HPAS (M)—2014

ANIMAL HUSBANDRY AND VETERINARY SCIENCE

Paper II

Time : 3 Hours   *Maximum Marks : 150*

Note :— Answer any *five* questions including Question No. **5** which is compulsory.

1. (*a*) Define genetic parameters.   10

    (*b*) Describe the various methods of heritability estimations for economic traits indicating most efficient one.   10

    (*c*) How can you improve the precision of heritability estimate ?   10

2. (*a*) Define Hardy-Weinberg law.   10

    (*b*) What are the consequences of genetic drift ? How do these consequences depend on population size ?   10

(c) What is progeny testing ? What precautions are needed while undertaking progeny testing program ? 10

3. (a) What is the need of conservation of Animal genetic resources ? 10

(b) What strategies you adopt for the conservation of hilly genetic resources ? 10

(c) Describe different types of mastitis and their etiology, clinical findings, diagnosis, treatment and control. 10

4. (a) What is Anti-microbial drug resistance and write a note on various biochemical mechanisms of antimicrobial drug resistance. 10

(b) Describe in detail about various factors which modify the effect of drugs. 10

(c) Give in detail the vaccination programs available in Himachal Pradesh for prevention of contagious diseases of cattle, buffaloes, horses, sheep and goat. 10

5. Write short notes on any *three* of the following :

(a) Estimation of general and specific combining ability. 　10

(b) Role of veterinarian in Slaughter houses. 　10

(c) Diagnosis and treatment of colic in horses. 　10

(d) Differentiate Participatory Rural Appraisal (PRA) and Rapid Rural Appraisal (RRA). Describe the types of interventions under TRYSEM. 　10

6. (a) Discuss hygienic requirements and standards for animal drinking water. 　10

(b) Discuss the strategy for prevention of water borne diseases in animals. 　10

(c) How gaseous pollutants affect animal health and production ? 　10

7. (a) Enlist the infectious diseases affecting cattle and equines. 　10

(b) Describe the etiology, pathogenesis, clinical finding, prevention and treatment of Hemorrhagic Septicemia in buffalo. 　10

(c)   Write some important emerging zoonotic diseases commonly observed in your place and mention their preventive measures.   10

8.   *(a)*   Define market led extension. Describe the importance and scope of market led extension in Livestock Marketing.   10

(b)   What are the characteristics should have in a newly perceived livestock technology ? Discuss in detail.   10

(c)   Describe the role of extension agent in adoption and diffusion of livestock technologies.   10