

PUNJAB PUBLIC SERVICE COMMISSION

COMBINED COMPETITIVE EXAMINATION FOR RECRUITMENT TO THE POSTS OF PROVINCIAL MANAGEMENT SERVICE, ETC -2021 CASE NO. 3C2022

SUBJECT:

VETERINARY SCIENCE (PAPER-II)

TIME ALLOWED:

THREE HOURS

MAXIMUM MARKS: 100

NOTE:

- All the parts (if any) of each Question must be attempted at one place instead of at different places.
- ii. Write Q. No. in the Answer Book in accordance with Q. No. in the Q. Paper.
- No Page/Space be left blank between the answers. All the blank pages of Answer Book must be crossed.
- iv. Extra attempt of any question or any part of the question will not be considered.

Attempt FIVE Questions in All. Attempt in Urdu or English.

- Q. No. 1. (a) What is the role of minerals in dairy animals' ration? Discuss in detail.
 - (b) How energy balance influences the reproductive efficiency in dairy animals?

(10+10=20 Marks)

Q. No. 2. For a Holstein cattle farm of 500 animals, how you as a manager, will manage year round plan to meet the feeding (forages and concentrate) requirements of all classes of animals?

(20 Marks)

Q. No. 3. How do you see the future of imported exotic live dairy animals in Pakistan (subtropical environment)? What are the implications of this import and its impact on small livestock holders?

(20 Marks)

- Q. No. 4. An investor (Non-technical in relation to livestock) intends to establish a modern meat production enterprise. As a technical person, how would you guide him for the purpose? From where he should start his business and how to make it a success?

 (20 Marks)
- Q. No. 5. How modern day broiler has been developed and improved overtime?

(20 Marks)

- Q. No. 6. (a) Give an account of marker assisted selection and its application in farm animals' improvement.
 - (b) How would you plan for genetic improvement in farm animals with special reference to buffaloes in Pakistan? (10+10=20 Marks)
- Q. No. 7. (a) How a dairy sire is important in genetic improvement and how its reproductive efficiency can be improved?
 - (b) Give an account of progeny testing program for Sahiwal cattle and buffaloes in Pakistan.

(10+10=20 Marks)

Q. No. 8. Backyard poultry is an important segment of poultry industry in Pakistan. Give a comprehensive plan to improve its performance. (20 Marks)