

SADAKATHULLAH APPA COLLEGE
(AUTONOMOUS)

(Reaccredited by NAAC at an 'A' Grade with a CGPA of 3.40 out of 4.00 in the III cycle An ISO 9001:2008 Certified Institution)

RAHMATH NAGAR, TIRUNELVELI- 11.

Tamilnadu

ADD ON COURSES
(ONE YEAR - NON SEMESTER)
(Aided and Unaided)



CBCS SYLLABUS

(Applicable for students admitted in June 2016 and onwards)

**(As per the Resolutions of the Academic Council
Meeting held on 23.02.2016)**

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SYLLABUS FOR CERTIFICATE COURSES
(Applicable for students who admitted in June 2016 and onwards)

DEPARTMENT OF TAMIL

Sl. No.	Paper	Title of the Paper	Subject Code	Hrs/ Year	Credit	Total		
						I	E	T
1	I	இதழியல் ஓர் அறிமுகம்	15NTAC11	45	3	25	75	100
2	II	செய்தி எழுதுதல், அறிக்கையிடலின் அடிப்படைகள்	15NTAC12	45	3	25	75	100
3	III	களப்பணி/இதழ் தயாரிப்பு	15NTACP1	30	2	--	100	100
Total				120	8	50	250	300

DEPARTMENT ARABIC

1	I	Applied Grammar-I	15NARC11	45	3	25	75	100
2	II	Translation-I	15NARC12	45	3	25	75	100
3	III	Practical (Arabic Typewriting)	15NARCP1	30	2	40	60	100
Total				120	8	90	210	300

DEPARTMENT OF ENGLISH

1	I	Procedures of Translating	15NENC11	45	3	25	75	100
2	II	Techniques of Translation	15NENC12	45	3	25	75	100
3	III	Project	15NENCP1	30	2	--	100	100
TOTAL				120	8	50	250	300

DEPARTMENT OF COMMERCE

1	I	BASICS IN ACCOUNTING	15NCOC11	45	3	25	75	100
2	II	MS OFFICE	15NCOC12	45	3	25	75	100
3	III	MS OFFICE PRACTICAL	15NCOCP1	30	2	40	60	100
TOTAL				120	8	90	210	300

DEPARTMENT OF HISTORY

1	I	PRINCIPLES OF TOURISM	15NHSC11	45	3	25	75	100
2	II	TRAVEL MANAGEMENT	15NHSC12	45	3	25	75	100
3	III	FIELD WORK	15NHSCP1	30	2	--	100	100
TOTAL				120	8	50	250	300

DEPARTMENT OF CHEMISTRY								
1	I	SOIL ANALYSIS-I	15NCHC11	45	3	25	75	100
2	II	WATER ANALYSIS-I	15NCHC12	45	3	25	75	100
3	III	PRACTICAL IN WATER AND SOIL ANALYSIS-I	15NCHCP1	30	2	40	60	100
TOTAL				120	8	90	210	300
DEPARTMENT OF COMPUTER SCIENCE								
1	I	COMPUTER HARDWARE	15NCSC11	45	3	25	75	100
2	II	COMPUTER NETWORKING	15NCSC12	45	3	25	75	100
3	III	PRACTICAL IN COMPUTER HARDWARE AND NETWORKING	15NCSCP1	30	2	40	60	100
TOTAL				120	8	90	210	300
DEPARTMENT OF ZOOLOGY								
1	I	GENERAL SERICULTURE	15NZOC11	45	3	25	75	100
2	II	MULBERRY CULTIVATION AND SILKWORM REARING	15NZOC12	45	3	25	75	100
3	III	PRACTICALS IN SERICULTURE	15NZOCP1	30	2	40	60	100
TOTAL				120	8	90	210	300
DEPARTMENT OF MICROBIOLOGY								
1	I	CLINICAL PATHOLOGY AND BIOCHEMISTRY	15NMBC11	45	3	25	75	100
2	II	HAEMATOLOGY, SEROLOGY AND BLOOD BANK	15NMBC12	45	3	25	75	100
3	III	TECHNIQUES IN MEDICAL LABORATORY TECHNOLOGY	15NMBCP1	30	2	40	60	100
TOTAL				120	8	90	210	300
DEPARTMENT OF NUTRITION AND DIETETICS								
1	I	FOOD SCIENCE AND THERAPUTIC NUTRITION	15NNDC11	45	3	25	75	100
2	II	BASICS OF FOOD PRODUCTION AND SERVICE	15NNDC12	45	3	25	75	100
3	III	BASICS OF DIETETICS AND QUANTITY FOOD SERVICE (PRACTICAL)	15NNDCP1	30	2	40	60	100
TOTAL				120	8	50	250	300

SYLLABUS FOR DIPLOMA AND ADVANCED DIPLOMA COURSES

(Applicable for students who admitted in June 2016 and onwards)

DEPARTMENT OF ARABIC								
1	I	THE HOLY QURAN AND HADITH	15NARD11	45	3	25	75	100
2	II	BIOGRAPHY OF THE PROPHET	15NARD12	45	3	25	75	100
3	III	FIQH	15NARDP1	30	2	25	75	100
TOTAL				120	8	75	225	300
DEPARTMENT OF COMMERCE								
1	I	INTRODUCTION TO ACCOUNTING	15NCOD11	45	3	25	75	100
2	II	APPLICATION OF TALLY	15NCOD12	45	3	25	75	100
3	III	APPLICATION OF TALLY PRACTICAL	15NCODP1	30	2	40	60	100
TOTAL				120	8	90	210	300
4	I	ADVANCED ACCOUNTING	15NCOA11	45	3	25	75	100
5	II	ADVANCED TALLY	15NCOA12	45	3	25	75	100
6	III	ADVANCED TALLY PRACTICAL	15NCOAP1	30	2	40	60	100
TOTAL				120	8	90	210	300

Paper – III can be either a Paper / Practical / Field work / Project / Training. In the case of Practical, 40 marks for the internal and 60 marks for the external examinations. In the case of field work / Project / Training, no internal examinations, 100 marks awarded for external examination, examination in the form of viva will be conducted. In the case of Paper III is given as theory, hours and credit can be changed accordingly, however total credit should not exceed 120.

தமிழ்த்துறை
தமிழ் இதழியல் சான்றிதழ் படிப்பு
(Certificate in Tamil Journalism)

ஒரு வருட பருவமுறைச் சார்ப் படிப்பு (ONE YEAR – NON SEMESTER)			
Paper – I	இதழியல் ஓர் அறிமுகம்		15 NTAC11
Total Hrs : 45	Hrs/Week : 2	Hrs/Unit : 9	Credits : 3

அலகு- 1

இதழியல் அறிமுகம் - இதழியலின் தோற்றம் - இதழ்களின் கடமைகளும் பொறுப்புகளும் - அடிப்படைக் கொள்கைகள் - இதழ்களின் பணிகள் - இதழ்களின் சுதந்திரம்.

அலகு- 2

இந்தியாவில் இதழ்களில் சுதந்திரம் - சமூகமும் இதழ்களும் - இதழியல் வளர்ச்சி, - இதழியல் சட்டங்கள், செய்தித்தாள் நிர்வாக அமைப்பு

அலகு- 3

இதழியல் நுணுக்கங்கள் - செய்தி விளக்கம் - செய்திகளின் அடிப்படை கூறுகள் - செய்திப் பதிப்பு – செய்திகளின் பாகுபாடு.

அலகு- 4

செய்திகளின் ஊடகங்கள் செய்தி உள்ளடக்கம் - விளக்கம் – செய்தியாளர் வகைகள் - பண்புகள்

அலகு- 5

செய்தியாளரின் பொறுப்புகள் - செய்தி திரட்டும் பணி, செய்தி ஆசிரியர், துணையாசிரியர், செய்தியின் கட்டமைப்பு

ஒரு வருட பருவமுறைச் சாரா படிப்பு (ONE YEAR – NON SEMESTER)			
Paper – II	செய்தி எழுதுதல், அறிக்கையிடலின் அடிப்படைகள்		15 NTAC12
Total Hrs : 45	Hrs/Week : 2	Hrs/Unit : 9	Credits : 3

அலகு- 1

செய்தி சேகரிக்கும் இடங்கள் - செய்தி சேகரிக்கும் முறைகள் - யார் செய்தியாளர்? எது செய்தி? - மாற்றம் தாக்கம், அண்மித்த தன்மை - பேரழிவு, வன்முறை, முறுகல், குற்றம், ஒழுங்கின்மை, துல்லியம், பக்கஞ்சாராமை, செய்தியாளர்கள் பிறக்கிறார்களா? உருவாக்கப்படுகிறார்களா? - செய்திக்கும் வதந்திக்கும் வேறுபாடுகள்

அலகு- 2

செய்தி நிறுவனங்கள் - உள்நாட்டு செய்தி நிறுவனங்கள் - வெளிநாட்டு செய்தி நிறுவனங்கள்

அலகு- 3

செய்தி எழுதுதல் : நடைக்கையேடு, நூலகம், உண்மைகளைச் சேகரித்தல், செய்தியின் கூறுகள், ஆறு கேள்விகள்.. ஏன், எதற்கு, எப்படி, யார், எங்கே, எப்போது - முகப்புரைகள் எழுதுவது எப்படி? தலைகீழ் முக்கோண முறை - வடிவம், மொழியின் பயன், எண்களைக் கையாளுதல்

அலகு - 4

குற்றவியல் செய்திகள், நீதிமன்றச் செய்திகள், சட்டமன்ற பாராளுமன்றச் செய்திகளை அறிக்கையிடல் - பேட்டியின் வகைகள்

அலகு - 5

இணைய வழிப் புகைப்படங்களை அனுப்புதல் - பக்க வடிவமைப்பு
ஏன் பலவகையான நெகிழ்வுரைகள் உள்ளன? வாழ்வியல் நெகிழ்வுரைகள் - செய்திப் பின்னணிக் கட்டுரை - நேர்முகம் - வகைகள் - நுணுக்கங்கள் - படத் தலைப்பிடல் - கேலிச் சித்திரங்கள்

பார்வை நூல்கள்

- | | | |
|-------------------------|---|---|
| இதழியல் நுணுக்கங்கள் | - | செண்பகா பதிப்பகம்,
24, 28 கிருஷ்ணா பதிப்பகம்,
சென்னை – 600 017.
தொலைப்பேசி : 24331510 |
| தகவல் தொடர்பியல் | - | டாக்டர் வெ.கிருட்டிணசாமி,
மணிவாசகர் பதிப்பகம்,
31, சிங்கர் தெரு, பாரிமுனை,
சென்னை – 600 108. |
| மக்கள் ஊடகத் தொடர்பியல் | - | மீடியா பப்ளிகேஷன்ஸ்,
52, வீரமுத்து கார்டன்
நகர் விலாசம்,
ஆணையூர் அஞ்சல்,
மதுரை. |
| மூன்றாவது கண் | - | கிழக்குப் பதிப்பகம்,
எண் 16 கற்பகம்மாள் நகர்,
மயிலாப்பூர்,
சென்னை – 600 004. |
| வண்ண போட்டோ கலை | - | நர்மதா பதிப்பகம்
சென்னை – 600 017 |

ஒரு வருட பருவமுறைச் சாரா படிப்பு (ONE YEAR – NON SEMESTER)		
Paper – III	களப்பணி/இதழ் தயாரிப்பு	15 NTAC12
Total Hrs : 30		Credits : 2

கதைகள், கட்டுரைகள், நேர்காணல் ஆகியவற்றை உள்ளடக்கிய இதழைத் தயாரித்து அச்சில் தர வேண்டும்.

கலை, இலக்கியம், பண்பாடு ஆகியவை தொடர்பான ஏதேனும் ஒரு கள ஆய்வு அறிக்கையினை 32 பக்க அளவில் அச்சில் தர வேண்டும்.

DEPARTMENT OF ARABIC

COP - COURSE

CERTIFICATE COURSE IN ARABIC TRANSLATION

PAPER-I	Applied Grammar-I	15 NARC11
Total Hrs: 60	Hrs./Week:2	Hrs/ Unit: 12
		Credits: 4

TEXT BOOK

Al Qirat- ul- Waaliha Part I (First 20 lessons only)

By: Waheeduz Zmaan Al-Keeranaviwi

Unit –I : From Lesson 1 To Lesson 5

Unit II : From Lesson 6 To Lesson 10

Unit III : Grammar Portions

1. Al Mufrad wal- muthanna wal jam’
- 2) Huroof ul Jarr
- 3) Al Asmaa – ul Ishaarah.
- 4) Adawaatul Istifhaa
- 5) Ad Damaair – ul – Munfasilah Val Muthasilah
- 6) Al-Idaafah
- 7) Al Muftada wal khabar
- 8)As-sifatu wal mausool
- 9) Al mudhakkar wal muannath
- 10) Asmaa-ul-mausool

Unit IV : From Lesson 11 To Lesson 15

Unit V : From Lesson 16 To Lesson 20

TEXT BOOK

1. Al Qirat- ul- Waaliha Part I (First 20 lessons only)

By: Waheeduz Zmaan Al-Keeranaviwi

Available at: Husainiya Bookstall, Deoband, Utterpradesh.

2) *An-Nahwul Waadih Ibtidayee – Part I (Grammar, selected topics only)*
by Ali Al-jaarim and Mustafa Ameen.

Available at: Hilal Book House , Tirurkad, Angadipuram, Kerala.

CERTIFICATE COURSE IN ARABIC TRANSLATION

PAPER-II	Translation-I	15 NARC12
Total Hrs: 60	Hrs/ Week: 2	Hrs/ Unit: 12
		Credits: 4

TEXT BOOK

Minhajul Arabiyya, part-I By: Prof. Syed Nabi

Unit -I : Lesson No:1 to 5

Unit II : Lesson No:6 to 10

Unit III : Lesson No:11 to 15

Unit IV : Lesson No:16 to 20

Unit V : Lesson No:21 to 25

TEXT BOOK

Minhajul Arabiyya, part-I By: prof. Syed Nabi,

Alif Books and Prints,11,

Rayapettah High Road, Chennai – 600 014.

CERTIFICATE COURSE IN ARABIC TRANSLATION

PAPER-III	Practical (Arabic Typewriting)	15 NARP1
Total Hrs: 60	Hrs/Week :2 Hrs/Units :12	Credits: 4

TEXT BOOK

Hand Book for Arabic Type Writing prepared by Department of Arabic

Unit - I

Type Writing (Arabic Alphabets)

Unit - II

Type Writing (Passage) a Letter without omitting any Structure and words within 20 minutes

Unit - III

Type a given Simple Passage without any mistakes within 30 minutes

Unit - IV

Type a given Simple Passage without any mistakes within 20 minutes

Unit - V

Type a Letter without omitting any Structure and words within 20 minutes

TEXT BOOK

Hand Book for Arabic Type Writing prepared by The Department of Arabic,
Sadakathullah Appa College (Autonomous),
Rahmath nagar,
Tirunelveli-11

DEPARTMENT OF ARABIC

DIPLOMA IN ISLAMIC THEOLOGY			
Paper –I	THE HOLY QURAN AND HADITH	15 NARD11	
Total Hrs: 45	Hrs / Week: 2	Hrs/Unit:9	Credits : 3

TEXTBOOKS

1. The Holy Quran
2. Arbayeen by Nawawi

UNIT I

History of Revelation (wahy): Collection and compilation of the Quran content and structure of the Quran Makki and Madani Chapters

UNIT II

The Meaning and explanation of chapter I (Sura Fatiha) and Chapters 105-114

UNIT III

Verses 1 -34 from Sura Noor

UNIT IV

Hadith No 1-15 from Nawawi.

UNIT V

Hadith No 16-30 from Nawawi.

REFERENCE BOOKS:

1. Anwarul Quran, E.M. Abdur Rahman - Adam Trust.
2. Tarjumatul Quran, by Abdul Hameed Baqavi.
3. Thiruk Quran, by Abdul Rawoof Baqavi Ed at., Islamic Foundation Trust, Chennai-12

DIPLOMA IN ISLAMIC THEOLOGY			
Paper - II	BIOGRAPHY OF THE PROPHET	15 NARD12	
Total Hrs: 45	Hrs / Week: 2	Hrs/Unit:9	Credits : 3

TEXTBOOK

‘Thiru Nabi Charitram’ written by M.N. Muhammad

UNIT I

Chapters 1 to 15 from Thiru Nabi Charitram

UNIT II

Chapters 16 to 25 from Thiru Nabi Charitram

UNIT III

Chapters 26 to 36 from Thiru Nabi Charitram

UNIT IV

Chapters 37 to 46 from Thiru Nabi Charitram

UNIT V

Chapters 47 to 54 from Thiru Nabi Charitram

TEXTBOOK

‘Thiru Nabi Charitram’ written by M.N. Muhammad

Available at:

M.N. Muhammad,
M.N.M. Trust Publication,
Tirunelveli.

DIPLOMA IN ISLAMIC THEOLOGY		
Paper -III	FIQH	15 NARD13
Total Hrs:30	Hrs/Unit: 6	Credits : 2

TEXTBOOK

1. Fiqhin Kalaikalnjjiam
2. Pirabala Mathangalin Kadavul Kolgai - by Dr. Zakir Naik

UNIT I

Fiqh definition sources of Islamic law schools of law - Cleanliness (taharat) Ablution and Tayammum. Hayd and Nifas, Bathing

UNIT II

Faith - Concept of God in Major religions - Prayer - Timings, Obligatory features of prayer - Collectible Prayer, Friday Prayer, Did Prayer, Janaza Prayer

UNIT III

Fasting (Obligatory, Optional Fasting) Factors which disrupt fasting - Those exempted.

UNIT IV

Zakat - (Rules relating to Zakat - who to pay who can receive - how much to pay - on what to pay - how to collect and distribute)

UNIT V

Haj (Pilgrimage) Rules relating to Haj rites and Umrah (Minor Pilgrimage) - Farl, Vajib and Sunnah of Haj

REFERENCE BOOKS:

1. Fiqhin Kalaikalnjjiam
2. Pirabala Mathangalin Kadavul Kolgai - by Dr. Zakir Naik

Available at:

1. Hawwa Publications. Madurai.
2. Sajitha Book Centre, 248 Thambu Chetty, First Floor, Chennai- 1

DEPARTMENT OF ENGLISH

CERTIFICATE COURSE IN TRANSLATION PROFICIENCY IN ENGLISH			
Paper-I	PROCEDURES OF TRANSLATING		15NENC11
Total Hrs:45	Hrs/ Week: 2	Hrs/Unit:9	Credits: 3

UNIT I

- 1.1. Defining translation
- 1.2. Art or Science or Craft?
- 1.3. The Nature of Translation
- 1.4. Fields of Translation
 - 1.4.1.1. Literary translation
 - 1.4.1.2. Scripture translation
 - 1.4.1.3. Scientific and technical translation
 - 1.4.1.4. Interpretation
 - 1.4.1.4.1. Alternate interpretation
 - 1.4.1.4.2. Consecutive interpretation
 - 1.4.1.4.3. Simultaneous interpretation
 - 1.4.1.4.4. Liaison interpreting
- 1.5. Translating for the Media
 - 1.5.1.1. Subtitling
 - 1.5.1.2. Dubbing
- 1.6. Machine translation
- 1.7.0. Problems, Principles, Methods and Procedures of translation
- 1.7.1. Problems of translation
 - 1.7.1.1. Lexis
 - 1.7.1.2. Syntax
 - 1.7.2. The role of the translator
- 1.7.3. Principles of translation
 - 1.7.3.1. Principle of fidelity
 - 1.7.3.2. Principle of intelligibility
 - 1.7.3.3. Principle of communication load
 - 1.7.3.4. Principle of contextual consistency
- 1.7.4. Methods of translation
 - 1.7.4.1. Differences between Formal Equivalence and Dynamic Equivalence
 - 1.7.4.2. Differences between Communicative Translation and Semantic Translation
 - 1.7.4.3. Procedures of Translating
- 1.8. Functions of Language
 - 1.8.1. Referential Function
 - 1.8.2. Imperative Function
 - 1.8.3. Expressive Function
 - 1.8.4. Phatic Function
 - 1.8.5. Contextual Function
 - 1.8.6. Metalinguistic Function
 - 1.8.7. Poetic Function
 - 1.8.8. Discrepancy between form and function

UNIT II

- 1.9. Grammatical Classes and Universal Semantic categories
 - 1.9.1. Lexical Ambiguity due to Semantic categories
 - 1.9.2. Words with Complex Structures
- 1.10. Transformational Generative Grammar and Translation
 - 1.10.1. Syntactic Ambiguity
 - 1.10.2. Paraphrase
 - 1.10.3. The same grammatical construction having different meanings

UNIT III

- 1.10.4. Kernel Sentences and Transformations
- 1.10.5. Basic Sentence Types
- 1.10.6. Process of Combining Kernels
 - 1.10.6.1. Constructions in which a conjunction links the kernels
 - 1.10.6.2. Constructions in which a relative pronoun links the kernels
 - 1.10.6.3. Constructions in which a finite is changed into a non-finite form
 - 1.10.6.4. Constructions in which some parts are lost
- 1.10.7. Combining a series of kernels into a single sentence
- 1.10.8. The Analysis of a series of kernels

UNIT IV

- 1.11. Referential Meaning
 - 1.11.1. Syntactic Marking of the Referential Meaning
 - 1.11.2. Marking of Meaning by Semotaxis
 - 1.11.3. Techniques of Semantic Analysis
 - 1.11.3.1. Chain Analysis
 - 1.11.3.2. Hierarchical Analysis
 - 1.11.3.4. Componential Analysis

UNIT - V

- 1.12. Connotative Meaning
- 1.13. Transfer
 - 1.13.1.1. Idioms
 - 1.13.1.2. Figurative Expressions
 - 1.13.1.3. Generic and Specific meanings
 - 1.13.1.4. Use of classifiers
 - 1.13.1.5. Active and Passive constructions
 - 1.13.1.6. Ellipsis
 - 1.13.1.7. Tenses
 - 1.13.1.8. Inclusive Vs. Exclusive First Person Plural
 - 1.13.1.9. Honorifics
- 1.14. Restructuring

Textbook:

Procedure of Translating. A.Nihamathullah. Tirunelveli: Shameem Publication, 2009.

CERTIFICATE COURSE IN TRANSLATION PROFICIENCY IN ENGLISH			
Paper - II	TECHNIQUES OF TRANSLATION		15NENC12
Total Hrs: 45	Hrs/ Week: 2	Hrs/Unit:9	Credits: 3

UNIT I

2.0 Approaches, Methods and Techniques

2.1 Determiners

2.1.1. Articles

2.1.2. Demonstrative Adjectives and Demonstrative Pronouns

2.1.3. Possessive Adjectives and Possessive Pronouns

2.1.4. Interrogative Adjectives and Interrogative Pronouns

2.1.5. Reflexive Pronouns

2.1.6. Indefinite Pronouns

2.1.6.1. Some

2.1.6.2. Any

2.1.6.3. No

2.1.6.4. None

2.1.6.5. All

2.1.6.6. Every

2.1.6.7. Each

2.1.6.8. Both, Either and Neither

2.2 Morphological Categories

2.2.1. Number

2.2.2. Gender

2.2.3. Person

2.2.4. Tense and Aspect

2.2.5. Mood

2.2.6. Voice

2.2.6.1 Nominative with Infinitive

2.2.6.2. Accusative with Passive Infinitive

UNIT II

2.3. Translating Inchoative Verbs

2.4. Translating Modals

2.4.1.1. Shall

2.4.1.2. Will

2.4.1.3. *Shall* and *will* compared and contrasted.

2.4.1.4. Can

2.4.1.5. May

2.4.1.6. *Can* and *May* compared and contrasted

2.4.1.7. Must

2.4.1.8. Would

2.4.2. Should

2.4.3. Could

2.4.4. Might

2.4.5. Ought

2.4.6. Dare

2.4.7. Need

2.4.8. Used to

2.5. Translating Syntactic Units

2.5.1. Translating Infinitive Phrases

2.5.1.1.1. The Plain Infinitive

2.5.1.1.2. The infinitive with 'to'

UNIT III

- 2.5.2. Translating Gerund Phrases
- 2.5.3. Translating Present Participle Phrases
 - 2.5.3.1.1. Accusative with Present Participle
 - 2.5.3.1.2. Nominative with Present Participle
 - 2.5.3.1.3. Present Participle as a Free Adjunct
 - 2.5.3.1.4. Absolute Participle
 - 2.5.3.1.5. Unrelated Participle Phrase
 - 2.5.3.1.6. As Predicative Adjuncts
- 2.5.4. Translating Past Participle Phrases
 - 2.5.4.1.1. Attributive use
 - 2.5.4.1.2. Predicative use
 - 2.5.4.1.3. The Accusative with Past Participle
 - 2.5.4.1.4. Free Adjuncts
 - 2.5.4.1.5. Absolute Participle
- 2.6. Translating Simple Sentences
 - 2.6.1. Form and Function

UNIT IV

- 2.7. Translating Complex Sentence
 - 2.7.1.1. Noun Clause as the subject of a verb
 - 2.7.1.2. Noun Clause in Apposition
 - 2.7.1.3. Noun Clause as the Object
 - 2.7.1.4. Noun Clause as Predicate Clause
 - 2.7.2. Adjective Clauses
 - 2.7.2.1. Restrictive Clauses
 - 2.7.2.2. Continuative Clauses
 - 2.7.3. Adverbial Clauses
 - 2.7.3.1. Adverbial Clauses of Time
 - 2.7.3.2. Adverbial Clauses of Place
 - 2.7.3.3. Adverbial Clauses of Cause/Reason
 - 2.7.3.4. Adverbial Clauses of Purpose
 - 2.7.3.5. Adverbial Clauses of Result
 - 2.7.3.6. Adverbial Clauses of Condition
 - 2.7.3.7. Adverbial Clauses of Concession
 - 2.7.3.8. Adverbial Clauses of Comparison
 - 2.7.3.9. Adverbial Clauses of Manner
 - 2.7.3.10. Adverbial Clauses of Restriction

UNIT V

- 2.8. Translating Exocentric Expressions
 - 2.8.1. Translating Foreign Words
 - 2.8.2. Translating Proverbs
 - 2.8.3. Translating Phrasal Verbs
 - 2.8.4. Translating Idioms.

Textbook:

Techniques of Translation. A.Nihamathullah. Tirunelveli: Shameem Publication, 2009.

CERTIFICATE COURSE IN TRANSLATION PROFICIENCY IN ENGLISH		
Paper -III	PROJECT	15NENCP1
Total Hrs : 30		Credits: 2

Objective:

To submit a project on translation to prepare students for research at higher levels.

Project:

1. The student must select a text of 10 -15 pages (Tamil or English) and translate it into English or Tamil .
2. Individual projects are preferred. However group projects are also allowed. A group may have a maximum of three students.
3. He should discuss the problems faced in translation and justify the procedures and techniques used.
4. The Project should be typed and submitted. It should contain the source text, its translation and the discussion.
5. The student must be able to answer questions on the project.
6. The minimum length of the project should be 30 pages in A4 size.
7. Marks for the project report will be 100 divided as 60% for the project and 40% for viva-voce.

DEPARTMENT OF COMMERCE
Certificate Course in Computerised Accounting

PAPER-I	Basics in Accounting		15NCOC11
Total Hrs: 45	Hrs./Week : 2	Hrs/ Unit : 9	Credits: 3

Objective:

To acquaint the students with basic concept of accounting.

UNIT I

Introduction to Accounting – meaning – objectives – limitations – Accounting concepts – Accounting conventions – double entry system – Rule for debit and credit.

UNIT II

Journal – Ledger – subsidiary books – Cash book – Petty cash book

UNIT III

Balancing of accounts – Trial balance – Rectification of errors – suspense account.

UNIT IV

Bills of Exchange – honour and dishonor of a bill – renewal of a bill – retirement of a bill – insolvency of acceptor – Accommodation bills

UNIT V

Final Accounts – Trading and Profit and Loss Account – Balance Sheet – adjustment entries.

60% Problem 40% Theory

TEXT BOOKS:

1. Introduction to Accountancy – T.S. Grewal; S.C. Gupta, S.Chand and S.Chand & Co.Ltd. (2010)
2. Advanced Accountancy – M.A. Arulanandam and K.S. Raman – Himalaya Publishing House.

REFERENCE BOOK

1. Advanced Accountancy – S.P. Jain and K.L. Narang – Kalyani Publishers.
2. An Introduction to Accountancy – Dr.S.N.Maheswari – Vikas Publishing House Pvttd. (2009)
3. Introduction to Accountancy – S.M, Shukla, Sahitya Bhawan Publications.
4. Advanced Accountancy - R.L. Gupta and M.Radhaswamy – Sulthan Chand and sons

PAPER-II	MS OFFICE		15NCOC12
Total Hrs: 45	Hrs/ Week : 2	Hrs/ Unit : 9	Credits: 3

Objective:

To impart basic knowledge of computer to the students.

UNIT I

Word – Introducing Word 2007 – Creating and Saving Documents – Typing and Editing Text – Formatting a Document: Applying Character Formatting – Formatting Paragraphs and Lists – Creating and Applying Styles and Themes – Formatting Documents and Sections – Using and Creating Templates – Working with Nonstandard Document Layouts.

UNIT II

Tables and Graphics : Creating and Formatting Tables – Working with Clip Art and the Clip Organizer – Working with Charts – Working with SmartArt and Math Formulas – using Header and Footer – Performing Mail Merge – Copying, Linking and Embedding Data – Citing sources and references – Protecting and Securing Documents – Macros.

UNIT III

Excel – Introducing Excel 2007 – Working with Worksheets and Workbooks – Controlling Data Entry with AutoComplete Options – Automatically Filling In a Series of Data – Finding, Replacing, and Transforming Data – Customizing the Worksheet Window – Hiding Rows and Columns – Splitting the Worksheet window – Data Validation – Printing Worksheets.

UNIT IV

Entering Data in an Excel Worksheet – Changing Formatting for a Cell or Range – Designing and Formatting a Worksheet for maximum Readability – Using Conditional Formatting to identify key values – Entering and Editing Formulas – Using Range Names and Labels in Formulas – Manipulating Data with worksheet Functions – Organizing Data with Tables and PivotTables – Creating and Editing Charts.

UNIT V

Powerpoint – Introducing PowerPoint 2007 – Creating a Presentation – Editing the Presentation Outline – Changing a Slide Layout – Editing Slides – Viewing a Presentation – Managing Slide Shows – Advanced Presentation Formatting – Adding Graphics, Multimedia and Special Effects – Planning and Delivering a Presentation.

Text Book

Using Microsoft Office 2007, Ed. Bott and Woody Leonard, Que Publishing, Indiana (USA)

Reference Books:

1. Microsoft Office 2007 on Demand, Stev Johnson, Que Publishing, Indiana (USA)
2. Microsoft Office 2007 All in One, Greg Perry, SAMS Publishing, Indiana (USA)
3. Step by Step – Microsoft Office 2007, Joyce Cox, Curtis Frye, Dow Lambert III, Steve Lambert, John Pierce and Joan Preppernau, Microsoft Press.
4. Office 2007 for Dummies, Wallace Wang, Wiley Publishing, Inc. Indiana (USA)
5. Microsoft Office 2007 illustrated Introductory on Windows XP By David Beskeen, Jennifer Duffy, Lisa Friedrichsen, Carol Cram, Elizabeth Eisner Reding, Thomson Course Technology, Boston
6. Microsoft Office Word 2007 By S.Scott Zimmerman, Beverly B.Zimmerman, Ann Shaffter and Katherine T.Pinard, SAMS Publishing, Indiana (USA)

PAPER-III	MS OFFICE PRACTICAL	15NCOCP1
Total Hrs: 30		Credits: 2

Objective:

To impart basic knowledge of computer to the students.

MS-WORD 2007

1. Formatting document.
2. Formatting tables in Word document
3. Typing letters and editing and printing
4. Using Header, Footer Bookmark, Foot notes
5. Mail merges a letter to an address file.
6. Typing 5 pages of Mathematical equations and symbols
7. Creating Simple Macros on inserting forms and formatting table.
8. Protecting word document with password.

MS-EXCEL 2007

1. Formatting an Excel Worksheet
2. Entering spread sheets with formula.
3. Creating hyperlink in Worksheet
4. Protecting worksheet and workbook
5. Preparing Graphs and charts on sales or production data
6. Application of data validation, Consolidation, grouping and Scenario manager.
7. Preparation of Excel worksheet using sort and filter function.
8. Creating Pivot Tale.

MS-POWERPOINT 2007

1. Creation of presentation with different styles on a topic of current interest.
2. Creation of Power Point presentation using Templates.
3. Creating of Power Point presentation with five slides with custom animations.
4. Preparing handouts
5. Creating Power Point show
6. Creating Power Point presentation with hyperlinks

DEPARTMENT OF COMMERCE
Diploma Course in Computerised Accounting

PAPER-I	Introduction to Accounting	15NCOD11
Total Hrs: 45	Hrs./Week : 2	Hrs/ Unit : 9
		Credits: 3

Objective:

To acquaint the students with the advanced accounting concepts.

UNIT I

Financial Accounting – meaning – definition - objectives – functions – Accounting – Advantages and disadvantages – Account Current and Averages due date.

UNIT II

Bank Reconciliation Statement – reasons for difference between Cash book and Pass book.

UNIT III

Consignment Accounts – valuation of unsold stock on consignment – invoicing goods higher than cost – accounting for loss of goods.

UNIT IV

Joint Venture Accounts – Differences between consignment and joint venture.

UNIT V

Accounts of Non-trading concerns – Receipts and Payments account – Income and Expenditure account – preparation of Balance Sheet.

60% Problem 40% Theory

TEXT BOOKS:

1. Advanced Accountancy – R.L.Gupta and M.Radhaswamy – Sulthan and sons
2. Advanced Accountancy – M.A. Arulanandam and K.S. Raman – Himalaya Publishing House.

REFERENCE BOOK

1. Advanced Accountancy – S.P. Jain and K.L. Narang – Kalyani Publishers.
2. Introduction to Accountancy – T.S.Grewal – S.Chand and Company.
3. Advanced Accountancy Dr.S.N.Maheswari – Vikas Publishing House
4. Advanced Accountancy – M.C. Shukla & T.C.Grewal – S.Chand and Company

PAPER-II	APPLICATION OF TALLY		15NCOD12
Total Hrs: 45	Hrs./Week : 2	Hrs/ Unit : 9	Credits: 3

Objective:

To impart the application knowledge to Tally.

UNIT I

Introduction to Tally – Company and Accounting Information Menu Tally Features – Technological advantages of Tally Accounting Software – Tally Screen Components – Gateway of Tally – Company information menu – Company Creation – Accounting information menu – Accounts Groups Creation – Predefined Groups – Ledger Creation – F11 Features- F12 configuration.

UNIT II

Accounts Vouchers – Vouchers Entry – Accounts Vouchers Types – Contra Vouchers – Payment Voucher – Receipt voucher – Purchase voucher – Sales voucher – Journal voucher – Voucher Alternation, Deletion and Cancellation.

UNIT III

Inventory Information – Inventory Masters – Unit of Measure – Stock Group – Stock Item – Stock Category – Godowns – Inventory Vouchers- Receipt Note Voucher – Rejection in Voucher – Delivery Note Voucher – Rejection out Voucher – Stock Journal Voucher – Order Processing - Invoicing

UNIT IV

Final Accounts – Trial Balance – Detailed Trail Balance – Trail Balance configuration – Reports- Profit & Loss Account – Detailed Profit & Loss Account – Balance sheet – Detailed Balance sheet – Printing of Reports – Bank Reconciliation Statement.

UNIT V

Data Collaboration – Security – Tally Vault – Tally Audit – Internet Connectivity – Emailing Tally Report as attachment – Data Maintenance – Bank up and Restore – Export and import of data.

Text Book

Implementing Tally ERP9 – AK Nadhani and K.K.Nadhani, BPB Publication.

Reference Books:

1. Tally User Manual, Tally Solutions (P) Limited
2. Tally Exp 6 in simple steps – Kogentt Learning Solutions Inc.
3. Tally ERP 9 – Vishnu P Singh.
4. Comdex Tally ERP9 – Namrata Agrawal, Dreamtech Press

PAPER-III	APPLICATION OF TALLY PRACTICAL	15NCODP1
Total Hrs: 30		Credits: 2

Objective:

To impart the fundamental practical knowledge of Tally

Accounts of a business organization without inventory (Accounts only)

1. Creation of new company
2. Configuring F11 features
3. Alteration of company
4. Configuration of masters and vouchers
5. Ledgers and groups creation
6. Accounting vouchers
7. Recording transactions of sample data for one year
8. Report Generation – financial reports
9. Display and Reports

Accounts of a trading concern with inventory (Accounts with inventory)

1. Creation of new company
2. Configuring F11 features
3. Alteration of company
4. Configuration of masters and vouchers
5. Recording transactions of sample data for one year
6. Display and Reports
7. Accounting and Inventory Reports in Tally
8. Accounting vouchers
9. Printing Reports

DEPARTMENT OF COMMERCE
Advanced Diploma Course in Computerised Accounting

PAPER-I	Advanced Accounting		15NCOA11
Hrs/ Year: 45	Hrs./Week: 2	Hrs/ Unit : 9	Credits: 3

Objective: To acquaint the students with the tools and techniques used for management decision making.

Unit – I

Accounts from incomplete records – Single Entry System – differences between Single entry and Double entry – defects of single entry – calculation of profit – preparation of statement of affairs method – conversion method.

Unit – II

Branch accounting – Debtor’s system – Stock and debtors system – Invoice price method – Departmental accounts – Allocation of common expenses – Departmental transfer at invoice price.

Unit – III

Hire purchase and Installment system – calculation of interest – calculation of cash price – default and repossession – difference between hire purchase and installment.

Unit – IV

Royalties account – meaning – minimum rent – short working – types of recoupment – strikes – sublease – Accounting Entries.

Unit – V

Accounting Standards – Indian Accounting Standards – AS 1 to AS 10

60% Problem 40% Theory

Text books:

1. Management Accounting And financial Control, S.N. Maheswari, Sultan Chand Pub.
2. Management Accounting Principles and Practice – R.K. Sharma and Shashi.K.Gupta. Kalyani Publishers.
3. Management Accounting, V.Bagavathi, R.S.N.Pillai, S.Chand & Company Ltd. (2009)

Reference books

1. Principles of Management Accounting – Manmohan and Goyal, Sahitya Bhavan Publications.
2. Management Accounting – S.P. Gupta.
3. Management Accounting and Financial Management – S.P. Gupta
4. Managerial Accounting – Jae.K.Shim and Joel.G.Singel, Schaum’s Outlines, Tata McGraw – Hill Edition.
5. Management Accounting, P.V. Khatri and Dr.Sudhanshu Verma, Global Vision Pub.
6. Management Accounting – M.Y.Khan and P.K.Jain Tata McGraw – Hill Edition

Advanced Diploma Course in Computerised Accounting

PAPER-II	Advanced Tally	15NCOA12
Total Hrs: 45	Hrs./Week : 2	Hrs/ Unit : 9
		Credits: 3

Objective: To impart the application knowledge on the advanced features of Tally.

Unit – I

Advanced Inventory Information – Order Processing – Reorder Levels – Tracking Numbers – Batch-wise Details – Additional Cost Details – Bill of Materials (BoM) – Price Levels and Price – Stock Valuation – Zoo valued Entries – Inventory Ageing Analysis – Different Actual and Billed Quantities.

Unit – II

Value Added Tax (VAT) – Vat Terminologies – Rate of VAT – Trader Identification Number – Computation of VT – Enabling VAT in Tally – Ledgers creation – Stock Item Creation – Voucher Entry – VAT Reports – computation of VAT- VAT Forms – Inter State Trade and CST.

Unit – III

Service Tax – Enabling Service Tax in Tally – Ledger Creation – Voucher Entry in Service Tax – Service Tax Reports – TR6 Challan – Service Tax Payables – Input Credit Form – ST3 Reports – ST3A Reports. Fringe Benefit Tax. Practice Exercises.

Unit – IV

Tax Deduction at Source (TDS) – Enabling TDS – Ledgers pertaining to TDS – TDS Voucher Types – Vouchers Creation – Voucher Entry – TDS Reports – TDS Challan – TDS Computation – TDS Payables – Ledger. Practice Exercises.

Unit – V

Payroll – Configuration payroll in Tally – Attendance Vouchers – Payroll Vouchers – Cash Remittance – Bank Transfer – Payment of Salaries (Salary Disbursement) – Accounting for Employer PF Contributions – Accounting for Employer ESI Contributions – Payment of Professional Tax – Tracking of Salary Advances / Loans – Accounting for Pay Revisions & Arrears – Payroll Reports.

Text Book:

Implementing Tally ERP 9-A K Nadhani and KK Nadhani, BPB Publication

Reference Books

1. Tally User Manual, Tally Solutions (P) Limited.
2. Tally ERP 9 in simple steps – Kogent Learning Solutions Inc.
3. Tally ERP 9 – Vishnu P Singh,
4. Comdex Tally ERP 9 – Namrata Agrawal, Dreamtech Press

Advanced Diploma Course in Computerised Accounting

PAPER-III	Advanced Tally Practical	15NCOAP1
Total Hrs: 30		Credits: 2

Objective: To impart the Practical knowledge on the advanced features of Tally

Value Added Tax (VAT)

1. Configuring VAT in Tally. ERP 9
2. Creating Masters
3. Entering Transactions
4. Accounting for Return of Goods
5. Rate Difference in Purchase/Sales
6. Accounting for Interstate Transactions
7. Exempt Transactions under VAT
8. Purchases from Unregistered Dealers
9. Claiming ITC on Capital Goods
10. Inter-State Branch Transfers

11. VAT Reports

Service Tax

1. Basics of Service Tax
2. Configuring Tally.ERP 9 for Service Tax
3. Creating Masters
4. Entering Transactions
5. Accounting for Advance Receipts
6. Accounting for Opening Service
7. Payment of Service Tax
8. Service Tax Reports

Tax Deducted at Source

1. Basic concepts of TDS
2. Configuring TDS in Tally. ERP 9
3. Creation of Masters
4. Processing Transactions
5. TDS Reports

Payroll Accounting and

Compliance

1. Configuring Payroll in Tall.ERP
2. Creating Payroll Masters
3. Processing Payroll in Tally.ERP
4. Accounting for Employer PF contributions
5. Accounting for Employer ESI contributions
6. Payment of Professional Tax
7. Generating Payroll Reports

DEPARTMENT OF HISTORY

CERTIFICATE IN TOURISM AND TRAVEL MANAGEMENT			
Paper -I	PRINCIPLES OF TOURISM		15NHSC11
Total Hrs: 45	Hrs/ Week: 2	Hrs/Unit:9	Credits: 3

UNIT I

Definition of tourism - Origin and growth of Tourism - Types of tourism - Forms of Tourism - Basic Components of Tourism.

UNIT II

Importance of Tourism in Modern times - causes for the rapid growth - concepts of domestic and international tourism.

UNIT III

Transportation - Roadways, Railways and Airways - Accommodations - types - Organisation and Managements - Travel Agency - Travel Documents.

UNIT IV

Display and sale of Handicrafts - organizing conventions and exhibition services - Reception of visitors - dissemination of information etc.

UNIT V

New policy on Tourism Management Strategy - Tourism Policy analysis - ITDC - TTDC - Sergeant - Committee Jha Committee.

REFERENCE BOOKS :

1. Bhatia A.K. - Tourism Development Principles and Practice
2. Bhatia. A.K. - International Tourism
3. Pran Seth - Successful Tourism Management Fundamentals of Tourism
4. R.K.Sinha - Travel and Tourism Management.

CERTIFICATE IN TOURISM AND TRAVEL MANAGEMENT			
Paper -II	TRAVEL MANAGEMENT		15NHSC12
Total Hrs: 45	Hrs/ Week: 2	Hrs/Unit:9	Credits: 3

UNIT I

General Introduction- Functions of Travel Agency- Travel Agents Association- IATA and its functions- TAAI, ASTA PATAetc.- Geography of the world- World time difference- International data line- the hemisphere and the reasons.

UNIT II

Transport systems- air, train, road, sea and waterways- Travel formalities and regulations- passport, visa, foreign exchange, customs and immigration, etc.

UNIT III

Preparation of the Tour itinerary – Modern ticketing and fares (air, train , road, and ship) - The various departments in a Travel Agency and their functions.

UNIT IV

Travel accounting procedures,mode of payment- Indian travelers, non- resident Indians - foreign nationals – airline payment, reports and lectures – budgeting and commissions from principals

UNIT V

Allied services connected with travel trading hotels, transport Government Tourist Agencies and their functions.

REFERENCE BOOKS:

1. Anand, M.M. - Tourism and Hotel Industry in India.
2. Chib, S.N. - Perspective of Indian Tourism in India.
3. Chakravarty - Railways for Developing countries.
4. Chopra, P.N. - India - An Encyclopedia Survey.

CERTIFICATE IN TOURISM AND TRAVEL MANAGEMENT		
Paper -III	Field Work	15NHSCP1
Total Hrs: 30		Credits: 2

To visit important historical places in and around Tirunelveli, Thoothukudi and Kanyakumari Districts.

Field work report should be submitted.

DEPARTMENT OF CHEMISTRY
Certificate Course in Water and Soil Analysis

PAPER-I	SOIL ANALYSIS-I	15NCHC11
Total Hrs: 45	Hrs/ Week : 2	Hrs/ Unit : 9
		Credits: 3

UNIT-I:

Definition of soil-Major components of soil – Origin of earth- theories- Nebular hypothesis, Tectonic plate theory, Continental drift theory – Age of earth – Soil forming rocks-Classification-Igneous, metamorphic and Sedimentary rocks-characteristics and formation.

UNIT-II:

Composition of earth's crusts – Soil forming minerals – occurrence – classification – primary, secondary minerals – clay minerals – structure , weathering of rocks and minerals – Physical, chemical weathering and biological weathering.

UNIT- III:

Soil formation – soil forming factors – Active factors – climate , precipitation, temperature and vegetation – Passive factors – parent material, topography, Age of soil – Main soil groups of Tamil Nadu- Red soil , Black soil , Alluvial Soil, Saline and Alkaline soils- Soil survey-types and uses.

UNIT -IV:

Soil forming process – Eluviations and Illuviations, Accumulation of organic matter – Soil profile – Organic horizons (O), A, B, C, R – Specific pedogenic processes – Calcification, decalcification, salinisation, alkalization, podsolization and laterisation.

UNIT -V: Soil Sampling and testing

Soil testing – concept, objectives and basis- soil sampling, tools, collection processing, dispatch of soil samples-Determination of pH ,Electrical conductivity, bulk density, specific gravity, Moisture content, water holding capacity and Cation exchange capacity.

Reference books:

1. Analytical Agricultural Chemistry – S.L.Chopra and J.S. Kanwar, Kalyani Publishers, Fourth Edn., 1991
2. Text book of soil Science – Second Edn. T.D. Biswas and S.K. Mukherjee Tata McGraw – Hill 1994
3. Environmental Science and biotechnology – A G Murugesan and C Rajakumari MJP Publishers.

PAPER-II	WATER ANALYSIS-I	15NCHC12
Total Hrs: 45	Hrs/Week : 2	Hrs/ Unit : 9
		Credits: 3

UNIT-I: Properties of Water

Introduction Molecular – structure of water – properties of water – physical properties- chemical properties – Anomalous properties of water- hydrogen bonding , Types of water, Freezing and Ice structure phase Diagram of Water, density, Taste, Compressibility, Viscosity ,Electrical Conductivity , Thermal-Conductivity, Specific and latent heat, Refractive index , Radioactivity, pH.

UNIT-II: Sources of Water

Water resources of the planet – Hydrosphere – Components and Composition – Importance of hydrosphere - hydrological cycle – Origin of Oceans and Characteristic features of the primitive oceans – Mode of formation of ground water – process of formation of elements – Ground water – Features of surface water (ocean, sea, lakes and rivers)- features of ground water.

UNIT-III: Features of sea water& estuarine water

Physical chemistry of sea water- chemical parameters and chemical composition of sea water- Geochemical balance – dissolved materials and their residence time in sea water – sea water model – chemical composition of Estuarine water – comparison of river water and sea water – Comparison of ground water and rain water in terms of chemical composition – characteristics of snow and ice , water vapour and vaporization.

UNIT-IV: Water quality parameters

Important parameters measuring the quality of water – Parameters and standards – domestic water and surface water - sampling – preservations – sample collection – Water Quality standards for drinking water by WHO and ICMR –water quality standard for effluents (WHO &NEQSE).

UNIT-V: Water analysis-I

Determination of colour , turbidity, Electrical conductivity, pH, Alkalinity, Acidity, Total hardness, Total solids, Total dissolved solids and Total suspended solids.

Reference books:

1. Analytical Agricultural Chemistry- S.L.Chopra and J.S. Kanwar, Kalyani Publishers, Fourth Edn., 1991
2. Text book of soil Science – Second Edn. T.D. Biswas and S.K. Mukherjee Tata McGraw – Hill 1994
3. Environmental Science and biotechnology – A G Murugesan and C Rajakumari MJP Publishers.
4. Environmental chemistry – A. K. De, 4th edition , New Age International Publishers
5. Environmental chemistry with green chemistry – Asim K Das, Books and Allied PVT Limited.
6. All About water- N.W. Gokhale, CBS Publishers& distributors, First edition , 2009.
7. Environmental Chemistry by V.P.Kudesia, First edition, 2000.
8. A Textbook of Environmental Chemistry and Pollution Control S.S.Dara, S.Chand &Company Ltd, New Delhi, Fourth Edition,2001.

PAPER-III	Practical in Water and Soil Analysis-I	15NCHCP1
Total Hrs: 30	Hrs/ Unit : 15	Credits: 2

i) Water Analysis Practical

1. Determination of pH, EC, and TDS
2. Determination of Total solids, Total dissolved solids and Total suspended solids.
3. Determination of Total acidity, Phenolphthalein acidity, Methyl Orange acidity.
4. Determination of Total alkalinity and phenolphthalein alkalinity.
5. Determination of Total hardness
6. Determination of Dissolved Oxygen.

ii) Soil Analysis Practical:

1. Determination of pH, EC
2. Determination of Bulk Density, Pore Space & Particle Density
3. Determination of Specific gravity
4. Determination of Moisture content
5. Determination of alkalinity
6. Determination of Organic carbon

DEPARTMENT OF COMPUTER SCIENCE

Certificate Course in Computer Hardware			
Paper – I	Computer Hardware		15NCSC11
Total Hrs.:45	Hrs/Week:2	Hrs/Unit:9	Credits : 3

Chapter I

Introduction to computer-motherboard with components-motherboard chipsets-i/o peripherals-daughter boards-bus standards-PC-bus-Isa-EISA-VESA-AGP-USB-cmos ram-front panel with diagram-

Chapter II

Processor(cpu)-processor manufactures-Intel-AMD-cache memory-ram-ram types and voltages-memory bytes. Hard disk drives(hdd)-hard disk interface-partition table-Formatting-low and high level formatting-floppy disk drive-usb/flash drives-i/o ports -AT & ATX power supply specification-smmps-operation and regulation.

Chapter III

Input devices-keyboard-Types of Keyboard-Pc/Pc XT-AT-Windows-MM –Remote Keyboard-keyboard operation-wireless keyboard-mouse-Types of Mouse-serial ball Optical and Wireless Mouse-operation of ball mouse-operation of optical mouse-wireless mouse-track mous.

Chapter IV

Display devices-Cathode Ray Tube(crt)monitor-Liquid Crystal Display (lcd)monitor-Thin Film Transistor (tft) monitor-plasma panel-data projector-touch screens-working resistive and capacitive screens-modems-types of modems.

Chapter V

Communications-bluetooth technology-wi-fi-wi-fi technologies-bluetooth dongle-li-fi-working principal of Li-Fi -printers-dot matrix printers-inkjet printers-laser printers.

References:

Computer Installation and Servicing by D.Balasubramanian,Managing and Troubleshooting PC's by Mike Meyers Scott Jernigan

Text Book:

Study Material for networking prepared by the Computer Science Department.

Certificate Course in Computer Hardware			
Paper – II	Computer Networking		15NCSC12
Total Hrs:45	Hrs./Week : 2	Hrs/Unit:9	Credits : 3

Chapter I

Troubleshooting the computer. – Systematic Troubleshooting – Symptoms observation and analysis – fault diagnosis – fault rectification – Troubleshooting levels and Assembling the PC.

Chapter II

Computer network basis-types of networks-Local Area Network (lan), Metropolitan Area Network (Man), Wide Area Network (Wan)-Home Area Network(Han)-Controller Area Network(Can)-internet-intranet.

Chapter III

Client server technology-network devices-hub-switch-router-Lan connectors- Transmission media-Guided Media utp stp coaxial fiber optic cables -Unguided Media-Free Space.

Chapter IV

Sharing System between networks-IP address classes-history of windows-Booting Operating systems-Installation of operating systems (Windows, Linux).

Chapter V

Basic electronic-components-passive, active components-resistors-resistor colour codings-capacitors-types of capacitors-inductors-diode-rectifiers-half, full, bridge rectifier-leds-transistors and other electronic components.

References:

Computer Installation and Servicing by D.Balasubramanian, Managing and Troubleshooting PC's by Mike Meyers Scott Jernigan.

Text Book:

Study Material for networking prepared by the Computer Science Department.

Certificate Course in Computer Hardware		
Paper-III	Practical in Computer Hardware and Networking	15NCSCP1
Total Hrs:30	Hrs/Unit:15	Credits : 2

Unit : I – Hardware

1. Assembling the Computer
2. Installing Operating System like Windows and Linux.
3. Troubleshooting the Computer.
4. Creating a bootable USB using Software
5. Creating a bootable USB using Commands.

Unit – II - Networking

1. Laying Cables
2. Connecting Switches
3. Connecting two or more Computers using LAN Cables.
4. Connecting Network Computers using IP Address.
5. Fault Diagnoses, rectify the problems in Computer.

DEPARTMENT OF ZOOLOGY

Certificate Course in Sericulture			
Paper - I	General Sericulture		15NZOC11
Total Hrs : 45	Hrs. / Week:2	Hrs / Unit : 9	Credits: 3

Unit – I Introduction to Sericulture

Introduction - Definition - Scope - Present Global and Indian Scenario of Silk – Special focus on Tamil Nadu - Characteristics of Sericulture industry - Origin and history of sericulture industry - Silk worm rearing as cottage Industry.

Unit – II Biology of *Bombyx mori* and Moriculture

Types of silkworm-mulberry and non-mulberry-habit and habitat-Races of *Bombyx mori*: voltinism - life cycle of *Bombyx mori*: morphology of silkworm, egg, larva, pupa and adult – silk glands. Moriculture-Biology of Mulberry- Taxonomy – morphology.

Unit – III Common diseases affecting Moriculture

Fungal diseases of Mulberry - occurrence - symptoms and control. a) Leaf spot b) Leaf rust c) Powdery mildew d) Leaf blight e) Root rot & Scales f) Dogare blight g) Twig blight- Bacterial - viral and mycoplasmal diseases of mulberry - control measures. Root knot nematode diseases - its occurrence - symptoms and control. Mineral deficiency symptoms in mulberry and reclamation. Fungicide formulations and method of application.

Unit – IV Common diseases affecting sericulture Industry

Types of silkworm diseases-Protozoan disease - Pebrine - Symptoms - mode of infection - prevention and control. Bacterial disease - Flacherie - Symptoms - causative agents - factors influencing flacherie - sources and mode of infection – prevention and control. Viral diseases - Grasserie - Symptoms - mode of infection - detection. Prevention and control. Fungal diseases - Muscardine - Symptoms - causative agents mode of infection - prevention and control. Aspergillus disease - symptoms - causative agents mode of infection - prevention and control and Uzi infestation.

Unit – V Cocoon and Silk Products

Economics of seed production - cost of seed cocoon -egg sheets. Physical & Chemical properties of silk - Uses of silk. Cocoon types - composition of cocoon - characteristics of cocoon - defective cocoons - harvesting of cocoons - silk wastes and byproducts. Detailed Processing of Cocoon- Reeling: Objective, raw silk yarn and its importance, cocoon feeding, croissure and its effects, Re-reeling and package.

Unit – V Silk Organization

Organisation of sericulture industry in India - Government of India - State departments of sericulture of different states. - sericulture research and its role in sericulture development. Raw silk testing and grading of silk. Silk marketing society - Credit Co-operatives. Financing agencies in sericulture. Short term, mid term and long term financing. NABARD and other nationalized banks – silk exchange and its activities-extension methodologies-role of CSB.

Reference books

1. Ganga, G. Comprehensive sericulture, Volume – 2. Silkworm rearing and silk reeling – Oxford and IBH Publishing Company Private Limited, S. 155 Panchshila Park, New Delhi.
2. Rao, M. M., Comprehensive sericulture manual. B.S. Publications, 4.3.309, 2nd floor, Girraj Lane, Sultan Bazar, Hyderabad.
3. Dandin, S.B., Jayaswal, J. and K. Giridhas, Hand book of sericulture technologies, Central Silk Board, Madivala, Bangalore – 68.
4. Kesary, M. and Johnson, M., Sericulture.
5. M. Madan Mohan Rao. A textbook of sericulture. B.S. Publications 4.3.309, 2nd floor, Girraj Lane, Sultan Bazar, Hyderabad.

Certificate Course in Sericulture			
Paper-II	Mulberry Cultivation and Silkworm rearing	15NZOC12	
Total Hrs : 45	Hrs./Week:2	Hrs / Unit : 9	Credits: 3

Unit-1 Mulberry propagation

Mulberry Propagation : Seedlings : method of raising seedlings-Saplings : Selection of plants for cutting - selection of cuttings- Grafting - selection of stock and scion - Layering : types – techniques-Nursery raising : Layour - Bed size - soil composition– Nursery raising by seedlings, saplings and grafts. Mulberry cultivation in irrigated land. Water resources - irrigation systems - surface - sub soil, drip system.

Unit 2 Mulberry growth and nutrition

Mulberry growth and nutrition: Importance of soil in mulberry cultivation -- essential elements for growth – their classification. Deficiency of soil in mulberry cultivation-Organic Manure application

Unit -3 Organ systems of *Bombyx mori*

Digestive system including mouth parts and reproductive systems - silk gland structure – silk spinneret. Embryology: Structure of the egg - developmental stages - blastokinesis - eye spot and blue egg stage - hatching.

Unit - 4 Silkworm rearing

Model house –CSB model – Rearing appliances. Disinfection - Selection of races for rearing - Bivoltine and multivoltine - their advantages and disadvantages.

Unit-5 Late age rearing

Spacing - leaf requirement - environmental conditions - feeding and bed cleaning schedules. Methods of rearing: Shelf, shoot and floor rearing - advantages and disadvantages Mounting - Types of mountages – Bamboo (Chawki)-plastic (Netrika) -advantages and disadvantages.

Reference books

1. Ganga, G. Comprehensive sericulture, Volume – 2. Silkworm rearing and silk reeling – Oxford and IBH Publishing Company Private Limited, S. 155 Panchshila Park, New Delhi.
2. Rao, M. M., Comprehensive sericulture manual. B.S. Publications, 4.3.309, 2nd floor, Girraj Lane, Sultan Bazar, Hyderabad.
3. Dandin, S.B., Jayaswal, J. and K. Giridhas, Hand book of sericulture technologies, Control Silk Board, Madivala, Bangalore – 68.
4. Kesary, M. and Johnson, M., Sericulture.
5. M. Madan Mohan Rao. A textbook of sericulture. B.S. Publications 4.3.309, 2nd floor, Girraj Lane, Sultan Bazar, Hyderabad.

Certificate Course in Sericulture		
Paper III	Practicals in Sericulture	15NZOCP1
Total Hrs : 30		Credits: 3

1. Observation of life history of silkworm (to be done individually or team of five members)
2. Identification and collection of mulberry varieties cultivated locally
3. Identification of different silkworm races
4. Identification of cocoons
5. Identification of pests of mulberry
6. Identification of pests of silkworm
7. Field visit report to mulberry garden and sericulture institute.
8. Organ systems of silkworm-Digestive and silk gland
9. DFL Card

DEPARTMENT OF MICROBIOLOGY
CERTIFICATE COURSE IN MEDICAL LABORATORY TECHNOLOGY

Paper - I	CLINICAL PATHOLOGY AND BIOCHEMISTRY	15NMBC11
Total Hrs: 45	Hrs./Week:2	Hrs. / Unit : 9
		Credits: 3

UNIT I Laboratory Organization

Organization of the clinical lab-role of medical lab technician-safety regulations-first aid-clinical lab records-Introduction to clinical Laboratory equipments, general comments on specimen collection.

UNIT II Examination of Urine and stool samples

Urine analysis- Physical-volume, color, odor, appearance, specific gravity and pH.)
 Chemical-Protein - Sulfosalicylic acid method - Reducing Sugar – Benedict test - Ketone bodies - Rothera test -Bile pigment - Fouchet method - Bile salt -Benzidine test - Urobilinogen - Bence Jones Protein. Microscopic (Pus, Cast, Crystal, epithelial)
 Stool analysis-Physical- colour, consistency, odour, presence of Blood mucus, Pus. Microscopic Examination (Stool smear, Wet mount)

UNIT III Examination of Semen Samples

Examination of Semen Samples - Physical , Chemical and Microscopic examination.

Examination of CSF

Examination of CSF: Physical, Chemical examination and Microscopic examination.

Examination of blood

Examination of blood - Routine examination - Hb, TC ,DC, ESR, Platelet count, Reticulocyte count, RBC counts.

UNIT IV

BioChemistry- Introduction - Blood glucose, urea, uric acid, cholesterol (LDL,HDL,TGL).

UNIT V Microbiology

Pulmonary - Diagnostic test for TB. Renal function test-24 hrs Examination of urine specimen, Blood urea nitrogen(BUN), Albumin. Liver function test-SGOT,SGPT, Bilirubin (Total, Direct, Indirect)

REFERENCE BOOKS :

1. Kanai L . K . Mukherjee – Medical Laboratory Technology – Vol. I , II & III.
2. Gunasekaran , R. – Laboratory Manual in Microbiology.
3. Kannan, D. - Laboratory Manual in General Microbiology.

CERTIFICATE COURSE IN MEDICAL LABORATORY TECHNOLOGY

Paper - II	HAEMATOLOGY, SEROLOGY AND BLOOD BANK	15NMBC12	
Total Hrs: 45	Hrs./Week:2	Hrs. / Unit : 9	Credits: 3

UNIT I

Histopathology-Introduction, Microtome-Types, Tissue cutting and clinical significance of examination of abnormal tissue and abnormal cells.

UNIT II

Biopsy - Examination of Tissue- Benign cells, malignant cells and morphology of various types of abnormal cells.

UNIT III

Hematology-Introduction-Blood components (Plasma cells - RBC, WBC, Platelets)-RBC-TC-WBC-TC, DC

UNIT IV

Serology - Introduction – Bacterimia, Septicemia, Anemia, HBs, HIV(ELISA), RA,WIDAL.

UNIT V

Blood Bank - Introduction- Criteria for the selection of bloods donors. Cross matching ABO blood grouping, Rh typing, Coombs test.

REFERENCE BOOKS :

1. Kanai L . K . Mukherjee – Medical Laboratory Technology – Vol. I , II & III.
2. Gunasekaran , R. – Laboratory Manual in Microbiology.
3. Kannan, D. - Laboratory Manual in General Microbiology.

Paper - III	15NMBCP1
TECHNIQUES IN MEDICAL LABORATORY TECHNOLOGY	
Total Hrs: 30	Credits: 2

1. Routine examination of urine
2. Routine examination of stool
3. Analysis of CSF
4. Semen analysis
5. Bio chemical tests-sugar, urea, creatinin, cholesterol, protein
6. Serological tests-RPR,VDRL,HIV
7. Antibiotic sensitivity test
8. Blood grouping
9. Blood cross matching

REFERENCE BOOKS :

1. Kanai L . K . Mukherjee – Medical Laboratory Technology – Vol. I , II & III.
2. Gunasekaran , R. – Laboratory Manual in Microbiology.
3. Kannan, D. - Laboratory Manual in General Microbiology.

DEPARTMENT OF NUTRITION AND DIETETICS

CERTIFICATE COURSE IN NUTRITION AND DIETETICS			
Paper I	FOOD SCIENCE AND THERAPUTIC NUTRITION	15NNDC11	
Total Hrs: 45	Hrs./Week:2	Hrs/ Unit : 9	Credits: 3

OBJECTIVES:

To enable students

- To understand the vital link between nutrition and health.
- To obtain knowledge of different food groups and their nutritive value
- To gain knowledge about the methods of assessment of nutritional status
- To plan suitable diets for different age groups and for special conditions.

Unit -I

a. Definition of Health, Classification of food according to functions- Energy yielding foods, Body Building foods and Protective foods. Food groups - Basic V and Basic VII

b. Preliminary techniques and different methods of cooking.

Unit –II

Food Commodities: Nutritive Value of Cereals, Pulses, Fruits and Vegetables, Milk and Milk Products, Egg, Flesh foods.

Unit – III

a. Balanced Diet – Nutritional needs in human life cycle – Nutrition in Pregnancy, Lactation, Infancy, Pre-school age, School age, Adolescence, and Old age- RDA recommended by ICMR.

b. Menu planning – Factors influencing planning menus

Unit – IV

a. Definition of Dietetics – purpose of diet therapy – factors to be considered in planning therapeutic diets – Types and role of a Dietitian.

b. Routine hospital diets – clear fluid diet, full fluid diet, soft diet, regular normal diet - preoperative diet and postoperative diet.

Unit V:

a. Special feeding methods – Tube feeding – Parental feeding.

b. Diet for Diabetes Mellitus, Obesity, Underweight, Chronic Renal Failure, Cardiovascular disease, Peptic Ulcer, Hepatitis and Fever.

References:

1. Brown, Amy. Understanding Food: Principles and preparation; Wadsworth Thomson Learning. California, 2000.
2. Parker, Risk. Introduction to Food Science; Delmar Thomason Learning Albany, 2003.
3. Whitney, Eleanor Noss. Understanding Nutrition; Wadsworth Thomson Learning California, 2002.
4. Cummings, Leslie E. Nutrition Management for Food services; Delmar Publishers, New York, 1989.
5. Drummond, Karen Eich. Nutrition for Food service and culinary Professionals, John Wiley, New Jersey, 2004

CERTIFICATE COURSE IN NUTRITION AND DIETETICS			
Paper II	BASICS OF FOOD PRODUCTION AND SERVICE	15NNDC12	
Total Hrs:45	Hrs./Week:2	Hrs/Unit : 9	Credits: 3

OBJECTIVES:

To enable students

- To gain knowledge about the methods of purchasing, storage and issuing of food commodities, maintaining records in different areas.
- To gain knowledge in quantity food preparation and serving

Unit I

Requirement of catering Institutions – Lay out – Plan of area of food preparation – cooking, cleaning, storing, serving and dining – flow of traffic

Unit II

Equipment in food service: Classification- Major and Minor. Electrical and Non Electrical – use- Serving equipment- table ware, hollow ware, Glasss ware and special equipments.

Unit III

Quantity cookery – Selection – purchase and storage –standardization, portion control- Cost control in food service.

Unit IV

- A. Mise-en-Place, Mise-en-scene
- B. Roles and responsibilities of a waiter.
- C. Food service- Styles of food service- Waiter service- Banquet service- Restaurant service- room service- Mechanics of waiter service- self service- Buffet service- cafeteria service- Leaf service-vending mobile catering .

Unit V

- a. Sanitation and Hygiene – Sanitation of eating places- Food handlers
- b..safety measures in food service

Refernces:

1. Brown, Amy. Understanding Food: Principles and preparation; Wadsworth Thomson Learning. California, 2000.
2. Cummings, Leslie E. Nutrition Management for Food services; Delmar Publishers, New York, 1989.
3. Drummond, Karen Eich. Nutrition for Food service and culinary Professionals, John Wiley, New Jersey, 2004

CERTIFICATE COURSE IN CATERING MANAGEMENT AND DIETETICS		
Paper-III	BASICS OF DIETETICS AND QUANTITY FOOD SERVICE	15NNDP1
(Practical)		
Total Hrs:30		Credits: 2

1. Units of measurement for food. Preparing market list and organization of work
2. Group experience in planning, preparing and serving different types of food.
3. Standardization of Recipes.
4. Organizing, Preparing and serving for 3 different meals for 50 members and more.
5. Food and Beverage service
 - a. Appraising of cutlery, crockery, glassware.
 - b. Laying and re-laying of table cloths.
 - c. Table 'd' hote cover laying
 - d. A la carte – Cover lying
 - e. Serviette folds
 - f. Arrangement of side board
 - g. Preparing Serving and clearing practice
 - h. Receiving the guest, presenting the menu, taking orders and presenting the bill
6. Training in a food service institution– with special reference to purchase, production and serving area.
7. Visit to different types of Food Service Institution (hotels, hospitals, hostels and Industrial canteen)

Record and project report to be submitted at the time of practical examination

References:

1. Sardesai, Vishwanath M. Introduction to Clinical Nutrition; Marcel Dekker, New York, 2003.
2. Brown, Judith E. Nutrition Now; Wadsworth Thomson Learning, California, 2002.
3. Ray, Debashri. Nutritional Challenge and Total Quality Management; Sarup & Sons, Delhi, 2001.
4. Nath, R. Health and Disease Role of Micronutrients and Trace Elements; APH Publishing, New Delhi, 2000.
5. Birchfield, John C; Design and Layout of Foodservices facilities; John Wiley and Sons, Nw Jersey, 2003.