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**R—64—2017**

**FACULTY OF SCIENCE**

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

**MARCH/APRIL, 2017**

**BOTANY**

**Paper VIII**

**(Gymnosperms and Palaeobotany)**

**(MCQ+Theory)**

**(Friday, 31-3-2017)**

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

*Time—Two Hours*

*Maximum Marks—40*

*N.B. :— (i) Attempt All questions.*

*(ii) All questions carry equal marks.*

*(iii) Choose the correct answer for MCQ.*

**(MCQs)**

1. Multiple Choice Questions :

10

(i) Gymnosperms are .....

(a) Annual

(b) Biannual

(c) Perennial

(d) None of these

(ii) In Gymnosperms, pollination is .....

(a) Zoophily

(b) Anemophily

(c) Entomophily

(d) All of these

(iii) Coralloid roots are present in .....

(a) Pinus

(b) Cycas

(c) Gnetum

(d) Ephedra

(iv) Cycas Ivs are used for .....

(a) Hats

(b) Mats

(c) Baskets

(d) All of these

P.T.O.

- (v) In young stem of pinus ..... absent.
- (a) Vessels and wood fibres  
(b) Trachieds and wood parenchyma  
(c) Both (a) and (b)  
(d) None of the above
- (vi) The pinus plant is .....
- (a) Herb (b) Shrubs  
(c) Tree (d) Climber
- (vii) Albuminous cells are occur in phloem of .....
- (a) Pinus (b) Gnetum  
(c) Cycas (d) Ephedra
- (viii) Family gnetaceae is represented by .....
- (a) Cycas (b) Gnetum  
(c) Pinus (d) Ephedra
- (ix) When the original plant material is replaced particle by certain minerals in type of fossil .....
- (a) Impression (b) Compression  
(c) Petrification (d) Coal-balls
- (x) Cenozoic era regarded as .....
- (a) Era of primitive life (b) Era of ancient life  
(c) Era of medieval life (d) Era of modern life

**(Theory)**

2. Describe the reproductive structure of male cone in cycas.

10

*Or*

Write short notes on :

- (a) Primary growth in cycas stem  
(b) Anatomy of cycas leaflets.

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3. Define secondary growth. Describe secondary growth in pinus stem. 10

*Or*

Write short notes on :

(a) T.S. Needle of pinus

(b) Male cone of pinus.

4. Describe the reproductive structure of female cone in Gnetum. 10

*Or*

Write short notes on :

(a) Process of fossilization

(b) General characters of Ginkgo.

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