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Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Zoology Degree Examination, November 2024

BBT3C03 – Morphology, Systematic Botany, Economic Botany, Plant Breeding &amp; Horticulture

(2022 Admission onwards)

Time: 2 hours

Max. Marks: 60

**SECTION A****(Answer all questions, each question carries 2 marks. Ceiling: 20 Marks)**

1. What is twisted aestivation? Cite an example.
2. What is synandrous condition? Cite example.
3. Write a brief note on the significance of botanical gardens.
4. What is numerical taxonomy?
5. Write a brief note on the androecium in Faboideae and Mimosoideae.
6. Describe the distinguishing vegetative features of Malvaceae.
7. Write the binomial and family of Pepper and Cardamom.
8. What are beverages? Cite examples with binomial and family.
9. What is mutation breeding? Cite an example
10. Write a brief note on pureline selection. Cite example.
11. Write a brief note on air layering.
12. Write a brief note on tongue grafting.

**SECTION B****(Answer all questions, each question carries 5 marks. Ceiling: 30 Marks)**

13. Write an account on the different types of fruits. Cite examples.
14. What is effective publication? Write the conditions given in ICN on effective publication.
15. What is cytotaxonomy? Discuss its role in solving taxonomic problems. Cite examples.
16. Write a note on the salient floral features of Poaceae.
17. Write brief notes on the following, citing their binomial, family and morphology of useful parts: (a) Black gram (b) Gingelly.
18. What is polyploidy breeding? Discuss its significance. Cite examples.
19. Write brief notes on Patch and T- budding. Cite examples.

### **SECTION C**

**(Answer any one question, each question carries 10 marks. 1 x 10 = 10 Marks)**

20. Write an essay on the various types of Inflorescences, citing examples.
21. What is herbarium? Write an account on the preparation of Herbarium. Discuss its significance. Cite the names of two major herbaria in India .

## FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

## Third Semester B.Sc Zoology Degree Examination, November 2024

## BZL3B03 – Animal Diversity Chordata Part – I

(2022 Admission onwards)

Time: 2 hours

Max. Marks : 60

## Section A

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

- 1 Mention the characteristic features of sub class Anapsida
- 2 Write short note on sphenodon.
- 3 Explain neotony with suitable example.
- 4 Mention the special features of Rhacophorus
- 5 Distinguish between cartilaginous fishes and bony fishes
- 6 Name i) any two cartilaginous fishes ii) any two bony fishes
- 7 Comment on the significance of ammocoetus larva
- 8 Explain the evolutionary significance of ostracoderms
- 9 Briefly explain the excretory organs of Amphioxus
- 10 What is endostyle? Comment on its significance
- 11 What is tunic?
- 12 .Mention the significant chordate features of ascidian tadpole

(Ceiling: 20 marks)

## Section B

## II Paragraph questions. Each question carries 5 marks

- 13 Write a brief account on common venomous snakes of Kerala
- 14 Explain the discovery of Nasikabatrachus sahyadrensis
- 15 Comment on the affinities and systematic position of Dipnoi
- 16 Explain the structure and function of neuromast sense organs
- 17 Describe the features of super order Holostei with suitable example
- 18 What are the salient features of class cyclostomata.
- 19 Comment on the systematic position of Amphioxus.

(Ceiling: 30 marks)

## Section C

## III Essay questions. Answer any one question.

- 20 Describe the digestive system of Mullet.
- 21 Explain the retrogressive metamorphosis with special emphasis on Ascidian tadpole.

(1x10 = 10 marks)



## FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

## Third Semester B.Sc Botany Degree Examination, November 2024

## BZL3C03 – Physiology and Ethology

(2022 Admission onwards)

Time: 2 hours

Max. Marks : 60

## Section A

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

1. What is orientation ?
2. What is altruism ?
3. What is circadian rhythm ?
4. Define osmoregulation ?
5. What is tachycardia?
6. What is rigor mortis ?
7. Which blood group is considered to be universal recipient ?
8. What is active transport ?
9. What is ammonotelism ? Give one example.
10. Give one example each for excitatory and inhibitory neuro transmitters.
11. What is asphyxia ?
12. What is meant by anorexia nervosa ?

(Ceiling: 20 marks)

## Section B

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

13. Describe significances of fasting
14. Briefly describe learned behaviours in animals
15. Draw a labelled diagram of neuromuscular Junction
16. Describe synaptic transmission of nerve impulse
17. Explain molecular organization of haemoglobin
18. Briefly describe transport of carbon dioxide
19. Describe functions of blood

(Ceiling: 30 marks)

## Section C

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

20. With the help of suitable diagram explain the structure, chemical composition & functions of plasma membrane.
21. Write an essay on the contraction of skeletal muscle.