SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE COURSE IN BOTANY FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

BASICS OF VASCULAR PLANTS AND PHYTOGEOGRAPHY (PTERIDOPHYTES, GYMNOSPERMS, TAXONOMY OF ANGIOSPERMS AND PHYTOGEOGRAPHY)

(Total hours of teaching – 60 @ 02 Hrs./Week)

Theory:

Learning Outcomes:

On successful completion of this course, the students will be able to:

- Classify and compare Pteridophytes and Gymnosperms based on their morphology, anatomy, reproduction and life cycles.
- > Justifyevolutionary trends in tracheophytes to adapt for land habitat.
- > Explain the process of fossilization and compare the characteristics of extinct and extant plants.
- > Critically understand various taxonomical aids for identification of Angiosperms.
- Analyze the morphology of the most common Angiospermplants of their localities and recognize their families.
- Evaluate the ecological, ethnic and economic value of different tracheophytes and summarize their goods and services for human welfare.
- Locate different phytogeographical regions of the world and India and can analyze their floristic wealth.

Unit – 1: Pteridophytes 12 Hrs.

- 1. General characteristics of Pteridophyta; classification of Smith (1955) upto divisions.
- 2. Occurrence, morphology, anatomy, reproduction (developmental details are notneeded) and life historyof (a) *Lycopodium* (Lycopsida) and (b) *Marsilea* (Filicopsida).
- 3. Stelar evolution in Pteridophytes;
- 4. Heterospory and seed habit.

Unit – 2: Gymnosperms 14 Hrs.

- 1. General characteristics of Gymnosperms; Sporneclassification uptoclasses.
- 2. Occurrence, morphology, anatomy, reproduction (developmental details are not needed) and life history of (a) *Cycas*(Cycadopsida) and (b) *Gnetum* (Gnetopsida).
- 3. Outlines of geological time scale.
- 4. A brief account on *Cycadeoidea*.

Unit – 3: Basic aspects of Taxonomy 13Hrs.

- 1. Aim and scope of taxonomy; Species concept: Taxonomic hierarchy, species, genus and family.
- 2. Plant nomenclature: Binomial system, ICBN- rules for nomenclature.
- 3. Herbarium and its techniques, BSI herbarium and Kew herbarium; concept of digital herbaria.
- 4. Bentham and Hooker system of classification;
- 5. Systematic description and economic importance of the following families:
 - (a) Annonaceae (b) Curcurbitaceae

Unit – 4: Systematic Taxonomy

- 1. Systematic description and economic importance of the following families:
 - (a) Asteraceae (b) Asclepiadaceae (c)Amaranthaceae(d) Euphorbiaceae
 - (e) Arecaceaeand (f) Poaceae
- 2. Outlines of Angiosperm Phylogeny Group (APG IV).

Unit – 5: Phytogeography

- 1. Principles of Phytogeography, Distribution (wides, endemic, discontinuous species)
- 2. Endemism types and causes.
- 3. Phytogeographic regions of World.
- 4. Phytogeographic regions of India.
- 5. Vegetation types in Andhra Pradesh.

Text books:

- Botany I (Vrukshasastram-I) : Telugu Akademi, Hyderabad
- > Botany II (Vrukshasastram-II) : Telugu Akademi, Hyderabad
- Acharya, B.C., (2019) Archchegoniates, Kalyani Publishers, New Delhi
- Bhattacharya, K., G. Hait&Ghosh, A. K., (2011) A Text Book of Botany, Volume- II, New Central Book Agency Pvt. Ltd., Kolkata
- Hait,G., K.Bhattacharya&A.K.Ghosh (2011) A Text Book of Botany, Volume-I, New Central Book Agency Pvt. Ltd., Kolkata
- > Pandey, B.P. (2013)College Botany, Volume-I, S. Chand Publishing, New Delhi
- Pandey, B.P. (2013)College Botany, Volume-II, S. Chand Publishing, New Delhi

Books for Reference:

- Smith, G.M. (1971)CryptogamicBotanyVol. II., Tata McGraw Hill, New Delhi
- Sharma, O.P. (2012) Pteridophyta. Tata McGraw-Hill, New Delhi
- Kramer, K.U.&P. S. Green (1990) The Families and Genera of Vascular Plants, Volume –I: Pteridophytes and Gymnosperms(Ed.K.Kubitzki) Springe-Verlag, New York
- Bhatnagar, S.P. & AlokMoitra (1996) Gymnosperms. New Age International, New Delhi
- Coulter, J.M. &C.J.Chamberlain(1910) Morphology of Gymnosperms, The University of Chicago Press, Chicago, Illinois
- Govil, C.M. (2007)Gymnosperms : Extinct and Extant. KRISHNA Prakashan Media (P) Ltd.Meerut& Delhi
- Sporne, K.R.(1971) The Morphology of Gymnosperms. Hutchinsons Co. Ltd., London
- Arnold, C.A., (1947) An introduction to PaleobotanyMcGraw –Hill Book Company,INC, New York
- Stewart, W.N., and G.W.Rothwell (2005) Paleobotany and the evolution of plants Cambridge University Press, New York
- Lawrence, George H.M. (1951) *Taxonomy of Vascular Plants*. The McMillan Co., New York
- Heywood, V. H. and D. M. Moore (1984)Current Concepts in Plant Taxonomy. Academic Press, London.
- Jeffrey, C. (1982) An Introduction to Plant Taxonomy. Cambridge University Press, Cambridge. London.
- Sambamurty, A.V.S.S. (2005) Taxonomy of Angiosperms I. K. International Pvt. Ltd., New Delhi
- Singh, G. (2012). *Plant Systematics: Theory and Practice*. Oxford & IBH Pvt. Ltd., NewDelhi.
- Simpson, M.G. (2006). *Plant Systematics*. Elsevier Academic Press, San Diego, CA,U.S.A.
- Cain, S.A. (1944)Foundations of Plant GeographyHarper & Brothers, N.Y.
- Good, R. (1997) The Geography of flowering Plants (2nd Edn.) Longmans, Green & Co., Inc., London & Allied Science Publishers, New Delhi
- Mani, M.S (1974) Ecology & Biogeography of India Dr. W. Junk Publishers, The Haque

13 Hrs.

08 Hrs.

SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE COURSE IN BOTANY FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

PRACTICAL PAPER: BASICS OF VASCULAR PLANTS AND PHYTOGEOGRAPHY (PTERIDOPHYTES, GYMNOSPERMS, TAXONOMY OF ANGIOSPERMS AND PHYTOGEOGRAPHY) (Total hours of laboratory exercises 30 Hrs. @ 02 Hrs. /Week)

Course Outcomes:

On successful completion of this course students shall be able to:

- 1. Demonstrate the techniques of section cutting, preparing slides, identifying of the material and drawing exact figures.
- 2. Compare and contrast the morphological, anatomical and reproductive features of vascular plants.
- 3. Identify the local angiosperms of the families prescribed to their genus and species level and prepare herbarium.
- 4. Exhibit skills of preparing slides, identifying the given twigs in the lab and drawing figures of plant twigs, flowers and floral diagrams as they are.
- 5. Prepare and preserve specimens of local wild plants using herbarium techniques.

Practical Syllabus:

- Study/ microscopic observation of vegetative, sectional/anatomical and reproductive structures of the following using temporary or permanent slides/ specimens/ mounts :
 - a. Pteridophyta : Lycopodium and Marselia
 - b. Gymnosperms : Cycasand Gnetum
- 2. Study of fossil specimens of *Cycadeoidea* and *Pentoxylon*(photographs /diagrams can be shown if specimens are not available).
- 3. Demonstration of herbarium techniques.
- 4. Systematic / taxonomicstudy of locally available plants belonging to the families prescribed in theory syllabus. (Submission of 30 number of Herbarium sheets of wild plants with the standard system is mandatory).
- 5. Mapping of phytogeographical regions of the globe and India.

SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE COURSE IN BOTANY FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

PRACTICAL PAPER: BASICS OF VASCULAR PLANTS AND PHYTOGEOGRAPHY (PTERIDOPHYTES, GYMNOSPERMS, TAXONOMY OF ANGIOSPERMS AND PHYTOGEOGRAPHY)

MODEL QUESTION PAPER FOR PRACTICAL EXAMINATION

Max. Time: 3 Hrs.

Max. Marks: 50

- 1. Take T.S. of the material 'A' (Pteridophyta), make a temporary slide and justify the identification with apt points. 10 M
- 2. Take T.S. of the material 'B' (Gymnosperms), make a temporary slide and justify the identification with apt points. 10 M
- Describe the vegetative and floral characters of the material 'C' (Taxonomy of Angiosperms) and derive its systematic position. 10 M
- 4. Identify the specimen 'D' (Fossil Gymnosperm) and give specific reasons. 5 M
- 5. Locate the specified phytogeographical regions (2x2M) in the world / India (E) map supplied to you. 4 M
- 6. Record + Herbarium & Field note book + Viva-voce 5 + 4 + 3 = 12 M

Suggested co-curricular activities for Botany Core Course-2 in Semester-II:

A. Measurable :

a. Student seminars :

- 1. Fossil Pteridophytes.
- 2. Aquatic ferns and tree ferns
- 3. Ecological and economic importance of Pteridophytes
- 4. Evolution of male and female gametophytes in Gymnosperms.
- 5. Endemic and endangered Gymnosperms.
- 6. Ecological and economic importance of Gymnosperms.
- 7. Floras and their importance: Flora of British India and Flora of Madras Presidency.
- 8. Botanical gardens and their importance: National Botanic garden and Royal Botanic garden.
- 9. Artificial, Natural and Phylogenetic classification systems.
- 10. Molecular markers used in APG system of classification.
- 11. Vessel less angiosperms.
- 12. Insectivorous plants.
- 13. Parasitic angiosperms.
- 14. Continental drift theory and species isolation.

b. Student Study Projects :

- 1. Collection and identification of Pteridophytes from their native locality/ making an album by collecting photographs of Pteridophytes.
- 2. Collection and identification of Gymnospermsfrom their native locality/ making an album by collecting photographs of Gymnosperms.
- 2. Collection of information on famous herbaria in the world and preparation of a report.
- 3. Collection of information on famous botanic gardens in the world and preparation of a report.
- 4. Collection of data on vegetables (leafy and fruity) plants in the market and and preparation of a report on their taxonomy.
- 5. Collection and identification of fresh and dry fruits plants in the market and and preparation of a report on their taxonomy.
- 6. Collection of data on plants of ethnic and ethnobotanical importance from their native locality.
- 7. Preparation of a local flora by enlisting the plants of their native place.
- **c.** Assignments: Written assignment at home / during '0' hour at college; preparation of charts with drawings, making models etc., on topics included in syllabus.

B. General:

- 1. Visit to Botanic garden in a Research institute/University to see the live plants.
- 2. Virtual tour in websites for digital herbaria and botanic gardens.
- Acquaint with standard floras like Flora of Madras Presidency, Flora of their respective district in Andhra Pradesh.
- 4. Looking into vegetation of different phytogeographical regions using web resources.
- Group Discussion (GD)/ Quiz/ Just A Minute (JAM) on different modules in syllabus of the course.

SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE EXAMINATION IN BOTANY

FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

BASICS OF VASCULAR PLANTS AND PHYTOGEOGRAPHY (PTERIDOPHYTES, GYMNOSPERMS, TAXONOMY OF ANGIOSPERMS AND PHYTOGEOGRAPHY)

MODEL QUESTION PAPER

Time: 3 hours

Marks: 75 marks

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer any five of the following questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks

PART – A

Answer any *Five* of the following question.

 1.

 2.

 3.

 4.

 5.

 6.

 7.

 8.

(5X5=25M)

PART – B

9.	(A)	
		OR
	(B)	
10.	(A)	
		OR
	(B)	
11.	(A)	
		OR
	(B)	
12.	(A)	
		OR
	(B)	
13.	(A)	
		OR
	(B)	

Answer All The Questions. Each question carries 10 marks (5X10= 50M)

SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE COURSE IN ZOOLOGY FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

PAPER - II: ANIMAL DIVERSITY - BIOLOGY OF CHORDATES

HOURS: 60 (5X12)

Max. Marks: 100

Course Outcomes:

By the completion of the course the graduate should able to -

- CO1 Describe general taxonomic rules on animal classification of chordates
- CO2 Classify Protochordata to Mammalia with taxonomic keys
- CO3 Understand Mammals with specific structural adaptaions
- CO4 Understand the significance of dentition and evolutionary significance
- **CO5** Understand the origin and evolutionary relationship of different phyla from Prochordata to mammalia.

Learning objectives

- 1. To understand the animal kingdom .
- 2. To understand the taxonomic position of Protochordata to Mammalia.
- 3. To understand the general characteristics of animals belonging to Fishes to Reptilians.
- 4. To understand the body organization of Chordata.
- 5. To understand the taxonomic position of Protherian mammals.

SYLLABUS

<u>Unit - I</u>

- 1.1 General characters and classification of Chordata upto classes
- 1.2 Salient features of Urochordata
- 1.3 Structure and life history of Herdmania
- 1.4 Retrogressive metamorphosis -Process and Significance

<u>Unit - II</u>

- 2.1 Cyclostomata, General characters, Comparison of Petromyzon and Myxine
- 2.2 Pisces : General characters of Fishes
- 2.3 Scoliodon: Digestive system, Structure and function of the Brain.
- 2.4 Migration in Fishes
- 2.5 Types of Scales
- 2.6 Dipnoi

<u>Unit - III</u>

- 3.1 General characters of Amphibia
- 3.2 Classification of Amphibiaup to orders with examples.
- 3.3 Ranahexadactyla: Digestive system, Structure and function of Heart, structure and functions of the Brain
- 3.4 Reptilia: General characters of Reptilia, Classification of Reptilia upto orders with examples
- 3.5 Identification of Poisonous snakes and Skull in reptiles

<u>Unit - IV</u>

- 4.1 Aves General characters of Aves
- 4.2 Columba livia: Respiratory system, structure and function of Brain
- 4.3 Migration in Birds
- 4.4 Flight adaptation in birds

<u>Unit - V</u>

- 5.1 General characters of Mammalia
- 5.2 Classification of Mammalia upto sub classes with examples
- 5.3 Comparison of Prototherians, Metatherians and Eutherians
- 5.4 Dentition in mammals

Co-curricular activities (suggested)

- Preparation of charts on Chordate classification (with representative animal photos) and retrogressive metamorphosis
- Thermocol or Clay models of Herdmania and Amphioxus
- Visit to local fish market and identification of local cartilaginous and bony fishes Maintaining of aquarium by students
- Thermocol model of fish heart and brain
- Preparation of slides of scales of fishes
- Visit to local/nearby river to identify migratory fishes and prepare study notes
- Preparation of Charts on above topics by students (Eg: comparative account of vertebrate heart/brain/lungs, identification of snakes etc.)
- Collecting and preparation of Museum specimens with dead frogs/snakes/lizards etc., and/or their skeletons
- Additional input on types of snake poisons and their antidotes (student activity).
- Collection of bird feathers and submission of report on Plumology
- Taxidermic preparation of dead birds for Zoology museum
- Map pointing of prototherian and metatherian mammals
- Chart preparation for dentition in mammals

REFERENCE BOOKS

- J.Z. Young, 2006. The life of vertebrates. (The Oxford University Press, New Delhi). 646 pages. Reprinted
- Arumugam, N. Chordate Zoology, Vol. 2. SarasPlublication. 278 pages. 200 figs.
- A.J. Marshall, 1995. Textbook of zoology, Vertebrates. (The McMillan Press Ltd., UK). 852 pages. (Revised edition of Parker & Haswell, 1961).
- M. EkambaranathaAyyar, 1973. A manual of zoology. Part II. (S. ViswanathanPvt. Ltd., Madras).
- P.S. Dhami& J.K. Dhami, 1981. Chordate zoology. (R. Chand & Co.). 550 pages.
- Gurdarshan Singh & H. Bhaskar, 2002. Advanced Chordate Zoology. Campus Books, 6 Vols., 1573 pp., tables, figs.
- A.K. Sinha, S. Adhikari& B.B. Ganguly, 1978. Biology of animals. Vol. II. Chordates. (New Central Book Agency, Calcutta). 560 pages.
- R.L.Kotpal, 2000. Modern textbook of zoology, Vertebrates. (Rastogi Publ., Meerut). 632 pages.
- E.L. Jordan & P.S. Verma, 1998. Chordate zoology. (S. Chand & Co.). 1092 pages.
- G.S. Sandhu, 2005. Objective Chordate Zoology. Campus Books, vii, 169 pp.
- Sandhu, G.S. & H. Bhaskar, H. 2004. Textbook of Chordate Zoology. Campus Books, 2 vols., xx, 964 p., figs.
- Veena, 2008. Lower Chordata. (Sonali Publ.), 374 p., tables, 117 figs.

SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE COURSE IN ZOOLOGY FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

PAPER – II: ANIMAL DIVERSITY – BIOLOGY OF CHORDATES

MODEL QUESTION PAPER

Time: 3 hrs

Max. Marks: 75

I. Answer any FIVE of the following:	5x5=25
Draw labeled diagrams wherever necessary	
1. Amphioxus	
2. Placoid scale	
3. Quill feather	
4. Prototheria	
5. Anadromous migration	
6. Draco	
7. Emu	
8. Apoda	
II. Answer any FIVE of the following:	5x10=50
Draw labeled diagrams wherever necessary	
9. Explain the life history of Herdmania	
OR Explain the origin and general characters of chordates	
10.Compare the characters of Petromyzon and Myxine	
OR Describe the structure of heart of Scoliodon	
11.Describe the brain of Ranahexadactyla	
OR Explain the external features of Calotes	
12.Write an essay on flight adaptations in birds	
OR Explain the respiratory system of Columba livia	
13.Compare the characters of Metatheria and Eutheria	
OR Write an essay on dentition in mammals	

SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE COURSE IN ZOOLOGY FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

PRACTICAL PAPER: ANIMAL DIVERSITY - BIOLOGY OF CHORDATES Periods: 24 Max. Marks: 50

Learning Outcomes:

- To understand the taxidermic and other methods of preservation of chordates
- To identify chordates based on special identifying characters
- To understand internal anatomy of animals through demo or virtual dissections, thus directing the student for "empathy towards the fellow living beings"
- To maintain a neat, labeled record of identified museum specimens

OBSERVATION OF THE FOLLOWING SLIDES / SPOTTERS / MODELS

- 1. Protochordata :Herdmania, Amphioxus, Amphioxus T.S through pharynx.
- 2. Cyclostomata : Petromyzon and Myxine.
- 3. Pisces : Pristis, Torpedo, Hippocoampus , Exocoetus, Echeneis, Labeo, Catla, Clarius, Channa, Anguilla.
- 4. Amphibia : Ichthyophis, Amblystoma, Axolotl larva, Hyla,
- 5. Reptilia: Draco, Chamaeleon, Uromastix,, Testudo, Trionyx, Russels viper, Naja, Krait, Hydrophis, Crocodile.
- 6. Aves : Psittacula, Eudynamis, Bubo, Alcedo.
- 7. Mammalia: Ornithorhynchus, Pteropus, Funambulus.

Dissections-

- 1. ScoliodonIX and X, Cranial nerves
- 2. ScoliodonBrain
- 3. Mounting of fish scales
- Note: 1. Dissections are to be demonstrated only by the faculty or virtual.
 - 2. Laboratory Record work shall be submitted at the time of practical examination.

REFERENCE BOOKS:

- 1. S.S.Lal, Practical Zoology Vertebrata
- 2. P.S.Verma, A manual of Practical Zoology Chordata

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SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE COURSE IN CHEMISTRY FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

COURSE II – (ORGANIC & GENERAL CHEMISTRY)

Course outcomes:

At the end of the course, the student will be able to;

- 1. Understand and explain the differential behavior of organic compounds based on fundamental concepts learnt.
- 2. Formulate the mechanism of organic reactions by recalling and correlating the fundamental properties of the reactants involved.
- 3. Learn and identify many organic reaction mechanisms including Free Radical
- 1. Substitution, Electrophilic Addition and Electrophilic Aromatic Substitution.
- 4. Correlate and describe the stereo chemical properties of organic compounds and reactions.

ORGANIC CHEMISTRY

UNIT-I

Recapitulation of Basics of Organic Chemistry Carbon-Carbon sigma bonds (Alkanes and Cycloalkanes)

General methods of preparation of alkanes- Wurtz and WurtzFittig reaction, Corey House synthesis, physical and chemical properties of alkanes, Isomerism and its effect on properties, Free radical substitutions; Halogenation, concept of relative reactivity v/s selectivity. Conformational analysis of alkanes (Conformations, relative stability and energy diagrams of Ethane, Propane and butane).General molecular formulae of cycloalkanes and relative stability, Baeyer strain theory, Cyclohexane conformations with energy diagram, Conformations of monosubstituted cyclohexane.

UNIT-II

Carbon-CarbonpiBonds (AlkenesandAlkynes)

General methods of preparation, physical and chemical properties. Mechanism of E1, E2, E1 cbreactions, Saytzeff and Hoff manneliminations, Electrophilic Additions, mechanism (Markownikoff/Antimarkownik off addition) with suitable examples, *syn*and*anti*-addition; addition of H_2 , X_2 , HX. oxymercuration- demercuration, hydroboration - oxidation, ozonolysis, hydroxylation, Diels Alderreaction, 1, 2 – and 1, 4 –addition reactions in conjugateddienes.

Reactions of alkynes; acidity, electrophilic and nucleophilic additions, hydration to form carbonyl compounds, Alkylation of terminal alkynes.

12h

36h

12h

UNIT-III

Benzene and its reactivity

Concept of aromaticity, Huckel's rule - application to Benzenoid (Benzene, Naphthalene) and Non - Benzenoid compounds (cyclopropenylcation, cyclopentadienyl anion and tropyliumcation)

Reactions - General mechanism of electrophilic aromatic substitution, mechanism of nitration, Friedel- Craft's alkylation and acylation. Orientation of aromatic substitution - ortho, para and meta directing groups. Ring activating and deactivating groups with examples (Electronic interpretation of various groups like NO₂ and Phenolic). Orientation of (i) Amino, methoxy and methyl groups (ii) Carboxy, nitro, nitrile, carbonyl and sulphonic acid groups (iii) Halogens

(Explanation by taking minimum of one example from each type)

GENERAL CHEMISTRY

UNIT-IV

1. Surface chemistry and chemical bonding

Surface chemistry

Colloids- Coagulation of colloids- Hardy-Schulze rule. Stability of colloids, Protection of Colloids, Gold number.

Adsorption-Physical and chemical adsorption, Langmuir adsorption isotherm, applications of adsorption.

2. Chemical Bonding

Valence bond theory, hybridization, VB theory as applied to ClF₃,Ni(CO)₄, Molecular orbital theory - LCAO method, construction of M.O. diagrams for homo-nuclear and hetero-nuclear diatomic molecules (N₂, O₂, CO and NO).

3. HSAB

Pearson's concept, HSAB principle & its importance, bonding in Hard-Hard and Soft-Soft combinations.

UNIT-V

Stereochemistry of carbon compounds

Molecular representations - Wedge, Fischer, Newman and Saw-Horse formulae. Optical isomerism: Optical activity- wave nature of light, plane polarised light, optical rotation and specific rotation.

Chiral molecules- definition and criteria(Symmetry elements)- Definition of enantiomers and diastereomers – Explanation of optical isomerism with examples- Glyceraldehyde, Lactic acid, Alanine, Tartaric acid, 2,3-dibromopentane.

D,L, R,S and E,Z- configuration with examples.

Definition of Racemic mixture – Resolution of racemic mixtures (any 3 techniques)

6h

24 h

6h

2h

10h

12h

Co-curricular activities and Assessment Methods Continuous Evaluation: Monitoring the progress of student's learning Class Tests, Worksheets and Quizzes Presentations, Projects and Assignments and Group Discussions: Enhances critical thinking skills and personality Semester-end Examination: critical indicator of student's learning and teaching methods adopted by teachers throughout the semester.

List of Reference Books

Theory:

Morrison, R. N. & Boyd, R. N. Organic Chemistry, Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).

Finar, I. L. Organic Chemistry (Volume 1), Dorling Kindersley (India) Pvt. Ltd. (Pearson

Education).

Finar, I. L. Organic Chemistry (Volume 2: Stereochemistry and the Chemistry of Natural

Products), Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).

Eliel, E. L. & Wilen, S. H. Stereochemistry of Organic Compounds; Wiley: London, 1994. Kalsi, P. S. Stereochemistry Conformation and Mechanism; New Age International, 2005.

Practical:

Ahluwalia, V.K. & Aggarwal, R. Comprehensive Practical Organic Chemistry: Preparation and Quantitative Analysis, University Press (2000).

Ahluwalia, V.K. & Dhingra, S. Comprehensive Practical Organic Chemistry: Qualitative

Analysis, University Press (2000).

Furniss, B.S.; Hannaford, A.J.; Smith, P.W.G.; Tatchell, A.R. Practical Organic Chemistry,

5th Ed., Pearson (2012).

Additional Resources:

<u>Solomons</u>, T. W. G.; <u>Fryhle, C.</u> B. &<u>Snyder, S</u>. A. Organic Chemistry, 12th Edition, Wiley. Bruice, P. Y. Organic Chemistry, Eighth Edition, Pearson. <u>Clayden, J.</u>; <u>Greeves, N.&Warren, S</u>. Organic Chemistry, Oxford.

Nasipuri, D. Stereochemistry of Organic Compounds: Principles and Applications, Third

Edition, New Age International.

Gunstone, F. D. Guidebook to Stereochemistry, Prentice Hall Press, 1975.

SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE COURSE IN CHEMISTRY FIRST YEAR - SECOND SEMESTER

(Under CBCS W.E.F. 2020-21)

LABORATORY COURSE-II

Practical-II Volumetric Analysis

30hrs (2 h / w)

(At the end of Semester-II)

Course outcomes:

At the end of the course, the student will be able to;

- 1. Use glassware, equipment and chemicals and follow experimental procedures in the laboratory
- 2. Understand and explain the volumetric analysis based on fundamental concepts learnt in ionic\ equilibria
- 3. Learn and identify the concepts of a standard solutions, primary and secondary standards
- 4. Facilitate the learner to make solutions of various molar concentrations. This may include: The concept of the mole; Converting moles to grams; Converting grams to moles; Defining concentration; Dilution of Solutions; Making different molar concentrations.

Volumetric analysis

- 1. Estimation of sodium carbonate and sodium hydrogen carbonate present in a mixture.
- 2. Determination of Fe (II) using KMnO₄ with oxalic acid as primary standard.
- 3. Determination of Cu (II) using Na₂S₂O₃ with K₂Cr₂O₇ as primary standard.
- 4. Estimation of water of crystallization in Mohr's salt by titrating with KMnO4

50 M

SRI VENKATESWARA UNIVERSITY B.Sc. DEGREE EXAMINATION IN CHEMISTRY FIRST YEAR - SECOND SEMESTER

(Under CBCS W.E.F. 2020-21)

COURSE -II: ORGANIC & GENERAL CHEMISTRY

MODEL QUESTION PAPER

Time: 3 hours

Maximum Marks: 75

PART-A

5 X 5 = 25 Marks

Answer any FIVE of the following questions. Each carries FIVE marks

- 1. Write different conformations of n-butane. Explain their relative stability..
- 2. Explain 1,2- & 1,4- addition reactions of conjugated dienes.
- 3. Explain the orientation effect of halogens on mono substituted benzene.
- 4. Explain the mechanism of E1^{CB} elimination reaction.
- 5. Explain the structure of ClF₃ by Valency Bond theory.
- 6. What are Hard & soft acids & bases? Explain with examples.
- 7. Draw the Wedge, Fischer, Newmann& saw-Horse representations for Tartaric acid.
- 8. Define Enantiomers and Diastereomers and give two examples for each.

PART-B

5 X 10 = 50 Marks

Answer ALL the questions. Each carries TEN marks

9 (a). (i) Write the preparation of alkanes by Wurtz and Corey-House reaction.(ii) Explain Halogenation of alkanes. Explain the reactivity and selectivity in free radical substitutions.

(or)

(b). (i) Explain Baeyer Strain Theory

(ii) Draw the conformations of Cyclohexane and explain their stability by drawing energy profile diagram.

10 (a). (i) Write any two methods of preparation of alkenes.(ii) Explain the mechanism of Markownikiff and Anti-Markownikoff addition of HBr to alkene.

(b). (i) Explain the acidity of 1-alkynes

(ii) How will you prepare acetaldehyde and acetone from alkynes? (iii) Write alkylation reaction of terminal alkne.

11.(a). Define Huckel rule of aromatic compounds. What are benzenoid and nonbenzenoid aromatic compounds? Give examples.

(or)

(b). Explain the mechanisms of Nitration and Friedel-Craft's alkylation of Benzene.

12.(a). (i) Define Hardy-Schulze rule & Gold number.

(ii) Differentiate Physisorption& Chemisorption. Explain Langmuir adsorption isotherm.

(or)

(b). Construct the Molecular Orbital diagram for O₂ and NO and explain their bond order and magnetic property.

13.(a). Define racemic mixture. Explain any two techniques for resolution of racemic mixture.

(or)

(b). (i) Define Optical activity and Specific rotation.(ii) Draw the R- & S- isomers of Alanine, Glyceraldehyde. (iii) Write the E- & Z- isomers of 2-butene.

SUBJECT EXPERTS

Prof. C. Suresh Reddy Professor, Department of Chemistry S.V. University Tirupati.

Dr. M. Mahaboob Pacha Lecturer in Chemistry Government Degree College Ramachandrapuram – 533255

SYLLABUS VETTED BY

Prof. N.V.S. Naidu, Professor, Department of Chemistry S.V. University Tirupati.

SRI VENKATESWARA UNIVERSITY

B.A. / B.Com. / B.Sc. DEGREE COURSE IN ENGLISH

FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

ENGLISH PRAXIS COURSE - II A COURSE IN READING & WRITING SKILLS

I. UNIT			
Prose Skills	 : 1. How to Avoid Foolish Opinions : 2. Vocabulary: Conversion of Wor : 3. One Word Substitutes : 4. Collocations 		
II. UNIT			
Prose	: 1. The Doll's House	Katherine Mansfield	
Poetry	: 2. Ode to the West Wind	P B Shelley	
Non-Detailed Text Skills	: 3. Florence Nightingale : 4. Skimming and Scanning	Abrar Mohsin	
III. UNIT			
Prose	: 1. The Night Train at Deoli	Ruskin Bond	
Poetry	: 2. Upagupta	Rabindranath Tagore	
Skills	: 3. Reading Comprehension : 4. Note Making/Taking		
IV. UNIT			
Poetry	: 1. Coromandel Fishers	Sarojini Naidu	
Skills	: 2. Expansion of Ideas		
	: 3. Notices, Agendas and Minutes		
V.UNIT			
Non-Detailed Text	: 1. An Astrologer's Day	R K Narayan	
Skills	: 2. Curriculum Vitae and Resume		
	: 3. Letters		
	: 4. E-Correspondence		

Approved by BOS (PASS) W.e.f. 2020-2021

3/9/2020 Chairperson BOS in ENGLISH (PASS)

SRI VENKATESWARA UNIVERSITY B.A. / B.Com. / B.Sc. DEGREE EXAMINATION IN ENGLISH FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

ENGLISH PRAXIS COURSE-II A COURSE IN READING & WRITING SKILLS

Time: 3 hours

Max Marks: 75

 a. Summarize Russell's, "How to Avoid Foolish Opinion" b. Write Noun forms for the following words by adding a Suffix: i) Manage ii) free iii) pollute iv) create v) Maintain c. Write one word substitutes for the following 	
i) Manage ii) free iii) pollute iv) create v) Maintainc. Write one word substitutes for the following	
c. Write one word substitutes for the following	
 i) A Government by one ii) One who looks at the bright side of things iii) A position for which no salary is paid iv) One who eats too much v) That which cannot be avoided. 	
d. Match the following into appropriate collocations:	
i) Strong i) Privacy	
ii) Happy ii) mistake	
iii) someiii) endingiv) worksiv) coffee	
v) Terrible v) perfectly	
e. Avoiding stupidity is easier than seeking brilliance. Explain	
II) Answer any THREE of the following questions; (3X5=	5)
a. Compare Torvald's and Nora's attitudes toward money	
b. How does Shelley describe the power of West Wind	
c. Describe Florence Nightingale	
d. Define Skimming	
e. Define Scanning	
III) Answer any THREE of the following questions (3X5=	(5)
a. What's the theme of "The Night" Train at Deoli?	
b. Critically appreciate the poem "Upagupta"	
c. Why does the narrator say it is a game in the Night Train at Deoli	
d. Read the following passage and answer the questions that follow.	
Slavery can broadly be described as the ownership, buying and selling of hum	in
beings for the purpose of forced labour. The institution of slavery is as old as civilization. Many nations and empires were built by the muscles of the slaves	

Overtime people have found many reasons to justify slavery. Slaves were ususally considered somehow different than their owners. They may belong to different race, religion, nationality or ethnic background. By focussing on such differences, slave owners felt that they could deny basic human rights to their slaves.

- i) What is the purpose of the institution of slavery?
- ii) What is a slavery?
- iii) How were the empires built?
- iv) How were the slaves different from their masters?
- v) Give the meaning of 'deny'
- e. Make notes on the following passage.

Early rising is the secret for a happy life. We all wish to live long but we cannot. We go against Nature. Nature likes us to work during day and to rest at night. But we do not obey this law of Nature. We do not go to bed early.We read or write late into night. Some of us keep playing, dancing and drinking whole night. So, we do not rise early. Our health breaks down and we fall ill. Nature takes revenge. We have to suffer for our disobedience. But birds and animals are healthy. They do not need a doctor every day. They sleep early and rise early. This simple habit will give everything.So, it is said: "Early to bed and early to rise makes a man healthy, wealthy and wise"

IV) Answer any **THREE** of the following questions. (3X5=15)

- a. Write a critical appreciation of the poem the Coromandel Fishers
- b. Make hay while the sun shines. Expand
- c. How does Sarojini Naidu a day in the lives of the fishermen?
- d. Imagine that you are the manager of a company. You want to inform your employees of an important meeting. Write a suitable notice.
- e. Explain minutes.

V) Answer any **THREE** of the following questions

- a. Justify the title "An Astrologer's Day"
- b. Prepare a CV for the post of a Sales Executive
- c. Write a letter to your friend about Carona crisis at your native place
- d. Write a resume for your dream job
- e. Assume that you received the letter of appointment for the post of General Manager from Splendour Pvt Ltd. Send an email to the company thanking them for the offer.

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Monalah

(05.12.2020) (Dr M.SREELATHA), Chairman, BOS English(PASS).

(3X5=15)

శ్రీ పేంకటేశ్వర విశ్వవిద్యాలయం, తిరుపతి బి.ఏ., బి.కాం., బి.యస్ సి., మెదలైన కోర్పులు జనరల్ తెలుగు సెమిస్టర్ 2 ఆదునిక తెలుగు సాహిత్యం పాఠ్య ప్రణాళిక - (2020 -21 నుండి) యూనిట్ - l : ఆధునిక కవిత్వం 1. ఆధునిక కవిత్వం 🛛 🗕 🗖 పరిచయం 2. కొండవీడు - దువ్వురి రామిరెడ్డి ('కవికోకిల' గ్రంధావళి – ఖండ కావ్యాలు-నక్షత్రమాల సంపుటి నుండి) 3. మాతృ సంగీతం - అనిశెట్టి సుబ్బారావు (అగ్ని వీణ కవితా సంపుటి నుండి) 4. తాతకో నూలు పోగు - బండారు ప్రసాద మూర్తి ('కలనేత' కవితా సంపుటి నుండి) యూనిట్ – ll : కథానిక 5. తెలుగు కథానిక - పరిచయం 6. భయం (కథ) - కాళీపట్నం రామారావు 7. స్వేదం ఖరీదు ...? (కథ) - రెంటాల నాగేశ్వర రావు యూనిట్ - III : నవల - పరిచయం 8. తెలుగు నవల - మహీధర రామ్మోహన రావు (సంక్షిప్త ఇతి వృత్తం మాత్రం) 9. రథ చక్రాలు (నవల) 10. రథ చక్రాలు (సమీకా వ్యాసం) – డా. యల్లాప్రగడ మల్లికార్జునరావు యూనిట్ – IV : నాటకం - పరిచయం 11. తెలుగు నాటకం 12. యక్షగానము (నాటిక) - ఎం.వి.ఎస్. హరనాధ రావు 13. అపురూప కళారూపాల విధ్వంసదృశ్యం 'యక్షగానం'(సమీజా వ్యాసం)- డా. కందిమళ్ళ సాంబశివరావు యూనిట్ – V : విమర_్ 14. తెలుగు సాహిత్య విమర్ప – పరిచయం 15. విమర్ప-స్వరూప స్వభావాలు : ఉత్తమ విమర్పకుడు-లకణాలు.

Approved by B.o.S.

ఆధార గ్రంథాలు : వ్యాసాలూ 1.ఆధునిక కవిత్వం – పరిచయం : చూ. 'దృక్ఫథాలు' పుట 1-22 ఆదార్య ఎస్పీ.సత్యనారాయణ 2. తెలుగు కథానిక – పరిచయం : చూ. మన నవలలు-మన కథానికలు. పుట 118 – 130 ఆదార్య రాచపాలెం చంద్ర శీఖర రెడ్డి 3. తెలుగు నవల – పరిచయం : చూ. నవలా శిల్పం. పుట 1-17, వల్లంపాటి పెంటక సుబ్బయ్య 4. తెలుగు నాటకం – పరిచయం : చూ. తెలుగు నాటక రంగం. పుట 17-25, ఆదార్య ఎస్.గంగప్ప 5. తెలుగు సాహిత్య విమర్శ-పరిచయం – చూ. తెలుగు సాహిత్య విమర్ళ –నాడు,నేడు పుట 213 – 217 తెలుగు వాణి, అయిదవ అఖిల భారత తెలుగు మహాసభల ప్రత్యేక సంచిక ఆదార్య జి.వి.సుబ్రహ్మణ్యం 6. నూరేళ్ళ తెలుగు నాటక రంగం - ఆదార్య మొదలి నాగభూషణ శర్మ 7. నాటక శిల్పం - ఆదార్య మొదలి నాగభూషణ శర్మ 8. సాంఘిక నవల – కథన శిల్పం - ఆదార్య సి.మృణాలిని

*సూచించబడిన సహా పాఠ్య కార్యక్రమములు

1. ఆధునిక కవిత్వానికి సంబంధించిన కొత్త కవితలను/అంశాలను ఇచ్చి, విద్యార్థుల చేత వాటిమీద అసైస్మెంట్లు రాయించడం

2. పాఠ్యాంశాలకు సంబంధించిన విషయాలపై వ్యాసాలూ రాయించడం(సెమినార్ / అసైస్మెంట్లు)

3. తెలుగు సాహిత్యంలోని ప్రసిద్ధ కథలపై,కవితలపై సమీక్షలు రాయించడం

4. ఆధునిక పద్య నిర్మాణ రచన చేయించడం .

5. విద్యార్థులను బృందాలుగా విభజించి,నాటికలపై/నవలలపై సమీక్షలు రాయించడం.

6.సాహిత్య వ్యాసాలూ సేకరించడం. బృంద చర్చ నిర్వహించడం, జేత్ర పర్యటనలు.

7. ప్రసిద్ధుల విమర్శా వ్యాసాలూ చదివించి, వాటిని విద్యార్థుల సొంత మాటలలో రాయించడం.

8. పార్యాంశాలపై స్వీయ విమర్సా వ్యయాలు రాయించడం.

Approved by B.o.S.

Dr.G.D.Jyotheeswari Devi

B.T.College,Madanapalli

శ్రీ పేంకటేశ్వర విశ్వవిద్యాలయం, తిరుపతి బి.ఏ., బి.కాం., బి.యస్ సి., మెదలైన కోర్సులు జనరల్ తెలుగు సెమిస్టర్ 2 ఆదునిక తెలుగు సాహిత్యం మాదిరి ప్రశ్న పత్రము

సమయం:: 3 గం.

అ – విభాగము

6. కథానిక

క్రింది వానిలో ఐదింటికి సంక్షిప్త సమాధానాలు రాయండి .

ప్రతి సమాధానానికి 5 మార్కులు.

- 1.కొండవీడు
- 2. తెలుగు నవల 7. విమర్శ
- 3. తెలుగు నాటకం 8. అనిసెట్టి సుబ్బారావు
- 4. ఆధునిక కవిత్వం 9. కాళీపట్నం రామారావు
- 5. యక్షగానం 10.జానపద కళారూపాలు

ఆ – విభాగము

క్రిందివానిలో అన్ని ప్రశ్నలకు సమాధానాలు రాయండి.

ప్రతి సమాధానానికి 10 మార్కులు.

- 11. ఆధునిక కవిత్వ ఆవిర్భావ వికాసాలను వివరించండి. (లేదా) కొండవీడులో దువ్వూరి రామిరెడ్డి గారి సందేశాన్ని వివరించండి.
- 12. తెలుగు కథానికను పరిచయం చేయండి.
 (లేదా)

 భయం కథ లోని రచయిత సందేశాన్సి రాయండి.
- 13. సాహిత్య ప్రక్రియగా నవల స్థానాన్ని విమర్శించండి. (లేదా)రథచక్రాలు నవలలోని ఇతివృత్తాన్ని విశ్లీషించండి.
- 14. తెలుగు నాటక పరిణామాన్ని గూర్చి రాయండి.(లేదా)యక్షగానం నాటికపై సమీజా వ్యాసం రాయండి.
- 15. తెలుగు సాహిత్య విమర్శను పరిచయం చేయండి. (లేదా)

విమర్శ స్వరూప స్వభావాలను వివరిస్తూ, ఉత్తమ విమర్శకుని లక్షణాలను రాయండి.

మార్కులు: 75

5X5 = 25 మా

5X10 = 50 మా

SRI VENKATESWARA UNIVERSITY B.A. / B.Com. / B.Sc. DEGREE COURSE IN SANSKRIT FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

PAPER - II : POETRY, PROSE & GRAMMER

UNIT - I OLD POETRY:	 "Indumateeswayamvaram", Raghuvamsam of kalidasa, 6thcanto (67 to 86 slokas) Chowkhamba krishadas academy, Varanasi-2012.
	 "Deekshaapradanam", Buddacharitam of Aswagosha, 16thcanto. Selected verses.
UNIT - II MODERN POETRY:	 "Gangavataranam", Bhojas Champu Ramayanam, Balakanda. "Mohapanodaha", 4th cant. Dharma Souhrudam by P.Pattabhi Ramarao, , Published by Author, Ramanth Nagar. "VandeKasmeerabharatam", by Doolypala Ramakrishna from Samskrita pratibha, sahitya academy , New Delhi -2018.
UNIT – III PROSE:	 "Avantisundarikatha", 5th Chapter. Dasakumara Charitam, Purva peetika. "Charudattacharitam", Bhasakathasaraha by Y.Mahalingasastry.
UNIT - IV GRAMMAR:	 DECLENSIONS :Nouns ending in vowels Nadee, Janu, vadhoo, Matru, Vana, Phala, Vaari & Madhu. CONJUGATIONS III Conjugation- Yudh, IV Conjugation- Ish, VIII Conjugation- Likh, Kru, IX Conjugation-Kreen X, Conjugation-Kath, Ram, Vand.
UNIT-V GRAMMAR:	 SANDHI - Halsandhi : Latva, Jastva -Visarga sandhi: Utva, Visargalopa, Rephadesa, Ooshma.
	2.SAMASA Avyayeebhava, Bahruvrihi.

SRI VENKATESWARA UNIVERSITY B.A. / B.Com. / B.Sc. DEGREE EXAMINATION IN SANSKRIT FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21) PAPER - II : POETRY, PROSE, CHAMPU & GRAMMER

MODEL QUESTION PAPER

प्रश्नापत्रप्रणाली

Q.No. 2, 3, 4, 5 & 10 Should be answered in Sanskrit Only

प्रथमो भागः (25 Marks)

 श्लोकपूरणं भावं लिखत (नक्षत्राङ्कितश्लोकेभ्यः देयाः) 	(Unit-I) 2 Out of 4	2 x 3 = 06
2. शब्दाः (सम्पूर्ण शब्दरूपाणि)	2 Out of 4	2 x 3 = 06
 धातवः (लकारे सर्वाणि रूपाणि) 	2 Out of 4	$2 \ge 2^{1/2} = 05$
 सन्धिः (नामनिर्देशपूर्वकं) 	4 Out of 8	4 x 1 = 04
 समासाः (नामनिर्देशपूर्वकं) 	4 out of 8	4 x 1 = 04

द्वितीयो भागः (50 Marks)

आन्ध्रभाषायां वा आग्लभाषायां वा अनुवव	त	
(from Unit-III only)	2 out of 4	$2 \ge 3 = 06$
निबन्धप्रश्नः (Unit-I)	1 out of 2	$1 \ge 08 = 08$
निबन्धप्रश्नः (Unit-II)	1 out of 2	$1 \ge 08 = 08$
निबन्ध प्रश्नः (Unit-III)	1 out of 2	$1 \ge 08 = 08$
लघुप्रश्नाः (from Unit I & III)	4 out of 8	$4 \ge 02 = 08$
सन्दर्भ वाक्यानि (from Unit I & III)	4 out of 8	4 x 03 = 12
	(from Unit-III only) निबन्धप्रश्नः (Unit-I) निबन्धप्रश्नः (Unit-II) निबन्ध प्रश्नः (Unit-III) लघुप्रश्नाः (from Unit I & III)	निबन्धप्रश्नः (Unit-I) 1 out of 2 निबन्धप्रश्नः (Unit-III) 1 out of 2 निबन्ध प्रश्नः (Unit-III) 1 out of 2 लाधुप्रश्नाः (from Unit I & III) 4 out of 8

- 15

25

50

25

प्रथमोभागः	- 25
द्वितीयोः भागः	- 50
अन्तर्गतपरीक्षा	-25
	100
Internal Assessment Mid-S	em
Assignment / Seminar - 5 A	Attendance
-	

d

SRI VENKATESWARA UNIVERSITY B.A. / B.Com. / B.Sc. DEGREE EXAMINATION IN SANSKRIT FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21) PAPER - II : POETRY, PROSE, CHAMPU & GRAMMER

MODEL QUESTION PAPER

Time : 3 Hours	Max. Marks : 75
सूचनाः - द्वितीय-तृतीय-चतुर्थ-पञ्चम-दशम-प्रश्नाः संस्कृत भाषायाग	नेव समाधेयाः।
Q.No. 2, 3, 4, 5 & 10 Should be answered in Sanskrit Only	
प्रथमो भागः (25 Marks)	
I. द्वौ श्लोकौ पूरयित्वा भावं च लिखत ।	$2 \ge 3 = 06$
 संचारिणीभूमिपालः ॥ 	
2. सा चूर्णंगोरंमूर्तमिवानुरागम् ॥	
 शरीरेण गृहं कथ्यते ॥ 	
4. पृथक् पृथग्दीनानुपदिशन्तु तान् ॥	
II. द्वयोः सम्पूर्ण शब्दरूपाणि लिखत ।	$2 \ge 3 = 06$
1.तनु 2. मातृ 3. वारि 4. नदी	
III. द्वयोः धातोः लकारे सर्वाणिरूपाणि लिखत	$2 \ge 2^{1/2} = 0.5$
1. एषिष्यति 2. अलिखत्	
3. करोति 4. वन्दे	
IV. चतुर्णां नामनिर्देशपूर्वकं सन्धत्त	4 x 1 = 04
1. तत्+लयः 2. अच् + अन्तः 3. नृपः + जयति	
4. नराः + इमे 5. गुरो + आज्ञा 6. धनैः + च	
 प्रत्यङ् + आत्मा 8 सुप् + अन्तः 	
V. चतुर्णाः नामनिर्देशपूर्वकं विग्रहवाक्यानि लिखत	$4 \ge 1 = 04$
1. उपकृष्णम् 2. प्रत्यक्षम्	
3. दत्तपशुः 4. सकलाः	
 दक्षिणापूर्वा उपदशाः 	
7. चक्रपाणिः 8 अनुरूपम्	
द्वितीयो भागः (50 Marks)	
/।. द्वयोः आन्ध्रभाषायां आग्लभाषायां वा अनुवदत ।	2 x 3 = 06
 a. सा मनसीत्थमचिन्तयत् - 'अनन्यसाधारणसौन्दर्येणाने- तरुणीनां लोचनोत्सवः क्रियते? पुत्ररत्नेनामुना पुरन्ध्रीणां नाम सीमन्तमौक्तिकीक्रियते? 	

b. 'सुभग कुसुमसुकुमारं जगदनवद्यं विलोक्य ते रूपम्। मम मानसमभिलषति त्वं चित्तं कुरु तथा मृदुलम् ॥'

स कदाचित्कामदेवानुयानावसरे वसन्तसेनां नाम युवजनोन्मादिनीं ललामभूताc. मुज्जयिन्याः प्रतिनवयौवनोन्मेषमधुरां गणिकादारिकां दृष्ट्वा मनसिजशरव्यतामयासीत्।

कः श्रद्धास्यति भूतार्थं सर्वो मा तूलयिष्यति। d. शङ्कनीया हि दोषेषु निष्प्रभावा दरिद्रता॥

VII. a. "इन्दुमती स्वयंवरम्" इति पाठचभागस्य सारांशं लिखत

(अथवा)

b. बुद्धोपदेशान् विवृणुत । VIII.

a. भगीरथः किं निमित्तीकृत्य घारें तपस्तेपे ?

(अथवा)

b. राजकुमार्याः सुनन्दायाः मोहः कथं अपनीतः?

IX.

a. ''अवन्तिसुन्दरीकथा'' इति पाठस्य सारांशं

(अथवा)

b. वसन्तसेनायाः पात्रचित्रणं कुरुत।

X. चतुर्णां लघुसमाधानानि लिखत

1. कालिदासस्य नाटकेषु किं श्रेष्ठतमम् ?

2. वनस्थः कः ?

3. चम्पूरामायणस्य कर्ता कः?

दण्डिनः कृती लिखत ?

5. मैत्रेयः वसन्तसेनां किमवोचत् ?

6. अजः कस्य पुत्रः?

7. कः विमुक्तः?

8. गङ्गा कथं जह्नवी अभवत्?

9. राजवाहनः कस्यां अनुरागबद्धः?

10. मैत्रेयः चारुदत्तं किमुवाच?

XI. चतुर्णां ससन्दर्भ वाक्यानि लिखित ।

1. विवर्णभावं स स भूमिपालः।

2. रत्नं समागच्छतु काश्चनेन ।

20

4x 02 = 8

 $1 \ge 08 = 08$

 $1 \ge 08 = 08$

 $1 \ge 08 = 08$

 $4 \ge 03 = 12$

3. पुत्रशोकाद् दिवं गतः।

4. भगीरथः पुरीं प्राप परिपूर्णमनोरथः।

5. को भवान् ? कस्यां विद्यायां निपुणः?

6. निःशङ्कमित आगम्यताम् इति।

7. युवति विदघृणाया मा शरीरं च रक्ष।

8. एकाकिन्यां मयि किमकार्यमेतौ पापौ न करिष्यतः।

* * *

SUBJECT EXPERTS

Prof.G.Padmanabham Dept of Sanskrit Sri Venkateswara University, Tirupati

Prof. P.Varaprasada Murthy, Dept of Telugu & Sanskrit Acharya Nagarjuna University, Guntur

Prof. C.Lalitha Rani, Dept of Sahitya National Sanskrit University, Tirupati

Dr.G.Sireesha Asst. Professor Dept of Sanskrit Sri Venkateswara University, Tirupati

> Sri B. Surendra Dept of Sanskrit S.V. Oriental College, Tirupati

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SRI VENKATESWARA UNIVERSITY B.A. / B.Com. / B.Sc. DEGREE COURSE IN HINDI FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

<u>GENERAL HINDI – II: PROSE, SHORT STORIES, GRAMMAR AND</u> <u>LETTER WRITING</u>

Subject Code:18-HIN-1-02

Credits : 03

Teaching Hrs/Week: 4

SYLLABUS

<u>गद्य संदेश (PROSE)</u>

1. संस्कृति और साहित्य का परस्पर संबंध - आ.सुन्दर रेड्डी

2. भारत एक है - दिनकर

3. HIV /AIDS

<u>कथा लोक (SHORT STORIES)</u>

4. जरिया – चित्रा मुद्गल

5. भूख हड़ताल – श्री बालशौरि रेड्डी

6. परमात्मा का कुत्ता - मोहन राकेश

<u>व्याकरण (GRAMMAR)</u>

कार्यालयीन हिन्दी शब्दावली - अंग्रेजी - हिन्दी

प्रशासनिक शब्द – हिन्दी – अंग्रेजी

संधि विच्छेद

पत्र लेखन (आवेदन पत्र, शिकायती पत्र)

SRI VENKATESWARA UNIVERSITY B.A. / B.Com. / B.Sc. DEGREE EXAMINATION IN HINDI FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

GENERAL HINDI – II: PROSE, SHORT STORIES, GRAMMAR AND LETTER WRITING

MODEL QUESTION PAPER

Subject Code: 18-HIN -1-02	Time: 3hrs	Max Marks :75
PART - A		
l. किन्हीपाँचप्रश्नोंकेउत्तरदीजिए	5 X 5 = 25	
Short Q & ANS		
1. Annotation - Prose		
2. Annotation - Prose		
3. Short Question - Prose		
4. Short Question - Short Stori	ies(Non-detailed)	
5. Short Question - Short Stor	ries(Non-detailed)	
6. Short Question - Short Stor	ries(Non-detailed)	
7. Short Question - Grammar		
8. Short Question - Grammar		

			PART -	В	
॥. निम्न लिखि	ात सभी प्रश्नं	ों के उत्तर	दीजिए ।	5 X10 = 50	
9. PROSE					
		(अथवा)			10 Marks
PROSE					
10. prose					
		(अथवा)			10 Marks
Short Stories(Non	-detailed)				
11. Short Stori	ies(Non-det	tailed)			
		(अथवा)			10 Marks
Short Sto	ories(Non-d	etailed)			
12. LETTER V (अथवा)			आवदन	पत्र, शिकायती पत्र)	10 Marks
LETTER WRIT					
LETTER WRIT 13. कारक कित	ने प्रकार के	-			
13. कारक कित		(अथव	T)		10 Marks
13. कारक कित		(अथव	T)	ाद कीजिए ।	10 Marks
13.कारक कित a) निम्न लिखित		(अथव का अंग्रेजी	T)		10 Marks
13.कारक कित a) निम्न लिखित 1.	हिन्दी शब्दों 2.	(अथव का अंग्रेजी 3.	T) में अनुव 4.	5.	10 Marks
13.कारक कित a) निम्न लिखित	हिन्दी शब्दों 2. हिन्दी पदनाः	(अथव का अंग्रेजी 3.	ा) में अनुव 4. नी में अनु	5.	10 Marks
13.कारक कित a) निम्न लिखित 1. o) निम्न लिखित	हिन्दी शब्दों 2. हिन्दी पदनाः	(अथव का अंग्रेजी 3. मों का अंग्रेज	ा) में अनुव 4. नी में अनु	5. ुवाद कीजिए ।	10 Marks
13.कारक कित a) निम्न लिखित 1. c) निम्न लिखित	हिन्दी शब्दों 2. हिन्दी पदना 2.	(अथव का अंग्रेजी 3. मों का अंग्रेज 3.	ा) में अनुव 4. नी में अनु	5. ुवाद कीजिए ।	10 Marks

SRI VENKATESWARA UNIVERSITY B.A. / B.Com. / B.Sc. DEGREE COURSE IN URDU FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

PART - 1(b) PAPER - II URDU POETRY

OBJECTIVES AND SUGGESTED OUTCOMES FOR THE COURSE URDU POETRY

Objectives as per the Bloom's Taxonomy: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation for the Remembering, Understanding, Applying and Analyzing, Evaluating and Creating.

By the end of the course the students will demonstrate the following on completion of this course, the students will be able to:

- Know about the Classical and Modern Poets of Urdu and their poetry.
- Remember all the basic concepts of Urdu Masnavi.
- To create interest and awareness about the Indian Heritage and culture.
- To train the students in speaking, reading and writing skills.
- To create interest in Poetry Recitation among the students.
- Developing the Research skills in literature.

OUTCOMES

of

First Year Degree Course Second Language Part - 1(b)Paper – II: Urdu Poetry (Semester – 2)

At the end of the course, the student is expected to demonstrate the following Cognitive abilities (thinking skill) and Psychomotor Skills as per the Bloom's Taxonomy: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation for the Remembering, Understanding, Applying and Analyzing Evaluating and Creating.

- A. Remember all the basic concepts (knowledge) 1.Contributions of the poets in literature
- B. Explains (Understanding)
 - 2. Theme of the Ordu Masnavi, Marsiya, Qasida and Rubayee 3. Beauty and theme of the Urdu poems
- C. Critically examines, (Analysis and Evaluation)

4. Thinking and Creativity of the deferent poets of Masnavi, Marsiya and Qasida

D. Appraises (Evaluate)

5. Urdu Masnavi, Marsiya, Qasida, Rubayee and Nazm

- 6. The Rise and Growth of Masnavi, Marsiya, Qasida and Rubayee
- E. Examines (Analyze)
 - 7. Differs between Masnavi, Marsiya, Qasida and Rubayee
- F. Investigates (Create)
 - 8. Creating awareness int students about life attitude and environment.
- G. Writes Masnavi, Marsiya, Qasida and Rubayee in their own words (Practical skills)

Chairman **BOS in Urdy** Dr. Mohd, Nisar Ahmed, M.A. M.Phil. Ph.D. ant Professor "Dept. of Arabic, Persian & Urdu" S.V."University, Tirupati-517 502.(A.P).

SRI VENKATESWARA UNIVERSITY B.A. / B.Com. / B.Sc. DEGREE COURSE IN URDU FIRST YEAR - SECOND SEMESTER (Revised Syllabus under CBCS w.e.f. 2020-21)

Paper – II: URDU POETRY

- UNIT I MASNAWI MEER HASAN – Aaghaaz-e-Dastaan (Sehrul Bayan)
- UNIT II MARSIYA MEER ANEES – Jab Qataa Ki Masafat-e-Shab Aaftaab ne (Ibtedayi 6 Bandh)
- UNIT III QASEEDA GHALIB – Dar Madh-e- Bahadur Shah Zafar (Haan Mahe Nau Sunen Hum Uska Naam)
- UNIT IV RUBAIYAAT

AMJAD HYDERABADI

- 1. Rutba Jise Duniya me Khuda Deta hai
- 2. Har Cheez Mussabab-e-Sabab se Maangoo

SAGHAR JAYYEDI

- 1. Tareef ki Meezan pe Tul jate hain
- 2. Zulmat ka Toofan Utha deta hai
- UNIT V

TA'ARUF

Muthtasar Ta'aruf aur Sawanehi Haalat

- 1. Amjad Hyderabadi
- 2. Saghar Jayyedi

SUGGESTED READING:

URDU SHAIRI KA TANQEEDI MUTA'A – SUMBUL NIGAAR TAREEK-E-ADAB-E-URDU – NOORUL HASAN NAQUI MUKHTASAR TAREEK-E-ADAB-E-URDU – EJAZ HUSSAIN

Chairman

BOS in Urdu Dr. Mohd. Nisar Ahmed, Assistant Professor Dept. of Arabic, Persian & Urdu S.V. University, Tirupati-517 502.(A.P).

SRI VENKATESWARA UNIVERSITY B.A. / B.Com. / B.Sc. DEGREE COURSE IN URDU **FIRST YEAR - SECOND SEMESTER** (Revised Syllabus under CBCS w.e.f. 2020-21)

Paper – II: URDU POETRY

MODEL QUESTION PAPER

Time: 3 Hours

Total Marks: 75

درج ذيل سوالوں ميں سے كوئى يانچ كے جواب كھيئے :

PART - A

5X5 = 25

مثنوی سے کہتے ہیں؟ اردوکی اہم مثنو یوں کے نام کھیئے۔ 1 میرحسن کامختصرتعارف کرائے۔ 2 نصاب میں شامل مرثیہ کا کوئی ایک بند کھیئے۔ 3 قصيدہ کی ہیت پرمخضرر دشیٰ ڈالیئے۔ 4 مجد حيدرآبادي کي کوئي ايک رباع ککھيئے۔ 5 ساغر جیدی کے بارے میں اپنی معلومات قلم بند کیجئے۔ 6 نصاب میں شامل کوئی ایک رہا تی لکھ کرردیف اور قافیہ کی نشان دہی سیجئے۔ 7 مرشه کے اجزائے ترکیبی کیا ہں؟ 8 غالب كامخضرتعارف پش ييچ -9 م شهاد شخصی مرشه کے فرق کوداض سیجئے۔ 10

PART - B

(l)

درج ذیل کے تمام سوالات کے جواب لکھئے۔

اردد مثنوى کے آغازادار تقايرروشني ڈاليئے۔ (a.)11

in Urdu Tirupati-517 502.(A.P).

5X10 = 50

(Ľ)

a.)13) غالب کی قصیدہ گوئی پرنوٹ کھیئے ۔

a.)14) امجد حیدرآبادی کی رباعی گوئی پرتفصیلی نوٹ ککھیئے۔ (یا)

Chairman -BOS in Urdu

Dept. of Arabic, Persian & Urdu S.V. University, Tirupati-517 502.(A.P).

Scanned with

SRI VENKATES WARA UNIVERSITY SKILL DEVELOPMENT COURSE SCIENCE STREAM FIRST YEAR - SECOND SEMESTER (UNDER CBCS W.E.F. 2020-21)

SOLAR ENERGY

Total 30 hrs (02h/wk),

02 Credits & Max Marks: 50

Learning Outcomes:

After successful completion of the course, students will be able to:

- 1. Acquire knowledge onsolarradiation principles with respect to solar energy estimation.
- 2. Get familiarized with various collecting techniques of solar energy and its storage
- 3. Learn the solar photovoltaic technology principles and different types of solar cells for energy conversion and different photovoltaic applications.
- 4. Understand the working principles of several solar appliances like Solar cookers, Solar hot water systems, Solar dryers, Solar Distillation, Solar greenhouses

SYLLABUS:

UNIT-I - Solar Radiation:

Sun as a source of energy, Solar radiation, Solar radiation at the Earth's surface, Measurement of Solar radiation-Pyroheliometer, Pyranometer, Sunshine recorder, Prediction of available solar radiation, Solar energy-Importance, Storage of solar energy, Solar pond

UNIT-II - Solar Thermal Systems:

Principle of conversion of solar radiation into heat, Collectors used for solar thermal conversion: Flat plate collectors and Concentrating collectors, Solar Thermal Power Plant, Solar cookers, Solar hot water systems, Solar dryers, Solar Distillation, Solar greenhouses.

UNIT-III - Solar Photovoltaic Systems:

Conversion of Solar energy into Electricity - Photovoltaic Effect, Solar photovoltaic cell and its working principle, Different types of Solar cells, Series and parallel connections, Photovoltaic applications: Battery chargers, domestic lighting, street lighting and water pumping

Co-curricular Activities (Hands on Exercises): (04 hrs)

[Any four of the following may be taken up]

- 1. Plot sun chart and locate the sun at your location for a given time of the day.
- 2. Analyse shadow effect on incident solar radiation and find out contributors.
- 3. Connect solar panels in series & parallel and measure voltage and current.
- 4. Measure intensity of solar radiation using Pyranometer and radiometers.
- 5. Construct a solar lantern using Solar PV panel (15W)
- 6. Assemble solar cooker
- 7. Desigining and constructing photovoltaic system for a domestic house requiring 5kVA power
- 8. Assignments/Model Exam.

(6 hrs)

(10 hrs)

(10 hrs)

Reference Books:

- 1. Solar Energy Utilization, G. D. Rai, Khanna Publishers
- 1. Solar Energy- Fundamentals, design, modeling & applications, G.N. Tiwari, Narosa Pub., 2005.
- 2. Solar Energy-Principles of thermal energy collection & storage, S.P. Sukhatme, Tata Mc-Graw Hill Publishers, 1999.
- 3. Solar Photovoltaics- Fundamentals, technologies and applications, Chetan Singh Solanki, PHI Learning Pvt. Ltd.,
- 4. Science and Technology of Photovoltaics, P. Jayarama Reddy, BS Publications, 2004.

V.Balan Bos chairman

SOLAR ENERGY

MODEL QUESTION PAPER

Max. Marks: 50

Time :1 $\frac{1}{2}$ hrs (90 minutes)

(4x5M=20 Marks)

SECTION – A

Answer any four questions. Each answer carries 5 Marks

- 1. Explain solar Radiation at the Earth's surface
- 2. Write short note on solar pond.
- 3. Explain Pyranometer.
- 4. Explain the Principal of conversion of solar radiation into heat
- 5. Write a note on solar green houses
- 6. Describe about solar cookers
- 7. Write a note on battery charges.
- 8. Mention the applications of photo voltaic system

SECTION - B

(3x10M=30 Marks)

Answer any four questions. Each answer carries 10 Marks

- 1. Explain solar energy storage systems
- 2. Describe the experimental set up used in measurement of solar radiation by pyroheliometer.
- 3. Explain the flat plate collectors
- 4. Explain the concentrating collectors
- 5. What is photo voltaic effect? describe working Principal of solar photo voltaic cell
- 6. Explain various solar cells.

FRUITS AND VEGETABLES PRESERVATION

Total 30 hrs (02h/wk).

Learning Outcomes:

On successful completion of this course the students will be able to;

- 1. Identify various types of fruits and vegetables and explain their nutritive value.
- 2. Understand the fragile nature of fruits and vegetables and causes for their damage.
- 3. Explain various methods of preservation for fresh fruits and vegetables.
- 4. Get to know the value-added products made from fruits and vegetables.

Syllabus:

Unit – 1 : Introduction to fruits and vegetables

- 1. Fruits: Definition, elementary knowledge on types of fruits (fleshy and dry) with local /common examples.
- 2. Vegetables: Definition, elementary knowledge on types of vegetables (root, leafy, stem, flower and fruit) with local/ common examples.
- 3. Importance of fruits and vegetables in human nutrition.
- 4. Concept of perishable plant products maturation and spoilage, shelf life; preservation definition and need for preservation of fruits and vegetables.

Unit – 2 : Preservation of Fruit

- 1. Fruits ripening and biological aging; storage and preservation concerns.
- 2. Preservation of fresh fruits at room temperature and in cold storage.
- 3. Fruit preservation at room temperatue as juices, squashes and syrups.
- 4. Preservation of fruits by application of heat; making of fruit products (jams, jellies and fruit slices in processing factories).
- 5. Preservation by dehydration (Eg. banana chips), application of sugar (Eg. mango candy), application of salt (pickling).
- 6. Fruit preservation by freezing storage at the lowest temperatures.

06 Hrs.

02 Credits & Max Marks: 50

09 Hrs.

Unit – 3 : Preservation of vegetables

09 Hrs.

- 1. Vegetables losses after harvesting and causes; problems in handling and storage.
- 2. Modern methods of packaging and storage to reduce losses.
- 3. Trimming of vegetables and packing in cartons; dehydration technique -factory processing.
- 4. Making of vegetable products (flakes/chips of potato and onion; garlic powder).
- 5. Frozen vegetables Carrots, Cauliflower, Okra and Spinach.
- 6. Preservation of sliced vegetables in factories by canning and bottling.

Suggested Co-curricular activities (6 Hrs.)

- 1. Assignments/Group discussion/Quiz/Model Exam.
- 2. Invited lecture and demonstration by local expert
- 3. Exhibition of various types of locally available fruits and vegetables.
- 4. Hands on training on handling and packaging methods of fresh fruits and vegetables.
- 5. Hands on training on making fruit juices.
- 6. Display of various preserved fruit products available in local markets.
- 7. Hands on training on making of potato, yam, onion chips.
- 8. Display of various preserved vegetable products available in local markets.
- 9. Watching videos on preservation of fruits and vegetables.
- 10. Visit to Horticulture University or research station to learn about value added products of fruits and vegetables.

Suggested text books/reference books :

- 1. Giridharilal, G. S. Siddappa and G.L.Tandon(2007) *Preservation of Fruits and Vegetables*, Indian Council of Agri. Res., New Delhi
- 2. Srivastava, R.P., and Sanjeev Kumar (2019) *Fruit and Vegetable Preservation : Principles and Practices,* CBS Publishers & Distributors Pvt., Ltd., New Delhi
- 3. Thompson, A.K. (1995) *Post Harvest Technology of Fruits and Vegetables*. Blackwell Sci.,U.K.
- 4. Verma, L.R. and V.K. Joshi (2000) *Post Harvest Technology of Fruits and Vegetables*. Indus Publ., New Delhi

FRUITS AND VEGETABLES PRESERVATION

MODEL QUESTION PAPER

Max. Marks: 50

Time: 1¹/₂ hrs (90 Minutes)

SECTION-A

(4x5M=20 Marks)

Answer any four questions. Each answer carries 5 marks (At least 1 question should be given from each Unit)

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SECTION B

(3x10M = 30 Marks)

Answer any three questions. Each answer carries 10 marks (At least 1 question should be given from each Unit)

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DAIRY TECHNOLOGY Total 30 hrs (02h/wk), 02 Credits & Max 50 Marks

Learning Outcomes:

After successful completion of the course, students will be able to;

- 1. Understand the pre-requisites for starting a Dairy farm
- 2. Recognize different breeds of Cows & buffaloes following safety precautions.
- 3. Prepare and give recommended feed and water for livestock
- 4. Maintain health of livestock along with productivity
- 5. Vaccination of cattle, nutrients requirements
- 6. Entrepreneurship i.e., Effectively market dairy products
- Ensure safe and clean dairy farm and Standard safety measures to be taken in establishing am industry
- 8. Efficiently start and manage to establish or develop a Dairy Industry

SYLLABUS:

Section I (Introduction and Establishment of a Dairy Farm):

05 Hrs

Dairy development in India – Dairy Cooperatives (NDRI, NDDB, TCMPF)(1hr) Constraintsof Present Dairy Farmingand Future Scope of Dairy Farmer.(1 hr) Selection of site for dairy farm; Systems of housing – Loose housing system, Conventional Dairy Farm; Records to be maintained in a dairy farm. (2 hrs)

Section II (Livestock Identification and Management): 13 Hrs

Breeds of Dairy Cattle and Buffaloes – Identification of Indian cattle and buffalo breeds and Exotic breeds; Methods of selection of Dairy animals. (5hrs) Systems of inbreeding and crossbreeding. (2 hrs) Weaning of calf, Castration, Dehorning, Deworming and Vaccination programme (3 hrs) Care and management of calf, heifer, milk animal, dry and pregnant animal, bulls and bullocks. (3 hrs)

Section III (Feed Management, Dairy Management, Cleaning and Sanitation): 8 Hrs

Basic Principles of Feed, Important Feed Ingredients, Feed formulation and Feed Mixing(2 hrs)

Operation Flood –Definition of Milk and Nutritive value of milk and ICMR recommendation of nutrients –Per Capita Milk production and availability in India and Andhra Pradesh -Methods of Collection and Storage of Milk–Labelling and Storage of milk products (4 hrs)

Cleaning and sanitation of dairy farm – Safety precautions to prevent accidents in an industry. (2 hrs)

Co-curricular Activities Suggested: (4 hrs)

- 1. Group discussion&SWOT analysis
- 2. Visit to a Dairy Farm
- 3. Visit to Milk Cooperative Societies
- 4. Visit to Feed Milling Plants
- Market Study and Identification of Government Schemes, Insurance and Bank Loans in relation to dairy farming

Reference books:

- 1. Dairy Science: Petersen (W.E.) Publisher Lippincott & Company
- 2. Principles and practices of Dairy Farm –Jagdish Prasad
- 3. Text book of Animal Husbandry G C Benarjee
- 4. Hand book of Animal Husbandry ICAR Edition
- 5. Outlines of Dairy Technology Sukumar (De) Oxford University press
- 6. Indian Dairy Products Rangappa (K.S.) & Acharya (KT) Asia Publishing House.
- The technology of milk Proceesing Ananthakrishnan, C.P., Khan, A.Q. and Padmanabhan, P.N. – Shri Lakshmi Publications.
- 8. Dairy India 2007, Sixth edititon
- 9. Economics of Milk Production Bharati Pratima Acharya Publishers.
- 10. http://www.asci-india.com/BooksPDF/Dairy%20Farmer%20or%20Entrepreneur.pdf
- 11. https://labour.gov.in/industrial-safety-health

DAIRY TECHNOLOGY

MODEL OUESTION PAPER & PATTERN

Max. Marks: 50

Time: 1 1/2 hrs (90 Minutes)

SECTION A

(Total: 4x5=20 Marks)

(Answer any **four questions**. Each answer carries **5 marks** (At least 1 question should be given from each Unit)

- 1. Conventional Dairy Farm
- 2. Animal Inbreeding
- 3. Sanitation of Dairy Farm
- 4. Dairy development in India
- 5. Feed Mixing
- 6. Deworming
- 7. Milk Storage Methods
- 8. Identification of characters of any Two Dairy cattle

<u>SECTION B</u> (Total: 3x10 = 30 Marks)

(Answer any three questions. Each answer carries 10 marks (At least 1 question should be given from each Unit)

- 1. Write an essay on Dairy development in India, its current position and future scenario.
- 2. List our different methods involved in selection of dairy animals and discuss briefly.
- 3. Give an account of feed ingredients and feed management required for dairy animals.
- 4. Explain different methods of collection of milk.
- 5. Explain two methods of systems of housing of dairy animals.

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Note: Please read the following in addition to the Guidelines sent.

- 1. In Unit-2 and Unit-3, Sub-titles highlighted in Yellow colour are Skills. Sub-titles not highlighted are of Theoretical base.
- 2. Skills, though separately shown, shall also have 'content' to be learnt and written in the examination by the students.
- 3. The field (hands on) skills are learnt through the Co-curricular Activities.
- 4. One or two books referred shall be related to 'learning of skills'
- 5. Topics and syllabus may be prepared keeping all (BA/BSc/BCom) urban as well as rural students in view.

BUSINESS COMMUNICATION

Total 30 hrs (02hrs/wk), 02 Credits, Max 50 marks

Learning Outcomes:

Aftersuccessful completion of this course, students will be able to;

- 1. Understand the types of business communication and correspondence
- 2. Comprehend the processes like receiving, filing and replying
- 3. Acquire knowledge in preparing good business communications
- 4. Acquaint with organizational communication requirements and presentations.

SYLLABUS:

UNIT I:06hrs

Introduction and Importance of communication an overview - meaning and process of communication - organizational communication and its barriers.

UNIT II: 10hrs

Types of Business Communications –Categories, methods and formats - Business vocabulary -Business idioms and collocations – OrganisationalHierarchy - Various levels of communication in an organization – Top-down, Bottom-up and Horizontal-Business reports, presentations– Online communications.

UNIT III: 10hrs

Receiving business communications -Filing and processing -Sending replies. Routine cycle of communications – Writing Communications - Characteristics of a good business communication -Preparation of business meeting agenda – agenda notes - minutes –circulation of minutes – Presentations of communication using various methods.

Recommended Co-curricularActivities (04hrs):

- 1. Collection of various model business letters
- 2. Invited lecture/field level training by a local expert
- 3. Reading of various business reports and minutes and its analysis
- 4. Presentations of reports, charts etc.
- 5. Assignments, Group discussion, field visit etc.

Reference books:

- 1. Chaturvedi. P.D.Chaturvedi.M Business Communication concepts, Cases and applications Pearsons Education
- 2. Kaul Asha Effective Business Communication PHI Learning pvt Ltd
- 3. <u>www.swayam.gov.in</u>
- 4. Websites on business communication

BUSINESS COMMUNICATION

MODEL QUESTION PAPER

Max. Marks: 50

Time: 1 1/2 hrs (90 Minutes)

SECTION A

(Total: 4x5=20 Marks)

(Answer any four questions. Each answer carries 5 marks (At least 1 question should be given from each Unit)

SECTION B

(Total: 3x10 = 30 Marks)

(Answer any three questions. Each answer carries 10 marks (At least 1 question should be given from each Unit)

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LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Total 30 hrs (02h/wk), 02 Credits & Max 50 Marks

Learning Outcomes:

At the successful completion of the course, the student will able to;

- 1. Summarize relationship between marketing and Logistic Management
- 2. Understand the concepts of Supply Chain Management in connection with products.
- 3. Understanding various types of seller and suppliers
- 4. Evaluate best logistic method among all means of transport operations
- 5. Analysis of different distribution strategies online and physical distribution
- 6. Compare the Logistics in National and International Scenario.
- 7. Design and develop new methods and models of Logistics in SCM

SYLLABUS:

Unit-1: Introduction to Logistics and Supply Chain Management (SCM):

Functions of Logistics - Structure of logistics - Logistics Costs - Modes of Logistics -Logistics in 21st Century -- Role of Supply Chain Management - Design and Development of Supply Chain Network - Different types of Supply Chain Networks

Unit-II: Logistics:

Customer Selection - Process -Customer Service and Customer Retention – Relationship Management - Integrating Logistics and Customer Relationship Management

Unit-III: Supply Chain Management:

Managing and Estimating Supply Chain Demand – Forecasting Techniques – Supplier Networks –Skills to Manage SCM - Recent Trends in SCM

Suggested Co-curricular Activities:

- 1. Invited lecture from Domain/Industry Experts
- 2. Field Visit (Manufacturing units, Suppliers)
- 3. Assignments, Seminars, Group Discussion, Quiz and Role Play
- 4. Poster presentations on SCM
- 5. Case Study Development

References:

- 1. Shailesh Kasande, Materials and logistics Management, NiraliPrakashan
- 2. Jhamb LC, Materials and logistics Management, Everest Publishing House.
- 3. Martin Christopher, Logistics & Supply Chain Management, Prentice Hall.
- 4. Alan Rushton, Phil Croucher & Peter Baker (CILT), Logistics and Distribution Management, Kogan Page Ltd.
- 5. G. Raghuram , Logics and Supply Chain Management, Macmillan.
- 6. Dr. Gopal Krishnan Material Management Rearview, Pearson New Delhi.
- 7. B.S. Sahay, Macmillan, Supply Chain Management, Pearson Education.
- 8. Bowersox, Closs & Cooper, Supply Chain Logistics Management, McGraw-Hill.
- 9. Websites on Logistics and supply chain management.

LOGISTICS AND SUPPLY CHAIN MANAGEMENT

MODEL QUESTION PAPER

Max. Marks: 50

Time: 1 1/2 hrs (90 Minutes)

SECTION A (Total: 4x5=20 Marks) (Answer any four questions. Each answer carries 5 marks (At least 1 question should be given from each Unit)

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 $\underbrace{SECTION B}_{(Answer any three questions. Each answer carries 10 marks)} (Total: <math>3x10 = 30$ Marks) (Answer any three questions. Each answer carries 10 marks) (At least 1 question should be given from each Unit)

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SRI VENKATESWARA UNIVERSITYB.A. / B.Com. / B.Sc. DEGREE COURSES LIFE SKILL COURSE

FIRST YEAR – SECOND SEMESTER UNDER CBCS W.E.F. 2020-21

INFORMATION & COMMUNICATION TECHNOLOGY

Semester	Course Code	Course Title	Ho urs	Credits
II	Life skill Course	INFORMATION & COMMUNICATION TECHNOLOGY	30	2

Objectives:

This course aims at acquainting the students with basic ICT tools which help them in their day to day and life as well as in office and research.

Course outcomes:After completion of the course, student will be able to;

- 1. Understand the literature of social networks and their properties.
- 2. Explain which network is suitable for whom.
- 3. Develop skills to use various social networking sites like twitter, flickr, etc.
- 4. Learn few GOI digital initiatives in higher education.
- 5. Apply skills to use online forums, docs, spreadsheets, etc for communication, collaboration and research.
- 6. Get acquainted with internet threats and security mechanisms.

SYLLABUS:

UNIT-I: (08 hrs)

Fundamentals of Internet: What is Internet?, Internet applications, Internet Addressing – Entering a Web Site Address, URL–Components of URL, Searching the Internet, Browser – Types of Browsers, Introduction to Social Networking: Twitter, Tumblr, LinkedIn, Facebook, flickr, Skype, yahoo, YouTube, WhatsApp.

UNIT-II:(08 hrs)

E-mail: Definition of E-mail -Advantages and Disadvantages –User Ids, Passwords, Email Addresses, Domain Names, Mailers, Message Components, MessageComposition, Mail Management.

G-Suite: Google drive, Google documents, Google spread sheets, Google Slides and Google forms.

UNIT-III:(10 hrs)

Overview of Internet security, E-mail threats and secure E-mail, Viruses and antivirus software, Firewalls, Cryptography, Digital signatures, Copyright issues.

What are GOI digital initiatives in higher education? (SWAYAM, SwayamPrabha, National Academic Depository, National Digital Library of India, E-Sodh-Sindhu, Virtual labs, e-acharya, e-Yantra and NPTEL).

RECOMMENDED CO-CURRICULAR ACTIVITIES: (04 hrs)

(Co-curricular activities shall not promote copying from textbook or from others work and shall encourage self/independent and group learning)

- 1. Assignments(in writing and doing forms on the aspects of syllabus content and outside the syllabus content. Shall be individual and challenging)
- 2. Student seminars (on topics of the syllabus and related aspects (individual activity))
- 3. Quiz and Group Discussion
- 4. Slip Test
- 5. Try to solve MCQ's available Online.
- 6. Suggested student hands on activities :
 - a. Create your accounts for the above social networking sites and explore them, establish a video conference using Skype.
 - b. Create an Email account for yourself- Send an email with two attachments to another friend. Group the email addresses use address folder.
 - c. Register for one online course through any of the online learning platforms like NPTEL, SWAYAM, Alison, Codecademy, Coursera. Create a registration form for your college campus placement through Google forms.

Reference Books :

- 1. In-line/On-line : Fundamentals of the Internet and the World Wide Web, 2/e byRaymond Greenlaw and Ellen Hepp, Publishers : TMH
- 2. Internet technology and Web design, ISRD group, TMH.
- 3. Information Technology The breaking wave, Dennis P.Curtin, Kim Foley, Kunai Sen and Cathleen Morin, TMH.

SRI VENKATESWARA UNIVERSITY

B.A. / B.Com. / B.Sc. DEGREE COURSES LIFE SKILL COURSE

FIRST YEAR – SECOND SEMESTER UNDER CBCS W.E.F. 2020-21

INFORMATION & COMMUNICATION TECHNOLOGY

MODEL QUESTION PAPER

Time: $1 \frac{1}{2}$ hours (90 Min.)

Marks: 50 marks

PART – A

Answer any *Four* of the following question. (4X5=20M)

PART -	В
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Answer any <u>Three</u> The Questions. Each question carries 10 marks (3X10= 30M)

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