

**CSM : 17**

**ANIMAL HUSBANDRY AND VETERINARY SCIENCE**

**PAPER - I**

Time Allowed : 3 hours

Full Marks : 100

*Marks for each question is indicated against it.*

*Attempt any 5 (five) questions taking not more than 3 (three) questions from each Part.*

**PART - A**

1. What are trace minerals? Why are they critical to animal nutrition? Discuss source, physiologic functions and deficiency symptoms of manganese and cobalt. Write a note on role of NPN compounds in ruminant nutrition. **(2+2+12+4=20)**
2. Define concentrates and roughages? Describe about the concentrates that are generally used to feed the animals and poultry? Describe about the different sources of fodders to feed livestock? Write short notes on “Non-conventional feeds”? **(4+6+5+5=20)**
3. Discuss about the following:- **(10+10=20)**
  - (a) How nerve impulses are originated and how it is transmitted at synapses and myoneural junctions?
  - (b) What do you understand by respiration? Explain the mechanism of transportation of oxygen and carbondioxide by blood?
4. What do you mean by synchronization of estrus? How it is beneficial for livestock farming? Briefly discuss the concept of MOET. **(5+10+5=20)**

**PART - B**

5. “Piggery is a profitable business in North East India” - Justify it with an example after calculating cost and benefits. **(20)**
6. Describe about housing, management and feeding schedule of broiler and layer birds? **(5+5+10=20)**
7. Write short note on: **(4×5=20)**
  - (a) Recombinant DNA technology
  - (b) Inbreeding
  - (c) Heritability
  - (d) Progeny testing
8. Why transfer of technology is an important factor to bring an improvement in Animal Husbandry sector? Discuss its constraints. **(10+10=20)**

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