

SRI VENKATESWARA UNIVERSITY : TIRUPATI

B. VOC. in DAIRYING AND ANIMAL HUSBANDRY

Under CBCS W.E.F. 2020-21

COURSE STRUCTURE

SEMESTER – I

Sl. No	Skill/ Gen. Edu	Courses	Title of the Paper/Course and code	Credits per course	Hours/ week	Total Hours/ Course	Marks		
							Internal	External	Total
1	General Education component Gen.Edu	Language	General English	3	4	60	25	75	100
2		Life skills	Human Values and Professional Ethics	2	2	30	-	50	50
3		Skill Dev. Course	Fundamentals of Inorganic & Physical Chemistry	2	2	30	-	50	50
4			Dairy Technology	2	2	30		50	50
5	Domain Skill component	Core-I	Poultry Farm Management and Production	4	4	60	25	75	100
6		Practical-I	Poultry Farm Management and Production	2	2	30	-	50	50
7		Core-II	Dairy Husbandry Management and Production	4	4	60	25	75	100
8		Practical-II	Dairy Husbandry Management and Production	2	2	30	-	50	50
9		Core-III	Indian Milk Dairy Products	4	4	60	25	75	100
		Practical III	Indian Milk Dairy Products	2	2	30	-	50	50
10		Industrial Internship	Industrial Training for 30 days	3	36	144	-	50	50
Total Credits				30	Total Marks				750

M
23/2/21

Chauhan
19/3/2021

SRI VENKATESWARA UNIVERSITY :: TIRUPATI
B.A. / B.Com. / B.Sc. / B.Voc. DEGREE COURSES

GENERAL ENGLISH
FIRST YEAR - FIRST SEMESTER
Under CBCS W.E.F. 2020-21

COURSE - 1 : ENGLISH PRAXIS
A COURSE IN COMMUNICATION AND SOFT SKILLS

- I. **UNIT: Listening Skills**
 - i. Importance of Listening
 - ii. Types of Listening
 - iii. Barriers to Listening
 - iv. Effective Listening

- II. **UNIT: Speaking Skills**
 - a. Sounds of English: Vowels and Consonants
 - b. Word Accent
 - c. Intonation

- III. **UNIT: Grammar**
 - a) Concord
 - b) Modals
 - c) Tenses (Present/Past/Future)
 - d) Articles
 - e) Prepositions
 - f) Question Tags
 - g) Sentence Transformation (Voice, Reported Speech & Degrees of Comparison)
 - h) Error Correction

- IV. **UNIT: Writing**
 - i. Punctuation
 - ii. Spelling
 - iii. Paragraph Writing

- V. **UNIT: Soft Skills**
 - a. SWOC
 - b. Attitude
 - c. Emotional Intelligence
 - d. Telephone Etiquette
 - e. Interpersonal Skills

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


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

**SRI VENKATESWARA UNIVERSITY B.A. / B.Com. /
B.A. / B.Com. / B.Sc. / B.VOC. DEGREE COURSES
GENERAL ENGLISH
FIRST YEAR - FIRST SEMESTER
Under CBCS W.E.F. 2020-21
ENGLISH PRACTICE COURSE-1**

**A COURSE IN COMMUNICATION AND SOFT SKILLS
MODEL QUESTION PAPER**

Time: 3 hours

Max Marks: 75

1. Answer any THREE of the following questions (3X5=15)
 - a) What is the importance of Listening?
 - b) Write a note on the types of Listening?
 - c) What are the barriers to listening?
 - d) Explain the strategies for effective listening.
 - e) Describe the traits of a good listener.

2. Answer any TWO of the following questions (2X5=10)
 - a. Write about consonant sounds with examples.
 - b. Explain Word Accent
 - c. What are the different kinds of intonation?
 - d. Mark the stress of the following words.
i) itself ii) alone iii) wonderful iv) pronunciation v) Electricity

3. Attempt the following questions: (2X1=2)
 - a. Concord
(i) Each of the cars _____ very well designed by the company.
(ii) The average worker's earnings _____ gone up dramatically
 - b. Fill in the blanks with suitable Modals: (2X1=2)
(i) Do we _____ to take our certificates for the Interview?
(ii) You _____ get an easy question paper this time.
 - c. Fill in the blanks with appropriate forms of the Verbs given in brackets. (5X1=5)
(i) Satya _____ (come) to college regularly.
(ii) When the police came, the thief _____ (escape)
(iii) The President _____ (address) the public tomorrow
(iv) I _____ (live) in a pent house for the last six months.
(iv) Aishu _____ (go) to school now.
 - d. Fill in the blanks with suitable Articles: (2x1=2)
(i) I met _____ European last month
(ii) _____ poor need our support.
 - e. Fill in the blanks with suitable prepositions (2x1=2)
(i) The patient is suffering _____ fever
(ii) The sweets are distributed _____ children.
 - f. Add Question Tags to the following statements (2x1=2)
(i) Sita is not writing _____?
(ii) I am late, _____?
 - g. Transform the following sentences as directed. (5x1=5)

- (i) The officer ordered the soldiers to open fire(change it into Direct speech)
- (ii) Akbar is one of the greatest kings(change it into positive degree)
- (iii) Bhavanasays,"I write a novel"(change it into Indirect speech)
- (iv) Jim Corbett had killed many tigers(Change it into passive voice)
- (iv) Mary is as clever as Lily. (Change it into Comparitive degree).

- h. Correct the following sentences (5x1=5)
- (i) could you return back the library cards to me, please
 - (ii) The painting is too beautiful.
 - (iii) Ram camped besides the lake.
 - (iv) I have read the book yesterday.
 - (v) The news are very pathetic.

4. Answer any TWO of the following questions. (2x5=10)

- i. Punctuate the following

The dog grinned sardonically down on him over the edge for a moment as if he thought it would be a good lark to drop the cartridge down on jim.

- ii. Pick out the correct word:

- a) A. company B. Compony C. Kompony D. Komphony
- b) A. Techanology B. Technalogy C. Tachnology D. Technology
- c) A. achievement B. acheivement C. acheevement D. achieevement
- d) A. psychology B. Psychologi C. acheevement D. achieevement
- e) A. Occassion B. occasion C. Occaassion D. occasion

iii. Write a meaningful paragraph using the hints given below and suggest a suitable title
 Reading hobby---good and bad books---of the hour and forever---books as best companions--- they entertain, educate and enlighten---make one forget one's loneliness.

- iv) Expand any one of the following idea:

- a) A stitch in time saves nine
- b) Rome was not built in a day.

5. Answer any THREE of the following questions: (3x5=15)

- a. What are the benefits of 'SWOC' analysis?
- b. Explain the importance of positive attitude. How can we develop it?
- c. Describe the qualities needed to develop emotional intelligence
- d. What is Telephone Etiquette? Explain
- e. How do you demonstrate good interpersonal skills?

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

SRI VENKATESWARA UNIVERSITY :: TIRUPATI
B.A. / B.Com. / B.Sc. / B.Voc. DEGREE COURSE
FIRST YEAR - FIRST SEMESTER
Life Skill Course - HUMAN VALUES AND PROFESSIONAL ETHICS (HYPE)
Under CBCS W.E.F. 2020-21

Learning Outcome:

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

- ✓ Understand the significance of value inputs in a classroom and start applying them in their life and profession
- ✓ Distinguish between values and skills, happiness and accumulation of physical facilities, the Self and the Body, Intention and Competence of an individual, etc.
- ✓ Understand the value of harmonious relationship based on trust and respect in their life and profession
- ✓ Understand the role of a human being in ensuring harmony in society and nature.
- ✓ Distinguish between ethical and unethical practices, and start working out the strategy to actualize a harmonious environment wherever they work.

UNIT: 1 Introduction – Definition, Importance, Process & Classifications of Value Education

- ❖ Understanding the need, basic guidelines, content and process for Value Education
- ❖ Understanding the thought provoking issues: need for Values in our daily life
- ❖ Choices making – Choosing, Cherishing & Acting
- ❖ Classification of Value Education: understanding Personal Values, Social Values, Moral Values & Spiritual Values.

UNIT: 2 Harmony in the Family – Understanding Values in Human Relationships

- ✓ Understanding harmony in the Family- the basic unit of human interaction
- ✓ Understanding the set of proposals to verify the Harmony in the Family:
- ✓ Trust (*Vishwas*) and Respect (*Samman*) as the foundational values of relationship
- ✓ Present Scenario: Differentiation (Disrespect) in relationships on the basis of body, physical facilities, or beliefs.
- ✓ Understanding the Problems faced due to differentiation in Relationships
- ✓ Understanding the harmony in the society (society being an extension of family): *Samadhan, Samridhi, Abhaya, Sah-asitru* as comprehensive Human Goals
- ✓ Visualizing a universal harmonious order in society- Undivided Society (*AkhundSamaj*), Universal Order (*SarvabhaumVyaswasthu*)- from family to world family.

UNIT: 3 Professional Ethics in Education

- ✓ Understanding about Professional Integrity, Respect & Equality, Privacy, Building Trusting Relationships.
- ✓ Understanding the concepts: Positive co-operation, Respecting the competence of other professions.
- ✓ Understanding about Taking initiative and Promoting the culture of openness.
- ✓ Depicting Loyalty towards Goals and objectives.

Approved by
G.D. Jyothsna B
(Dr. G.D. Jyothsna Devi)

Text Books:

R R Gaur, R Sangal, G P Bagaria, 2009, A Foundation Course in Human Values and Professional Ethics.

Bhatia, R. & Bhatia, A (2015) Role of Ethical Values in Indian Higher Education.

References:

- Ivan Illich, 1974, Energy & Equity, The Trinity Press, Worcester, and Harper Collins, U
- E.F. Schumacher, 1973, Small is Beautiful: a study of economics as if people mattered, Blond & Briggs, Britain.
- Sussan George, 1976, How the Other Half Dies, Penguin Press. Reprinted 1986, 1991
- Donella H. Meadows, Dennis L. Meadows, Jorgen Randers, William W. Behrens III, 1972, Limits to Growth – Club of Rome's report, Universe Books.
- A Nagraj, 1998, Jeevan Vidya EkParichay, Divya Path Sansthan, Amarkantak.
- P L Dhar, RR Gaur, 1990, Science and Humanism, Commonwealth Publishers.
- A N Tripathy, 2003, Human Values, New Age International Publishers.

Mode of Evaluation:

Assignment/ Seminar/Continuous Assessment Test/Semester End Exam.

Co curricular Activities:

1. Visit to an Old Age Home and spending with the inmates for a day.
2. Conduct of Group Discussions on the topics related to the syllabus.
3. Participation in community service activities.
4. Working with a NGO like Rotary Club or Lions International, etc.

SRI VENKATESWARA UNIVERSITY :: TIRUPATI
HUMAN VALUES AND PROFESSIONAL ETHICS
MODEL QUESTION PAPER

I SEMESTER - W.E.F. 2020-21

Time: 1½ Hour(90 Min.)

Max.Marks: 50

SECTION-A

I. Answer any **FOUR** Questions:

4x5=20

1. Illustrate the content of Value Education.
2. What are the basic guidelines for Value Education?
3. Explain Moral Values in Value Education?
4. Write on basic unit of the Human Interactions?
5. What do you mean by differentiation in relationship?
6. What can be the basis of undivided society for the word family?
7. Write about the need of Professional Integrity?
8. Explain the significance of positive cooperation in professions.

II. Answer any **THREE** Questions

3X10=30

9. Explain and justify the need of the Value Education in our daily life?
10. Brief about the classification of the Value Education.
11. Explain Set of proposals to verify Harmony in the Family?
12. Write the role of trust and respect as Foundation Value in Complete Human Relationship?
13. Write about role of loyalty in achieving the goals and objectives?
14. Write the need and significance of promoting the culture of openness?

Approved by
G. D. Jyothirani
(Dr G. D. Jyotheeswari Devi)

SRI VENKATESWARA UNIVERSITY :: TIRUPATI
B.VOC. DEGREE COURSE IN DAIRYING AND ANIMAL HUSBANDRY

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

GENERAL EDUCATION COMPONENT

Skill Development Course I – FUNDAMENTALS OF INORGANIC & PHYSICAL CHEMISTRY

(i) Fundamentals of Inorganic and Physical Chemistry **30 hrs. (2h/w)**

Course outcomes:

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

1. Understand the basic concepts of p-block elements and d-block elements.
2. Learn and apply different methods of expressing concentration of solutions.

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INORGANIC CHEMISTRY

18 h

UNIT –I

Chemistry of p-block elements

10h

Group 15: Oxoacids of Nitrogen and Phosphorus, Preparation and applications of Nitric acid.

Group 16: Classification of Oxides based on (i) Chemical behaviour and (ii) Oxygen content, Oxoacids of Sulphur, Preparation and properties of Sulphur dioxide and Sulphurtrioxide.

Group 17: Oxoacids of Halogens and Pseudohalogens, Preparation and applications of Hydrochloric acid.

UNIT-II

Chemistry of d-block elements

8h

Characteristics of d-block elements with special reference to electronic configuration, Variable oxidation states, Stability of various oxidation states, Colour and Magnetic properties of d-block elements, Catalytic properties and ability to form complexes.

PHYSICAL CHEMISTRY

12h

UNIT-III

Basic Concepts of Chemistry

12h

Atomic and Molecular Masses, Mole Concept and Molar Masses, Percentage Composition, Empirical Formula for Molecular Formula, Equivalent mass, Methods of expressing the concentration of a solution: Percentage by Weight, Percentage by Volume, Weight by Volume, Molarity, Normality, Molality, Mole Fraction, Parts Per Million, Dilution principle.

M. Srinivas
23/2/21

Co-curricular activities and Assessment Methods

1. Continuous Evaluation: Monitoring the progress of student's learning
2. Class Tests, Worksheets and Quizzes
3. Presentations, Projects and Assignments and Group Discussions
: Enhance critical thinking skills and personality
4. Semester-
end Examination: critical indicator of student's learning and teaching methods adopted by teachers throughout the semester.

List of Reference Books

1. Principles of physical chemistry by Prutton and Marron
2. Solid State Chemistry and its applications by Anthony R. West
3. Text book of physical chemistry by K L Kapoor
4. Text book of physical chemistry by S Glasstone
5. Advanced physical chemistry by Bahl and Tuli
6. Inorganic Chemistry by J.E. Huheey
7. Basic Inorganic Chemistry by Cotton and Wilkinson
8. A textbook of qualitative inorganic analysis by A.I. Vogel
9. Atkins, P.W. & Paula, J. de Atkin's Physical Chemistry Ed., Oxford University Press 10th Ed (2014).
10. Castellan, G.W. Physical Chemistry 4th Ed. Narosa (2004).
11. Mortimer, R. G. Physical Chemistry 3rd Ed. Elsevier: NOIDA, UP (2009).
12. Barrow, G.M. Physical Chemistry

SRI VENKATESWARA UNIVERSITY :: TIRUPATI
B.VOC. DEGREE EXAMINATION IN DAIRYING AND ANIMAL HUSBANDRY

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

GENERAL EDUCATION COMPONENT

**Skill Development Course I – FUNDAMENTALS OF INORGANIC & PHYSICAL
CHEMISTRY**

MODEL QUESTION PAPER

Time: 1 ½ hours (90 Min.)

Marks: 50

PART – A

Answer any **Four** of the following question. Each Question carries 5 Marks (4X5=20M)

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	

PART – B

Answer any **Three** of the following Questions. Each Question carries 10 Marks (3X10= 30M)

9.	
10.	
11.	
12.	
13.	
14.	

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B.VOC. DEGREE COURSE IN DAIRYING AND ANIMAL HUSBANDRY

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

GENERAL EDUCATION COMPONENT

Skill Development Course-II: 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
7. Ensure safe and clean dairy farm and Standard safety measures to be taken in establishing an 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) Constraints of Present Dairy Farming and 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. (5 hrs)

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
5. 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.
7. The technology of milk Processing – Ananthkrishnan, 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>

SRI VENKATESWARA UNIVERSITY :: TIRUPATI
B.VOC. DEGREE COURSE IN DAIRYING AND ANIMAL HUSBANDRY

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

GENERAL EDUCATION COMPONENT

Skill Development Course-II: DAIRY TECHNOLOGY

MODEL QUESTION 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

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)

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/B.Voc) urban as well as rural students in view.

SRI VENKATESWARA UNIVERSITY :: TIRUPATI
B.VOC. DEGREE COURSE IN DAIRYING AND ANIMAL HUSBANDRY

FIRST YEAR – FIRST SEMESTER

Under CBCS W.E.F. 2020-21

SKILL COMPONENT

Core Paper-I: POULTRY FARM MANAGEMENT AND PRODUCTION

Learning outcome:

After successfully completion of course, student is able to

1. Establish basic knowledge on How to maintain poultry hatchery and farm
2. Know about common diseases and also how to control diseases
3. Understand about vaccination schedule.
4. Provide Hands on experience

Unit I (12 Hours)

Introduction - Definition of poultry farm, past and present status of poultry farm production in national and international level. Housing systems and poultry farming, Varieties of poultry, Biology of poultry and management of growers, Broilers and layers.

Unit-II (12 Hours)

Design and construction of poultry hatchery and Poultry farm management. Poultry Nutrition Principles of poultry feed (Minerals, proteins, Toxicants, Vitamins and additives) and nutrient requirements for different stages in broilers and layers, and methods of feeding.

Unit –III (12 Hours)

Poultry Hatchery and farm Management:-Poultry hatchery management (From selection, care and testing of egg, handling and incubation of eggs ,hatching methods to growing of chicks including sexing methods of chick)and chick care management., Broiler farm management, Layers farm management.

Unit –IV (12 Hours)

Backyard poultry farming, Duck and Geese farming, Emu, Guinea, Quail and Turkey farmings; Health and Hygiene in poultry:-symptoms, causes, treatment and preventions of Viral, Bacterial, Fungal, parasitic diseases.

Unit –V (12 Hours)

Vaccine schedule in different stages of poultry farm and records to be maintained, Preparation of project report for applying of bank loan and process of insurance. Recycling of poultry waste and manure.

Reference books and website:

1. https://swayam.gov.in/nd2_nou19_ag09/preview
2. Sreenivasaiah., P. V., 2015. Textbook of Poultry Science-New Delhi
3. Jull A. Morley, 2007. Successful Poultry Management.-New Delhi"
4. Hurd M. Louis, 2003. Modern Poultry Farming. 1st Edition. International Book Distributing Company, Lucknow."
5. Life and General Insurance Management,
6. Financial services, Tata Mc Graw hill
7. https://nsdcindia.org/sites/default/files/MC_AGR-Q4306_Small-poultry-farmer-.pdf
8. <http://ecourses online.iasri.res.in/course/view.php?id=335>.

SRI VENKATESWARA UNIVERSITY :: TIRUPATI
B.VOC. DEGREE COURSE IN DAIRYING AND ANIMAL HUSBANDRY

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

SKILL COMPONENT

Practical Paper-I: POULTRY FARM MANAGEMENT AND PRODUCTION

Hours: 30

Marks: 50

Credits: 02

1. External Anatomy of Chick/Hen/Cock/duck
2. Internal Anatomy of Chick/Hen/Cock/duck
3. Study of various types of Fowls, Broilers, Layers, ducks, goose, quail (photographs / models)
4. Identification of diseases causing by microbes in poultry
5. Design of a poultry farm
6. Visit to poultry Hatchery and farm

*Submission of Field note book at the time of university practical examination

Scheme of Valuation

1. Draw a neat diagram of digestive system of Any bird -----10 Marks
2. Identify the any three (A, B, and C)of Broilers , layers, fowls, etc., (diagram / model/
photograph) ---3X 4=12 Marks Q
3. Identify the following D and E (related diseases of the poultry) photograph/ model/
Diagram----- 2 X 4=8 Marks
4. Field note book 05 marks
5. Viva 05 marks
6. Certified Record 10 marks

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B.VOC. DEGREE COURSE IN DAIRYING AND ANIMAL HUSBANDRY

FIRST YEAR – FIRST SEMESTER

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SKILL COMPONENT

Core Paper-II: DAIRY HUSBANDRY MANAGEMENT AND PRODUCTION

Learning outcomes: After completion the course student is able to

- Understand establishment of dairy farm
- Various types of dairy animal breeders, breeding techniques
- Various types of feeds, and know about diseases in dairy animals

Unit-I (12 Hours)

Introduction to Dairy farm and Advantages of Dairy, Past and present status of production in dairy farm development in national level, Economic traits of dairy cattle, Sheep and Goats, Methods of selection of dairy animals, Classification of dairy animals such as Indigenous, Exotic, Cross breeds (Indian cattle and Buffalo breeds).

Unit-II (12 Hours)

Definition, Characteristics and Types of breeding, Process of breeding, Artificial Insemination, Embryo transfer techniques, Housing of dairy animals and systems of housing, Cleaning and Sanitation of dairy farm. Care and management of Calf, Heifer, Milk /dairy animals and pregnant, Bull and Bullocks animals, Parturition/ Calving, Castration, Weaving, dehorning and deworming.

Unit-III (12 Hours)

Digestion of ruminants, Nutrient requirements of dairy animals feed, Definition and benefits of Fodder and forage to dairy animals, Harvesting techniques, Feed additives, Probiotics, Common feed stuffs. And water requirements to dairy animals.

Unit-IV (12 Hours)

Diseases to dairy animals: Mastitis - Common contagious diseases – Foot and Mouth disease – Rinder pest – Anthrax – Black quarter – Tuberculosis – Johne’s disease – Brucellosis – Rabies, Hemorrhagic Septicemia. Health Care management such as sick, indigestion, Diarrhea, Temperature, Ectoparasites, Respiration problem, Engorgement, and bloat and Vaccination programme and to be maintained record.

Unit-V (12 Hours)

Dairy Institutions and organizations for dairy management, Significance of dairy business, Construction of Vermi-composting, Government schemes for development of dairy, Cooperative societies, Good management practices for dairy industry, Proposal of bank loan for establishment of dairy farm.

SRI VENKATESWARA UNIVERSITY :: TIRUPATI
B.VOC. DEGREE COURSE IN DAIRYING AND ANIMAL HUSBANDRY

FIRST YEAR – FIRST SEMESTER

Under CBCS W.E.F. 2020-21

SKILL COMPONENT

Core Paper-II: DAIRY HUSBANDRY MANAGEMENT AND PRODUCTION

MODEL QUESTION PAPER

Time: 3 H

Max Marks: 75

Section- A (5X 5=25)

Answer any FIVE Questions, each question carries FIVE Marks. (Draw a labeled diagram wherever necessary)

1. Embryo transfer
2. Artificial Insemination,
3. Characteristics of breeding dairy animal
4. Castration
5. Benefits of Fodder
6. Significance of Dairy Business
7. Government scheme for development of dairy
8. Foot and Mouth disease to dairy animals

Section-B (5X10=50)

Answer any FIVE Questions, each question carries TEN Marks
(Draw a labeled diagram wherever necessary)

9. Write an essay on Indian Dairy animals
OR
Explain the present status of dairy farm
10. Care and management of dairy animals- Explain
OR
Design and construction of Dairy housing system
11. Explain the digestive system of Ruminants
OR
Write about an essay on harvesting techniques
12. Write the essay on common diseases in dairy animals
OR
Write an essay on vaccine program
13. How to prepare for project report of establishment of dairy farm for apply of bank loan
OR
Explain the good management practice for dairy industry

SRI VENKATESWARA UNIVERSITY :: TIRUPATI
B.VOC. DEGREE COURSE IN DAIRYING AND ANIMAL HUSBANDRY

FIRST YEAR – FIRST SEMESTER

Under CBCS W.E.F. 2020-21

SKILL COMPONENT

Practical Paper-II: DAIRY HUSBANDRY MANAGEMENT AND PRODUCTION

Hours: 30

Marks: 50

Credits: 02

- 1 External Anatomy of cow/bullock/bull/calf
- 2 Internal Anatomy of cow/bullock/bull/calf
- 3 Diagram of male and female reproductive system of cow/bull
- 4 Study of various types of breeds of dairy animals (photographs/ models)
- 5 Identification of diseases causing by microbes in dairy animals
- 6 Process of castration
- 7 Process of dehorning
- 8 Preparation of Vermi compost
- 9 Design of a Dairy Farm

*Submission of Field note book (visited to veterinary hospital/ university/ dairy farm)

Scheme of Valuation

1. Draw a neat diagram of digestive system of Any cow/ bull ----- 10 Marks
OR
Preparation of Vermi compost
2. Draw a neat diagram of Male/ female Reproductive system of any cow/ bull ----- 10 Marks
3. Identify the any three (A, B, and C) of breeds of dairy animals (diagram / model/ photograph)– 3 X 3=9 Marks
4. Identify the following D and E related diseases in the dairy animals (photograph/ model/ Diagram)----- 2 X 3=6 Marks
5. Field note book 05 marks
6. Certified Record 10 marks

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SKILL COMPONENT

Core Paper-III: INDIAN MILK DAIRY PRODUCTS

Learning outcomes:

After completion of course, student is able to

- understand about composition of milk, clean milk production, and organic milk production,
- Advantages of milk products,
- Acquire knowledge on various methods of milking and sanitation and to provide hands on experience.

Unit-1 (12 Hours)

Composition of cow, buffalo, goat, sheep and Human milk and physical and chemical properties of milk., and White revolution, Production and consumption of milk, Nutritive value of milk and effect of heat processing on nutritive value , Differences between colostrums and Normal Milk.

Unit-II (12 Hours)

Animal Hygiene – Milker’s hygiene - Production of clean milk and organic milk – milking environment – utensils - preparation for milking – methods of milking – milk handling - Cleaning and disinfection of dairy farm and milk room and Definition and advantages of Homogenization ,Standardization of milk and Packing of milk , Process of Disposal of Dairy Effluents.

Unit –III (12 Hours)

History of market milk, Market milk industry in India, Milk collection systems and pricing policies manufacture of market milk , Clean milk production practices, Fixing of price for milk Buying of Milk-Methods of milk payment, organization of raw milk transport , problems and transportation of milk , Milk cooling and chilling centres, platform tests, chilling, preheating, filtration, clarification, storage

Unit –IV (12 Hours)

Types of microorganisms present in the milk, Milk borne Diseases such as Bacterial, Virus, and other diseases., Pasteurization (Definition, objectives, principles, methods) and Sterilization of milk. Market milk such as Toned, doubled toned, standardized and full cream milk-Standards and methods of manufacture

Unit –V (12 Hours)

Separation and composition of creams, classification, methods and Manufacture of Ice-creams, methods of manufacture of Indigenous milk products such as Cheese, Curd, Paneer, Khoa, Channa Kulfi, Ghee and Butter. Manufacture of Milk powder and spray dried milk powder.

References (Paper-II and III)

1. Jagadish Prasad, 2002. Principles and practices of Dairy Farm Management. Kalyani Publishers, Ludhiana.
2. ICAR, 2013. Hand book of Animal Husbandry, New Delhi
3. Ranjhan, S.K., and N.N. Pathak, 2003. Text book on buffalo production, Vikas Publishing House Pvt. Ltd., New Delhi
4. Sastry, N.S.R., C.K. Thomas and R. A. Singh, 2015. Livestock Production Management, Kalyani Publishers, New Delhi
5. Banerjee, G.C., 2006. Text book of Animal Husbandry New Delhi.
6. Balasubramanian, P and S. P. Palaniappan, 2002. Principles and Practices of Agronomy. Agrobios (India), Jodhpur
7. Chatterjee, B.N and P. K. Das, 1989. Forage crop production – Principles and practices, Oxford and IBH, Publishing Co. Pvt. Ltd. , New Delhi.
8. ICAR, 1996. Hand book of Agriculture. Indian Council of Agricultural Research, New Delhi
9. Dairy Microbiology –R K Robinson
10. Milk products preparation and quality control -C P Ananthkrishnan
11. Food Microbiology -W C Frazier
12. Outlines of Dairy Technology - Sukumar De
13. Modern Dairy products -Lincoln M Lampert
14. Milk and milk products - Eckles , Combs ,Harold Macy
15. Dairy Management in India -Madhan Mohan

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SKILL COMPONENT

Practical Paper-III: INDIAN MILK DAIRY PRODUCTS

Hours: 30

Marks:50

Credits: 02

1. Estimation of Fat in milk
 2. Estimation of P^H in milk.
 3. Microscopic observation of milk
 4. Cream separation from Milk
 5. Preparation of butter
 6. Preparation of milk products such as ghee, Khoa, Kulfi, Butter, Paneer , Cheese, and Dahi.
 7. Visit to Milk dairy
 8. Preparation of milk powder
- * Observation of dried and concentrated milk, Microscopic observation, preparation of milk products and Packing, etc.,
- * Field note book should submit at the time of practical examination

Scheme of valuation (50 marks)

- | | | |
|----|--------------------------------------|----------|
| 1. | Estimation of fat | 7 Marks |
| | Or | |
| | Estimation of P ^H in milk | |
| 2. | Microscopic observation of milk | 07 marks |
| 3. | Preparation of Milk powder | 07 Marks |
| 4. | Separation of cream | 07 marks |
| 5. | Separation of cream from milk | 07 Marks |
| 6. | Field note book | 05 Marks |
| 7. | Certified record | 10 marks |

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INDUSTRIAL INTERNSHIP
Industrial Training for 30 days

Total Credits	Total hours / week	Total hour / semester
03	36	144

1. Industrial Training for 30 days

30 days of internship to provide industrial exposure to the students through internship with various food processing industries to develop good practical knowledge beyond the classroom experience.

2. Report writing.

3. Seminar presentation

SRI VENKATESWARA UNIVERSITY :: TIRUPATI
B.VOC. EXAMINATION IN DAIRYING AND ANIMAL HUSBANDRY

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

CORE PAPERS - I, II & III
MODEL QUESTION PAPER

Time: 3 hours

Marks: 75

SECTION – A

Answer **ALL** of the following

5X2=10Marks

- 1.
- 2.
- 3.
- 4.
- 5.

SECTION – B

Answer any **THREE** of the following

3X5=15Marks

- 6.
- 7.
- 8.
- 9.
- 10.

SECTION – C

Answer **ALL** of the following

5X10=50Marks

11. A
(or)
B
12. A
(or)
B
13. A
(or)
B
14. A
(or)
B
15. A
(or)
B