

If the questions attempted are in excess of the prescribed number, only the questions attempted first up to the prescribed number shall be valued and the remaining ones ignored.

Answers may be written either in English or in Bengali but all answers must be in one and the same language.

**Group-A**

Answer question No. 1 and any two from the rest:

1. Write in brief on any ten of the following: 10X10=100

- Describe about Brucellosis in animal. What are the problems to eradicate Brucellosis in India? 5+5=10
- Write the name of various environmental variables and its major effect on animal performance. Briefly describe the ecological rules for morphological adaptation of animals 5 + 5 = 10
- What is Cystitis? Narrate its aetiology, pathogenesis and clinical findings. 2+8=10
- What are the different steps to achieve Disease elimination eradication from a country. 10
- What is BQ? Write the etiology, pathogenesis and lesions of BQ in cattle. 2+8=10
- What is the difference between 'Wild animal ' and 'Wild life ' according to The Wild Life (Protection) Act, 1972? Write the salient considerations of pre and post capture operation of wild animals. 4+6=10
- What do you mean by Hepatitis? Write on its clinical findings, diagnosis and treatment. 3+7=10
- How persistently infected calves develop in Bovine Viral Diarrhoea & contribute towards development of Mucosal Disease. 5+5=10
- What is RD? Write the various strain of RD virus? Briefly describe the sign, symptoms and lesions of RD infection in poultry. 2+2+6=10
- Role of Insulin in regulation of carbohydrate metabolism. Describe about Glucose tolerance test. 5+5=10
- The laboratory animals are called 'Reagent of the biologists '- justify the comment. Name some common viral, bacterial and parasitic diseases with their brief features in rat, rabbit and guinea pig. 3+7=10
- Classify viruses. State the transcription and replication strategy of Herpesviridae. 5+5=10

2. Describe about the role of enzymes in disease diagnosis of domestic animals. Describe about the recent techniques for protein purification and characterization from a complex sample. 10+10=20

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3. Write down the morphological features, lifecycle and pathogenesis of liver fluke. What is nodular worm of sheep? Describe its pathogenesis and control measures. Which is the most pathogenic coccidian species in poultry? Write down the general life cycle and control measure of poultry coccidiosis.

7+2+5+2+4=20

4. Describe adverse effects of sulphonamides, tetracyclines and aminoglycoside antibiotics. Describe clinical signs of arsenic and lead poisonings. Write treatment of these poisonings in domestic animals. Write short note on Toxic plant plants and their poisoning in goats.

5+5+5+5=20

### Group-B

Answer any two questions.

5. Write in brief about the followings: 6x5=30

- Hormonal regulation of galactopoiesis
- Neuro-hormonal mechanism of milk letdown process.
- What is Ketosis? Mention different types of Ketosis.
- Common mode of infection of parasites with suitable examples.
- What is surra? Write about the clinical signs and control of surra in horse.

6. a. Name the parts of a Hernia and distinguish between reducible and irreducible hernia. What are the major etiological factors leading to diaphragmatic hernia in cow? Describe the different approaches for its surgical correction.

5+5+5=15

b. What is the difference between Axial Skeleton of Fowl and Mammal? Describe the structure of diarthrodial joint. Enumerate the different parts of digestive system of poultry.

5+5+5=15

7. Write short notes on: 6x5=30

- Zoonosis and its classification.
- Common diseases of Wild life
- Can good disinfection of farm premises control spread of FMD? Justify.
- What is PPR?
- Control measures for prevention of Brucellosis.