graphical presentation (Histogram, Frequency curve, Frequency polygon).

Portions to be completed	Tentative Schedule	Teaching methodology to be applied	Learning strategies	Assessment
Introduction of Data	July I week	Lecture	Notes writing	Assignment
classification of data	July II week	Lecture	Notes writing	Test
tabulation of data	July III week	Lecture	Notes writing	Test
Presentation of Data	July IV week	Lecture	Notes writing	Test
Bar	August I week	Powerpoint presentation	Disscussion	Disscussion
Pie	August II week	Powerpoint presentation	Disscussion	Disscussion
graphical presentation	August III week	Lecture	Notes writing	Test
Conti nuation of graphical presentation	August IV week	Lecture	Notes writing	Test
Revision	September Iweek	Seminar	Notes writing	Seminar presentation skill
Class test	SeptemberI I week	Lecture	Notes writing	Test

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Name of the staff: **Dr. G. Priya**
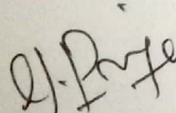
CORE COURSE V - BIOCHEMISTRY

THEORY HOURS	5	COURSE CODE	: P21ZC205
PRACTICAL HOURS:		CREDITS	5
EXAM HOURS	3	MARKS	: ESE-75/CIA-25

UNIT - V

Enzymes -Nomenclature and classification, chemical nature and properties of enzyme, factors affecting enzyme activity, Active site, Enzyme inhibition, Enzyme specificity, Mechanism of enzyme action- MichaelisMenten Hypothesis.Regulation of enzyme activity, Non protein enzymes -coenzymes and Iso enzyme. Hormones: Biochemical classification.

Portions to be completed	Tentative Schedule	Teaching methodology to be applied	Learning strategies	Assessment
UNIT - V Enzymes -Nomenclature and classification	December IV week	Lecture	Notes writing	Assignment
chemical nature	January I week	Lecture	Notes writing	Test
properties of enzyme	January II week	Lecture	Notes writing	Test
factors affecting enzyme activity	January III week	Lecture	Notes writing	Test
Active site	January IV week	Lecture	Notes writing	Test
Enzyme inhibition	February I week	Powerpoint presentation	Disscussion	Test
Enzyme specificity	February II week	Powerpoint presentation	Disscussion	Test
Mechanism of enzyme action	February III week	Lecture	Notes writing	Test
MichaelisMenten Hypothesis	February IV week	Youtube videos http://youtube.com@studysmartly 8096	Discussion	—
Regulation of enzyme activity	March I week	Lecture	Notes writing	Test
Non proteinenzymes	March II week	Seminar	Discussion	Seminar presentation skill
coenzymes and Iso enzyme	March III week	Lecture	Notes writing	Test
Hormones: Biochemical classification	March IV week	Lecture	Assignment	Assignment
Revision	April I week	Discussion	Discussion	Test
Class Test	April II week	Test	Test	Test

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EXTRA DISCIPLINARY COURSE (EDC)

DIET FOR HEALTHY LIFE

THEORY HOURS	2	COURSE CODE	: P21Z2EDC
PRACTICAL HOURS:		CREDITS	2
EXAM HOURS	3	MARKS	: ESE-75/CIA-25

UNIT-III

Role of different kinds of food materials on health
Vegetables and fruits in diet, Different kinds of fats/oils (Animal fat, Vegetable fat, visible and nutritive fats, Vanaspati),Salt intake, Sugars, Whole grains ,Water & Beverages Milk & Soft drinks, Tea, Coffee, Energy drinks, Tender coconut water, Alcohol.

UNIT-IV

Best practices for storage-Handling of Perishable foods-Dairy, Fresh fruits and Vegetables,egg, Non vegetarian foods, Personal hygiene, Removal or reduction of pesticides-washing, balancing, peeling, cooling, Beware of adulterants-common adulterant

Unit-V

Healthy cooking practices,pre cooling preparation,washing and cutting of raw food,Cooling methods,Diet and weight management, foods, Tips to reduce body weight –Naturopathy

Portions to be completed	Tentative Schedule	Teaching methodology to be applied	Learning strategies	Assessment
Role of different kinds of food materials on health. Vegetables and fruits in diet	December IV week	Lecture	Notes writing	Assignment
Different kinds of fat and oils	January I week	Lecture	Notes writing	Assignment
Sugars,Whole grains Water &Beverages	January II week	Lecture	Notes writing	Assignment
Milk & Soft drinks, Tea, Coffee, Energy drinks, Tender coconut water, Alcohol.	January III week	Lecture	Notes writing	Assignment
Best practices for storage- Handling of Perishablefoods-Dairy, Fresh fruits and Vegetables,egg, Non vegetarian foods	January IV week	Lecture	Notes writing	Assignment
Personal hygiene	February I week	Powerpoint present ation	Disscussion	Test
Removal or reduction of pesticides-washing, balancing, peeling, cooling	February II week	Lecture	Notes writing	Test
Beware of adulterants-common adulterants.	February III week	Lecture	Notes writing	Test
Healthy cooking practices pre cooling preparation, washing and cutting of raw food, coolingmethods	February IV week	Youtube videos http://nutritionfacts.org/subscribe/	Discussion	Discussion
Diet and weight management -Healthy foods, Tips to reduce body weight	March I week	Powerpoint present ation	Disscussion	Test
Naturopathy	March II week	Powerpoint present ation	Disscussion	Test

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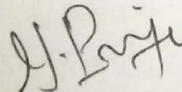
CORE COURSE XIII - ECOLOGY AND ETHOLOGY

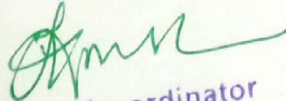|				
THEORY HOURS	6	COURSE CODE		: P21ZC413
PRACTICAL HOURS:		CREDITS		5
EXAM HOURS	3	MARKS		: ESE-75/CIA-25

UNIT-V

Animal behaviour: Feeding and Anti predator behaviour, Aggressive behaviour, Sexualbehaviour and Selection, Family and group behaviour, Dominance behaviour. Animal Communication: Visual, Olfactory, Auditory, Tactile and Chemicals.

Portions to be completed	Tentative Schedule	Teaching methodology to be applied	Learning strategies	Assessment
Feeding behaviour	January I week	Lecture	Notes writing	Test
Anti predator behaviour	January II week	Lecture	Notes writing	Test
Aggressive behaviour	January III week	Lecture	Notes writing	Test
Sexualbehaviour	January IV week	Lecture	Notes writing	Test
Selection	February I week	Lecture	Notes writing	Test
Family behaviour	February II week	Powerpoint presentation	Discussion	Test
group behaviour	February III week	Powerpoint presentation	Discussion	Test
Dominance behaviour	February IV week	Lecture	Notes writing	Test
Visual Communication	March I week	Youtube videos https://t.me/dadhic hhelpline	Discussion	Test
Olfactory Communication	March II week	https://t.me/dadhic hhelpline	Discussion	Test
Auditory Communication	March III week	https://t.me/dadhic hhelpline	Discussion	Test
Tactile Communication	March IV week	https://t.me/dadhic hhelpline	Discussion	Test
Chemicals Communication	April I week	https://t.me/dadhic hhelpline	Discussion	Test
Revision	April II week	Discussion	Group discussion	Group discussion
Test	April III week onwards	-	-	-

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Core Course –III - CHORDATA

Theory Hours : 6	Course Code :U20ZC203		
Practical Hours : --	Credits 6	Exam Hours : 3	
Marks :100			

UNIT – I

Sub Phylum: Prochordata - General characters and classification up to order level with suitable examples.

Detailed Study: Amphioxus (Exclusive of endoskeleteon).

General Topic: 1. Origin of Chordates.

2. Retrogressive metamorphosis in ascidians.

UNIT – II

Class: Pisces and Amphibia: General characters and classification up to order level with suitable examples. Detailed study: Scoliodon

Portions to be completed	Tentative Schedule	Teaching methodology to be applied	Learning strategies	Assessment
Prochordata - General characters and classification	January I week	Lecture	Notes writing	Test
Amphioxus-External structure	January II week	Youtube videos http://www.youtube.com/@tponder7	Disscussion	Disscussion
Digestive system	January III week	Lecture	Notes writing	Test
Endoskeleton system	January IV week	Powerpoint presentation	Disscussion	Test
Digestive system	February I week	Lecture	Notes writing	Test
Circulatory system	February II week	Lecture	Notes writing	Test
Excretion&reproduction	February III week	Lecture	Notes writing	Test
Origin of Chordates	February IV week	Lecture	Notes writing	Test
Retrogressive metamorphosis in ascidians	March I week	Powerpoint presentation	Disscussion	Test
Pisces and Amphibia: General characters and classification	March II week	Lecture	Notes writing	Test
Scoliodon- External structure	March III week	Lecture	Notes writing	Test
Digestive system&Circulatory system	March IV week	Lecture	Notes writing	Test
Reproductive system	April I week	Powerpoint presentation	Discussion	Test
Endoskeletal system	April II week	Seminar	Group discussion	Presentation skill
Excretory system	April III week	Lecture	Notes writing	Test
Continuation..	April IV week	Lecture	Notes writing	Test

Staff Incharge

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