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HPAS (Main)—2016

**ANIMAL HUSBANDRY AND VETERINARY
SCIENCE**

Paper I

Time : 3 Hours

Maximum Marks : 100

Note :— Answer any five questions.

1. (a) Define digestibility. Write down in detail various factors affecting digestibility. 10
- (b) Describe the methods adopted for arriving at energy and protein requirements for maintenance. 10
2. (a) Discuss in detail the nutrient requirement of various categories of poultry and explain the various methods of feeding in poultry. 10
- (b) What is the feed restriction in poultry ? Describe in detail various methods of feed restriction. 10
3. (a) Describe the development of mammary gland in cow during prenatal period, birth to conception, pregnancy and lactation period. 10

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- (b) Discuss the effects of climatic variation on growth, production and reproduction in animals. 10
4. (a) Define brooding ? Write in detail the method of rearing day old chicks under artificial brooding. 10
- (b) Write about the managerial practices in grower chicken (9-18 weeks). 10
5. (a) Describe the feeding of pregnant and lactating mares in terms of nutrient requirements, feeds and fodder used and rations composition. 10
- (b) Describe summer management practices on layer farm. 10
6. (a) Define the term pasteurization and describe in detail about the techniques generally adopted for pasteurization ? 10
- (b) Describe in detail about the manufacturing process of ice-cream and cheddar cheese. 10
7. (a) Define 'sensory evaluation' and 'threshold tests' ? Discuss the different methods used for sensory evaluation of meat products. 10

(b) How will you detect toxic residues in meat and meat products ? Write in detail the steps that can be taken to minimize these residues in meat in Indian scenario. 10

8. (a) Prepare the lay out plan for establishment of Dairy farm for 100 animals with sanitation measures required for clean and safe milk production. 10

(b) What do you mean by slaughterhouse by-product ? Write the different basis of their classification. Give *two* uses of any ten by-products. 10