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BF—61—2016

FACULTY OF SCIENCE

B.Sc. (Second Year) (Fourth Semester) EXAMINATION

OCTOBER/NOVEMBER, 2016

BOTANY

Paper VIII

(Gymnosperms and Palaeobotany)

(MCQ + Theory)

(Tuesday, 18-10-2016)

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

Time—2 Hours

Maximum Marks—10+30=40

N.B. :—(i) Attempt All questions.

(ii) All questions carry equal marks.

(iii) Choose the correct answer for MCQ.

MCQ

1. Multiple Choice Questions : 10
- (1) Fruits are not found in Gymnosperms because
- (a) they are seedless
 - (b) they are not pollinated
 - (c) process of fertilization does not present
 - (d) ovary is absent
- (2) In Gymnosperms phloem lacks
- (a) Sieve plate
 - (b) Sieve tubes and companion cells
 - (c) Pholem parenchyma
 - (d) Sieve cells
- (3) The ovules of cycas are
- (a) Anatropous and trigemic
 - (b) Orthotropous and trigemic
 - (c) Anatropous and unitegmic
 - (d) Orthotropous and unitegmic

P.T.O.

- (4) Cycas stem is characterised with
(a) Large pith (b) Girdle bundles
(c) Medullary rays (d) All of these
- (5) In pinus the pollination is
(a) Zoophilous (b) Hydrophilous
(c) Entomophilous (d) Anemophilous
- (6) Pinus belongs to order
(a) Cycadales (b) Gnetales
(c) Coniferales (d) Pentoxylates
- (7) Resin canal absent in
(a) Gnetum (b) Cycas
(c) Pinus (d) None of these
- (8) Vessels are present in xylem of
(a) Ginkgo (b) Cycas
(c) Gnetum (d) Pinus
- (9) Fossils serve as tools for studies of
(a) Palynology (b) Genetics
(c) Palaeobotany (d) Cytology
- (10) Paleozoic era regarded as
(a) Era of ancient life (b) Era of primitive life
(c) Era of modern life (d) Era of early life

Theory

2. Explain the reproductive structure of female cone in cycas. 10

Or

Write in brief on :

- (a) Economic importance of cycas
(b) Primary growth of cycas stem.

3. Describe the primary structure of pinus stem. 10

Or

Write notes on :

- (a) L.S. of female cone of pinus
(b) T.S. of pinus needle.
4. What is secondary growth ? Explain in detail secondary growth in Gnetum stem. 10

Or

Explain in brief :

- (a) Petrification
(b) Bennettites flower.