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H.P.A.S. (Main)—2011

ANIMAL HUSBANDRY AND
VETERINARY SCIENCES

Paper I

Time : 3 Hours

Maximum Marks : 150

Note :— Attempt any *five* questions including question number 1 which is compulsory. Be brief and to the point. Parts of the same questions must be answered together and not to be attempted in between the answers to others questions.

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

3×10=30

- (a) Balanced ration for high yielding crossbred cows.
- (b) Methods of controlling heat stress on the dairy animals.

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- (c) Opportunities in commercial dairy farming in India.
- (d) Feeding of animals under drought conditions.
2. (a) Draw a diagram of the reproductive tract of a cow. 15
- (b) Describe functions of each part. 15
3. (a) Describe growth in farm animals. 10
- (b) Explain different measures of growth. 10
- (c) Explain factors affecting growth in livestock. 10
4. Comment on the following :
- (a) Is pasteurization of milk essential when milk in most part of the country is consumed fresh after properly boiling it. 10
- (b) Can capital intensive commercial dairy farms compete with small and marginal Dairy farmers with very little cost of milk production. 10

- (c) India has perpetual shortage of concentrate, green and dry fodder, shall it opt for high yielding crossbred cows. 10
5. (a) Explain the term 'Nutrient'. 10
- (b) List different classes of nutrients. 10
- (c) What are the main functions of each nutrient class ? 10
6. (a) Describe steps in freezing of semen. 10
- (b) Describe physical and chemical properties of good semen. 10
- (c) List abnormalities of sperms. 10
7. (a) Describe symptoms of heat in dairy cows. 10
- (b) How the artificial insemination technology helped in improving the productivity of local cows ? 10

- (c) Enlist causes of poor conception through artificial insemination in cattle & buffaloes in rural areas. 10
8. (a) Explain process of milk secretion in udder of cows. 15
- (b) Explain the role of hormones in initiation of lactation and let down of milk. 15