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HPAS (Main)—2016

**ANIMAL HUSBANDRY AND VETERINARY
SCIENCE**

Paper II

Time : 3 Hours

Maximum Marks : 100

Note :— Answer any five questions.

1. (a) What do you understand by Nucleus Breeding Scheme ? Discuss different types of nuclear breeding schemes used for Livestock improvement. 10
- (b) Describe different criteria of selection of dairy animals. Write a scorecard method for judging a dairy bull. 10
2. (a) Define Hardy-Weinberg Law. Show algebraically that equilibrium is reached in only one generation of random mating for a single pair of genes following a cross. 10
- (b) Describe the various methods of heritability estimation for economic and threshold traits indicating most efficient one. How can you improve the precision of heritability estimate ? 10

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3. (a) Explain in brief the various methods of conservation and their feasibility to hilly breeds of livestock. Describe current livestock breeding policy of your state. 10
- (b) What are the Intellectual Property Rights issues related to conservation of Animal-Genetic Resources ? 10
4. (a) Classify the hormones and describe their mode of transmission from source to target organ with example. Discuss the role of hormones in health and diseases. 10
- (b) What is placenta ? Classify the placenta on the basis of histological and gross appearance. 10
5. (a) Discuss etiology, pathogenesis, symptoms, post-mortem changes, diagnosis and control of Equine influenza. 10
- (b) Discuss the effect of High Altitude on the health and production of livestock. 10
6. (a) Discuss bacterial zoonotic diseases that are transmitted from milk. Enlist the essential steps in hygienic milk production. 10

- (b) Describe epidemiology of rabies in India along with preventive and control measures adopted in your area. 10
7. (a) What is the concept of cooperatives ? Discuss the history and role of cooperatives in dairy development in India. 10
- (b) Describe the various methods used for transfer of technology to the rural masses in India. Enlist the various schemes of Animal Husbandry and Rural Development implemented in your state. 10
8. (a) Discuss in detail about important sections required in modern abattoir with suitable diagram ? 10
- (b) Describe in detail about utilization of glandular by-products for pharmaceutical purpose ? 10