

Write the following information in the first page of Answer Script before starting answer

ODD SEMESTER EXAMINATION: 2020-21

Exam ID Number _____

Course _____ Semester _____

Paper Code _____ Paper Title _____

Type of Exam: _____ (Regular/Back/Improvement)

Important Instruction for students:

1. Student should write objective and descriptive answer on plain white paper.
2. Give page number in each page starting from 1st page.
3. After completion of examination, Scan all pages, convert into a single PDF, rename the file with Class Roll No. (2019MBA15) and upload to the Google classroom as attachment.
4. Exam timing from 10am – 1pm (for morning shift).
5. Question Paper will be uploaded before 10 mins from the schedule time.
6. Additional 20 mins time will be given for scanning and uploading the single PDF file.
7. Student will be marked as ABSENT if failed to upload the PDF answer script due to any reason.

B.Sc. BOTANY
FIRST SEMESTER
ARCHEOGONIATES & PALAEOBOTANY
BSB - 102

Duration : 3 hrs.

Full Marks : 70

Time : 20 min.

(PART-A : Objective)

Marks : 20

Choose the correct answer from the following:

1X20=20

- Which among the following is also known as bog moss?
 - Riccia
 - Marchantia
 - Sphagnum
 - Funaria
- The antherozoids of *Funaria* are
 - uniflagellate
 - biflagellate
 - multiflagellate
 - do not have flagella
- In mosses, meiosis takes place during
 - gamete formation
 - antheridia and archegonia formation
 - spore germination
 - spore formation
- Find the true statement about bryophytes
 - they have chloroplasts
 - they have archegonia
 - they are thalloid
 - all of the above
- The thalloid plant body is found in
 - Marchantia*
 - Sphagnum*
 - Funaria*
 - Salvinia*
- Pteridophytes and Bryophytes differ in having
 - Spermatozoids
 - Archegonia
 - Separate gametophytes
 - conducting system
- Which of the following is deemed to be vital in the development of seed habit?
 - Heterospory
 - Dependant sporophyte
 - Free-living gametophyte
 - Haplontic life cycle
- This group does not have seeds but has vascular tissues and produces spores
 - Pteridophyta
 - Bryophyta
 - Angiosperms
 - Gymnosperms
- Prothallus represents
 - sporophytic phase in a fern
 - gametophytic phase in a fern
 - sporophytic phase in a gymnosperm
 - gametophytic phase in a gymnosperm

10. Club moss' belongs to
- a. Fungi
 - b. Algae
 - c. Bryophyta
 - d. Pteridophyta
11. Flowers and cones are similar because
- a. both assist seed dispersal
 - b. both are responsible for attracting insects to pollinate
 - c. both are shiny and bright
 - d. both are reproductive structures
12. An autotrophic, prokaryotic and nitrogen-fixing symbiont is present in
- a. Cicer
 - b. Cycus
 - c. Sequoia
 - d. Pinus
13. Though Cycas has an embryo with two cotyledons, it is not grouped under dicotyledonous plants as
- a. ovules are naked
 - b. possesses compound leaves
 - c. has megasporophyll
 - d. resembles a palm tree
14. In gymnosperms, the ovules typically are
- a. bitegmic and anatropous
 - b. bitegmic and orthotropous
 - c. unitegmic and orthotropous
 - d. unitegmic and anatropous
15. Endosperm of gymnosperm is formed
- a. At the time of fertilization
 - b. Before fertilization
 - c. After fertilization
 - d. Along with the development of embryo
16. Coralloid root are found
- a. Cycus
 - b. Pinus
 - c. Dryopteris
 - d. Lycopodium
17. Endosperm in gymnosperms is
- a. Haploid
 - b. Diploid
 - c. Triploid
 - d. None
18. Which of the following constitutes a fossil?
- a. A mineralized burrow of an extinct animal
 - b. An unidentified animal found frozen in a glacier
 - c. An ant found inside a block of amber, dating back to 110 million years
 - d. All of the above
19. Rhynia belongs to a geological period
- a. Devonian
 - b. Permian
 - c. Carboniferous
 - d. Cambrian
20. Birbal Sahni is popularly known as
- a. Mycologist
 - b. Paleobotanist
 - c. Physiologist
 - d. Phycologist

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(PART-B : Descriptive)

Time : 2 hrs. 40 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. Write the economic importance of bryophytes **10**
2. Morphological features of Hepaticopsida and Anthoceropsida group. **5+5=10**
3. Discuss the differences in reproductive structures of *Lycopsidea* and *Pteropsida* group. **10**
4. Write short notes on **5+5=10**
 - a. Stelar diversity in pteridophytes
 - b. Seed habit in pteridophytes
5. Write down the general feature of Cycadales and coniferales. **5+5=10**
6. Define living fossil? Why Ginkgo called as living fossil. **2+8=10**
7. What is fossil? Write down the process of fossilization. **2+8=10**
8. Write a short note on **5+5=10**
 - a. Psilophyta
 - b. Bennettites

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