

**CSM : 18**

**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. Define maintenance ration and production ration? What are the different factors should be considered for working out a feeding plan for cattle? Compute maintenance ration for a cattle of weight 250 kg and production ration for a cattle of weight 400 kg and producing 10 kg milk per day? **(4+6+5+5=20)**
2. Describe in detail about antinutrients and toxic constituents in unconventional feed resources of livestock? Discuss in brief on processing methods for amelioration of antinutritional factors? **(12+8=20)**
3. What are the advantages and disadvantages of natural breeding and artificial insemination in case of pigs of Mizoram? Write a short note on semen extender? Write about the precautions to be taken at the time of thawing of frozen semen for artificial insemination? **(8+6+6=20)**
4. Write short notes on- **(4×5=20)**
  - (a) Anoestrus
  - (b) Repeat Breeding
  - (c) Sub-Oestrus
  - (d) Persistent Corpus Luteum (PCL)

**PART - B**

5. Write about the advantages of 'tail-to-tail arrangement' of housing of cattle? Describe about plan and layout of housing of ten dairy cattle for comfortable housing in 'tail-to-tail arrangement' including ancilliary structures? **(5+15=20)**
6. Dairy industry in India is not more mechanised and systematic unlike advanced countries. Explain with reason and remedies? **(10+10=20)**
7. Define mutation? Explain in detail about various types of mutation? Describe about the methods for detecting mutations? **(2+10+8=20)**
8. What are the different methods to educate rural farmers regarding scientific animal husbandry practices? Write short notes on five technologies in relation to animal husbandry and veterinary sciences that has transferred to farmers field from laboratory? **(5+15=20)**

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