VIRUDHUNAGAR HINDU NADARS' SENTHIKUMARA NADAR COLLEGE

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

(Re – accredited with 'A' Grade by NAAC)

VIRUDHUNAGAR

18.03.2016

MINUTES OF THE SEVENTH ACADEMIC COUNCIL MEETING

The Seventh Academic Council Meeting of Virudhunagar Hindu Nadars' Senthikumara Nadar College (Autonomous) Virudhunagar was held on 18th March, 2016 at 11 a.m. in K.C.S.Rathinasamy Nadar - R.Mariammal Memorial Building.

The Chairperson and Principal welcomed the gathering

The Chairperson also introduced Mr.R.Rameshbabu, a Principal Nominee in the Academic Council earlier and now nominated as the Head of Department of Mathematics, Mr.B.Pavalakumar, Head of the Department of Management Studies, and Dr.G.Mahendra Perumal, Co-ordinator – B.Voc. Programme who were inducted as new members to the Academic Council.

The Principal presented before the Council the progress report on Autonomy.

Four subjects were presented for resolution

Subject 1:

Approval for the detailed syllabi and Subject Codes for the UG and PG second year subjects, I year subjects for B.A & M.A. History and B.Voc. Programme and the changes made in the existing syllabus passed in the various Board of Studies Meetings.

The Principal invited the Chairperson of the respective Board of Studies to move the subject for the approval of the Academic Council.

Dr. S. Jayaram, Chairperson, Board of Studies of Part I Tamil and B.A. Tamil moved the subject of approval by the Academic Council for the revisions in the second year syllabus for Part – I Tamil and B.A. Tamil passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr. K. Sridhar, Chairperson, Board of Studies of M.A. Tamil and M.Phil. Tamil moved the subject of approval by the Academic Council for the revisions in the second year syllabus for M.A. Tamil passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr.R.Selvam, Chairperson, Board of Studies of Part – II English, B.A. English, M.A. English and M.Phil. English moved the subject of approval by the Academic Council for the revisions in the second year syllabus for Part II English, B.A. English and M.A. English passed in the Board of Studies meetings held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr.G.Ravi, Chairperson, Board of Studies of B.A. History and M.A. History moved the subject of approval by the Academic Council for the revisions in the first year syllabus for B.A. History & M.A. History passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr.M.Mariappan, Chairperson, Board of Studies of B.A. Economics moved the subject of approval by the Academic Council for the revisions in the second year syllabus for B.A. Economics passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr. R.Vairamuthuvel, Chairperson, Board of Studies of B.Com., B.Com with CA, M.Com. and M.Phil. Commerce moved the subject of approval by the Academic Council for the revisions in the second year syllabus for B.Com. B.Com with CA, and M.Com. passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr.S.Sekar Subramanian, Chairperson, Board of Studies of B.B.A. moved the subject of approval by the Academic Council for the inclusion of industrial visit as a part of curriculum for all the three years course and the revisions in the second year

syllabus for B.B.A. passed in the meeting and also for the subject code allotted to each subject as given in Annexure I.

Mr. R.Rameshbabu, Chairperson, Board of Studies of B.Sc. Maths, M.Sc. Maths, and M.Phil. Maths moved the subject of approval by the Academic Council for the revised subject code for the M.Phil. subject *Advanced Algebra* (M2MAC12 is changed as M3MAC12) and for the revisions in the second year syllabus for B.Sc. Mathematics and M.Sc. Mathematics passed in the Board of Studies meeting held on 09.03.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr. S. Rajasingh, Chairperson, Board of Studies of B.Sc. Physics, M.Sc. Physics and M.Phil. Physics moved the subject of approval by the Academic Council for the revisions in the second year syllabus for B.Sc. Physics and M.Sc. Physics passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr. R. Boominathan, Chairperson, Board of Studies of B.Sc. Chemistry, M.Sc. Chemistry and M.Phil. Chemistry moved the subject of approval by the Academic Council for the changes in the first M.Sc. Chemistry Major Elective Subject *Nanoscience and Nanotechnology* (P2CHE11), the detailed syllabi for *Cosmetics* and *Applied Chemistry* which are introduced as Self Learning Subjects respectively for B.Sc. Chemistry and M.Sc. Chemistry, the revisions in the second year syllabus for B.Sc. Chemistry and M.Sc. Chemistry passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr. A. Rajendran, Chairperson, Board of Studies of B.Sc. Botany, M.Sc. Botany, and M.Phil. Botany moved the subject of approval by the Academic Council for the revisions in the second year syllabus for B.Sc. Botany and M.Sc. Botany passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Mr. V. Shanmugavelu, Chairperson, Board of Studies of B.Sc. Zoology, M.Sc. Zoology and M.Phil. Zoology moved the subject of approval by the Academic Council for the inclusion of *Limnology - In Depth Study, Aquaculture (Live Feed Culture) - In Depth Study* and *Microbial Bioremediation – In Depth Study* which are introduced as additional Elective papers for M.Phil. Zoology, the detailed syllabi for these elective papers and for the revisions in the second year syllabus for B.Sc. Zoology and M.Sc. Zoology passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr. T. Kathirvalavakumar, Chairperson, Board of Studies of B.Sc. Computer Science, M.Sc. Computer Science and M.Phil. Computer Science moved the subject of approval by the Academic Council for the revisions in the second year syllabus for B.Sc. Computer Science and M.Sc. Computer Science passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr. T. Durai Anand, Chairperson, Board of Studies of B.Sc. Microbiology, M.Sc. Microbiology, and M.Phil. Microbiology moved the subject of approval by the Academic Council for the revisions in the second year syllabus for B.Sc. Microbiology and M.Sc. Microbiology passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Mr. D. Rajkumar, Chairperson, Board of Studies of BCA, MCA and PGDCA moved the subject of approval by the Academic Council for the revisions in the second year syllabus for B.C.A. and M.C.A. passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Mr. Z. Ramya Sushil, Chairperson, Board of Studies of B.Sc. IT and M.Sc. CS&IT moved the subject of approval by the Academic Council for the revisions in the second year syllabus for B.Sc. IT and M.Sc. CS & IT passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Mr. B.Pavala Kumar, Chairperson, Board of Studies of MBA moved the subject of approval by the Academic Council for the revisions in the second year syllabus for M.B.A. passed in the Board of Studies meeting held on 20.032.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr. G. Hezekiah Raja, Chairperson, Board of Studies of M.Com. CA moved the subject of approval by the Academic Council for the revisions in the second year syllabus for M.Com. Computer Applications passed in the Board of Studies meeting held on 20.02.2016 and also for the subject code allotted to each subject as given in Annexure I.

Dr. G. Mahendra Perumal, Co-ordinator - B.Voc. Programme moved the subject of approval by the Academic Council for the newly constituted Board of Studies for B.Voc. Programme on *Environmental Assessment and Remediation* as given in Annexure – II and the paper titles, detailed syllabus and subject codes for the first year B.Voc. passed in the Board of Studies meetings held on 01.10.2015 as given in Annexure I.

Resolution

The subject was considered and resolved to approve the detailed syllabi and Subject Codes for the UG and PG second year subjects, I year B.A & M.A. History and B.Voc. Programme and the changes made in the existing syllabus passed in the various Board of Studies Meetings.

Dr. R. Selvam moved the next subject.

Subject 2:

Approval for the time span prescribed for students to complete a programme.

Resolution

The subject was considered and resolved to approve N+2 years for the completion of programme for the students admitted in the academic year 2015 – 2016 and for the

students who were admitted earlier the duration to complete the programme shall be decided by the Principal.

Subject 3:

Ratification for the modus operandi and question pattern for the self learning courses offered by the departments.

Resolution

The subject was considered and resolved to ratify the modus operandi and question pattern for the self learning courses offered by the departments as given in Annexure-III.

Subject 4:

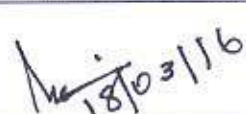Approval for the introduction of common self learning subjects.

Resolution
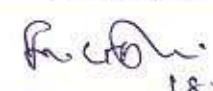
The subject was considered and resolved to approve the introduction of common Self Learning Subjects both for UG and PG courses.
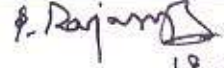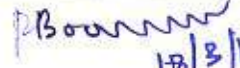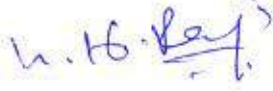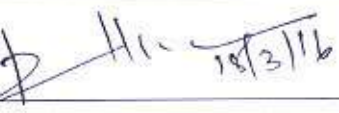
All resolutions were unanimously passed.

Out of 37 members, 29 turned out for the meeting and 8 members got permission to absent.

Mr. R. Palaniappan, the Member Secretary proposed vote of thanks and the meeting came to an end.

Members Present:

S.No.	Name and Designation	Signature
1.	Dr. S. Jayaram, M.A.,M.Phil.,Ph.D.,P.G.Dip.in.M.S.S Head, Department of Tamil.	18/03/16
2.	Dr. K. Sridhar, M.A.,M.Phil.,Ph.D.,P.G.D.J.M.C. Head I/c, Department of Tamil (P.G).	18.3.16
3.	Dr. R. Selvam, M.A.,M.Phil.,Ph.D. Head, Department of English.	18/3/16
4.	Dr. M. Mariappan, M.A.,M.Phil.,P.G.D.C.A.,Ph.D. Head, Department of Economics.	18/3/16

5.	Dr. G. Ravi, M.A.,M.Phil.,M.L.I.S.,Ph.D. Head, Department of History.	
6.	Mr. R.Rameshbabu, M.Sc.,M.Phil. Head, Department of Mathematics.	
7.	Dr. S. Raja Singh, M.Sc.,M.Phil.,Ph.D. Head, Department of Physics.	18-03-16
8.	Dr. R. Boominathan, M.Sc.,M.Phil.,Ph.D. Head, Department of Chemistry.	18/3/16.
9.	Dr. A. Rajendran, M.Sc.,M.Phil.,Ph.D. Head, Department of Botany.	18/3/2016
10.	Mr. V. Shanmugavelu, M.Sc.,M.Phil. Head, Department of Zoology.	
11.	Dr. T. Kathirvalavakumar, M.Sc.,PGDCA.,M.Phil.,Ph.D. Head, Department of Computer Science. & Dean for Science	
12.	Dr. R. Vairamuthuvel, M.Com.,M.Phil.,M.B.A.,PGDCA., Ph.D. Head, Department of Commerce.	R Vairamuthuvel
13.	Dr. G. Hezekiah Raja, M.Com.,M.Phil.,PGDCA.,Ph.D. Head I/c, Department of Commerce (SF).	
14.	Dr.S.Sekar Subramanian,M.Com.,M.Phil.,MBA.,Ph.D. Head, Department of Business Administration.	
15.	Mr. B.Pavala Kumar, MBA., M.Phil. Head I/c, Department of Management Studies.	
16.	Mr. Z. Ramya Sushil, M.Sc.,M.B.A.,M.Phil.,M.Tech. Head, Department of Information Technology.	18/3/16
17.	Dr. T. Durai Anand, M.Sc.,M.Phil.,Ph.D. Head I/c, Department of Microbiology.	18-3-16.
18.	Mr. D. Raj Kumar, M.C.A.,M.Phil. Head I/c, Department of Computer Applications.	18/03/2016

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Virudhunagar – 626 001.

Course Name : Bachelor of Science
Discipline   : Mathematics

CHOICE BASED CREDIT SYSTEM

(For those who join in June 2015 and after)

Course Scheme:

Semester	Part	Subject	Hour	Credit	Int+Ext =Total	Subject Code	Status
III	Part 1	Tamil	6	3	25+75=100	U2PT3	Revised
	Part II	English	6	3	25+75=100	U2PE3	New
	Core 5	Differential Equations	4	4	25+75=100	U2MAC3	Revised
	Allied 3	Electricity & Electronics / General Chemistry - III	4	4	25+75=100	U1PHA3X3/ U2CHA3X3	Revised
	Allied 3 Lab	LAB: Physics Practical – II / Organic Qualitative Analysis	2	--	--	--	
	Allied 4	Numerical Methods (4+2)	6	4	25+75=100	U2MAA3	New
	SBE-2	Discrete Mathematics	2	2	25+75=100	U2MAS3	New

Semester	Part	Subject	Hour	Credit	Int+Ext =Total	Subject Code	Status
IV	Part I	Tamil	6	3	25+75=100	U1PT4	No change
	Part II	English	6	3	25+75=100	U2PE4	New
	Core 6	Modern Algebra	4	4	25+75=100	U2MAC4	Interchanged
	Allied 5	Optics, Spectroscopy & Modern Physics / General Chemistry - IV	4	4	25+75=100	U1PHA4X4/ U2CHA4X4	Revised
	Allied 5 Lab	LAB: Physics Practical – II / Organic Qualitative Analysis	2	2	40+60=100	U1PHA4PX/ U2CHA4PX	Revised
	Allied 6	Linear Programming	4	4	25+75=100	U2MAA4	Interchanged
	Allied 6 Practical	LAB:Linear Programming and Numerical Methods	2	1	40+60=100	U2MAA4P	New
	SBE - 3	Transformation Techniques	2	2	25+75=100	U2MAS4	Revised

Year	Part	Subject	Credit	Int=Total	Code
I & II	Part V	NSS/ NCC/ Physical Education – Sports/YRC/RRC	1	100=100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ U1RR4

Placed in the Academic Council Meeting held on 18.03.2016   **Annexure I**   B.Sc. Mathematics

Course Name : Master of Science
Discipline   : Mathematics
CHOICE BASED CREDIT SYSTEM
(For those who join in June 2015 and after)
Course Scheme:

Semester	Part	Subject	Hour	Credit	Int+Ext = Total	Subject Code	Status
III	Core 10	Field Theory	6	5	25+75 = 100	P2MAC31	Interchanged
	Core 11	Complex Analysis	6	4	25+75 = 100	P2MAC32	Interchanged
	Core 12	Numerical Methods	6	4	25+75 = 100	P3MAC33	Interchanged
	Core 13	Measure Theory	6	4	25+75 = 100	P2MAC34	Revised
	Elective 2	a) Applications of Graph Theory b) Differential Geometry	6	5	25+75 = 100	P3MAE31/ P2MAE32	Interchanged

Semester	Part	Subject	Hour	Credit	Int+Ext = Total	Subject Code	Status
IV	Core 14	Optimization Techniques	6	4	25+75 = 100	P2MAC41	Interchanged
	Core 15	Functional Analysis	6	4	25+75 = 100	P2MAC42	Interchanged
	Core 16	Advanced Statistics	6	4	25+75 = 100	P2MAC43	New
	Core 17	Combinatories	6	4	25+75 = 100	P2MAC44	New
	Elective 3	a) Classical Mechanics b) Advanced Topology c) Stochastic Processes	6	5	25+75 = 100	P2MAE41/ P2MAE42/ P2MAE43	Interchanged New Interchanged

Semester: III

CORE 10 - FIELD THEORY

Contact Hours per Semester: 90
Contact Hours per week: 6

Subject code: P2MAC31
Credit: 5

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Objectives:
To enable the students to understand the concept of Field theory
To enable the students to understand the concept Galois theory
To enable the students to understand the concept of chain conditions

Unit I: FIELDS:
Introduction – Sub fields and Prime fields – Definitions , Examples, Results and Worked out exercises – Extension fields – Definitions – Examples – Results – Worked out exercises.
Chapter 13: Sections 1 and 2 (Pages from 350-372; Excluding all the non-worked out problems from both the sections).   (18 hours)

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Course Name : **Bachelor of Science**
Discipline   : **Physics**

CHOICE BASED CREDIT SYSTEM
(For those who join in June 2015 and after)
COURSE OBJECTIVES:

- Nowadays most of the students prefer to join Professional Colleges after completing their higher secondary School studies. Only limited students wish to join Science Colleges.
- The curriculum of B.Sc Physics programme is now carefully designed to create interest in Physics and in order to prepare the students to meet the challenges of Society locally or globally.
- After the successful completion of this course, a B.Sc. degree holder would be able to face various competitive examinations and take up any job requiring the graduateship.
- Also, the degree holder will become equipped to undergo various post graduate courses in Physics and related subjects and to give full assistance to researchers in various research and development laboratories.

Sem	Subject	Hrs	Credit	Int.+Ext. =Total	Subject Code	Status
III	Tamil	6	3	25+75=100	U2PT3	Revised
	English	6	3	25+75=100	U2PE3	New
	Core 3 Electromagnetism	4	4	25+75=100	U2PHC3	Revised
	Core LAB: General Physics II	2	--	--	--	---
	Allied Maths: Differential Equations and Laplace Transform	6	3	25+75=100	U2MAA3X3	Revised
	Allied: General Chemistry-I	4	4	25+75=100	U2CHA3X1	Revised
	Allied- LAB: Volumetric Analysis	2	--	--	--	---
IV	Tamil	6	3	25+75=100	U1PT4	No changed
	English	6	3	25+75=100	U2PE4	New
	Core 4 Analog Electronics	4	4	25+75=100	U2PHC4	Revised
	Core : LAB: General Physics II	2	2	40+60=100	U2PHC4P	Revised
	Allied Maths: Statistics, Groups and Fourier Series	6	5	25+75=100	U2MAA4X4	Revised
	Allied: General Chemistry-II	4	4	25+75=100	U2CHA4X2	Revised
	Allied- LAB: Volumetric Analysis	2	2	40+60=100	U2CHA4PX	Revised

Year	Part	Subject	Credit	Int=Total	Code
I & II	Part V	NSS/ NCC/ Physical Education – Sports/YRC/RRC	1	100=100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ U1RR4

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Virudhunagar – 626 001.

Course Name : Master of Science

Discipline   : Physics

CHOICE BASED CREDIT SYSTEM

(For those who join in June 2015 and after)

COURSE OBJECTIVES:

- To develop a general competence in Physics. This is a pre-requisite for contributing flexibility in today's cross- disciplinary research arenas.
- To nurture the creative imagination of young minds and to reinforce the spirit of rational enquiry in a co-operative ambience.
- To cultivate specific strengths in the flourishing and future oriented areas of Nano Physics and Molecular Spectroscopy respectively.
- To enable students to develop insights into the techniques used in current projects.
- To give students the experience of teamwork, to develop presentational skills and to train students to work to deadlines.
- To develop the professional skills necessary for students to play a meaningful role in industrial or academic life and satisfy the need, nationally for well qualified post-graduates who will be able to respond to the challenges that arise form future developments.
- This course will put students in a strong position when applying for a PhD and other higher studies.

Sem	Subject	Hrs	Credit	Int+Ext =Total	Subject Code
III	Core 7 - Solid State Physics I	6	4	25+75=100	P1PHC31
	Core 8 - Quantum Mechanics - I	6	4	25+75=100	P1PHC32
	Core 9- Nuclear and Particle Physics	6	4	25+75=100	P2PHC33
	Major Elective- Fiber Optic Communication / Applied Optics	6	5	25+75=100	P1PHE31/ P1PHE32
	Core Lab4- LAB: Digital Electronics & General Physics	6	5	40+60=100	P1PHC3P
IV	Core10- Solid State Physics II	6	4	25+75=100	P1PHC41
	Core11- Molecular Spectroscopy	6	4	25+75=100	P1PHC42
	Core12- Quantum Mechanics II	6	4	25+75=100	P1PHC43
	Major Elective- Nanophysics/Biophysics	6	5	25+75=100	P1PHE41/ P1PHE42
	Core Lab 5: Project & Viva-voce	6	5	40+60=100	P1PH4PV

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Course Name: Bachelor of Science

Discipline   : Chemistry

CHOICE BASED CREDIT SYSTEM

(For those who joined in June 2015 and after)

Course scheme

Sem	Part	Subject	Hrs	Cr	Int+Ext=Total	Code	Status
III	I	Tamil	6	3	25+75 = 100	U2PT3	Revised
	II	English III	6	3	25+75 = 100	U2PE3	New
	III	Core Subject III–Inorganic and Physical Chemistry	4	4	25+75 = 100	U2CHC3	Revised
	III	Core Lab II – Semi-micro Inorganic Qualitative Analysis	2	-	---	---	----
	III	Allied I (Differential Equations and Laplace Transform / **Oils & Fats**)	6/4	4/3	25+75 = 100	U2MAA3X3 / U2CHA31	Revised Revised
	III	Allied II – LAB: Food Analysis	2	-	---	---	---
	III	Allied II - Physics: Mechanics, Properties of Matter and Sound	4	4	25+75 = 100	U1PHA3X1	No change
	III	Allied II – LAB: Physics Practical - I	2	-	---	---	----
IV	I	Tamil/Hindi	6	3	25+75 = 100	U1PT4	No change
	II	English IV	6	3	25+75 = 100	U2PE4	New
	III	Core Subject IV– Organic and Physical Chemistry	4	4	25+75 = 100	U2CHC4	Revised
	III	Core Lab II – LAB: Semi-micro Inorganic Qualitative Analysis	2	2	40+60 = 100	U1CHC4P	No change
	III	Allied I (Statistics, Groups and Fourier Series / **Oils & Fats**)	6/4	4/3	25+75 = 100	U2MAA4X4 /U2CHA41	Revised Revised
	III	Allied II - LAB: Food Analysis	2	2	40+60 = 100	U1CHA4P	No change
	III	Allied II-Physics: Thermal Physics	4	4	25+75 = 100	U1PHA4X2	No change
	III	Allied II – LAB: Physics Practical - I	2	2	40+60 = 100	U1PHA4PX	No change

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Virudhunagar – 626 001.

Course Name: Master of Science
Discipline: Chemistry
CHOICE BASED CREDIT SYSTEM
(For those who joined in June 2015 and after)
Course scheme:

Sem	Part	Subject	Hr	Cr	Int+Ext =Total	Subject Code	Status
1	III	Core Subject I – Organic chemistry I	5	5	25+75=100	P2CHC11	Revised
	III	Core Subject II – Inorganic chemistry I	5	4	25+75=100	P2CHC12	Revised
	III	Core Subject III – Physical chemistry I	5	4	25+75=100	P2CHC13	Revised
	III	Core lab I – LAB: Organic chemistry	3	-	-----		----
	III	Core lab II –LAB: Inorganic Chemistry I	4	-	-----		----
	III	Core lab III – LAB:Physical chemistry I	4	-	------		----
	III	Major Elective 1 – **Nano science and Nanotechnology/** Computers in Chemistry	4	4	25+75=100	**P3CHE11/** P2CHE12	**New** **Revised**

SEM	SUBJECT	Hr	Cr	Int+Ext= Total	Subject code	Status
III	Core Subject VII-Organic Chemistry III	5	4	25+75=100	P1CHC31	No change
	Core Subject VIII-Inorganic Chemistry III	5	4	25+75=100	**P2CHC32**	**Revised**
	Core subject IX-Physical Chemistry III	5	4	25+75=100	P1CHC33	No change
	Core Lab IV-LAB:Organic Chemistry Practical II	4	-	-	-	---
	Core Lab V-LAB:Inorganic Chemistry Practical II	4	-	-	-	---
	Core subject X - Analytical Methods in Chemistry	3	3	25+75=100	**P2CHC34**	**Revised**
	Major Elective 2- Medicinal and Pharmaceutical Chemistry / Polymer Chemistry	4	4	25+75=100	P1CHE31/ P1CHE32	No change
	Core subject XI-Organic Chemistry IV	5	4	25+75=100	P1CHC41	No change
	Core subject XII-Inorganic Chemistry IV	5	4	25+75=100	**P2CHC42**	**Revised**
	Core subject XIII-Physical Chemistry IV	5	4	25+75=100	P1CHC43	No change
	Core Lab IV-LAB: Organic Chemistry Practical II	4	4	40+60=100	P1CHC4P1	No change

Placed in the Academic Council Meeting held on 18.03.2016   **Annexure I**   M.Sc. Chemistry

VIRUDHUNAGAR HINDU NADARS' SENTHIKUMARA NADAR COLLEGE

(An Autonomous Institution Affiliated to Madurai Kamaraj University)
[Re-accredited with 'A' Grade by NAAC]
Virudhunagar – 626 001.

Course Name: Bachelor of Science

Discipline : Botany

CHOICE BASED CREDIT SYSTEM

(For those who joined in June 2015 and after)

Course scheme

Sem	Part	Subject	Hr	Cr	Int+Ext=Tot	Code	Status
III	Part I	Tamil III	6	3	25+75=100	U2PT3	Revised
	Part II	English III	6	3	25+75=100	U2PE3	New
	Core - III	Fungi, Lichen & Plant pathology	4	4	25+75=100	U2BYC3	Revised
	Core Practical - III	LAB: Fungi, Lichen & Plant pathology	2	1	40+60=100	U2BYC3P	Revised
	Allied (a) - III	General Chemistry-III	4	4	25+75=100	U2CHA3Y	Revised
	Allied (a) - Practical III	LAB: Organic Qualitative Analysis	2	-	-	---	---
	Allied (b) - I	Invertebrata	4	4	25+75=100	U2ZYA3X1	Revised
	Allied (b) - Practical I	LAB: Invertebrata And Chordata	2	-	-	---	----

Sem	Part	Subject	Hr	Cr	Int+Ext=Tot	Code	Status
IV	Part I	Tamil IV/Hindi	6	3	25+75=100	U1PT4	No change
	Part II	English IV	6	3	25+75=100	U2PE4	New
	Core - IV	Pteridophytes & Gymnosperms	4	4	25+75=100	U2BYC4	Revised
	Core Practical - IV	LAB: Pteridophytes & Gymnosperms	2	1	40+60=100	U2BYC4P	Revised
	Allied (a) - IV	General Chemistry-IV	4	4	25+75=100	U2CHA4Y	Revised
	Allied (a) - Practical IV	LAB: Organic Analysis	2	2	40+60=100	U2CHA4YP	Revised
	Allied (b) - II	Chordata	4	4	25+75=100	U2ZYA4X2	Revised
	Allied (b) - Practical II	LAB: Invertebrata And Chordata	2	2	40+60=100	U2ZYA4PX	Revised

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Course Name: Master of Science
Discipline   : Botany
CHOICE BASED CREDIT SYSTEM
(For those who joined in June 2015 and after)
Course Scheme:

Semester	Part	Subject	Hour	Cr	Int+Ext= Total	Code	Status
III	Core 11	Microbiology, Fungi and Plant Pathology	6	4	25+75=100	P2BYC31	Revised
	Core 12	Biotechnology	5	4	25+75=100	P2BYC32	Revised
	Core 13	Biochemistry	6	4	25+75=100	P2BYC33	Revised
	Core 14	Lab V –LAB: Microbiology, Fungi and Pl. Pathology and Biotechnology	4	3	40+60=100	P2BYC3P1	Revised
	Core 15	Lab VI – LAB: Biochemistry	4	3	40+60=100	P2BYC3P2	Revised
	Elective II	Biodiversity & Conservation	5	5	25+75=100	P1BYE31/ P1BYE3	No change
IV	Core 16	Plant Physiology	5	4	25+75=100	P2BYC41	Revised
	Core 17	Bioinformatics and Biostatistics	5	4	25+75=100	P2BYC42	Revised
	Core 18	Developmental Botany	5	4	25+75=100	P2BYC43	Revised
	Core 19	Lab VII –LAB: Plant Physiology	4	3	40+60=100	P2BYC4P1	Revised
	Core 20	Lab VIII-LAB: Bioinformatics and Biostatistics, Developmental Botany	5	3	40+60=100	P2BYC4P2	Revised
	Elective III/ Project	Project work	6	5	40+60=100	P2BY4PV	Revised

Third Semester
Core 11 - Microbiology, Fungi and Plant pathology

Hours/week: 6
Credit: 4

Subject Code: P2BYC31

Course objectives

1. To know the contributions of microbiologists.
2. To learn about the structure of bacterial cell, growth of bacteria and bacterial culture techniques.
3. To understand Bergey's manual of bacterial classification.
4. To understand factors affecting microbial growth.
5. To acquire knowledge on the characteristics of viruses.
6. To study the morphology and reproduction of major classes of fungi.
7. To study fungal, bacterial and viral diseases and control measures.

Course Name : Bachelor of Science

Discipline : **Zoology**

CHOICE BASED CREDIT SYSTEM

(For those who join in June 2015 and after)

COURSE SCHEME:

Semester	Part	Subject	Hours	Credit	Int+Ext=Total	Subject code	Status
III	Part – I	Tamil/Hindi	6	3	25+75=100	U1PT3/ U1PH3	Revised
	Part – II	English	6	3	25+75=100	U1PE3	New
	Core – 4	Cell Biology	4	4	25+75=100	U2ZYC3	Revised
	Core Lab	LAB: Cell Biology	2	-		---	---
	Allied I – 3	General Chemistry-III	4	4	25+75=100	U2CHA3Y	Revised
	Allied I – 3 Lab	LAB:Organic Qualitative Analysis	2	-		---	----
	Allied II – 1	Ancillary: Sericulture- I	4	4	25+75=100	U2ZYA3	Revised
	Allied II– 1 Lab	Ancillary: LAB: Sericulture- I & II	2	-		---	----
IV	Part – I	Tamil/Hindi	6	3	25+75=100	U1PT4/ U1PH4	No change
	Part – II	English	6	3	25+75=100	U2PE4	No change
	Core – 5	Developmental Biology	4	4	25+75=100	U2ZYC4	Revised
	Core Lab – 6	Cell Biology and Developmental Biology	2	2	40+60=100	U2ZYC4P	Revised
	Allied I – 4	General Chemistry-IV	4	4	25+75=100	U2CHA4Y	Revised
	Allied I – 4 Lab	LAB: Organic Qualitative Analysis	2	2	40+60=100	U2CHA4YP	Revised
	Allied II – 2	Ancillary: Sericulture – II	4	4	25+75=100	U2ZYA4	Revised
	Allied II – 2 Lab	Ancillary: LAB: Sericulture I & II	2	2	40+60=100	U2ZYA4P	Revised

Year	Part	Subject	Credit	Int=Total	Code
I & II	Part V	NSS/ NCC/ Physical Education – Sports/YRC/RRC	1	100=100	U2NS4/ U2YC4/ U2PS4/ U1YR4/ U1RR4

Course Name : Master of Science
Discipline   : Zoology
CHOICE BASED CREDIT SYSTEM
(For those who join in June 2015 and after)

Semester	Part	Subject	Hours	Credit	Int + Ext =Total	Subject code	Status
III	Core – 11	Immunology	6	4	25+75=100	P2ZYC31	Revised
	Core – 12	Microbiology	6	4	25+75=100	P2ZYC32	Revised
	Core – 13	Evolution	6	4	25+75=100	P2ZYC33	Revised
	Elective – 2	Sericulture	6	5	25+75=100	P2ZYE3	Revised
	Core – 14	LAB: Immunology	3	3	40+60=100	P2ZYC3P1	Revised
	Core – 15	LAB: Microbiology	3	3	40+60=100	P2ZYC3P2	Revised
IV	Core – 16	Developmental Biology	6	4	25+75=100	P2ZYC41	Revised
	Core – 17	Animal Physiology	6	4	25+75=100	P2ZYC42	Revised
	Core – 18	Biotechnology	6	4	25+75=100	P2ZYC43	Revised
	Elective – 3	Aquaculture	6	5	25+75=100	P2ZYE4	Revised
	Core – 19	LAB: Developmental Biology	3	3	40+60=100	P2ZYC4P1	Revised
	Core – 20	LAB: Animal Physiology	3	3	40+60=100	P2ZYC4P2	Revised

SEMESTER: III
IMMUNOLOGY

CORE: 11

Contact hours per Week – 6 hours
Contact hours per Semester – 90 hours

CREDITS: 4
Subject Code: P2ZYC31

Objectives
> To give an overall knowledge of immune systems
> To familiarize the mechanisms involved in immune response
> To understand the infectious process of human diseases

UNIT – I
Basic concepts of Immunology   [15 Hours]

Historical perspectives- types of Immunity– Acquired and Innate - Lymphoid lineage– T, B cells and its type, Null cells, Myeloid lineage– Neutrophil, Eosinophil, Basophil, Mast cell, mononuclear cell and Dendritic cell- Primary Lymphoid organs– Structure and function of Bone marrow, Bursa Fabricius and Thymus- Secondary Lymphoid organs – Structure and function of Spleen, Lymph node, MALT, GALT.

UNIT-II
Humoral Immune response   [20 Hours]

Primary and Secondary immune response- B cell generation, activation & differentiation, expression of Immunoglobin- gene, Structure, Biological properties & Functions of IgG, M, A, D and E- Complement– Classical & Alternate pathways, Compelement Fixation test

Course Name: M.Phil

Discipline: ZOOLOGY

CHOICE BASED CREDIT SYSTEM

(For those who join in 2016 and after)

Course Structure

Semester	Part	Subject	Hours	Int+Ext=Total	Code
1	Elective – 4	LIMNOLOGY- IN DEPTH STUDY	6	40+60=100	M1ZYE14
	Elective – 5	AQUACULTURE (LIVE FEED CULTURE) -IN DEPTH STUDY			M1ZYE15
	Elective – 6	MICROBIAL BIOREMEDIATION – IN DEPTH STUDY			M1ZYE16

Elective: 4 - LIMNOLOGY- IN DEPTH STUDY

Contact hours / week – 6 hours

Contact hours /semester – 90 hours   Sub. Code: M1ZYE14

Objectives

- ❖ To understand the facts of comparative account of water and living structures.
- ❖ To acquire the knowledge of interdependence between hydrosphere and fishes.
- ❖ To study the live feed organism and their importance to commercially important fishes

UNIT – I   [15 Hours]

WATER

Water – structure, physical and chemical properties, Hydrological cycle, fresh water ecosystem, lentic and lotic system, Adaptations of Fishes and Plankton in aquatic system, Pond ecosystem.

UNIT – II   [20 Hours]

WATER-SAMPLING AND ASSESMENT

Physical parameters – Surface Water temperature, Colour, Turbidity of water, Light penetration (Secchi Disc experiment), Electrical conductivity. Chemical parameters (APHA method)– Phenolphthalein & Methyl Orange Alkalinity, Total salinity, Total solids, Total Dissolved solids, Estimation of Oxygen (Winkler's method), Estimation of Total Free carbondioxide, Total Hardness, Total Calcium, Total Chloride.

UNIT – III   [15 Hours]

NUTRIENT PARAMETERS OF WATER

Nitrogen cycle in the aquatic system – Nitrogen fixation by Rhizobes, Ammonification, Nitrification, Denitrification.Role of microbes in the Nitrogen cycle. Quantitative estimation of Nitrate, Phosphates and Silicates

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Course Name : **Bachelor of Science**
Discipline : **Computer Science**
(Those who joined in 2015 and after)
COURSE SCHEME:

Semester	Part	Subject	Hour	Credit	Marks Int+Ext=Total	Subject Code	Status
III	Part I	Tamil	6	3	25+75=100	U2PT3	Revised
	Part II	English	6	3	25+75=100	U2PE3	New
	Part III Core 5	Java Programming	4	4	25+75=100	U2CSC31	Revised
	Part III Core 6– Lab	LAB: Programming in Java	6	3	40+60=100	U2CSC3P	Revised
	Part III Core 7	Data Structures	4	4	25+75=100	U2CSC32	Revised
	Part III Allied 3	Resource Management Techniques	4	4	25+75=100	U2MAA3C	Revised

Semester	Part	Subject	Hour	Credit	Marks Int+Ext=Total	Subject Code	Status
IV	Part I	Tamil	6	3	25+75=100	U1PT4	No change
	Part II	English	6	3	25+75=100	U2PE4	New
	Part III Core 8	Advanced Java Programming	4	4	25+75=100	U1CSC41/ U2CSC41	No change
	Part III Core 9– Lab	LAB: Programming in Advanced Java	6	4	40+60=100	U1CSC4P1/ U2CSC4P	No change
	Part III Core 10	Operating Systems	4	4	25+75=100	U2CSC42	Interchanged
	Part III Allied 4	Numerical Methods	4	4	25+75=100	U2MAA4C	Revised

Year	Part	Subject	Credit	Int=Total	Code
I & II	Part V	NSS/ NCC/ Physical Education – Sports/YRC/RRC	1	100=100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ U1RR4

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Course Name : Master of Science
Discipline: Computer Science
CHOICE BASED CREDIT SYSTEM
(For those who join in June 2015 and after)
Course Scheme:

Semester	Part	Subject	Hour	Credit	Marks Int+Ext	Sub. Code	Status
III	Core 11	Data Communication and Networks	5	4	25+75=100	P2CSC31	New
	Core 12	Software Testing	5	5	25+75=100	P2CSC32	New
	Core 13	Principles of Compiler Design	5	5	25+75=100	P1CSC33	No change
	Core 14-Lab	LAB: Python Programming	5	3	40+60=100	P2CSC3P1	New
	Core 15-Lab	LAB: Open Source Programming	5	3	40+60=100	P2CSC3P2	New
	Elective 2	Wireless Communication/ Operating System Design / Computer Networking Security	5	5	25+75=100	P1CSE31/ P1CSE32/ P1CSE33	No change

Semester	Part	Subject	Hour	Credit	Marks Int+Ext	Sub. Code	Status
IV	Core 16	Soft Computing	5	4	25+75=100	P1CSC41	No change
	Core 17	Data Mining and Warehousing	5	4	25+75=100	P1CSC42	No change
	Elective-3	Project & Viva-voce	20	10	80+120=200	P1CS4PV	No change

CORE 11 – Data Communication and Networks

Contact Hours per week: 5 hrs   **Sub. Code: P2CSC31**
Contact hours per semester: 65 hrs
Objective:
         To enhance students knowledge in learning of Networking Concepts such as the basic network architecture, digital and analog transmission and the media, types of networks, ISDN protocols, network applications, protocols and standards.

UNIT I   **(13 Hours)**
         Introduction: Data communication – Networks – Network Types – Standards and Administration – Network models: Protocol Layering TCP/IP Protocol suite – The OSI Model – Introduction to Physical Layer: Data and Signals - Periodic analog signals – digital signals - Transmission impairment – Data rate limits – Performance

UNIT II   **(13 Hours)**
         Digital Transmission: Digital to Digital conversion –Analog to Digital Conversion - Transmission modes
         Analog Transmission: Digital to Analog conversion – Analog to Analog Conversion – Bandwidth Utilization: Multiplexing and Spectrum spreading: Multiplexing – Spread spectrum – Transmission media: Guided media – unguided media Switching: Introduction - Circuit Switching networks - Packet Switching – Structure of a Switch.

Course Name : Bachelor of Science
Discipline: Information Technology
CHOICE BASED CREDIT SYSTEM
(For those who join in June 2015 and after)
Course Scheme:

Semester	Part	Subject	Hour	Credit	Int+Ext=Total	Sub. Code	Status
III	Part I	Tamil	6	3	25+75=100	U2PT3	Revised
	Part II	English	6	3	25+75=100	U2PE3	New
	Core 6	Data Structures	4	4	25+75=100	U2NTC31	Revised
	Core 7	Object Oriented Programming With C++	4	4	25+75=100	U1NTC32	No change
	Core 8	LAB: Computer Animation	5	3	40+60=100	U2NTC3P1	New
	Core-9 Lab	LAB: Programming in C++	5	3	40+60=100	U2NTC3P2	Revised

Semester	Part	Subject	Hour	Credit	Int+Ext=Total	Sub. Code	Status
IV	Part I	Tamil	6	3	25+75=100	U1PT4	No change
	Part II	English	6	3	25+75=100	U2PE4	New
	Core 10	Java Programming	4	4	25+75=100	U2NTC41	Interchanged
	Core 11	Operating Systems	5	4	25+75=100	U1NTC42	No change
	Allied 4	Resource Management Techniques	4	4	25+75=100	U1MAA4N	No change
	Core-12 Lab	LAB:Programming in Java	5	3	40+60=100	U2NTC4P	Interchanged

Year	Part	Subject	Credit	Int=Total	Code
I & II	Part V	NSS/ NCC/ Physical Education – Sports/YRC/RRC	1	100=100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ U1RR4

CORE 6 – DATA STRUCTURES

Contact Hours per week: 4 hrs   **Sub. Code: U2NTC31**
Contact hours per semester: 52 hrs
Objective:

1. Assess how the choice of data structures and algorithm design methods impacts the performance of programs.

2. Choose the appropriate data structure and algorithm design method for a specified application.

Course Name : Master of Computer Science & Information Technology

CHOICE BASED CREDIT SYSTEM

(For those who join in June 2015 and after)

Course Scheme:

Semester	Part	Subject	Hour	Credit	Marks Int+Ext=Tot	Sub. Code	Status
III	Core 11	Android Programming	5	4	25+75=100	P2NTC31	No change
	Core 12	Operating Systems	5	4	25+75=100	P2NTC32	No change
	Core 13	Dot Net Programming	5	5	25+75=100	P2NTC33	No change
	Core 14 – Lab	LAB: Programming Android Applications	5	3	40+60=100	P2NTC3P1	No change
	Core 15 – Lab	LAB: Programming in Dot Net	5	3	40+60=100	P2NTC3P2	No change
	Elective -2	Software Engineering / Object Oriented Analysis and Design	5	5	25+75=100	P2NTE31/P1NTE32	No change

Semester	Part	Subject	Hour	Credit	Marks Int+Ext =Tot	Sub. Code	Status
IV	Core 16	Data Mining	5	4	25+75=100	P1NTC41	No change
	Core 17	Internet Working with TCP/IP	5	4	25+75=100	P1NTC42	No change
	Elective-3	Project & Viva-voce	20	10	80+120=200	P1NT4PV	No change

CORE 11 – Android Programming

Contact Hours per week: 5 hrs   **Sub. Code: P2NTC31**

Contact hours per semester: 65 hrs

Objective:

Owing to the popularity of Android, Mobile Apps development industries are considering Android Application Development as one of the best remunerative business opportunities. The need to hire knowledgeable mobile application developer is intense.

UNIT I   **(12 hrs)**

Preliminary informations - Before we get started: History of Android - Advantages of Android - SDK tools to download

Setting up Android Development Environment: Installing java,eclipse.android sdk - Android development tools - Setting up AVD's

Android Software development platform: Dalvik virtual machine - Directory structure of Android project - Common resource folder - Common values folder - Andoid manifest.xml - Creating first application

Activities: Introduction - Declaring an activity - Starting new activity with an intent object - switching between activities - Returning result from an activity - Storing an activity state - storing persistent activity data - Managing activity life cycle

UNIT II   **(12 hrs)**

Layouts: Introduction - Declaring layout - Applying relative layout - Applying table layout - Using Listviews and Listadapters - Applying gravity and weight - Controlling layout during runtime - Optimizing for tablets and multiple screens - Dividing screen into fragments

Course Name : Bachelor of Computer Applications (BCA)
CHOICE BASED CREDIT SYSTEM
(For those who join in June 2015 and after)
Course Scheme:

II BCA

Semester	Part	Subject	Hour	Credit	Int+Ext = Total	Subject Code	Status
III	Core 5	Java Programming	5	4	25+75=100	U2CAC31	Revised
	Core 6	Data Structure	4	4	25+75=100	U1CAC32	No change
	Core 7	Computer Graphics	4	4	25+75=100	U2CAC33	Interchanged
	Allied 3	Computer Based Financial Accounting	5	4	25+75=100	U1CAA3	No change
	Core 8 – Lab	LAB: Java Programming	5	3	40+60=100	U2CAC3P1	Revised
	Core 9 – Lab	LAB: Data Structure	5	3	40+60=100	U2CAC3P2	Revised
	SBE – 3 Lab	LAB: Financial Accounting	2	2	40+60=100	U2CAS3P	Revised

Semester	Part	Subject	Hour	Credit	Int+Ext = Total	Subject Code	Status
IV	Core 10	Operating System	4	4	25+75=100	U2CAC41	Revised
	Core 11	Data Communications and Networks	4	4	25+75=100	U2CAC42	Title changed
	Core 12	Advanced Java Programming	4	4	25+75=100	U2CAC43	New
	Allied 4	Principles of Costing	5	4	25+75=100	U2CAA4	Revised
	Core 13 – Lab	LAB: Visual Programming	6	3	40+60=100	U2CAC4P1	Revised
	Core 14 – Lab	LAB: Advanced Java Programming	5	3	40+60=100	U2CAC4P2	New
	SBE - 4	Biometrics	2	2	25+75=100	U2CAS4	New

YEAR	PART	SUBJECT	CREDIT	INT. MARK = TOTAL	SUBJECT CODE
I & II	V	NSS/ NCC/ PHYSICAL EDUCATION- SPORTS/ YRC/ RRC	1	100 = 100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ U1RR4

Course Name : Master of Computer Applications (MCA)
CHOICE BASED CREDIT SYSTEM
(For those who join in June 2015 and after)
Course Scheme:

II MCA Lateral

Semester	Part	Subject	Hour	Credit	Int+Ext = Total	Subject Code	Status
III	Core 10	Cryptography and Network Security	5	5	25+75=100	P1LCC31	Revised
	Core 11	Principles of Compiler Design	5	5	25+75=100	P1LCC32	Interchanged
	Core 12	Cloud Computing	5	5	25+75=100	P1LCC33	New
	Core 13 – Lab	LAB: Software Development	5	4	40+60=100	P1LCC3P1	Interchange
	Core 14 – Lab	LAB: Dot Net Programming	5	3	40+60=100	P1LCC3P2	Interchange
	Elective III	Digital Image Processing/ Embedded Systems/ Android Programming	5	5	25+75=100	P1LCE31/ P1LCE32/ P1LCE33	New New New

Semester	Part	Subject	Hour	Credit	Int+Ext = Total	Subject Code
IV	Project and Viva-voce	Project & Viva-voce	-	12	100+100=200	P1CA4PV

Core 10 - Cryptography and Network Security

Contact Hours per Week: 5 Hrs   **Subject Code: P1LCC31**
Contact Hours per Semester: 60 Hrs   **Credits: 5**
Objectives:

➤ To give awareness to the students about the security in Computer networking.
➤ To describe the study of several network attacks
➤ Retrieving authentication by so symmetric and asymmetric key cryptography concepts as well as Digital Signature with hash in view of analysis of security

Unit I   **12Hrs**
Introduction: Security Goals – Cryptographic Attacks – Services and Mechanism – Techniques.
Traditional Symmetric Key Ciphers: Introduction – Substitution Ciphers- Transposition Ciphers – Stream and Block Ciphers.
Introduction to Modern Symmetric Key Ciphers: Modern Block Ciphers – Modern Stream Ciphers.

Course Name: Bachelor of Science
Discipline : **Microbiology**
CHOICE BASED CREDIT SYSTEM
(For those who join in June 2015 and after)
Course Scheme:

Semester	Part	Subject	Hour	Credit	Marks Int+Ext	Total	Subject code	Status
III	Part I	Tamil	6	3	25+75	100	U2PT3	Revised
	Part II	English	6	3	25+75	100	U2PE3	New
	Core 5	Immunology	4	4	25+75	100	U1MBC31	No change
	Core 6 Lab	LAB: Major Practical III	2	1	40+60	100	U1MBC3P	No change
	Allied 5	General Chemistry - III	4	4	25+75	100	U2CHA3Y	Revised
	Allied 6 Lab	Organic Qualitative Analysis	2	--	--	--	---	----
	Allied 7	Biology – Plant Science	4	4	25+75	100	U2MBA3	Revised
	Allied 8 Lab	Biology	2	-	--	--	---	----
IV	Part I	Tamil	6	3	25+75	100	U1PT4	No change
	Part II	English	6	3	25+75	100	U2PE4	New
	Core 7	Microbial Biochemistry	4	4	25+75	100	U2MBC4	Revised
	Core 8 Lab	LAB: Major Practical IV	2	2	40+60	100	U2MBC4P	Revised
	Allied 9	General Chemistry - IV	4	4	25+75	100	U2CHA4Y	Revised
	Allied 10 Lab	LAB: Organic Qualitative Analysis	2	2	40+60	100	U2CHA4YP	Revised
	Allied 11	Biology – Animal Physiology	4	4	25+75	100	U2MBA4	Revised
	Allied 12 Lab	LAB: Biology	2	2	40+60	100	U2MBA4P	Revised

Year	Part	Subject	Credit	Int=Total	Code
I & II	Part V	NSS/ NCC/ Physical Education – Sports/YRC/RRC	1	100=100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ U1RR4

Course Name: Master of Science
Discipline   : Microbiology
CHOICE BASED CREDIT SYSTEM
(For those who join in June 2015 and after)
Course Scheme:

Semester	Part	Subject	Hours	Credit	Int+Ext =Total	Subject code	Status
III	Core 11	Environmental & Agricultural Microbiology	5	4	25+75=100	P2MBC31	Interchanged
	Core 12	Genetic Engineering	5	4	25+75=100	P2MBC32	Revised
	Core 13	Fermentation Technology	5	4	25+75=100	P2MBC33	Revised
	Core 14Lab	LAB: Environmental, Agricultural & Fermentation Technology	5	3	40+60=100	P2MBC3P1	Revised
	Core 15Lab	LAB: Genetic Engineering	5	3	40+60=100	P2MBC3P2	Revised
	Elective 2	Bioinformatics	5	5	25+75=100	P2MBE3	Revised

Semester	Part	Subject	Hours	Credit	Int+Ext =Total	Subject code	Status
IV	Core 16	Research Methodology	5	4	25+75=100	P2MBC4	Revised
	Elective 3	Microbial Nanotechnology	5	5	25+75=100	P2MBE4	Revised
	Core 17	Project & Viva-voce	20	11	40+60=100	P1MB4PV	No change

Core-11 - Environmental and Agricultural Microbiology

Contact Hours per week: 5   **Credits: 4**
Contact Hours per semester: 75   **Subject Code: P2MBC31**
Objectives:
- To impart knowledge about soil fertility, biogeochemical cycles, plant growth promoting rhizobacteria, microbial interactions in soil and other soil activities.
- To provide knowledge on soil-plant disease relationship.

Unit I   **(15 Hours)**

Soil micoflora – Factors influencing the soil microflora – Role of microorganisms in soil fertility. Microbial interactions – Mutualism, commensalism, competition, amensalism, parasitism and predation. Interaction between microbes and plants. Rhizosphere and phyllosphere.

Unit II   **(12 Hours)**

Biogeochemical cycles: Carbon, nitrogen, sulfur and phosphorous cycle. Bioleaching – Principle and Applications. Nitrogen fixation types – Symbiotic, asymbiotic and associative symbiotic – Components and mechanisms – Phosphate solubilization – Microbes in waste treatment: Solid – saccharification, gasification and composting; Liquid – aerobic and anaerobic method.

Course Name: **Bachelor of Vocational**

Discipline: **Environmental Assessment and Remediation**

CHOICE BASED CREDIT SYSTEM

(FOR THOSE WHO JOIN IN 2015 AND AFTER)

Duration of The Course: Three Years

1. Course Objectives

The objective is to recognize that curriculum, course content and assessment of academic achievement play complementary roles in shaping education. The course has been designed to improve the understanding of the students about different pollution control strategies and the skills of application of remediation techniques to combat pollution in three environmental compartments i.e. water, air and soil. The course will also be dealing with the sources of pollution in water, air, soil, solid-waste, thermal and noise and the impacts these sources on the environment and health. In addition, the students will be given the training to develop the particular skills required in pollution related structured study and conservation methods.

➢ To study sources and classification of water pollutants.

➢ To study air pollution: sources and effects.

➢ To study sources of soil contamination and management of solid waste.

➢ To develop skill in practical work, experiments, equipments and laboratory use along with collection of sample and interpretation of data for environmental Assessment.

➢ Make aware of natural resources and environment and the importance of conservation.

2. Eligibility for admission:

A pass in the Higher Secondary with Biology background / other streams also and its equivalent as per Madurai Kamaraj University rules.

COURSE SCHME:

Sem	Part	Subject	Hours	Credits	Int+Ext =Total	Subject Code
I	Allied-1	Communicative English - Paper I	4	4	25+75=100	EV15E1
	Allied-2	Mathematics-I	6	6	25+75=100	EV15M1
	Part-IV	Value education	2	2	25+75=100	U1VE11
	Core-1	Environmental Science	5	5	25+75=100	EV15T11
	Core-2	Environmental Pollution- I	4	4	25+75=100	EV15T12
	Core 1 Lab	Lab: Environmental Chemistry	5	5	40+60=100	EV15P1
		Internship		4	100 (Internal)	EV15TV1
		Total Credits		**30**		

VIRUDHUNAGAR HINDU NADARS' SENTHIKUMARA NADAR COLLEGE
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[Re-accredited with 'A' Grade by NAAC]
Virudhunagar – 626 001.

Part I – Tamil
CHOICE BASED CREDIT SYSTEM
(For those who joined in June 2015 and after)
பாடத்திட்டம்

பருவம்	பாடம்	பயிற்றுக்காலம்	அக மதிப்பெண்	புற மதிப்பெண்	மொத்த மதிப்பெண்	மதிப்பெருகள்	Subject code	Status
III	பக்தி இலக்கியமும் சிற்றிலக்கியமும்	6	25	75	100	3	U2PT3	Revised
IV	சங்க இலக்கியம்	6	25	75	100	3	U1PT4/U1PT41	No change

மூன்றாம் பருவம்
பக்தி இலக்கியமும் சிற்றிலக்கியமும்

தகுதிப்புள்ளிகள்: 3
காலம் - வாரம் - 6 மணிகள்
பருவத்திற்கு – 90 மணிகள்

Subject Code :

நோக்கம் :
❖ பக்தி இலக்கிய வகைமைகளையும் சிற்றிலக்கிய வகைமைகளையும் தெரியச் செய்தல்
❖ இவ்விலக்கியங்களில் காணலாகும் கருத்துக்களையும் அவை எழுந்த சூழலையும் மாணவர்களுக்கு அறிமுகம் செய்தல்

பயன்கள்:
❖ சமயமும் தமிழும் இரண்டறப் பொருந்தி நிற்கும் பான்மையினை மாணவர்கள் அறிதல்
❖ பக்தி இலக்கியங்கள் வழி சமய பொதுமையையும் மெய்ப்பொருள் தன்மையையும் உணர்தல்
❖ பக்தி இலக்கியங்களில் காணலாகும் கவித்துவத்தையும் சமூக மேம்பாட்டுக் கருத்துக்களையும் அறிந்துகொள்ளுதல்

பக்தி இலக்கியமும் சிற்றிலக்கியமும்

கூறு I
அ.திருஞானசம்பந்தர் தேவாரம் - கோளறுபதிகம் (11 பாடல்கள்)
1. வேயுறு தோளி பங்கன் விடமுண்ட கண்டன்
2. என்பொடு கொம்பொடாமை இவை மார்பிலங்க
3. உருவளர் பவளமேனி ஒளி நீறணிந்து
4. மதிநுதல் மங்கையோடு வடபால் இருந்து
5. நஞ்சணி கண்டன் எந்தை மடவாள் தனோடும்
6. வாள்வரி அதளதாடை வரி கோவணத்தர்
7. செப்பிள முலை நன்மங்கை ஒரு பாகமாக
8. வேள்பட வழி செய்தன்று விடைமேல் இருந்து
9. பல பல வேடமாகும் பரனாரி பாகன்
10. கோத்தலள் குழலியோடு விசையற்கு நல்கு
11. தேனமர் பொழில் கொள் ஆலைவிளை செந்நெல்துன்னி

ஆ. திருநாவுக்கரசர் தேவாரம் - திருச்சேறைப்பதிகம் - (10 பாடல்கள்)
1. பூரி யாவரும் ... நவிலவே
2. என்ன மாதவம் ... வைகவே
3. பிறப்பு மூப்பு .... வைக்கவே
4. மாடுதேடி ..... உய்ம்மினே

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[Re-accredited with 'A' Grade by NAAC]

Virudhunagar – 626 001.

Course Name : **Bachelor of Arts**

Discipline : Tamil

CHOICE BASED CREDIT SYSTEM

(For those who joined in June 2015 and after)

பாடத்திட்டம்

பருவம்	பகுதி	பாடம்	பயிற்றுக் காலம்	அக மதிப்பெண்	புற மதிப்பெண்	மொத்த மதிப்பெண்	மதிப்பீடுகள்	Subject code	Status
III	Part I	தமிழ்	6	25	75	100	3	U2PT3	Revised
	Part II	ஆங்கிலம்	6	25	75	100	3	U2PE3	No change
	Core 3	பக்தி இலக்கியம்	5	25	75	100	4	U1TAC31	No change
	Core 4	இலக்கணம் - யாப்பும் அணியும்.	5	25	75	100	4	U1TAC32	No change
	Allied 3	மக்கள் தகவல் தொடர்பியல்	6	25	75	100	5	U2TAA3	Revised
	SBE I	மொழி பெயர்ப்பியல்	2	25	75	100	2	U1TAS3/ U1TAS31	No change
IV	Part I	தமிழ்	6	25	75	100	3	U1PT4/ U1PT41	No change
	Part II	ஆங்கிலம்	6	25	75	100	3	U2PE4	No change
	Core 7	காப்பிய இலக்கியம்	4	25	75	100	4	U2TAC41	Revised
	Core 8	பொருள் இலக்கணம் - நம்பியகப் பொருள்	4	25	75	100	4	U2TAC42	Revised
	Allied 4	நாட்டுப்புற இலக்கியங்களும் கோட்பாடுகளும்	6	25	75	100	5	U1TAA4/ U1TAA41	No change
	SBE 2	ஆட்சித்தமிழ்	2	25	75	100	2	U1TAS41	No change
	SBE 3	தமிழில் புலம்பெயர்ந்தோர் இலக்கியம்	2	25	75	100	2	U2TAS42	Revised

Year	Part	Subject	Credit	Int=Total	Code
I & II	Part V	NSS/ NCC/ Physical Education – Sports/YRC/RRC	1	100=100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ U1RR4

PRINCIPAL
VIRUDHUNAGAR HINDU NADARS
SENTHIKUMARA NADAR COLLEGE
AUTONOMOUS
VIRUDHUNAGAR.

Course Name : Master of Arts
Discipline   : Tamil
CHOICE BASED CREDIT SYSTEM
(For Those who Join in 2015 and After)

Semester	Part	Subject	Hour	credit	Int+Ext=Tot	Subject Code	Status
III	Core 10	இலக்கணம் தொல்-பொருள் I	6	5	25+75 =100	P1TAC31	No change
	Core 11	காப்பிய இலக்கியம்	6	4	25+75 =100	P2TAC32	Revised
	Core 12	ஆய்வு நெறிமுறைகள்	6	4	25+75 =100	P2TAC33	Revised
	Core 13	தமிழ் இலக்கிய வரலாறு	6	4	25+75 =100	P2TAC34	Revised
	Elective- 2	நாட்டுப்புறவியல்	6	5	25+75 =100	P2TAE3	No change

Semester	Part	Subject	Hour	credit	Int+Ext=Tot	Subject Code	Status
IV	Core 14	இலக்கணம் தொல் - பொருள் II	6	4	25+75 =100	P2TAC41	Revised
	Core 15	பண்டை இலக்கியம்	6	4	25+75 =100	P2TAC42	Revised
	Core 16	இந்திய இலக்கியம்	6	4	25+75 =100	P2TAC43	Revised
	Core 17	இலக்கியங்களும் இயக்கங்களும்	6	4	25+75 =100	P2TAC44	Revised
	Elective- 3	ஆய்வேடு-வாய்மொழித்தேர்வு	6	5	40+60 =100	P1TA4PV	No change

தாள் -10   இலக்கணம் தொல் - பொருள்- I

Contact hours per week :6
Credits :5

Contact hours per semester : 90
Code   : P1TAC31

நோக்கங்கள் :
1. அகத்திணையின் வகை தொகைகளை அறிதல்.
2. தமிழரின் புற வாழ்க்கையை அறிதல்.
3. களவியலில் மாந்தர்களின் உளப்பாங்கினைத் தெரிதல்.
4. தமிழரின் மண வாழ்வியல் சிறப்பினை உணர்தல்.
5. தமிழரின் அகம் மற்றும் புற வாழ்வியல் சார்ந்த பண்பாட்டை அறிதல்

கூறு : I
         தொல்-அகத்திணையியல்

காலம்:18 மணி நேரம்

கூறு : II
         தொல்- புறத்திணையியல்

காலம்:18 மணி நேரம்

கூறு : III
         தொல்- களவியல்

காலம்:18 மணி நேரம்

கூறு : IV
         தொல்-கற்பியல்

காலம்:18 மணி நேரம்

கூறு : V
         தொல்-பொருளியல்

காலம்:18 மணி நேரம்

பாட நூல்கள் :
01. தொல்காப்பியம்(பொருள்)   - இளம்பூரணர்
                                       திருநெல்வேலித் தென்னிந்திய சைவ
                                       சித்தாந்த நூற்பதிப்புக் கழகம்,
                                       சென்னை.
                                       பதிப்பு – 1964

02. தொல்காப்பியம் (பொருள்)   - தமிழண்ணல்,
     (தொகுதி I & II)   மீனாட்சி புத்தக நிலையம்,
                                       மதுரை,
                                       பதிப்பு - 2010.

Course Name: Part II English
Discipline   : English
CHOICE BASED CREDIT SYSTEM
(For those who joined in June 2015 and after)
(Common to all the UG Degree Courses: B.A./B.Sc.)
Course Scheme

Semester	Subject	Hours	Credits	Int.+Ext=Total	Sub. code	Status
III	Paper III – Poetry, One-Act Play, Grammar, Composition and Communicative English	6	3	25+75=100	U2PE3	New
IV	Paper IV – Poetry, One-Act Play, Grammar, Composition and Communicative English	6	3	25+75=100	U2PE4	New

II BA / B.Sc.   Semester – III
Part-II English
Paper III – Poetry, One–Act Plays, Grammar, Composition & Communicative English

Contact Hours: 90   **Credits: 3**
                                                                      Subject Code: U2PE3

Objectives:
    a) To orient the students towards the learning of English through literature
    b) To train the students to communicate clearly & fluently

Unit I: Poetry   **(15 hrs)**
    1. William Shakespeare   -Polonius' Advice to His Son
    2. Robert Frost   - Stopping by Woods on A Snowy Evening
    3. Sarojini Naidu   - Coromandel Fishers

Unit II: One-Act Plays   **(15 hrs)**
    1. Hugh Chesterman   - The Pie and the Tart
    2. L. Houseman   - Under Fire
    3. Ronald Gow   - The Sheriff's Kitchen

Unit III: Grammar   **(30 hrs)**
    1. Preposition – Fill in format
    2. Tenses – a) Past Tense: Simple Past, Past Continuous, Past Perfect,
                     Past Perfect Continuous
              b) Future Tense: Simple Future, Future Continuous, Future Perfect,
                     Future Perfect Continuous
    3. Voice
    4. Degrees of Comparison

Unit IV: Composition   **(15 hrs)**
    1. Note–Making
    2. Notice
    3. Agenda
    4. Comprehension

Course Name : **Bachelor of Arts**
Discipline   : **English**
CHOICE BASED CREDIT SYSTEM
Rules and regulations, Course Scheme and Scheme of Examinations
(For those who join in June 2015 and after)

1. Course Scheme

Semester	Part	Subject	Hours	Credit	Int.+Ext.=Total	Subject code	Status
III	Part I	Tamil	6	3	25+75=100	U2PT3	Revised
	Part II	English	6	3	25+75=100	U2PE3	New
	Core 5	History of English Literature (Johnson to the Present Age)	5	4	25+75=100	U2ENC31	New
	Core 6	English Literature - III (The Age of Johnson to Wordsworth)	5	4	25+75=100	U2ENC32	New
	Allied 3	Literary Criticism - I (Plato to Johnson)	6	5	25+75=100	U2ENA3	New
	SBE-I	Modern English Grammar - I	2	2	25+75=100	U2ENS3	New

Semester	Part	Subject	Hour	Credit	Int.+Ext.=Total	Subject Code	Status
IV	Part I	Tamil	6	3	25+75=100	U1PT4	No change
	Part II	English	6	3	25+75=100	U2PE4	New
	Core 7	English Literature – IV (Age of Tennyson)	4	4	25+75=100	U2ENC41	New
	Core 8	English Literature – V (20th Century Literature)	4	4	25+75=100	U2ENC42	New
	Allied 4	Literary Criticism II (Wordsworth to F.R.Leavis)	6	5	25+75=100	U2ENA4	New
	SBE-2	Modern English Grammar - II	2	2	25+75=100	U2ENS41	New
	SBE-3	Phonetics	2	2	25+75=100	U2ENS42	New

Course Name: Master of Arts
Discipline : English
Rules and regulations, Course Scheme and Scheme of Examinations
(For those who join in June 2015 and after)
1. Course Scheme

Semester	Part	Subject	Hours	Credit	Int+Ext=Tot	Sub. Code	Status
III	Core 10	Indian Literature in English Translation	6	5	25+75=100	P2ENC31	New
	Core 11	Contemporary Literatures in English	6	4	25+75=100	P2ENC32	New
	Core 12	Women's Writing in English	6	4	25+75=100	P2ENC33	New
	Core 13	Literature Study for NET/SET/JRF	6	4	25+75=100	P2ENC34	New
	Elective - 2	Linguistics	6	5	25+75=100	P2ENE3	New

Semester	Part	Subject	Hours	Credit	Int+Ext=Tot	Sub. Code	Status
IV	Core 14	Contemporary Literary Theories	6	4	25+75=100	P2ENC41	New
	Core 15	Teaching of English Language and Literature	6	4	25+75=100	P2ENC42	New
	Core 16	Research Methodology	6	4	25+75=100	P2ENC43	New
	Core 17	Comparative Literature	6	4	25+75=100	P2ENC44	New
	Elective - 3	Research Scope in English	6	5	25+75=100	P2ENE4	New

II MA English   Semester – III
Core Subject
Paper   : Indian Literature in English Translation
Contact Hours: 90   **Credits: 5**
                                       Subject Code: P2ENC31

Objectives:
1. To provide students ample opportunities to read English version of Indian regional literatures.
2. To make them familiar with different cultures prevailing in India.
3. To reach a high level of proficiency in analyzing and interpreting works with different social background.

Unit I: Poetry   **(15 hrs)**

1. Tagore   - Gitanjali

        Songs: 1 & 50 (Devotion to God)   (Bengali)
               8 & 11 (True values of life)
               31 & 35 (Spiritual freedom)
               60 & 62 (Glorifications of child life)
               86 & 91 (Death obsession)

Course Name : Bachelor of Arts

Discipline: Economics

CHOICE BASED CREDIT SYSTEM

(For those who join in June 2015 and after)

Course Scheme:

Semester	Part	Subject	Hour	Credit	Int+Ext=Total	Code
III	Part I	Tamil/Hindi	6	3	25+75=100	U2PT3/ U1PH3
	Part II	English	6	3	25+75=100	U2PE3
	Core 5	Macro Economics I	5	4	25+75=100	U2ECC31
	Core 6	Mathematical Methods I	5	4	25+75=100	U1ECC32
	Allied 3	Banking	6	5	25+75=100	U2ECA3
	SBE-1	Foreign Trade	2	2	25+75=100	U2ECS3

Sem	Part	Subject	Hour	Credit	Int+Ext=Total	Code
IV	Part I	Tamil/Hindi	6	3	25+75=100	U1PT4/ U1PH4
	Part II	English	6	3	25+75=100	U2PE4
	Core 7	Macro Economics II	4	4	25+75=100	U2ECC41
	Core 8	Mathematical Methods II	4	4	25+75=100	U1ECC42
	Allied 4	Entrepreneurship Development	6	5	25+75=100	U2ECA4
	SBE-2	Economics of Tourism	2	2	25+75=100	U2ECS41
	SBE-3	Advertisement	2	2	25+75=100	U2ECS42

Year	Part	Subject	Credit	Int=Total	Code
I & II	Part V	NSS/ NCC/ Physical Education – Sports/YRC/RRC	1	100=100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ U1RR4

VIRUDHUNAGAR HINDU NADARS' SENTHIKUMARA NADAR COLLEGE
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Virudhunagar – 626 001.

Course Name: Bachelor of Arts
Discipline   : History
CHOICE BASED CREDIT SYSTEM
Rules and regulations, Course Scheme and Scheme of Examinations
(For those who join in June 2016 and after)
Course Scheme:

Semester	Part	Subject	Hour	Credit	Int.+Ext.=Total	Subject Code	Status
I	Part I	Tamil	6	3	25+75=100	U2PT1	Revised
	Part II	English	6	3	25+75=100	U2PE1	New
	Core 1	இந்திய அரசியல் வரலாறு (பழங்காலம் முதல் கி.பி 647 வரை)	5	4	25+75=100	U2HSC11	New
	Core 2	தமிழக அரசியல் வரலாறு (சங்ககாலம் முதல் கி.பி 1800 வரை)	5	4	25+75=100	U2HSC12	New
	Allied 1	தற்கால அரசாங்கங்கள் - I	5	4	25+75=100	U1HSA1	No change
	VE	Value Education	2	2	25+75=100	U1VE11	No change

Semester	Part	Subject	Hour	Credit	Int.+Ext.=Total	Subject Code	Status
II	Part I	Tamil	6	3	25+75=100	U2PT2	Revised
	Part II	English	6	3	25+75=100	U2PE2	New
	Core 3	இந்திய அரசியல் வரலாறு (கி.பி 647 – 1526 வரை)	5	4	25+75=100	U2HSC21	New
	Core 4	தமிழக அரசியல் வரலாறு (கி.பி.1800 முதல் 2006 வரை)	5	4	25+75=100	U2HSC22	New
	Allied 2	தற்கால அரசாங்கங்கள் - II	6	5	25+75=100	U1HSA2	No change
	EVS	Environmental Studies	2	2	25+75=100	U1ES21	No change

Year	Part	Subject	Credit	Int=Total	Code
I & II	Part V	NSS/ NCC/ Physical Education – Sports/YRC/RRC	1	100=100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ U1RR4

Course Name : **Master of Arts**
Discipline : **History**
CHOICE BASED CREDIT SYSTEM
(For those who joined in June 2016 and after)

Course Scheme:

Semester	Part	Subject	Hour	Credit	Int.+Ext.=Total	Subject Code	Status
I	Core 1	Socio-cultural History of Tamilnadu upto 1336 AD	6	5	25 + 75 = 100	P1HSC11	No change
	Core 2	Cultural History of India (upto 1206 A.D)	6	4	25 + 75 = 100	P1HSC12	No change
	Core 3	History of U.S.A. (1776 to 1865 A.D.)	6	4	25 + 75 = 100	P1HSC13	No change
	Core 4	History of China 1840 – Present Day	6	4	25 + 75 = 100	**P2HSC14**	**New**
	Elective-1	Tourism and Travel Management	6	5	25 + 75 = 100	P1HSE1/ P1HSE11	No change

History of China 1840 – Present Day

HOURS : 6   **CREDIT : 4**   **Subject Code: P2HSC14**

Unit – I
The Manchu dynasty – the opening of China – the first Opium war – causes – course – consequences - the Taiping Rebellion – causes – course – consequences– the second Opium War - causes – course – consequences.

Unit II
China 1860 – 1890 an uneasy interlude – reforms versus revolution – frontier relations between China and Russia – China and her dependent states – Sino – Japanese war 1894 – 1895.

Unit III
The United States and the Open Door Policy – The Battle of concessions – Hundred days Reforms – The Boxer uprising – Manchu attempts at Reform – Sun Yat Sen and Revolution of 1911 – The Presidency of Yuan Shih Kai – 1912 -1916 – China and First World War.

Unit IV
Nationalist collapse and communist takeover –The People's Government at Peking – The cultural Revolution – Ideology of Mao – Tse – Tung – The National Government of Taiwan

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Virudhunagar – 626 001.

Course Name: **Bachelor of Commerce**
Discipline: **Commerce**
CHOICE BASED CREDIT SYSTEM
(For those who joined in June 2015 and after)

COURSE SCHEME:

Semester	Part	Subject	Hours	Credit	Int + Ext = Total	Subject Code	Status
Third	III	Allied III – Business Statistics	6	5	25+75 = 100	U2CMA31	Revised
	III	Elective – I – Banking Law & Practice	6	5	25+75 = 100	U2CME3	Revised
	III	Financial Accounting – III	6	4	25+75 = 100	U2CMC31	Revised
	III	Business Correspondence	5	4	25+75 = 100	U2CMC32	Revised
	III	Salesmanship	5	4	25+75 = 100	U2CMC33	Revised
	IV	SBE I– Fundamentals of Computers	2	2	25+75 = 100	U2CMS3	No change

Semester	Part	Subject	Hours	Credit	Int + Ext = Total	Subject Code	Status
Fourth	III	Allied IV – Business Mathematics	6	5	25+75 = 100	U2CMA4	Revised
	III	Cost Accounting	5	4	25+75 = 100	U2CMC41	Revised
	III	Company Organization	5	4	25+75 = 100	U2CMC42	Revised
	III	Advertising	5	4	25+75 = 100	U2CMC43	Revised
	III	Financial Accounting – IV	5	4	25+75 = 100	U2CMC44	Revised
	IV	SBE – II MS-Office	2	2	25+75 = 100	U2CMS4	Revised
	IV	SBE – III LAB: MS-Office	2	2	40+60 = 100	U2CMS4P	Revised

Year	Part	Subject	Credit	Int=Total	Code
I & II	Part V	NSS/ NCC/ Physical Education – Sports/YRC/RRC	1	100=100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ UIRR4

Course Name: **Master of Commerce**
Discipline: **Commerce**
CHOICE BASED CREDIT SYSTEM
(For those who joined in June 2015 and after)

COURSE SCHEME:

Semester	Subject	Hours	Credit	Int + Ext = Total	Subject Code	Status
Third	Direct Taxes – I	6	5	25 + 75 = 100	P1CMC31	No change
	Retail Management	6	4	25 + 75 = 100	P1CMC32	No change
	Indirect Tax – I	6	4	25 + 75 = 100	P1CMC33	No change
	Strategic Management	6	4	25 + 75 = 100	P1CMC34	No change
	Elective – II – Corporate Accounting	6	5	25 + 75 = 100	P2CME3	Reviced

Semester	Subject	Hours	Credit	Int + Ext = Total	Subject Code	Status
Fourth	Financial Management	6	4	'25 + 75 = 100	P1CMC41	Révised
	Direct Taxes – II	6	4	25 + 75 = 100	P1CMC42	Revised
	Entrepreneurship Development	6	4	25 + 75 = 100	P1CMC43	Revised
	Indirect Tax – II	6	4	25 + 75 = 100	P1CMC44	New
	Elective – III – Accounting Standards & Corporate Reporting	6	5	25 + 75 = 100	P1CME41 / P1CME4	No change

III – SEMESTER
DIRECT TAXES - I

Hours: 6hrs/week 90 Hrs   Sub.Code: P1CMC31
Credits: 5
OBJECTIVE:

To provide basic knowledge on the provisions of the Income tax law and to provide skills on the computation of the taxable income.

Unit – 1   (18-hours)

Income Tax Act 1961 – Definitions- Income, deemed income, person, and assessee – Basis of charge – Residential status – capital and Revenue Receipts – Exempted income.

Unit – 2   (18-hours)

Computation of Income from Salary – meaning- salary, profit in lieu of salary- Allowances- fully taxable, fully exempted and special– Perquisites- exempted perquisites, valuation of car, accommodation, medical facility, leave travel concession, transfer of moveable assets. Computation of Income from House property – complete coverage

Unit – 3   (18-hours)

Computation of Income from Profits and Gains of Business or Profession – Depreciation – Admissible deductions sec 30 to 37- Inadmissible expenses Sec 40(a), 40 (b), 40A

Unit – 4   (18-hours)

Computation of Capital Gains and Income from Other sources- Capital asset, transfer- Indexation – Exemptions – 54 to 54GA

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Course Name: **Bachelor of Commerce**

Discipline: **Commerce with Computer Application**

CHOICE BASED CREDIT SYSTEM

(For those who joined in June 2015 and after)

COURSE SCHEME:

Semester	Part	Subject	Hours	Credit	Int + Ext = Total	Subject Code	Status
Third	III	Allied III – Business Statistics	6	5	25+75 = 100	U1CCA3/ U1CCA31	No change
	III	Elective – I – Database Management Systems	6	5	25+75 = 100	U2CCE3	Revised
	III	Financial Accounting – III	6	4	25+75 = 100	U1CCC31	No change
	III	Business Correspondence	5	4	25+75 = 100	U1CCC32	No change
	III	LAB: Oracle	5	3	40+60 = 100	U1CCC3P	No change
	IV	SBE – I – LAB: Multimedia	2	2	40+60 = 100	U1CCS3P	No change

Semester	Part	Subject	Hours	Credit	Int + Ext = Total	Subject Code	Status
Fourth	III	Allied IV – Business Mathematics	6	5	25+75 = 100	U1CCA4/ U1CCA41	No change
	III	Cost Accounting	5	4	25+75 = 100	U1CCC41	No change
	III	Visual Programming	5	5	25+75 = 100	U1CCC42	No change
	III	LAB: Visual Basic	5	3	40+60 = 100	U1CCC4P	No change
	III	Financial Accounting – IV	5	4	25+75 = 100	U1CCC43	No change
	IV	SBE – II – MS-Office Theory	2	2	25+75 = 100	U1CCS4/ U1CCS41	No change
	IV	SBE – III – LAB:MS Office	2	2	40+60 = 100	U1CCS4P	No change

Year	Part	Subject	Hour	Credit	Int=Total	Code	Status
I & II	Part V	NSS/ NCC/ Physical Education – Sports/YRC/RRC	–	1	100=100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ U1RR4	No change

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Course Name: **M.Com. (Computer Applications)**
Discipline: **Commerce (SF)**
CHOICE BASED CREDIT SYSTEM
(For those who joined in June 2015 and after)
COURSE SCHME:

Semester	Subject	Hours	Credit	Int + Ext =Total	Subject Code	Status
Third	Direct Taxes - I	6	5	25+75=100	P2CCC31	Revised
	Elective 3: Retail Marketing	6	5	25+75=100	P2CCE3	New
	Special Accounts	6	5	25+75=100	P2CCC32	New
	VB with Oracle	6	4	25+75=100	P2CCC33	New
	LAB: Client Server	6	3	40+60=100	P2CCC3P	New

Semester	Subject	Hours	Credit	Int + Ext =Total	Subject Code	Status
Fourth	Financial Management	6	5	25+75=100	P2CCC41	Revised
	Direct Taxes-II	6	5	25+75=100	P2CCC42	Revised
	Research Methodology	6	4	25+75=100	P2CCC43	Revised
	WEB DESIGN	6	4	25+75=100	P2CCC44	New
	Project work & viva-voce	6	3	40+60=100	P2CC4PV	No change

III – SEMESTER
DIRECT TAXES - I

Hours: 6hrs/week 90 Hrs   **Sub.Code: P2CCC31**
Credits: 5

OBJECTIVE:
        To provide basic knowledge on the provisions of the Income tax law and to provide skill on the computation of the taxable income.

Unit – I   **(18-hours)**
        Income Tax Act 1961 – Definitions- Income, deemed income, person, and assessee Basis of charge – Residential status – capital and Revenue Receipts – Exempted income.

Unit – II   **(18-hours)**
        Income from Salary – Meaning – Types of salary, profit in lieu of salary – Allowances – Computation of Salary Income - Perquisites - Income from House property – Meaning – Computation of House property Income

Unit – III   **(18-hours)**
        Income from Profits and Gains of Business or Profession – Admissible expenses Sec 30 to 37 - Inadmissible expenses Sec 40(a), 40 (b), 40A - Depreciation

Unit – IV   **(18-hours)**
        Income from Capital Gains and Income from Other sources - Exemptions 54 to 54GA

Unit – V   **(18-hours)**
        Aggregation of income set-off and carry forward off losses

Note: 60% problems and 40% theory

TEXT BOOKS
   1. Direct taxes law and practice – Vinod K.Singhania.
   2. Income tax law and practice – Mehrotra and Goyal.

VIRUDHUNAGAR HINDU NADARS' SENTHIKUMARA NADAR COLLEGE

Course Name : Bachelor of Business Administration

CHOICE BASED CREDIT SYSTEM

(For those who joined in June 2015 and after)

Course Scheme:

III SEMESTER

Semester	Part	Subject	Hours	Credits	Int+Ext =Total	Subject Code	Status
III	Core 5	BUSINESS LAW-I	5	4	25+75=100	U2BAC31	Revised
	Core 6	BANKING LAW AND PRACTICE	5	4	25+75=100	U2BAC32	Revised
	Core 7	COMPUTER APPLICATIONS IN BUSINESS	5	4	25+75=100	U2BAC33	Revised
	Core 8	ORGANIZATIONAL BEHAVIOR	5	4	25+75=100	U2BAC34	Revised
	Allied 3	BUSINESS STATISTICS	6	5	25+75=100	U2MAA3B	Revised
	SBE 1	LAB: MS-OFFICE	2	2	40+60=100	U2BAS3P	Revised
	SBE 2	BODY LANGUAGE	2	2	25+75=100	UIBAS3	No change

IV SEMESTER

Semester	Part	Subject	Hours	Credits	Int+Ext =Total	Subject Code	Status
IV	Core 9	BUSINESS LAW-II	6	4	25+75=100	U2BAC41	Revised
	Core 10	MARKETING MANAGEMENT	5	4	25+75=100	U1BAC42	No change
	Core 11	INTERNET AND WEB DESIGNING	5	4	25+75=100	U2BAC43	Revised
	Elective 1	ENTREPREUNEURSHIP	6	5	25+75=100	U2BAE4	Revised
	Allied 4	BUSINESS MATHEMATICS	6	5	25+75=100	U2MAA4B	Revised
	SBE 3	LAB: WEB DESIGNING	2	2	40+60=100	U2BAS4P	Revised

Year	Part	Subject	Credit	Int. Mark = Total	Subject Code
I & II	V	NSS/ NCC/ PHYSICAL EDUCATION- SPORTS/ YRC/ RRC	1	100 = 100	U2NS4/ U2NC4/ U2PS4/ U1YR4/ U1RR4

SEMESTER III
Core Paper 5
BUSINESS LAW – I

Contact Hours per week: 5

Contact Hours per semester: 75

Subject Code: U2BAC31

Credits: 4

Objectives:

1. To enable the students to secure a basic general knowledge in business law.
2. To understand the impact of various business laws on business.
3. To develop skills so as to apply the law of business to various practical situations
4. To acquaint themselves with latest developments in the field of business law.

Course Name : Master of Business Administration (MBA)

CHOICE BASED CREDIT SYSTEM

(For those who join in June 2015 and after)

Objectives

1. To provide the society with a steady stream of competent young persons with necessary knowledge, skills, values and attitudes to occupy positions of management and administration in business, industry, government and public systems.

2. To impart the students with relevant and latest knowledge from the field of management theory and practice.

3. To provide opportunities to the students to develop a strong foundation in functional skills.

Course Scheme:

Semester-III

Sl. No	Part	Course Title	Hours	Credits	Marks			Sub. Code	Status
					I	E	Total		
1		Operations Research	5	4	25	75	100	P2MSC31	Revised
2		International Business	5	4	25	75	100	P2MSC32	Revised
3		Research Methodology	5	4	25	75	100	P2MSC33	Revised
4		Major Elective 1	4	3	25	75	100	Refer Elective Table	No change
5		Major Elective 2	4	3	25	75	100	Refer Elective Table	No change
6		Minor Elective 1	4	3	25	75	100	Refer Elective Table	No change
7		Workshop on Employability Skills	3	2	100	-	100	P1MSC3PV	No change
		Total	30	23					

SEMESTER IV

Sl. No	Part	Course Title	Hours	Credits	Marks			Sub Code	Status
					I	E	Total		
1		Business Environment	6	4	25	75	100	P2MSC41	Revised
2		Strategic Management	6	4	25	75	100	P1MSC42	No change
3		Major Elective 3	6	3	25	75	100	Refer Elective Table	No change
4		Major Elective 4	6	3	25	75	100	Refer Elective Table	No change
5		Minor Elective 2	6	3	25	75	100	Refer Elective Table	No change
6		Final Project &Viva Voce	6 weeks	4	100	100	200	P1MSC4PV	No change
		Total	30	21					

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Placed in the Academic Council Meeting held on 18.03.2016   Annexure I