

152019

COMBINED COMPETITIVE EXAMINATION (MAIN)  
ANIMAL HUSBANDRY & VETERINARY SCIENCE

Paper-II

Time : 3 Hours

Full Marks : 200

Note : (1) The figures in the right-hand margin indicate full marks for the questions.  
(2) Attempt all questions.

1. Answer any *four* of the following questions : 10×4=40
- (a) Describe about the role of extension education in animal husbandry sector for rural development.
  - (b) What is heritability? Write down the difference between heritability and repeatability.
  - (c) Elaborate the duties and the role of veterinarian in a slaughter house in ensuring hygienic meat supply to human population.
  - (d) Write about the breeding policy of dairy cattle in India. What are the strategic plans for upgrading indigenous cattle breed of India?
  - (e) What are the common infectious bacterial diseases of cow? How will you diagnose and control a case of brucellosis in dairy cow?
2. Answer any *five* of the following questions : 8×5=40
- (a) Write the procedure of butter making.
  - (b) How does woman empowerment play a key role for socio-economic development of rural India?
  - (c) Discuss the role of abattoirs in the development of meat industry in India.
  - (d) How will you explain the sustainable rural livelihood of North Eastern region of India through integrated farming?
  - (e) What is by-product? What is the procedure of obtaining good leather from slaughter house?
  - (f) What are the zoonotic diseases transmitted through slaughter house? How will you prevent it?

3. Answer any *three* of the following questions : 20×3=60
- (a) What do you mean by inbreeding? What is the main effect of inbreeding in a population? What are the advantages and disadvantages of inbreeding? Does inbreeding increase the homozygosity of recessive gene? Explain it.
  - (b) What is zoonosis? What are the types of zoonosis? What are the zoonotic diseases transmitted from animal to man through milk and meat? Explain in detail.
  - (c) What is hormone? What are the hormones associated with digestive system in pig? How do these hormones act directly or indirectly on the feed material in digestive tract?
  - (d) What are the native bovine milk breed and draught breed in India? Write down the characteristics of any three breeds from each. How do you justify indigenous cross-breeding programme as more efficient than exotic cross-breeding programme?
4. Answer any *eight* of the following questions : 5×8=40
- (a) Write a short note on ghee and cheese.
  - (b) What is casein? Describe the procedure of paneer making.
  - (c) Write a short note on the method of collection and processing of hormonal gland from slaughter house.
  - (d) Draw a diagram of reproductive tract of sow.
  - (e) Write, in brief, the factors to be considered for prevention of diseases transmitted through milk and meat.
  - (f) Write down a short note on Hardy-Weinberg law.
  - (g) What is colostrum? What is the importance of colostrum feeding in neonatal calf?
  - (h) Draw a schematic diagram of mammary gland of a dairy cow.
  - (i) How will you prepare a blood sample for staining and diagnosis of blood protozoal diseases?
5. Answer any *two* of the following questions : 10×2=20
- (a) What is shelf life of dairy product? How can the shelf life of a dairy product be extended?
  - (b) How do you disseminate livestock technology to rural part of India? What is the role of extension education for dissemination of technology from an institute to rural farmer? Explain in detail.
  - (c) What are the most common diseases that affect the annual income of a dairy farmer? Explain briefly about prevention and control of common parasitic diseases incurred in a dairy farm.