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(Pages : 2)

Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester B.Sc Degree Examination, November 2020

**BZL1C02 – Human Physiology**

(2020 Admission onwards)

Time: 2 hours

Max. Marks : 60

### **SECTION A**

**Each question carries 2 marks. Answer in 2 or 3 sentences.  
There shall be ceiling of 20 marks in this section.**

1. Why is meiosis known as reduction division? What is its significance?
2. What is a back cross and when is a back cross referred to as a test cross?
3. Explain the functional difference between a dendrite and an axon?
4. Write a note on rough endoplasmic reticulum.
5. How is an ideogram different from a karyotype?
6. Explain pleiotropy.
7. Differentiate homozygosity from heterozygosity.
8. Elucidate the similarity and difference between starch and cellulose.
9. Explain the law of dominance.
10. Mention four important functions of blood.
11. Explain the composition of a nucleotide.
12. Mention the more important symptoms of Cry du chat syndrome.

**( Maximum: 20 marks)**

## SECTION B

Each question carries 5 marks. Answer in a paragraph of about half a page to one page.

There shall be ceiling of 30 marks in this section.

13. What is Down's syndrome? Give the probable causes and symptoms.
14. With the help of a neat, labeled diagram detail the structure of a mitochondrion.
15. Explain linkage, linked genes and the phenomenon of crossing over.
16. With suitable examples explain how incomplete dominance differs from co dominance.
17. What are lysosomes? Describe the different forms in which they can be found in a cell.
18. What is epithelial tissue? Write a note on its classification.
19. What is gene mutation? Describe the various types.

( Maximum : 30 marks)

## SECTION C

Answer any one from the following. Each question carries 10 marks.  
Essay type question.

20. Enumerate the steps involved in DNA replication.
21. With the help of relevant diagrams explain mitosis and give its significance.

( 1 x 10 = 10 marks)

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(Pages :1)

Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE  
First Semester B.Sc Zoology Degree Examination, November 2020  
BZL1B01 - Animal Diversity : Non Chordata - I  
(2020 Admission onwards)

Time: 2 hours

Max. Marks : 60

**Section A**

**I. Short answer questions. Each question carries 2 marks.**

1. What is DNA Barcoding?
2. What is a Gemmule?
3. Explain molecular systematics ?
4. What is Metagenesis? Mention an example.
5. What is ICZN?
6. Enlist the features of Phylum Parabasilia.
7. Write the salient features of *Noctiluca*.
8. Name any two examples of Platyhelminth parasites of man.
9. What are glass sponges? How are they different from other sponges?
10. Write a short account on the salient features of Class Scyphozoa.
11. What are Nematocysts? Mention its function.
12. Write the systematic position of *Pleurobrachia*.

(Ceiling: 20 marks)

**Section B**

**II. Paragraph questions. Each question carries 5 marks.**

13. Distinguish between Schizocoelic and Enterocoelic coelom.
14. Describe the structure of *Obelia* colony.
15. Explain polymorphism with reference to *Physalia*.
16. Mention the parasitic adaptations of *Taenia solium*.
17. Write a short essay on the new trends in Systematics.
18. Differentiate between Mesozoa and Parazoa.
19. Explain the salient features of Phylum Ctenophora.

(Ceiling: 30 marks)

**Section C**

**III. Essay questions. Answer any one question.**

20. Describe the characteristic features and classification of Kingdom Protista down to phyla citing suitable examples.
21. Explain the Canal system in Sponges with relevant examples.

(1x10 = 10 marks)

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE  
 First Semester B.Sc Botany Degree Examination, November 2020  
**BZL1C01 - Animal Diversity & Wild Life Conservation**  
 (2020 Admission onwards)

Time: 2 hours

Max. Marks : 60

**Section A**

**I. Short answer questions. Each question carries 2 marks.**

1. What are Hotspots? Name any two hotspots in India.
2. Enumerate the salient features of phylum Rhizopoda.
3. Distinguish between polyp and medusa.
4. List four salient features of *Ichthyophis*.
5. What is evisceration?
6. Write notes on *Plasmodium*.
7. Write a short note on IUCN.
8. What are the flight adaptations in class Aves.
9. Mention the importance of Biodiversity.
10. Write a note on parasitic adaptation in *Fasciola*.
11. What is retrogressive metamorphosis?
12. Explain in-situ conservation with suitable examples.

(Ceiling :20marks)

**Section B**

**II. Paragraph Questions. Each Question carries 5 marks.**

13. Describe the salient features and classification of Phylum Porifera.
14. Give an account on a). *Branchiostoma* b). *Naja*
15. Discuss the threats of Biodiversity.
16. Outline the classification of phylum Chordata.
17. Give an account on a). *Hirudinaria* b). *Teredo*
18. Explain the sexual dimorphism and parasitic adaptation in *Ascaris*
19. What are the flight adaptations in *Pteropus*.

(Ceiling: 30 marks)

**Section C**

**III. Essay Questions. Answer any one question.**

20. Explain the digestive system of Rabbit with the help of diagram. Add a note on its dentition.
21. With neat labeled diagrams, describe the thoracic appendages of *Penaeus*.

(1x10 = 10marks)