

<b>CSM – 8/18</b>
<b>Animal Husbandry and Veterinary Science</b>
<b>Paper – I</b>

*Time : 3 hours*

*Full Marks : 300*

*The figures in the right-hand margin indicate marks.*

*Candidates should attempt Q. No. 1 from  
Section – A and Q. No. 5 from Section – B  
which are compulsory and any **three** of  
the remaining questions, selecting  
at least **one** from each Section.*

**SECTION – A**

1. Write brief notes on any **three** of the following in  
not more than **150** words each :  $20 \times 3 = 60$   
(a) Chromosomal aberration

- (b) Organization providing extension services in India
  - (c) Use of recombinant DNA technology in animal production
  - (d) Enumerate the economic dairy farming in India
  - (e) Feeding guideline of high yielding dairy cow
2. What do you mean by Electrocardiogram ?  
Discuss, in brief, about cardiac cycle and heart-beat. 10+50 = 60
  3. What are the feeding habits of sheep and goat ?  
What are the differences in habit of feeding between sheep and fodder for goats ?  
30+30 = 60
  4. Write the nutrient requirements of piglet, grower, finisher, pregnant and lactating pig. Write the one each ration formulation and indifferences among other stage of pig. 40+20 = 60

## SECTION - B

5. Write short notes on any three of the following in not more than 150 words each :  $20 \times 3 = 60$

- (a) Write the general functions of blood in a cow
- (b) Humoral and cell mediated immunity
- (c) Repeatability of genetic traits and measurement
- (d) Humoral regulation of ovulation in cow
- (e) Role of Pancreas in animal body

6. What are the methods to improve the nutritive value of crop residues ? Discuss feeding strategic of animal feeding during scarcity period.  $30+30 = 60$

7. What are the occasionally beneficial trace elements ? Give examples. Discuss the interaction among Selenium, Vitamin E and Sulphur. What is active transport ? Discuss the transport system involving Sodium, Potassium A-T-O-pase pump. Name the

elements involved in functions of insulin and discuss the role of insulin in controlling glucose homeostasis. Discuss.  $20+20+20 = 60$

8. Develop a practical and economic ration for a crossbred dairy cow weighting 350 kg and producing 20 kg milk per day with 3.5% fat with locally available feed ingredients which are the feed additives, will be used in this ration and how it acts on in animal system.  $30+30 = 60$

