

महाराष्ट्र वन सेवा मुख्य परीक्षा-2024 दिनांक - १० मे, 2024



2024

Z19

BOOKLET NO.

200026

Forest Services
Animal Husbandry and Veterinary Science

Time Allowed : Three Hours

Maximum Marks : 200

Medium : English

Type of Paper : Conventional

Question Paper Specific Instructions

Please read each of the following instructions carefully before attempting questions :

1. There are **EIGHT** questions divided in two Sections, out of which **FIVE** are to be attempted.
2. Questions no. 1 and 5 are compulsory. Out of the remaining questions, **THREE** are to be attempted choosing at least **ONE** question from each Section.
3. The number of marks carried by a question/sub question is indicated against it.
4. Keep in mind the word limit indicated in the question if any.
5. Wherever option has been given, only the required number of responses in the serial order attempted shall be assessed. Unless struck off, attempt of a question shall be counted even if attempted partly. Excess responses shall not be assessed and shall be ignored.
6. Candidates are expected to answer all the sub-questions of a question together. If sub-question of a question is attempted elsewhere (after leaving a few page or after attempting another question) the later sub-question shall be overlooked.
7. Any page or portion of the page left blank in the Answer Booklet must be clearly struck off.
8. Unless otherwise mentioned, symbol and notation have their usual standard meanings. Assume suitable data, if necessary and indicate the same clearly.
9. Neat sketches may be drawn, wherever required.
10. The medium of answer should be mentioned on the answer book as claimed in the application and printed on admission card. The answers written in medium other than the authorized medium will not be assessed and no marks will be assigned to them.

Note – 1. Candidates will be allowed to use Scientific (Non-programmable type) calculators.

P.T.O.

SEAL

**SECTION - A**

- Q1.** Solve **any five** out of seven : **(8×5=40)**
- (a) Methods of feed analysis.
 - (b) Body condition score.
 - (c) Hormonal control on mammary development.
 - (d) Milk Pricing Policy in India.
 - (e) Cytoplasmic inheritance.
 - (f) Partitioning of energy.
 - (g) Heritability in animal breeding.
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- Q2.**
- (a) Elucidate role of water in animal body. **15**
 - (b) Explain in detail chromosomal aberrations. **15**
 - (c) Define ethology and elucidate role of ethology in welfare of farm animals. **10**
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- Q3.**
- (a) Define feeding standards. Describe various feeding standards being used. Enlist advantages and disadvantages of feeding standards. **15**
 - (b) Describe methods of selection and explain construction of selection indices with its uses. **15**
 - (c) Describe desirable characteristics of practical and economic ration for farm animals. **10**
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- Q4.**
- (a) What is meant by artificial insemination and describe chemical and physical properties of ejaculated semen. **15**
 - (b) Explain how to improve nutritive value of low quality roughages. **15**
 - (c) Define nutrients. Describe digestion, absorption and metabolism of carbohydrates in ruminants. **10**
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SECTION - B

- Q5.** Solve **any five** out of seven : **(8×5=40)**
- (a) Write a note on locomotion and kinetics of horse.
 - (b) Describe methods of neurological examination for bullocks suffering from vestibular diseases.
 - (c) How will you perform a Veterolegal investigation of the cow suspect for bestiality.
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- (d) Write a note on post slaughter physico-chemical changes taking place in meat and enlist the factors affecting these changes.
 - (e) Discuss various principles of extension education.
 - (f) Enlist the cranial nerves and give its functional classification and distribution.
 - (g) How will you suspect and confirm acidic indigestion in goats.
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- Q6.** (a) Discuss the physiology of urine formation in mammals and aves. How do factors such as hormonal regulation and pathological conditions influence the overall functioning of the urinary system. **15**
- (b) Define milk. Enlist the composition of important milk species and their nutritive properties. Enlist the fat and SNF content of different types of packaged milk available in the market. **15**
- (c) Explain role of domesticated, domicialated, wild and cold blooded animals in transmission of zoonosis. **10**
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- Q7.** (a) Discuss the composition of blood and explain the functions of its components in maintaining homeostasis. **15**
- (b) Describe etiopathogenesis, clinical findings, treatment and prevention and control of foot and mouth diseases in domestic animals. **15**
- (c) What is postmortem meat inspection ? Discuss the postmortem inspection of large animal along with decisions taken after postmortem meat inspection. **10**
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- Q8.** (a) Enlist the endocrine glands present in ox. Describe in detail the histology of pituitary gland and thyroid gland. **15**
- (b) Enlist commonly occurring production and deficiency diseases in dairy animal practice. Discuss etiopathogenesis, clinical findings, diagnosis and treatment of milk fever in recently parturiated cow. **15**
- (c) What are extension teaching methods ? Write advantages and disadvantages of it. Classify extension teaching methods. **10**
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SEAL