FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Degree Examination, November 2021

BZL3B03 – Animal Diversity:Chordata Part – I

(2019 Admission onwards)

Time: 2 hours   Max. Marks : 60

Part A

Answer all questions.
Each question carries Two marks.
Ceiling - 20 Marks

1. Examine why protochordta are named Acrania
2. Differentiate between Carapace and Plastron
3. Outline the classification of Gnathostomata
4. Explain the significance of Ammocoetes
5. Explain retrogressive metamorphosis
6. What did you observe as the specialised features of Amphioxus?
7. Write a note on the distribution of lung fishes
8. Golden age of reptiles
9. Describe any 2 subterranean fishes from Kerala
10. Name cartilage bones and membrane bones of frog
11. What is paedogenesis
12. What did you observe as the specialised features of Amphioxus?

Part B

Answer all questions.
Each question carries Five marks.
Ceiling - 30 Marks

13. Classify sub phylumm Urochordata upto classes
14. Ventricles of brain of Mullet
15. Ventricles of brain of *Hoplobatrachus tigerinus*
16. Describe the characters of agnatha using two examples.
17. Discuss chordate diversity
18. Give an account of the morphology of Amphioxus
19. Construct a table showing the relation of skull and temporal fossae of reptiles

Part C

Answer any one questions.

Each question carries Ten marks.

20. Compare male and female urnogenital system of *Calotes versicolor*

21. With a labelled diagram explain the eye of *Hoplobatrachus tigerinus*

(1 x 10 = 10 Marks)

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Zoology Degree Examination, November 2021

BBT3C03 - Morphology, Systematic Botany, Economic Botany, Plant Breeding & Horticulture

(2019 Admission onwards)

Time: 2 hours   Max. Marks: 60

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

1. What is opposite phyllotaxy? Give an example

2. What is a Spike? Give an example.

3. Differentiate between polypetalous and gamopetalous flowers? Give examples.

4. What is Artificial classification ? Give examples

5. Explain the inflorescence found in the family Poaceae

6. What do you mean by Chemotaxonomy?

7. Write the binomial and morphology of useful part of Cotton.

8. Write the binomials of two oil yielding plants you studied.

9. What is acclimatization?

10. What is pureline selection.

11. What is nursery stocking?

12. Write the binomials of two medicinal plants you studied

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

13. Explain the different types of placentation with examples.

14. Briefly describe the steps involved in herbarium preparation.

15. Explain the economic importance of the family Rubiaceae

16. Write the binomial, family and morphology of useful parts of any two cereals.

17. Elucidate the merits and demerits of plant introduction.

18. What is meant by post-sowing care? Comment on its importance.

19. Describe the different types of aestivation with line drawings and giving examples

SECTION C

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

20. Describe the various types of inflorescences with diagrammatic sketches and examples.

21. Describe the salient features of the subfamilies of Fabaceae citing examples of various

species.

(Pages : 2)   Reg. No:...........................

Name: ....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Third Semester B.Sc Degree Examination, November 2021

BCH3C03 – Organic Chemistry

(2019 Admission onwards)

Time: 2 hours

Max. Marks: 60

Section A (Short answers)
(Answer questions up to 20 marks. Each question carries 2marks)

1. What is meant by electromeric effect ?
2. Draw the resonance structures of aniline.
3. Mention a method to distinguish maleic acid and fumaric acid.
4. Draw the possible conformations of methyl cyclohexane.
5. Illustrate Friedel-Crafts alkylation reaction with a suitable example. Give equation and name the product.
6. Explain the term Williamson's synthesis with an example?
7. What is Fittig reaction ? Illustrate with an example.
8. What is meant by denaturation of alcohol?
9. How can fluorobenzene be obtained from benzene diazonium chloride ?
10. What are essential aminoacids ? Name two of them.
11. Draw the structure of nicotine.
12. What is meant by vulcanization ? Explain with example.

[Ceiling of marks: 20]

Section B (Paragraph)
(Answer questions up to 30 marks. Each question carries 5 marks)

13. Explain the different kinds of bond fission observed in organic reactions.
14. Explain the term hyper conjugation and its significance with illustrative examples.
15. Explain the relative stability of conformations of cyclohexane.
16. State and explain Hückel's rule.
17. Explain the Lucas test to distinguish between 1°, 2° and 3 alcohols.
18 Arrange aniline, N-methylaniline and N, N dimethylaniline in the increasing order of basicity and explain the variation.
19. State the important characteristics of enzyme action.

[Ceiling of marks: 30]

Section C (Essay)
(Answer any one. Each question carries 10 marks)

20. Illustrate the different structural levels of protein.

21. Discuss the optical isomerism in tartaric acid.

[1 x 10 = 10 Marks]