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To
The Registrar,
Andhra University,
Visakhapatnam

Sir,


It is submitted that herewith I am submitting the course outlines and mode papers pertaining to 2nd year, 4th semester (2020-21 admitted batch) of Dairying & Animal husbandry B.vocational course.

Thanking you,

Encl:
Course outlines and model papers in duplicate (As hard copies and in CDs)

Yours faithfully,

[Signature]

PRINCIPAL
A.M.A.L.COLLEGE
ANAKAPALLE
INFECTIONOUS DISEASES OF LIVESTOCK AND POULTRY

Time: 3hrs
Maximum: 75 marks

SECTION - A
Answer any FIVE questions. Each question carries equal marks. \( (5 \times 5 = 25) \)

1. Describe Etiology, Transmission, Symptoms and control of Foot and Mouth Disease.
2. Describe Etiology, Transmission, Symptoms and control of Blue tongue in sheep.
3. Write note on Ascariosis in calves.
4. Describe in detail about Trypanosomiasis (Surra) in large ruminants.
5. Enlist common Endoparasitic diseases of bovine and small ruminants
6. Write deworming schedule and prophylactic vaccinations calendar in large ruminants.
7. Write about symptoms of rabies in cattle and control.
8. List out common Viral, Bacterial and Protozoan diseases of cattle and buffalo.

SECTION - B
Answer all questions. Each question carries TEN marks \( (5 \times 10 = 50) \)

1. Write a detailed note on Haemorrhagic septicaemia in buffaloes.
   (or) Narrate Brucellosis in cattle.

2. Write in detail about Theileriosis in cross breed cattle including prophylaxis.
   (or) Write in detail about Babesiosis in cattle including .

3. Explain Etiology, Symptoms, lesions, and control of Enterotoxaemia (ET) in sheep
   (or) Explain Etiology, Symptoms, lesions, and control of PPR in sheep & Goan

   (or) Enlist common Deworming drugs and Ectoparasiticide used in veterinary medicine.

5. Narrate Etiology, Symptoms, post-mortem lesions and control of Ranikhet disease (ND) in poultry.
   (or) Explain how to control infectious disease Outbreak systematically at field level.
ANDHRA UNIVERSITY  
B.Vocational course  
Dalrying & Animal husbandry  
II Year – Semester IV  
2020-21 Admitted batch  

VETERINARY IMMUNOLOGY AND VACCINES  
(Credits 4+2=6)  
Model paper  

Time: 3hrs  
Maximum: 75marks  

SECTION – A  
Answer any FIVE questions. Each question carries equal marks.  

1. What are antibodies? Differentiate between different classes of antibodies  
2. What is the role of thymus, bone marrow, bursa of fabricus in the immune system?  
3. write in detail about lymph nodes, location and functions.  
4. write in detail about cells of immunity.  
5. write in detail about biological barriers.  
6. write in detail differences between B & T-Lymphocytes.  
7. what is phagocytosis? Explain.  
8. write down vaccination schedule in Bovines  

SECTION – B  
Answer all questions. Each question carries TEN marks  

1. Write about different portals of entry of infection and local defense mechanism.  
   (or)  
   What are different types of Immunoglobulins. Write their functions in detail.  
2. Write in brief about historical significant achievements in immunology.  
   (Small pox vaccine-Edward Jenner, Rabies vaccine-Louis pastuer etc.)  
   (or)  
   Write in detail about types of immunity.  
3. What is an antigen. Draw diagram of antigen and write down its function.  
   (or)  
   Write down vaccination schedule in layers and broilers.  
4. What is vaccine. Write in detail about storage, safety and maintenance.  
   (or)  
   Write the differences between live attenuated vaccines and killed vaccinates.  
5. Give a detailed account of vaccination of sheep and goat.  
   (or)  
   What are the different types of hypersensitivity? Give one example for
ANDHRA UNIVERSITY
B.Vocational course
Dalrying & Animal husbandry
II Year – Semester IV
2020-21 Admitted batch
MILK AND MILK PRODUCTS TECHNOLOGY
(Credits 4+2=6)
Model paper

Time: 3hrs  Maximum: 75 marks

SECTION – A
Answer any FIVE questions. Each question carries equal marks.  (5*5 =25)

1. Write about composition of milk and also factors effecting composition of milk.
2. Write down physio-chemical properties of milk.
3. Write about collection and chilling of milk.
4. Write about common defects of milk products and their remedial measures.
5. Write down food safety standards of milk and milk products.
6. Expand HACCP and importance of HACCP measures in milk plant.
7. Write about organic milk products.
8. Write in detail about cream separation.

SECTION – B
Answer all questions. Each question carries TEN marks  (5*10 =50)

1. Write in detail about scope of Milk industry in India.
   (or)
   Write in detail about milk processing unit and its management.

2. Write in detail about adulteration of milk and tests for detection of milk adulteration
   (or)
   Write in detail about sampling of milk estimation of fat, solid not fat (SNF) and total solids.

3. Write down the procedure of preparation of milk products like ghee, paneer or channa
   khoa, ice cream.
   (or)
   Write down the procedure of preparation of milk products like cream, butter, mozzarella,
   cheese, lassi, dahi.

4. What is Standardization of milk write in detail.
   (or)
   Write about packaging, transport, storage and milk and milk products.

5. Write in detail about good manufacturing practices of milk.
   (or)
   Write in detail about platform tests.
ANDHRA UNIVERSITY
B.Vocational course
Dairying & Animal husbandry
II Year – Semester IV
2020-21 Admitted batch
MEAT PRODUCTION AND ABATTOIR MANAGEMENT
(Credits 4+2=6)
Model paper

Time: 3hrs
Maximum: 75 marks

SECTION – A
Answer any FIVE questions. Each question carries equal marks. (5*5 =25)

1. Write in detail about nutritive value of meat.
2. Explain ageing of meat.
3. Write in detail about packaging of meat and meat products.
4. What is HACCP? Write about concepts of HACCP in abattoir management.
5. Explain salting, curing, freezing, canning.
6. Write about evaluation and grading of carcass.
7. Write about slaughtering and dressing of birds.
8. Write about pre-slaughter care of animal and birds.

SECTION – B
Answer all questions. Each question carries TEN marks (5*10 =50)

6. Write in detail about prospect of meat industry in India. (or)
   Write in detail about preservation of meat & poultry.
7. Write in detail about modern processing technologies of meat and meat products. (or)
   Write in detail about different formulations and development of meat.
8. What is the procedure of Ante-mortem examination of meat animals. Write in detail. (or)
   What is the procedure of Post-mortem examination of meat animals. Write in detail.
9. What are the FSSA standards on organization and layout of abattoirs. (or)
   Write about layout and management of rural, urban and modern abattoirs.
10. Write in detail about methods of ritual and humane slaughter, flaying and dressing of food animals. (or)
    Write in detail about handling and transport of meat animals and poultry.
ANDHRA UNIVERSITY
B.Vocational course
Dairying & Animal husbandry
II Year – Semester IV
2020-21 Admitted batch

PRINCIPLES OF DAIRY CHEMISTRY AND DAIRY MICROBIOLOGY
(Credits 4+2=6)
Model paper

Time: 3hrs  Maximum: 75 marks

Section - A
Answer any FIVE questions. Each question carries equal marks. (5x5=25)

1. Give the composition of cow and buffalo milk.
2. Explain in detail physio-chemical properties of milk.
3. Explain in detail about freezing point & boiling point of milk.
4. Explain how colostrum milk is different from normal milk?
5. State hydrolytic rancidity and its control.
6. Give in brief about factors affecting the composition of milk.
7. Explain about thermal processing of milk.
8. Enumerate in detail different types microorganisms found in milk.

Section – B
Answer all the questions. Each question carries TEN marks (5x10=50)

1. Indicate the growth characteristic various microbes in milk.
   (or)
   Explain in detail the significance of microbes in the context of dairy industry.
2. Write in detail about freeze processing of milk & effect of enzymes on it.
   (or)
   Write the bacterial & viral contaminants of milk?
3. What is the procedure to assess the chemical composition of milk samples.
   (or)
   Explain in detail the usage of pycometer and lactometer
   (or)
   Explain in detail about preservatives, neutralisers and adulterants in milk
5. What is heat processing of milk. Explain effect of heat on milk in detail.
   (or)
   Explain in detail about the density and specific gravity of milk.
ANDHRA UNIVERSITY
B.Vocational course
Dairying & Animal husbandry
II Year – Semester IV
2020-21 Admitted batch
LABORATORY DIAGNOSTIC TECHNIQUES
(Credits 4+2=6)
Model paper
Maximum: 75 marks

Time: 3hrs

SECTION – A
Answer any FIVE questions. Each question carries equal marks. (5*5 =25)

1. Write about microscope and usage of microscope.
2. Write about different staining methods.
3. Write about different media for bacterial and fungal cultures.
4. Write in detail about antigens and antibodies.
5. Write down the differences between antigen and antibody.
6. Write in detail about hematological examination.
7. Write in detail about biochemical analysis.
8. Write about collection and preservation of specimens.

SECTION – B
Answer all questions. Each question carries TEN marks (5*10 =50)

1. Write in detail about sterilization and also different methods of sterilization.
   (or)
   Explain various ingredients used for preparation of culture media.

2. Write in detail about different staining methods.
   (or)
   Write in detail about different tissue culture stains and dyes used for diagnosis.

3. Write in detail about examination of parasitic specimens.
   (or)
   Explain examination of pathological specimens.

4. What are the different serodiagnostic techniques used for identification of antigen/antibody.
   (or)
   Explain in detail about preparation of permanent slides.

5. Write about collection and processing of specimens for clinical examination.
   (or)
   Explain in detail about staining procedures of different specimens.