

**NEP-03 / 01MSCB3 - Major (DSC) Paper-III : Gymnosperms & Paleobotany**

P. Pages : 1



**GUG/W/23/15063**

Time : Three Hours

Max. Marks : 80

- Notes : 1. All questions are compulsory and carry equal marks.  
2. Draw diagrams wherever necessary.

1. What are progymnosperms. Describe in detail the *Aneurophyton* and *Archaeopteris* progymnosperms. **16**

**OR**

Write notes on:

- a) *Lyginopteris* **8**  
b) *Medullosa*. **8**

2. Describe in detail the morphology, anatomy and reproductive structure with diagrams of *Cycas*. **16**

**OR**

Write notes on:

- a) *Williamsonia* **8**  
b) *Pentoxylon* **8**

3. Describe the reproduction and reproductive structure of *Gnetum* with the help of male and female cone. **16**

**OR**

Write notes on:

- a) T.S. Stem and Needle of *Pinus*. **8**  
b) T.S. Steam and Leaf of *Taxus*. **8**

4. Describe the Nomenclature, Age determination and Geological time scale of fossil. **16**

**OR**

Write notes on:

- a) Fossil parks and Museum of India. **8**  
b) BSIP, Lucknow. **8**

5. Write short notes on:  
a) Economic importance of Gymnosperms. **4**  
b) *Caytonia*. **4**  
c) *Cordiates*. **4**  
d) Objective of Paleobotany. **4**

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