

TUMKUR UNIVERSITY

TUMAKURU

B.Sc. (UG) Botany Syllabus CBCS

2016-17 on wards

Practical Examination - Paper - VIII

Time : 3 Hrs

Max marks :50

- *1. Estimate the protein content of the sample 'A' by Lowry's method
Or
Estimate the RNA content of the sample 'A' by Orcinol method.
Or
Estimate the DNA content of the sample 'A' by DPA method 15
2. Estimate the chloride / dissolved oxygen content in the given sample 'B' 10
3. Comment on 'C' and 'D' 2x5= 10
4. Project report /Dissertation work/Tour Report 5
5. Viva voce 5
6. Class record 5

Scheme of valuation

1. Requirements – 1 mark, principle – 1marks, procedure -4, conduction – 5 marks,
Calculation & result – 4 marks.
(* students should select one of the experiments 'A' by means of lottery chit)
(. Requirements – 1 mark, principle – 1marks, procedure -4, conduction – 3 marks,
Calculation & result – 1 marks
2. Identification -1 mark, diagram – 1 mark , comment – 3 marks.

Experiments: 1 PBR322
2 Northern, Southern and Western Blotting,
3 DNA Fingerprinting
4 PCR
(By photographs)

4. Project report / dissertation work / tour report - 5 marks
5. Viva based on the experiments given in the examination. -5 marks
6. Class Records. 5 marks

ZOOLOGY PROJECT WORKS

PRACTICAL VIII

TOTAL NO. OF PRACTICALS

14 UNITS

i) PHYSIOLOGY EXPERMENTS

1. Organic constituents of protoplasm – Tests for glucose, Sucrose, Starch and proteins.
2. Nitrogenous wastes – Tests for ammonia, urea and uric acid.
3. Effects of temperature on the heartbeat of fresh water mussel.
4. Oxygen consumption by crab.
5. Salt loss and salt gain by crab.
6. Quantitative estimation of amylase activity (Ptyalin)
7. Total glycogen in muscle (authrocin method).
8. Detection of abnormal excretion of sugar, albumin, ketone in human urine.

8 units.

- ii) Micro technique: Preparaton of slides and blockmaking and parafin sectioning. 4 Units.

iii) Animal behaviour:

Project report on:

- a) Eco-behaviourial adaptations: Deep sea fishes
Bio-Luminiscence
Migratory fishes
Birds
Desert fauna

SCHEME OF PRATICALS IV

DURATION: 3 HOURS

MAX.MARKS: 30

- | | | |
|------|---|----------|
| I. | IDENTIFICATION OF SPECIMEN 3 X 3 MARKS EACH | 09 Marks |
| II. | HUMAN ANATOMY -IDENTIFY & COMMENT ON 1 & 2 | 6 Marks |
| III. | COMPARATIVE ANATOMY - COMPARE & COMMENT ON A & B | 5 Marks |
| IV. | CLASS RECORDS | 5 Marks |
| V. | PREPARATION OF ANY MODEL PERTAINING TO HUMAN ANATOMY→ | 5 Marks |

30 Marks

I SEMESTER PRACTICAL-1(1.8)
BASED ON ANIMAL DIVERSITY

CREDITS-2

15 Units

04H
02H
02H

1 PHYLUM: PROTOZOA

Observation of water samples for the live Protozoan, Study of Amoeba, Euglena and Paramecium.

06H
02H
04H

2 PHYLUM: PORIFERA

Sycon, Euplectella and Spongilla.

3 PHYLUM: COELENTERATA

Obelia, Physalia, Aurelia and Fungia.

Whole mount preparation of Coelenterate colony (Obelia or Sertularia colony).

4 PHYLUM: PLATYHELMINTHES AND NEMATHELMINTHES

Haenia solium, Male and Female Ascaris lumbricoides, T.S. of Male and Female Ascaris.

5 PHYLUM: ANNELIDA

Earth worm, Nereis and Leech.

6 PHYLUM: ARTHROPODA

Peripatus, Palaeon, Limulus, Centipede, Millepede and Spider.

7 PHYLUM: MOLLUSCA

Chiton, Octopus, Shells of Dentalium, Pila and Sepia.

8 PHYLUM: ECHINODERMATA

Asterias, Brittle star, Sea Urchin, Cucumeria, Antedon and Bipinnaria larva.

9 PROTOCHORDATA AND CYCLOSTOMATA

Dalanoglossus, Ascidia, Amphioxus and Petromyzon.

10 PISCES

Pristis, Hippocampus, Exocoetus and Anguilla.

11 AMPHIBIA

Ichthyophis, Salamander and Hyla.

12 REPTILES

Chelone, Chameleon, Draco, Varanus or Crocodile.

13 AVES/BIRDS

Beak and Feet modifications in Crow, Pigeon, Parrot and Duck.

14 MAMMALS

Bat, Funambulus, Loris, Pangolin and Hedgehog.

15: Identification of Poisonous and Non-poisonous (Cobra/Viper and Python or Rat Snake or Natrix)

16 Preparation of Animal album containing photographs with information about Taxonomy, Habit, Habitat and Characters. Different animals may be given to different sets of students (Five from invertebrates and Five from Vertebrates. Except the photographs rest of the information to be hand written).

Note: Photographs, Charts and Models can be used.

IV SEMESTER PRACTICAL-IV (4.8)

BASED ON INSECT VECTORS AND DISEASES

CREDITS -2

15Units

1. Study of different kinds of mouth parts of insects (Cockroach, Mosquito (male and female), Housefly, Honeybee and Butterfly).

2. Study of following insect vectors through permanent slides /photographs:

Aedes, Culex, Anopheles, Pediculus humanus capitis. Pediculus humanus corporis, Phthirus pubis. Xenopsylla cheopis, Cimex lectularius, Phlebotomus argentipes, Musca domestica, through permanent slides/photographs.

3. Study of different diseases transmitted by above Insect vectors.

Submission of a project report on any one of the Insect vectors and Disease transmitted.

(Note: Except the photographs rest of the information to be hand written)

IV SEMESTER ZOOLOGY

PRACTICAL -IV (4.8) BASED ON INSECT VECTORS AND DISEASES SCHEME OF EXAMINATION

Duration: 3 hrs.

Max. Marks: 50

Q1. Identify and comment on A and B

(Two insects mouth parts (trophi)-slides/photograph

(2x5) = 10 marks

Q2. Identify, Classify, Comment and diseases transmitted by

Insect vectors any four

(4x5) = 20 marks

Q3. Submission of project report on any one of the Insect vectors and Diseases Transmission. Except the photographs rest of the information to be hand written)

10 marks

Q4 Viva -Voce (based on practical 2 specified in the syllabus):

05 marks

Q5 Practical records:

05 marks

III SEMESTER
PRACTICAL -III (3.8)
BASED ON PHYSIOLOGY AND HUMAN ANATOMY

CREDITS 2 15 Units

- 1 Nitrogenous wastes-Tests for Ammonia, Urea and Uric acid.
- 2 Organic constituents of Protoplasm-Tests for Glucose, Sucrose, Starch and Proteins.
- 3 Detection of abnormal Excretion of Sugar, Albumin, Ketone and creatinine urine.
- 4 Study of permanent Microscopic anatomy of Mammalian Pituitary, Thyroid, Pancreas and Adrenal gland.
- 5 Study of permanent Microscopic anatomy of Stomach, Small intestine, Liver, Kidney, Testis and Ovary.
- 6 Human Skeletal System: Axial and Appendicular Skeleton except the bones of hand and foot.
- Q7 Preparation and submission of Any Model pertaining to Human Anatomy.**

III SEMESTER PRACTICAL-III (3.8)
BASED ON PHYSIOLOGY AND HUMAN ANATOMY

SCHEME OF VALUATION

DURATION 3 Hours

MAX.MARKS=50

- | | |
|---|-----------------|
| Q1: Physiological experiments (any one of the experiments from 1to 3). | 12 Marks |
| Q2: Microscopic anatomy 2+2 slides (from4 and 5). | 4x4=16Marks |
| Q3: Human Skeletal system (1 from Axial + 1 from Appendicular Skeleton). | 2x4=08 Marks |
| Q4: Submission of Model pertaining to Human Anatomy. | 04 Marks |
| Q5: Viva-Voce
(2 Questions from Physiology experiments+2 Questions from Human skeleton
+1 Question microscopic anatomy). | 05 Marks |
| Q6: Class Records: | 05 Marks |

V SEMESTER PRACTICALS-V (5.9 A)
BASED ON GENETICS AND EVOLUTIONARY BIOLOGY

CREDITS-2 15 Units

- 1 Study of Mendelian inheritance(Monohybrid and Dihybrid crosses -4 problems
Gene interactions(Blood groups, Sex linked inheritance) -4 problems
 - 2 Drosophila Genetics :a)Male and Female Identification b) Syndrome Identification
 - 3 Study of Human Karyotypes: Normal and Abnormal(Turner's, Klinefelter's, Down's and Cri-du-Chat syndrome)
 - 4 Study of a) Homologous organs b) Analogous organs with suitable specimens/pictures
a) Mouthparts of cockroach and Female mosquito
b) Wing of Bird, Wing of Insect and Patagium of Bat.
 - 5 Study of Vestigial organs from suitable Specimens/Pictures.
(Vermiform appendix, Wisdom tooth and Coccyx)
 - 6 Study of Fossil evidences from suitable Specimens/Pictures:
Ichthyosaurus, Brontosaurus, Stegosaurus and Archaeopteryx
 - 7 Charts:
a) Identification and comment on fossil records of Man- Pictures
Ramapithecus, Australopithecus, Pithecanthropus erectus, Pithecanthropus pekinesis, Neanderthal man and Cromagnon man.(Any three)
b) Identification and comment on fossil records of Horse- Pictures
Hyracotherium, Mesohippus, Merychippus, Pliohippus and Equus.(Any three)
 - 8 Submission on Project report on 1) Evolution of Elephant. 2) Evolution of Camel
3) DNA Finger printing or Human Genome Project
4) Application of Genetic engineering in Agriculture,
Pharmaceuticals and Food technology
5) Dinosaurs 6) Fossils
- (Note: Except the photographs rest of the information to be hand written)

V SEMESTER PRACTICALS-V (5.9 A)
BASED ON GENETICS AND EVOLUTIONARY BIOLOGY
SCHEME OF EXAMINATION

DURATION:3 Hours	MAX.MARKS:50
Q 1: Problems on a) Monohybrid or Dihybrid crosses (one problem)	04Marks
b) Blood groups or Sex linked inheritance(one problem)	05Marks
Q 2 Drosophila Genetics :a)Male and Female Identification 2 ½	
b) Syndrome Identification 2 ½	05Marks
Q 3. Identify and comment -Human Karyotypes (Normal and Abnormal)	2x4= 08 Marks
Q 4. Identify and comment	
a) Homologous or Analogous or Vestigial organs (Any one)	3x2= 06 Marks
b) Study of Fossil evidence: picture or model (Any one)	
Q 5. Identify and Comment on(Pictures)	
a) Phylogeny of Man (Any two)	3x2= 06 Marks
b) Phylogeny of Horse(Any two)	3x2= 06 Marks
Q 6. Submission of Project report (Specified in practical syllabus-5.9A)	05 Marks
Q 7. Class records	05 Marks

**VI SEMESTER PRACTICAL-VII 6.9A
BASED ON APPLIED ZOOLOGY**

2 CREDITS 15Units

1 Identify and Comment on following Bacterial strains: Salmonella typhi, Mycobacterium tuberculosis, Borrelia recurrentis, Treponema pallidum, Rickettsia prowazekii- through Photographs/ Slides/Charts

2 Study of Helminthes worms: Ancylostoma duodenale, Wuchereria bancrofti and Schistoma haematobium

3 Study of Morphology of Bombyxi mori (Egg, Larva, Pupa and Moth).

4 Study of Silk glands of Bombyxi mori.(Photos/Picture/Specimens)

5 Identify and Comment on Food fishes of Karnataka

(Catla catla, Clarias, Labeo and Saccobranchus)

6 Identify and Comment on Breeds of fowl.(Photos/Picture)

(White horn, Plymouth rock, Sussex, Langshan and Giriraja)

7 Estimation of protein in Milk sample.

8 Lactometer test for water content.

9 Project on Dairy farming, Breeds of Cattle, Diseases of Cattle, Pisciculture, Poultry farming. Transgenic animals.

Rearing of Silkworm. (Note: Except the photographs rest of the information to be hand written)

**VI SEMESTER PRACTICAL-VII 6.9 A
BASED ON APPLIED ZOOLOGY
SCHEME OF PRACTICAL EXAMINATION**

MAX.MARKS:50

Q 1:Identify and comment on any two bacterial strains(Photos/Slide) 2X3=06 Marks

Q 2:Study of Helminthes worms any one (Specimens/Photos) 03 Marks

Q3 :Study Morphology of Bombyxi mori(Any one of stage mentioned) 03 Marks

Q4: Study of Silk glands of Bombyxi mori (Specimen/ Photo) 04 Marks

Q5 Identification of food fishes of Karnataka(Specimen/ Photos) Any two 2x4=08 Marks

Q6: Identification and Comment on breeds of Fowl (Any two) 2x4=08 Marks

Q7: Estimation of protein In Milk sample(Titration method)

OR

Lactometer test for water content 0 8 Marks

Q8: Project report on: Dairy farming, Breeds of Cattle, Diseases of Cattle,
Pisciculture, Poultry farming , Rearing of Silkworm and Transgenic animals. 05 Marks

Q 9: Class records 05 Marks

TUMKUR UNIVERSITY

SYLLABUS

ELECTRONICS (UG)

(UNDER CBCS SCHEME)

w.e.f. 2016-17

Semester	PAPER	TITLE OF THE PAPER	Hrs/ week	CREDITS	IA Marks	SEE Marks	Max. Mark
I	I	NETWORK ANALYSIS, ANALOG and DIGITAL ELECTRONICS	T 4	4	10	90	100
	Practical	NETWORK ANALYSIS ANALOG and DIGITAL ELECTRONICS LAB	P 4	2	...	50	50
II	II	LINEAR AND DIGITAL INTEGRATED CIRCUITS	T 4	4	10	90	100
	Practical	LINEAR AND DIGITAL INTEGRATED CIRCUITS LAB	P 4	2	...	50	50
III	III	COMMUNICATION ELECTRONICS	T 4	4	10	90	100
	Practical	COMMUNICATION ELECTRONICS LAB	P 4	2	...	50	50
IV	IV	MICROPROCESSOR AND C-PROGRAMMING	T 4	4	10	90	100
	Practical	MICROPROCESSOR AND C-PROGRAMMING LAB	P 4	2	...	50	50
V	V	8051 MICROCONTROLLER AND INTERFACING	T 3	3	10	90	100
	Practical	8051 MICROCONTROLLER AND INTERFACING LAB	P 3	1.5	...	50	50
	VI	PHOTONIC DEVICES AND POWER ELECTRONICS	T 3	3	10	90	100
	Practical	PHOTONIC DEVICES AND POWER ELECTRONICS LAB	P 3	1.5	...	50	50
VI	VII	ELECTRONIC INSTRUMENTATION AND VERILOG	T 3	3	10	90	100
	Practical	ELECTRONIC INSTRUMENTATION AND VERILOG LAB	P 3	1.5	...	50	50
	VIII	TRANSMISSION LINES, ANTENNA AND WIRELESS NETWORKS	T 3	3	10	90	100
	Practical	LAB and PROJECT WORK	P 3	1.5	...	50	50

TUMKUR UNIVERSITY

Dept. of Studies & Research in Commerce

Revised

M.Com Course Structure and Syllabus

(Choice Based Credit System)

(From the Academic Year 2018-19 onwards)

M.Com – Course Structure (CBCS)

Paper	Title of the Paper	Instruction Hrs (Per Week)	No. of Credits	Duration of the Exam. (Hours)	Marks		
					Internal Assessment	Semester End Examn.	Total Marks
I Semester							
CPT-1.1	Organisational Behaviour	4	4	3	20	80	100
CPT-1.2	Business Environment	4	4	3	20	80	100
CPT-1.3	Marketing Management	4	4	3	20	80	100
CPT-1.4	Accounting Standards and Financial Reporting	4	4	3	20	80	100
CPT-1.5	Financial Institutions, Markets and Services	4	4	3	20	80	100
CPT-1.6	Macro Economics for Business Decisions	4	4	3	20	80	100
	Total	24	24		120	480	600
II Semester							
CPT-2.1	Human Resource Management	4	4	3	20	80	100
CPT-2.2	Advanced Financial Management	4	4	3	20	80	100
CPT-2.3	Business Research Methods	4	4	3	20	80	100
CPT-2.4	OR & QT for Business Decisions	4	4	3	20	80	100
CPT-2.5	Information Systems & E-Commerce	4	4	3	20 (Practical)	80	100
OEPT-2.6	Offered by other department	4	4	3	20	80	100
	Total	24	24		120	480	600
III Semester							
CPT-3.1	Strategic Management	4	4	3	20	80	100
CPT-3.2	Entrepreneurship Development	4	4	3	20	80	100
SPT-3.3	Elective Paper – I	4	4	3	20	80	100
SPT-3.4	Elective Paper – II	4	4	3	20	80	100
SPT-3.5	Elective Paper – III	4	4	3	20	80	100
OEPT-3.6	Offered by other department	4	4	3	20	80	100
	Total	24	24		120	480	600
IV Semester							
CPT-4.1	International Business	4	4	3	20	80	100
CPT-4.2	Business Ethics and Corporate Governance	4	4	3	20	80	100
SPT-4.3	Elective Paper - IV	4	4	3	20	80	100
SPT-4.4	Elective Paper - V	4	4	3	20	80	100
SPT-4.5	Elective Paper - VI	4	4	3	20	80	100
CDR-4.6	Dissertation	*	4		20 (Viva-voce)	80 (Report)	100

SPECIALISATION: ELECTIVE PAPERS

III Semester		IV Semester	
Paper	Title of the Elective Paper	Paper	Title of the Elective Paper
Group I: Accounting and Taxation (AT)			
SPT 3.3	AT-1 Strategic Cost Management	SPT 4.3	AT-4 Accounting for Managerial Decisions
SPT 3.4	AT-2 Innovations in Accounting	SPT 4.4	AT-5 Customs Duty and GST-I
SPT 3.5	AT-3 Corporate Taxes and Planning	SPT 4.5	AT-6 Goods and Services Act-II
Group II: Accounting and Finance (AF)			
SPT 3.3	AF-1 Strategic Cost Management	SPT 4.3	AF-4 Accounting for Managerial Decisions
SPT 3.4	AF-2 Innovations in Accounting	SPT 4.4	AF-5 International Financial Management
SPT 3.5	AF-3 Security Analysis & Portfolio Management	SPT 4.5	AF-6 Strategic Financial Management
Group III Banking and Insurance (BI)			
SPT 3.3	BI-1 Bank Management	SPT 4.3	BI-4 Marketing of Bank Products
SPT 3.4	BI-2 Credit and Risk Management	SPT 4.4	BI-5 Actuarial Science
SPT 3.5	BI-3 Principles and Practice of Insurance	SPT 4.5	BI-6 Management of Insurance Companies

Note / Follow ups:

- Pedagogy:** The pedagogy of teaching includes - Lectures, Case Analysis, Group Discussion, Seminars/Presentations, Assignments, Movie screening, Role plays, Live telecast, etc.
- Case Study:** Minimum one case study need to be discussed in each unit of the concerned subject in the class room.
- Special Paper Theory (SPT) / Electives:** A Group of specialization will be offered only when minimum of 10 students opt for it.
- Dissertation:** Each student will have to undertake a business research / live business problem in a business organisation or industry and submit the report to the University in the 4th Semester. This will be evaluated for 80 marks and 20 marks will be awarded for the performance in the viva-voce. Preliminary work on Dissertation will commence in the beginning of the III Semester itself. Student will formulate research problem with the consultation of Guide and work on it during the III & IV semesters.
- Internal Assessment Marks allotment basis:** Internal assessment marks should be awarded on the following guidelines and documents to be preserved.

1 st Test for	: 10 marks	} average of two tests need to be taken for 10 marks
2 nd Test for	: 10 marks	
Seminar/ Presentations	: 05 marks	
Assignments	: 05 marks	
Total	: 20 marks	
- Industrial Visits:** One industrial visit per year should be arranged for M.Com Students to gain practical insights and knowledge of the industry. (Two industrial visits during the course)

JOURNALISM

Semester VI—Paper 7

MEDIA MANAGEMENT

Teaching hours: 5 hrs/week
(Theory: 04 hrs + Practicals: 01 hr)

Total hours/semester: 90

UNIT-I

18 hours

Starting of a Newspaper: Structure of a Newspaper organisation and its operations. Principles of newspaper business: Planning, staffing, organisation, directing. Types of newspaper organisation.

UNIT-2

18 hours

Newspaper Ownership: Types of newspaper ownership in India. Role of Circulation, Promotion and Advertisement. Public Relations for Newspaper Organisation.

UNIT -3

18 hours

Problems and prospects of newspaper industry in India. Small Newspapers and their problems. Global Competition on Indian Media.

UNIT-4

18 hours

Starting of a TV channel and Radio station. Organizational Structure of radio and TV studios. Recent trends in television and radio broadcasting in India.

UNIT-5

18 hours

Practicals* : (1) Media visit (2) Filling up of Form IV (Applying for RNI registration) (3) Study of local media establishments (their problems and prospects).

* The performance of the students in the practicals /assignments should be considered for the Internal Assessment marks. The students should maintain a Record Book.

REFERENCES

1. Achal Mehra: *Newspaper Management in the New Multimedia Age*, Asian Mass Communication Research and Information Centre (AMIC), Singapore, 1988
2. Rucker & Williams: *Newspaper Organization and Management*, 5 edition, Iowa State Pr, 1955
3. Trilok N. Sindhvani: *Newspaper Economics and Management*, Ankur Publishing House, 1979
4. Rayudu C S: *Media and Communication Management*, Himalaya Publishing House, 2011
5. Mocavatt & Pringle: *Electronic Media Management*, Stoneham, MA: Focal Press, 1986
6. Arun Bhattacharjee: *Indian Press – Profession to Industry*, Vikas Publications, 1972
7. Barnhart T F: *Weekly Newspaper Management*, Appleton-Century-Crofts, 1952
8. ಬಿ. ಕೆ. ರವಿ ಮತ್ತು ಸತ್ಯಪ್ರಕಾಶ್ ಎಂ. ಆರ್.: ಮಾಧ್ಯಮ-ಉದ್ಯಮ, ಕನ್ನಡ ಪುಸ್ತಕ ಪ್ರಾಧಿಕಾರ, ಬೆಂಗಳೂರು, 2008

JOURNALISM

6

Semester V—Paper 5

REPORTING

Teaching hours: 5 hrs/week
(Theory: 04 hrs + Practicals: 01 hr)

Total hours/semester: 90

UNIT-1 18 hours

News: Meaning, Definitions. News Values, Kinds of News. Principles of News Writing. Methods of Writing a News Story. Leads: Types of Leads. Sources of News. Qualifications of a Reporter.

UNIT-2 18 hours

Reporting Speech, Crime, Sports, Courts, Accidents, Science, Agriculture. News writing skills for covering Conference, Seminar, Press Conference, Press Releases.

UNIT -3 18 hours

Interview: Meaning, Preparation, Techniques, Types. Methods of Writing Interview Stories.

UNIT-4 18 hours

Features: Meaning, Definitions, Kinds. Writing different kinds of features. Differences between news, articles and features.

UNIT-5 18 hours

Practicals*: (1) News Reporting (2) Interviewing (3) Model Press Conference (4) Meet-the-Press

* The performance of the students in the practicals /assignments should be considered for the Internal Assessment marks. The students should maintain a Record Book.

REFERENCES

1. Kamath M V: *Journalist's Handbook*, Vikas Publishing House Pvt Ltd, Noida, 2011
2. Srivastava K M: *News Reporting and Editing*, Sterling Publishers Pvt Ltd, Delhi, 2009
3. Rangaswami Parthasarathy: *Basic Journalism*, MacMillan Publishers India Ltd., Delhi, 2012
4. Rangaswami Parthasarthy: *Here is the News! Reporting for the Media*. Sterling Publishing Pvt. Ltd. New Delhi 1996
5. McDougal C D: *Interpretative Reporting*, MacMillan Company, 1972
6. Kamath M V: *Professional Journalism*, Vikas, New Delhi, 1980
7. Ramachandra Iyer: *Quest for News*, MacMillan Pvt. Ltd. Madras, 1979
8. Baba Prasad M: *Reporting*, Wordmakers, Bangalore.
9. ಎಂ. ವಿ. ಕಾಮತ್ (ಅನು: ಎನ್. ಎಸ್. ರಾಮಪ್ರಸಾದ್): ವೃತ್ತಿ ಪತ್ರಿಕೋದ್ಯಮ, ಕರ್ನಾಟಕ ಪತ್ರಿಕಾ ಅಕಾಡೆಮಿ, ಬೆಂಗಳೂರು, 1990
10. ನಿರಂಜನ ವಾನ್ಶಿ: *ಸುದ್ದಿಚಿತ್ರಗಳು ಏನು? ಹೇಗೆ?* ಸುಮುಖ ಪ್ರಕಾಶನ, ಬೆಂಗಳೂರು, 2003
11. ವಿಶ್ವೇಶ್ವರ ಭಟ್: *ಪತ್ರಿಕೋದ್ಯಮ ಪಲ್ಲವಿ*, ಅಂಕಿತ ಪುಸ್ತಕ, ಬೆಂಗಳೂರು, 2010
12. ಪಿ. ರಾಜೇಂದ್ರ: *ಮಾಧ್ಯಮ ಮಾರ್ಗದರ್ಶಿ*, ದೇಶ ಪುಸ್ತಕ, ಬೆಂಗಳೂರು, 2010
13. ಕರ್ನಾಟಕ ಮಾಧ್ಯಮ ಅಕಾಡೆಮಿಯ 'ಪತ್ರಿಕೋದ್ಯಮ ಪುಸ್ತಕ ಮಾಲೆ'ಯ ಕೃತಿಗಳು

Tumkur University

I B.Sc., I SEMESTER

PRACTICAL PAPER - I - SCHEME

GENERAL SERICULTURE AND MORICULTURE

Time: 3 Hours

Maximum Marks: 50

- Q. 1. Prepare a Pie chart with index for the given data 'A'. 07
- Q. 2. Describe 'B' in technical terms with its sericultural importance. 07
- Q. 3. Prepare a temporary mount of T.S of 'C'. Identify and leave the preparation for evaluation. 07
- Q. 4. Determine the water holding capacity of the given soil. Write the procedure.
- Or
- Determine the P^H of the given soil sample. Write the procedure. 05
- Q. 5. Comment on 'D' and 'E'. (3x2=6)
- Q. 6. Identify F, G, H and I with reasons. (4x2=8)
- Q. 7. Class records + Farm visit report. 05+05

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I B.Sc., II SEMESTER

PRACTICAL PAPER - II – SCHEME

SILKWORM BIOLOGY AND REARING TECHNOLOGY

Time: 3 Hours

Maximum marks: 50

- Q. 1. Dissect and display ----- system of silkworm larva / moth. 10
- Q. 2. Brush the given hatched larvae and write the procedure. 10
- Q. 3. Comment on 'A' and 'B'. (2x4=8)
- Q. 4. Identify 'C', 'D', 'E', 'F' and 'G' with reasons. (5x2=10)
- Q. 5. Calculate the ----- on given egg card. 10
- Q. 6. Class records + Rearing report. 5+7

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II B.Sc., IV SEMESTER

PRACTICAL PAPER - IV – SCHEME

SILKWORM SEED TECHNOLOGY AND EXTENSION OF SERICULTURE

Time: 3 Hours

Maximum marks: 50

Q. 1. Conduct mother moth examination, identify the spores and leave the smear preparation for evaluation. Write the procedure.

Or

Calculate the sex ratio of given pupae. Write the procedure.

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Q. 2. Mount the given embryo and identify the stage. Leave the preparation for evaluation.

Write the procedure.

10

Q. 3. Comment on 'A' and 'B'.

(2x3=6)

Q. 4. Identify C, D, E, F with reasons.

(4x2=8)

Q. 5. Prepare a pamphlet / bulletin on -----

07

Q. 6. Class records.

05

Submission: Grainage training report.

03

Extension study tour report.

03

FOURTH SEMESTER

PRACTICAL – IV: SILKWORM SEED TECHNOLOGY AND EXTENSION OF SERICULTURE.

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|---|----|
| 1. Ground plan of model grainage and grainage equipments. | 02 |
| 2. Selection of seed cocoons, sorting and preservation. | 01 |
| 3. Sex separation at cocoon stage, pupal stage and moth stage. | 01 |
| 4. Moth emergence – pairing, depairing, ovi position – preparation of egg cards / loose eggs – surface sterilization of eggs. | 01 |
| 5. Moth examination for pebrine spores. | 01 |
| 6. Identification of different types of eggs: Diapause and non-diapause eggs, fertilized and unfertilized eggs, dead, hatched and unhatched eggs. | 01 |
| 7. Study of eye spot and blue egg stage embryos of silkworm. | 02 |
| 8. Acid treatment – cold and hot acid treatment – preparation of acids of required specific gravity. | 01 |
| 9. Disinfection: Disinfectants, types, formulations and calculations. | 01 |
| 10. Preparation of organizational charts: Extension network system in Karnataka and India. | 01 |
| 11. Preparation of leaflets, pamphlets and bulletins. | 02 |
| 12. Study of functioning of TSCs and interaction with trained farmers with a structured questionnaire through field visits. | 01 |
| 13. Visit to Government model grainage. | 01 |

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III B.Sc., V SEMESTER

PRACTICAL PAPER - V – SCHEME

CYTOGENETICS AND BREEDING OF MULBERRY

Time: 3 Hours

Maximum marks: 50

- Q. 1. Prepare a temporary squash of given material 'A'. Write the procedure and comment on the cytological stages observed. 10
- Q. 2. Conduct the given experiment 'B'. Write the procedure and comment. 10
- Q. 3. Evaluate the given mulberry variety 'C' for its morphological features. 06
- Q. 4. Comment on 'D' and 'E'. (2x3=6)
- Q. 5. Identify F, G, H and I with reasons. (4x2=8)
- Q. 6. Class record. 05
- Submission: Study tour report. 05**

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III B.Sc., V SEMESTER

PRACTICAL PAPER - VI - SCHEME

CYTOGENETICS AND BREEDING OF MULBERRY

Time: 3 Hours

Maximum marks: 50

- Q. 1. Prepare a temporary squash of the given material 'A'. Write the procedure and comment on the cytological stages observed. 10
- Q. 2. Calculate 'B' and 'C'. 12
- Q. 3. Evaluate the racial characters of 'D' and 'E'. (2x4=8)
- Q. 4. Identify F, G, H with reasons. (3x3=9)
- Q. 5. Class records. 05
- Submission: Study tour report. 3+3
- CSGRC and RSRS.

SIXTH SEMESTER

PRACTICAL – VIII: NON-MULBERRY SERICULTURE AND ECONOMICS OF SERICULTURE

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|---|----|
| 1. Taxonomy of primary and secondary food plants of Tasar, Muga and Eri silkworms. | 03 |
| 2. Life cycle of Tasar, Muga and Eri silkworms - Morphology of egg, larva, cocoon, pupa and moth. | 03 |
| 3. Rearing appliances used in rearing of non-mulberry silkworms (Drawing / sketches). | 03 |
| 4. Characteristics of Non-mulberry silks. | 01 |
| 5. Graphical representation of data – Preparation of Pie charts – Bar diagrams. | 01 |
| 6. Computation of economics of seed production under different scales of production. | 01 |
| 7. Economics of Chawki rearing centres – with a capacity of 2500dfls / 5000dfls / 10,000dfls per batch. | 01 |
| 8. Visit the CRC, TSC, CSB and KSMB. | 03 |
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