

1B5N19255

(Pages : 2)

Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester B.Sc Botany Degree Examination, November 2019

BBOT5B07 – Embryology, Palynology, Economic Botany, Ethnobotany & Horticulture

(2017 Admission onwards)

Time: 3 hours

Max. Marks: 80

**Part-A**  
**(Answer all questions)**

1. What is parthenocarpy?
2. What is Apomixis?
3. What is Pollinium?
4. Name the different soil types you studied.
5. What is Polyhouse
6. Name any two garden tools
7. Differentiate between Monothealous and dithealous anthers
8. Name any two tribes in South India
9. Triple fusion involves.....
10. Name the binomial of *Teak* and *Rose wood*

**(1x10= 10 marks)**

**Part-B**  
**(Answer all questions)**

11. Write notes on anther dehiscence.
12. Comment on male gametogenesis.
13. What is Acetolysis?
14. What is green house? Name the different types.
15. Briefly mention about major components of pollen wall.
16. What are seed beds?
17. Differentiate between Indoor and outdoor plants.
18. Name the binomial of '*Tulsi*' and '*Turmeric*'
19. What is top dressing?
20. Name the binomial, family and morphology of useful part of the following  
(a) *Cocoa* (b) *Rubber*

**(10 x 2 = 20 marks)**

**Part-C**  
(Answer *any six* of the following)

21. Explain various types of seed germination.
22. Write notes on different types of endosperm formation.
23. Explain NPC system.
24. Briefly describe various irrigation methods you studied.
25. Write note on post harvest management of vegetables and ornamentals.
26. Explain ethno botanical significances of *Aegle marmelos* and *Ficus religiosa*.
27. Describe medicinal properties of *Adhatoda* and *Rauwolfia*.

**(6 x 5 = 30 marks)**

**Part D**  
(Answer *any two* of the following)

28. Give details on budding, grafting and layering with suitable line drawings.
29. Write an essay on types of pollinating agents with respect to different kinds of pollination.
30. Give an account on various steps involved in seed propagation methods.

**(2 x 10 = 20 marks)**

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FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester B.Sc Botany Degree Examination, November 2019

BBOT5B06 – Angiosperm Morphology & Plant Systematics

(2017 Admission onwards)

Time: 3 hours

Max. Marks: 80

**PART A**  
**(Answer all the questions)**

1. Name the individual unit of gynoecium.
2. Who is known as the father of plant taxonomy?
3. Binomials with identical generic and specific names are called \_\_\_\_\_
4. What is a tepal?
5. What is a type specimen?
6. Monadelphous stamen seen in the family \_\_\_\_\_
7. Name the characteristic fruit of Solanaceae.
8. What is a Flora?
9. Fruit found in Annonaceae is \_\_\_\_\_
10. What is exalbuminous seed?

**(10 x 1 = 10 Marks)**

**PART - B**  
**(Answer all questions)**

11. Point out the differences of monocots from dicots.
12. Define aestivation.
13. What is a taxonomic character? Differentiate primitive and advanced characters.
14. Mention the features of Hypanthodium.
15. What are the characteristic features of stamen in Asteraceae?
16. Write down the principles of the International Code of Botanical Nomenclature.
17. Explain briefly the importance of systematics.
18. Define binomial nomenclature. Who proposed it?
19. Give the differences between indented key and bracketed key.
20. Give the ovary position and placentation for Cucurbitaceae.

**(10 x 2 = 20 Marks)**

**PART - C**

**(Answer any six of the following)**

21. What is placentation? Briefly explain different kinds of placentation.
22. Briefly explain Bentham & Hooker's system of classification.
23. Give an account on the classification of fruits.
24. Discuss the economic importance of Rubiaceae.
25. Explain the major roles of Botanical gardens.
26. Give an account on root modification in plants.
27. Briefly explain the floral characters of the family Lamiaceae.
28. Briefly describe reproductive characters of Solanaceae.

**(6 x 5 = 30 Marks)**

**PART - D**

**(Answer any two of the following)**

29. Write an essay on modern trends in plant taxonomy.
30. What is an inflorescence? Give an account on various types of inflorescences.
31. "Poaceae is considered as an advanced family among angiosperms". Discuss it.  
Write the binomial of any four economically important plants in Poaceae.

**(2 x 10 = 20 Marks)**

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Fifth Semester B.Sc Botany Degree Examination, November 2019

BBOT5B05 – Gymnosperms, Paleobotany, Phytogeography &amp; Evolution

(2017 Admission onwards)

Time: 3 hours

Max. Marks: 80

**PART A****(Answer all the questions)**

1. 'Shower of sulphur' observed in ----- plant.
2. The theory of 'inheritance of acquired characters' was proposed by -----.
3. ----- is a plant fossil identified from India.
4. In *Cycas* coralloid roots perform ----- function.
5. ----- era is known as the 'Age of Angiosperms'.
6. In ----- type of fossils both internal and external structures are well preserved.
7. Among Gymnosperms, the female gametophyte of ----- plant is marked by the absence of archegonium.
8. ----- theory recognizes mutation as the major source of genetic variation.
9. The single large continental mass existed during the Upper Carboniferous era is called - -----.
10. Sago palm is the common name of -----.

**(10 x 1 = 10 marks)****PART B****(Answer all questions)**

11. Explain the mechanisms operating in the fertilization of *Cycas*.
12. Describe Vicarism.
13. Draw a neat labelled diagram showing the structure of ovule of *Gnetum*?
14. Explain land-bridge hypothesis.
15. Differentiate bract scale and ovuliferous scale.
16. Describe the structural peculiarity of the mesophyll part of *Pinus* needle.
17. Comment on the Indian contributions to Paleobotany.
18. What is continuous distribution? Mention the types.
19. Differentiate homology and analogy.
20. Comment on the morphology of shoot and leaves of *Pinus*.

**(10 x 2 = 20 marks)**

### PART C

(Answer any six of the following)

21. Comment on the advanced characters in *Gnetum*.
22. Explain the continental drift hypothesis.
23. Elicit any five major differences between the structure of ovules of *Cycas* and *Gnetum*.
24. Discuss in detail the morphology and structure of *Rhynia*.
25. What are fossils? Explain different types.
26. Explain the cardinal points regarding the Darwin's theory of Natural selection.
27. What is discontinuous distribution? Explain the supporting hypotheses.
28. Give a detailed account regarding the economic importance of Gymnosperms.

(6 x 5 = 30 marks)

### PART D

(Answer any two of the following)

29. Give a detailed account on the life cycle of *Pinus*. Draw suitable diagrams.
30. Explain the phyto-geographic zones of India with the help of suitable diagram.
31. Write an essay on speciation and its types. Comment on the methods of speciation.

(2 x 10 = 20 marks)