

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

ZOOLOGY (SEM-II) FLP – I

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

1. What are mermaid's wallets called?
2. Where are eggs laid in stickleback fish?
3. Explain the difference between latitudinal and longitudinal migration.
4. Explain the meaning of anatomical radiation.
5. What is the eruption of teeth from the gums called?
6. What is the role of prolactin in metamorphosis?
7. What is the blastula called?
8. What is the gastrula called?
9. How many types of placenta are there based on physics?
10. What is meant by a potential diagram?

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

UNIT-I

1. Briefly explain the general characteristics and classification of Cephalocaudata. 2. Write an essay on broadcast control in fish.

UNIT-II

2. Write an essay on adaptive radiation in mammals. 4. Explain flight adaptations in birds.

UNIT-III

5. Write an essay on cleavage. 6. Write an essay on parthenogenesis.

UNIT-IV

7. Write an essay on parturition. 8. Explain regeneration in frogs.

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

ZOOLOGY (SEM-II) FLP-II

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

1. Name the true excretory organ of brancostoma.
2. Write any five characteristics of Cyclostomata.
3. What is the main difference between Metatheria and Eutheria?
4. What is the protrusion of teeth from the gums called?
5. What is neoteny?
6. What types of teeth are found in living amphibians?
7. What is Beer's Law?
8. What is the theory of imitation?
9. What is pregnancy?
10. What is the law of speciation?

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

UNIT-I: 1. Describe the nervous system of Petromyzon. 2. Describe the excretory nervous system and reproductive system of Herdmannia.

UNIT-II: 1. Explain the general characteristics and classification of Reptilia. 2. Explain the general characteristics and classification of Mammalia. 3. Explain the classification of Amphibia and its origin.

UNIT-III: 1. Explain the development of a chick and a possible diagram. 2. What do you understand by gestation and explain the dynamics of morphological development.

UNIT-IV: 1. Describe the different types of placenta found in mammals. 2. What do you understand by malformation? Write the symptoms of structural malformations.

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

ZOOLOGY (SEM-II) HLP-I (UNIT-I & II)

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

1. Why do gobies migrate? 2. What are ganoid scales? 3. Name the scales that arise from the dermis. 4. How is the age of bony fish estimated? 5. How many types of teeth does a human have? 6. Explain the function of avian venom in birds. 7. What is the nature of the venom of cobra and krait? 8. Describe the main characteristics of

the order Apido. 9. How many toes are found on the feet of the class Amphibia? 10. Describe the main characteristics of birds.

Sec. B: Choose any 2 questions, choosing one from each unit. Each question carries a mark weight of 15.

UNIT-I

1. Explain parental protection and migration in fish.
2. Describe the life cycle of the reproductive system of *Petromyzon*.

UNIT-II

2. Differentiate between venomous and non-venomous snakes.
4. Explain the general characteristics, classification, and migration of birds.
3. R.K. Vigyan (P.G.) Mahavidyalay, Kalwar, Jaipur
4. ZOOLOGY (SEM-II) HLP-II (UNIT-III & IV)
5. Sec. A: Choose any 5 questions. Each question carries a mark weight of 2.
6. 1. What is a meninge?
7. 2. What enzymes are found in the acrosome?
8. 3. What is the fertilization membrane and how and when is it formed?
9. 4. What is amphiamisis?
10. 5. State three advantages of internal fertilization.
11. 6. What are the disadvantages of parthenogenesis?
12. 7. What are the advantages of parthenogenesis?
13. 8. State the chemical composition of the yolk.
14. 9. What is the importance of the placenta?
15. 10. State any four functions of the placenta.
16. Sec. B: Choose any 2 questions, choosing one from each unit. Each question carries a mark weight of 15.
17. UNIT-III 1. Briefly explain what you understand by spermatogenesis. 2. Define fertilization and describe the process of fertilization in detail.
18. UNIT-IV 3. Define placenta and classify them on the basis of oocysts. 4. How do hormones affect metamorphosis in frogs?
19. R.K. Vigyan (P.G.) Mahavidyalay, Kalwar, Jaipur
20. ZOOLOGY (SEM-II) QLP-I (UNIT-I)
21. Sec. A: Choose any 3 questions. Each question carries a mark weight of 2.
22. 1. Write the common name of *Herdmania*.
23. 2. Write the taxonomic position of *Petromyzon*.
24. 3. What is the main excretory product of *Herdmania*?

25. 4. Write the common name of Brachystoma.

26. 5. Write any five characters of Urocordata.

27. 6. Write any five characters of Cephalocordata.

28. 7. Write the characters of Agnatha.

29. 8. Write the life history of Petromyzon.

30. 9. Name the types of scales found in fish.

31. 10. What type of circulatory system is found in fish.

32. Sec. B: Choose any 1 question. Each question carries a mark weight of 15.

33. UNIT-I

34. 1. Describe in detail the scales and fins found in fishes OR

35. 2. Explain the morphology and homologies of Petromyzon.

36.

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

38. ZOOLOGY (SEM-II) QLP-II (UNIT-II)

39. Sec. A: Choose any 3 questions. Each question carries a mark weight of 2.

40. 1. Define parental protection.

41. 2. State the main characteristics of Amphibia.

42. 3. In which order are tailless amphibians placed?

43. 4. Are all snakes venomous and harmful?

44. 5. State the main characteristics of reptiles.

45. 6. What is the color of snakes?

46. 7. Name the types of migration.

47. 8. What is meant by twilight migration?

48. 9. What are the main characteristics of Mammalia?

49. 10. Write the dental formula of humans.

50. Sec. B: Choose any 1 question. Each question carries a mark weight of 15.

51.

52. UNIT-II

53. 1. Write an essay on parental defense, describing the general characteristics of amphibians. 2. Write an essay on the importance and functions of the dentition in mammals.

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

55. ZOOLOGY (SEM-II) QLP-III (UNIT-III)

56. Sec. A: Choose any 3 questions. Each question carries a mark weight of 2.

57. 1. What is gametogenesis?

58. 2. What is oogenesis?

59. 3. What is cleavage?

60. 4. What is acrosome?

61. 5. Define parthenogenesis.

62. 6. What are the division planes of cleavage?

63. 7. What is blastula?

64. 8. What is fertilization?

65. 9. Differentiate between isogamy and anisogamy.

66. 10. Name the types of blastula.

67. Sec. B: Choose any 1 question. Each question carries a mark weight of 15.

68. UNIT-III

69. 1. Describe the process of oogenesis. 2. What is a blastocyst? Describe the different types of blastocysts.

70.

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

72. ZOOLOGY (SEM-II) QLP-IV (UNIT-IV)

73. Sec. A: Choose any 3 questions. Each question carries a mark weight of 2.

74. 1. What is a placenta? 2. How many types of placenta can be identified based on implantation? 3. Define extraembryonic membranes. 4. What is metamorphosis? 5. What factors influence frog metamorphosis? 6. What is teratology? 7. What is parturition? 8. Describe the tadpole stage with external gills. 9. What is the role of iodine in frog metamorphosis? 10. What is implantation?

75. Sec. B: Choose any 1 question. Each question carries a mark weight of 15.

76.

77. UNIT-IV

78. 1. Explain extraembryonic membranes in detail. 2. Write an essay on morphological reproduction.

79.