| IB1N16109 | (Pages :2) | Reg. No: |
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#### FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

# First Semester B.Sc Degree Examination, November 2016 ZO1C01 - Animal Diversity & Wild life conservation

(2016 Admission onwards)

Max. Time: 3 hours Max. Marks : 64

### I Answer all questions. Each carries one mark

- 1. Name the connecting link between Annelida and Arthropoda.
- 2. What is the secretion of parietal cell?
- 3. Name the balancing organ of Penaeus.
- 4. Which salivary gland is seen at the base of ear lobe of Oryctolagus?
- 5. Name the excretory organ of Fasciola.
- 6. Name the part modified to form the sucker in Echeneis.
- 7. Identify an organism with brood pouch in male.
- 8. Name the condition where an animal has two uteri.
- 9. Who is the publisher of the Red Data book?
- 10. What do you call preservation of germ plasma in liquid nitrogen?

 $(10 \times 1 = 10 \text{ marks})$ 

# II. Answer any seven of the following. Each carries 2 marks.

- 11. What is gastric mill?
- 12. Write a note on pacemaker of Oryctolagus.
- 13. What are the criteria adopted by R.H. Whittaker in the five-kingdom classification.
- 14. Write any four adaptations of *Hirudinaria*?
- 15. What is red tide? Name an organism responsible for it.
- 16. What are chordates? State their diagnostic features.
- 17. Comment on living fossil.
- 18. What is os innominatum?
- 19. What are rods and cones?
- 20. What is meant by tetralocular heart? Write its significance

# III. Answer any four of the following. Each carries 5 marks.

- 21. With labeled diagrams explain the structure of compound eye of Penaeus.
- 22. Write any five features of the class mammalia.
- 23. Sketch and label the dorsal view of brain of Oryctolagus.
- 24. Write notes on any two economically important molluscs.
- 25. What is sustainable development? Write its objectives.
- 26. What are the identifying features of Daboia?

 $(4 \times 5 = 20 \text{ marks})$ 

## IV. Answer any two of the following. Each carries 10 marks.

- 27. Explain the structure of ear of Oryctolagus. Add a note on its working.
- 28. With a suitable example, give an account on the diagnostic features of Phylum Cnidaria.
- 29. Write the salient features of the class Aves. List the adaptations of Columba.
- 30. Explain the techniques adopted for wild life conservation. (2 x 10 = 20 marks)

| 1B1N16   | (Pages : 2)                                     | Reg. No:                           |
|----------|---|------------------------------------|
|          |   | Name:                              |
|          | FAROOK COLLEGE (AUTONOMO                        | US), KOZHIKODE                     |
|          | First Semester B.Sc Degree Examinat             | tion, November 2016                |
|          | ZO2B01T – Animal Diversity N                    |                                    |
| Max. Tir | me: 3 hours (2016 Admission onwa                | Max. Marks: 80                     |
| I. One   | e word questions (Answer all questions)         |                                    |
| 1.       | Name the organelle that performs osmoregulation | on in <i>Paramecium</i> .          |
| 2.       | Name a bioluminescent protist.                  |                                    |
| 3.       | Name an animal that exhibits polymorphism.      |                                    |
| 4.       | Name a diploblastic animal.                     |                                    |
| 5.       | Name a flagellate protist.                      |                                    |
| 6.       | Give the scientific name of malarial parasite.  |                                    |
| 7.       | Name the body cavity present in sponges.        |                                    |
| 8.       | Name a pseudocoelomate phylum.                  |                                    |
| 9.       | Name the disease caused by Blood fluke.         |                                    |
| 10.      | Who proposed the Eight Kingdom classification   | n?                                 |
|          |   | $(10 \times 1 = 10 \text{ marks})$ |
| II. Para | agraph questions (Answer any ten questions)     |                                    |
| 11.      | What are cnidoblasts?                           |                                    |
| 12.      | Explain binomial nomenclature.                  |                                    |
| 13.      | What is bilateral symmetry?                     |                                    |
| 14.      | What are organelles? Give examples.             |                                    |
| 15.      | What are choanocytes?                           |                                    |
| 16.      | What is hemixis?                                |                                    |
| 17.      | Comment on schistosomiasis.                     |                                    |

What is metagenesis? Give one example.

22. Give two differences between polyp and medusa.

Describe the structure of a trichocyst.

What is phenetics?

Comment on gemmule.

 $(10 \times 2 = 20 \text{ marks})$ 

## III. Short answer questions (Answer any five questions)

- 23. Describe the life cycle and pathogenicity of Wuchereria.
- 24. With the help of a labelled sketch, describe the external morphology of Fasciola.
- 25. With the help of diagrams, describe sexual dimorphism in Ascaris.
- 26. With the help of a labelled diagram, describe the morphology of Paramecium.
- 27. List the salient feature of Phylum Rhizopoda giving examples.
- 28. Describe polymorphism in Physalia.
- 29. List the salient features of Phylum Ctenophora. Give an example.
- Describe the general characteristics of Class Turbellaria with an example.

 $(5 \times 6 = 30 \text{ marks})$ 

## IV. Essay questions (Answer any two questions)

- 31. Give an account of canal system in sponges. Draw suitable sketches.
- 32. Explain the Five Kingdom classification. Comment on its merits and demerits.
- 33. Explain the concepts followed in the classification of animals.
- 34. Describe the salient features of Protista giving examples.

(2x10=20 Marks)

| 1B1N16091  |                      | 4                 | (Pages: 2)              | Reg. No:                          |     |
|------------|----------------------|-------------------|-------------------------|-----------------------------------|-----|
|            |                      |                   |                         | Name:                             |     |
|            | FAROOK               | COLLEGE (         | AUTONOMOUS),            | KOZHIKODE                         |     |
|            | First Sen            | nester B.Sc Deg   | gree Examination, N     | ovember 2016.                     |     |
|            |                      |                   | - Human Physiolo        | gy                                |     |
| Max. Time: | 3 hours              | (2016 A           | dmission onwards)       | Max. Marks                        | : : |
| Max. Time. | 5 Hours              |                   |                         |                                   |     |
|            |                      | h .               |                         |                                   |     |
|            |                      |                   | PART - A                |                                   |     |
|            | Answer               | all questions.    | Each question carri     | es one mark.                      |     |
| 1.         | Which of the follow  | ving is a monos   | accharide?              |                                   |     |
|            | (a) Fructose         | (b) Sucrose       | (c) Lactose             | (d) Maltose                       | ×.  |
| 2.         | The region of the cl | hromosome at v    | which a particular gen  | e is located:                     |     |
|            | (a) Nucleus          | (b) Locus         | (c) Centromere          | (d) Core                          |     |
| 3.         | The cells which have | ve the ability to | initiate electric signa | ls and to propagate these signals |     |
|            | along their process  | es from one are   | a of the body to anoth  | er is known as:                   |     |
|            | (a) Muscle cells     | (b) nerve cell    | s (c) epithelial cells  | (d) blood cells                   |     |
| 4.         | PKU is caused by t   | he accumulation   | n of                    | so participate in medical con-    |     |
|            | (a) Phenyl alanine   | (b) Tyrosin       | (c) Alkaptone           | (d) Galactose                     |     |
| 5.         | tamic acid by:       |                   |                         |                                   |     |
|            | (a) Alanine          | (b) Leucine       | (c) Tyrosine            | (d) Valine                        |     |
| 6.         | Crossing over occu   | rs during which   | stage of meiosis?       |                                   |     |
|            | (a) Zygotene         | (b) Diplotene     | (c) Pachytene           | (d) Leptotene                     |     |
|            | * .                  |                   |                         |                                   |     |
| Fill in t  | the blanks           |                   |                         |                                   |     |
| 7.         | Genetic constitutio  |                   |                         |                                   |     |
|            | ada i                |                   |                         |                                   |     |

9. Genotypic ratio obtained in the F2 generation of monohybrid cross is\_\_\_\_\_

10. \_\_\_\_\_ is the coding sequences in the DNA

11. Metacentric chromosomes have \_\_\_\_\_ at the center

12. Cell theory is proposed by \_\_\_\_\_

 $(12 \times 1 = 12 \text{ marks})$ 

#### PART-B

### Answer any seven questions. Each question carries two marks.

- Cytoplasm.
- 14. What is the cause of Albinism?
- Karyotype.
- 16. What is inversion?
- 17. What is test cross?
- 18. Define homozygosity.
- 19. Significance of meiosis.
- 20. Nucleotides.
- 21. What is the function of mitochondria?

 $(7 \times 2 = 14 \text{ marks})$ 

#### PART-C

## Answer any six questions. Each question carries five marks

- Discuss sex chromosomal anomalies.
- Explain the functions of genes and chromosomes.
- Explain the process of DNA replication.
- Explain fluid mosaic model of plasma membrane.
- 26. Write a brief note on epistasis.
- 27. Comment on different types of muscle tissue?
- 28. Explain crossing over?
- Write a note on errors in phenyl alanine metabolism.

 $(6 \times 5=30 \text{ marks})$ 

#### PART-D

#### Answer any three questions. Each question carries eight marks

- 30. With the help of a neat labeled diagram, explain the structure of an animal cell.
- Which are different types of mutation? Explain.
- Explain Watson and Crick model of DNA.
- 33. Explain the process of mitosis.
- 34. Write an essay on Mendel's work and laws of inheritance.

 $(3 \times 8 = 24 \text{ marks})$