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Y—81—2019

FACULTY OF SCIENCE

B.Sc. (Fourth Semester) (Backlog) EXAMINATION

NOVEMBER/DECEMBER, 2019

BOTANY

Paper-VIII

(Gymnosperm and Palaeobotany)

(MCQ & Theory)

(Monday, 23-12-2019)

Time : 2.00 p.m. to 4.00 p.m.

Time—2 Hours

Maximum Marks—40

N.B. :— (i) Attempt all questions.

(ii) All questions carry equal marks.

(iii) Choose the correct answer for MCQs.

MCQ

1. Multiple Choice Questions : 10

(i) Gymnosperms differ from angiosperms in possessing.....

- (a) Naked ovules (b) Cones
(c) Complete flowers (d) Both (a) & (b)

(ii) An evergreen, Palm like gymnospermic plant.....

- (a) Pinus (b) Gnetum
(c) Cycas (d) Ephedra

(iii) A dwarf shoot with a cluster of needles is called as.....

- (a) Unifoliar spur (b) Foliar spur
(c) Bifoliar spur (d) Trifoliar spur

(iv) The leaf of pinus is called as amphistomatic because of.....

- (a) Stomata are on upper surface
(b) Stomata are on lower surface
(c) Stomata are on all surfaces
(d) Absence of stomata.

P.T.O.

- (v) The winged pollen grains are found in.....
- (a) Gnetum (b) Pinus
(c) Cycas (d) All of these
- (vi) Sporophytic plant of Gnetum looks like.....plant
- (a) Bryophytic (b) Pteridophytic
(c) Both (a) & (b) (d) Angiospermic
- (vii) Xylem of Gnetum consists of.....
- (a) Sieve tubes (b) Vessels
(c) Tracheids (d) Both (a) & (b)
- (viii) Gnetum is.....
- (a) Dioecious and Heterosporous
(b) Dioecious and homosporous
(c) Monoecious and homosporous
(d) Monoecious and Heterosporous
- (ix) Father of Indian Paleobotany.....
- (a) Ram Sahni (b) C.R. Reddy
(c) Theophrastus (d) Birbal Sahni
- (x) Internal structures are well preserved in.....
- (a) Cast (b) Petrification
(c) Amber (d) Impression

Theory

2. Describe the anatomy of cycas leaflet with well labelled diagram and add a note on its xerophytic characters. 10

Or

Explain in brief on :

- (a) Economic importance of Cycas.
(b) General characters of Gymnosperms.

3. Describe external morphology of vegetative structures of Pinus. 10

Or

Write short notes on :

- (a) Male cone of pinus.
- (b) L.S. of mature female cone of pinus.

4. Define secondary growth. Describe secondary growth in Gnetum stem. 10

Or

Write short notes on :

- (a) Process of plant fossilization
- (b) Petrification.