

R.K. Vigyan (P.G.) Mahavidyalay, Kalwar, Jaipur

ZOOLOGY (SEM-III) FULL LENGTH PAPER-I

Sec. A: Choose all 10 questions. Each question carries a mark weight of 2.

1. What is the main food of the silkworm? Define the term “staphylococcus” in silk production industries. What do you understand by sericulture?
2. Write the chemical composition of lacquer? Explain the key points of hive care? What are the tools used for beekeeping? What is the medium for communication among bees?
3. What is vermiculture and its benefits?
4. What is the chemical composition of pearl?
5. What is black fever?
6. Which helminthes causes Bala or Naaru disease?
7. What is behavior?
8. What is chin stimulation?
9. Write the full form of FAP?
10. What are brain waves?

Sec. B: Choose any 4 questions, choosing 1 question from each unit. Each question carries a mark weight of 15.

UNIT: I (1) Explain the life cycle of the silkworm and the methods of silk production. (2) What is apiculture? Describe the methods of beekeeping.

UNIT: II (3) Write a brief note on vermiculture. (4) Describe poultry farming techniques in detail.

UNIT: III (5) Write the causes and preventive measures for the spread of malaria. (6) Explain in detail what pest management is.

UNIT: IV (7) Write an article on study and learning in animals. (8) Write an essay on communication in animals.

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ZOOLOGY (SEM-III) FULL LENGTH PAPER-II

Sec. A: Choose all 10 questions. Each question carries a weight of 2 marks.

1. What is the reproductive process of a million insects?
2. Write the phylum, genus, and species of honeybees?
3. What is the method for using deep nets?
4. Explain the symptoms of Ranikhet disease?

5. What are viral diseases?

6. Name two insects that control their own insects?

7. Which center is controlled by Broca's area?

8. Define social behavior?

9. What is communication?

10. Name any three psychologists? What is the full form of EEG?

How many types of electrical waves are known in the brain? Name them?

In the technical physiological technique, the aberration of which organ in apes destroys the ability to differentiate them?

Define IRM.

Name three animals whose behavior is of a spontaneous type?

What does SS mean?

What is meant by transformative learning?

Who proposed the concept of behavior?

Note on hormones and motivation? Name the scientist who used trial and error learning on cats?

Sec.-B: Choose any 4 questions, choosing 1 question from each unit. Each question carries 15 marks.

UNIT-I (1) Write an essay on Lac culture / Explain the life cycle of the Lac insect and describe its host plants. (2) Write a note on Prawn culture / Explain shrimp culture in freshwater.

UNIT-II (3) Write an essay on Mukta culture. (4) Write an essay on fish culture technique.

UNIT-III (5) In which fish is Ascaris disease spread and explain its causes and prevention. (6) Explain mite infestation disease.

UNIT-IV (7) Explain the concept of fixed action pattern and action specific energy with the help of suitable examples. (8) Write an essay on methods of studying animal behavior. (8) Write notes on the methods of studying animal behavior: (i) Mechanical methods (ii) Mechanical physiological techniques (iii) Mechanical chemical systems (iv) Functions of hormones in the study of behavior.

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ZOOLOGY (SEM-III) HALF LENGTH PAPER-1 (UNIT-I & II)

Sec. A: Choose any 5 questions. Each question carries a mark weight of 2.

- (1) Give the zoological name of the arthropod that produces tussarsilk or coral silk. (2) Write the zoological name of the lac insect. (3) Write the zoological names of the major bee species. (4) What is black spot disease? What is the role of pesticides in shrimp surveys? What effect does water pollution have on prawn productivity? Why is ice used in shrimp preservation? Name five species of prawns. (5) In what forms are prawns used? (6) Define vermicompost and describe the properties of compost manure. (7) What is the nutritional value of red rigs? Explain with examples. (8) What is the percentage of CaCO_3 in pearls? (9) How many types of nets are there? (10) What is the most common disease of poultry? Name the founder of the free-floating Sarvadhan technique. Which method of nucleus inoculation is the best? When are pearls harvested? Name three methods of fish culture.

Sec. B: Choose two questions, choosing one from each unit. Each question carries 15 marks.

UNIT-I: (1) Explain the equipment for beekeeping. (2) Write an article on prawn breeding.

UNIT-II (3) What is vermicomposting? Explain the method of compost preparation in detail. (4) Describe the basic requirements for fish farming. Describe the benefits of aquaculture.

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ZOOLOGY (SEM-III) HALF LENGTH PAPER-II (UNIT-III & IV)

Sec. A: Choose any 5 questions. Each question carries a mark weight of 2.

- (1) Who is a malaria vector? (2) How is Ascaris transmitted? (3) What is the cause of tick-borne disease? (4) Which hormones are used to control insects? (5) Name two plant-derived insecticides. (6) What is instinctive behavior? (7) Which scientist wrote the book "Animal Intelligence"? (8) What experiments did Thorndike conduct on cats? (9) State five advantages of social organization. (10) What is the biological

clock? Who introduced the concept of communication? What are the functions of worker populations in honeybees? What are three disadvantages of social organization? Explain the structure of macaques and primate societies? What is meant by polymorphism in honeybees? Explain the distinctive features of primate society.

Sec. B: Choose any two questions, choosing one from each unit. Each question carries a mark weight of 15.

UNIT-III (1) Write the symptoms, causes, and treatment of amoebiasis. (2) Explain the symptoms, causes, and treatment of insect-borne diseases.

UNIT-IV (3) Write an essay on the concept of motivation. (4) Write an essay on social communication in honeybees.

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ZOOLOGY (SEM-III) QUARTER LENGTH PAPER-1 (UNIT-I)

Sec. A: Choose any three questions. Each question carries a mark weight of 2.

- (1) What is the silk obtained from broken cocoons called? (2) What materials are required for silkworm production? (3) What is reeling? (4) What is button lock? (5) What is broad lac? (6) Which pheromone is produced in the mandibular gland of queen bees? (7) What is a microbe that causes infection in the prawn? (8) Name three methods of catching prawns. (9) Draw the structure of an artificial umbrella. (10) Name the four main species of bees found in India. How did the method of weaving cloth from silk reach Europe from China? What is called sponsilk? State any three uses of silk. Write the uses of lac. What is the artificial method of lac? What is curry lac? Write the habitat of lac insect? Write the chemical composition of lac? What is the nutrient of lac insect? What is seat lock? What is arilakh? Show the classification of lac insect? What are the main types of lac insect?

Sec. B Choose any 1 question. Each question carries 15 marks.

UNIT-I (1) Explain the method of obtaining silk from cocoon. (2) Explain in detail the methods of lac cultivation. (3) Write a note on the composition of bee wax. (4) Explain the culture of prawns in fresh water. (5) Explain beekeeping in detail.

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ZOOLOGY (SEM-III) QUARTER LENGTH PAPER-II (UNIT-II)

Sec. A: Choose any three questions. Each question carries a mark weight of 2.

- (2) Show the correlation between vermicomposting and microorganisms. (2) Describe the materials required for vermiculture. (3) A center for free-rearing has been established in India. (4) Draw the structure of the mantle in a clam shell. (5) What are baby fish called? (6) What is an example of a migratory fish? (7) What is a disease caused by overeating in chickens? (8) Name three chicken diseases. (9) Describe the characteristics of all-weather fish. (10) What is the induced breeding technique for aquaculture? Which fish lives in saline water? What is meant by composite fish farming? Which fish is cultivated on the largest scale in India?

Sec. B: Choose any 1 question. Each question carries 15 marks.

UNIT-II (1) Write the economic importance of pearl culture. (2) Write an essay on poultry farming. (3) Write an article on fish farming, describing the benefits of aquaculture. (4) Write a note on pearl production.

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ZOOLOGY (SEM-III) QUARTER LENGTH PAPER-III (UNIT-III)

Sec. A: Choose any 3 questions. Each question carries 2 marks.

- (1) Which part of the body is affected by malaria? (2) What is malaria and how is it spread? (3) In how many hosts does Taenia complete its life cycle? (4) What is the secondary host of Ascaris? (5) What spreads insect-borne diseases? (6) Name two contact insecticides? (7) Name two mammals that control insects by feeding on them? (8) Name two insects that are controlled by birds? (9) Name a bacterium that is being successfully used in insect control. (10) What are the natural insect control agents? Malaria is spread by which mosquito? Write the symptoms of malaria. What is the cause of African sleeping sickness? What is the causative organism of amoebic dysentery? What is amoebic infection? What is leishmaniasis disease spread by? Which is an organic phosphate class insecticide? Name an insect repellent?

Sec. B Choose any one question. Each question carries 15 marks.

UNIT-III (1) Briefly explain African sleeping sickness. (2) Which disease is spread by tapeworm? Write the reasons for its spread and preventive measures. (3) What is tick borne infection? Write the reasons for its spread and preventive measures. (4) Write a detailed article on biological pest control. (5) Write a brief note on how leishmania is spread.

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ZOOLOGY (SEM-III) QUARTER LENGTH PAPER-IV (UNIT-IV)

Sec. A: Choose any three questions. Each question carries a mark weight of 2.

- (1) Define ethology! (2) Name three ethologists! (3) Who is the father of behaviorism? (4) Name three contributions made by Darwin to the development of ethology? (5) Who formulated the concept of learning? (6) What is the lesions-mark stimulus? (7) State two harmful effects of excessive androgen intake? (8) What brain waves are responsible for a calm state? (9) What waves are responsible for mental stress? (10) What are the benefits of grooming in primates? Who is known as the father of modern ethology? What is the T-score and what is its use? Which gland is called the biological clock? What is biological rhythm? Give examples. How do our biological rhythms affect our daily activities? What is the role of the Silver Back gorilla in society? State four characteristics of primate society? What is altruism?

Sec. B: Choose any one question. Each question carries 15 marks.

UNIT-IV (1) Describe the history of animal behavior. (2) Explain the concept of the cue-stimulus system with examples. (3) Describe the mechanical physiological techniques for studying animal behavior. (4) Briefly explain biological rhythms and the biological clock. (5) Write an essay on the instinctive release system. (6) Write an essay on social behavior in mammals.