## **BACHELOR OF SCIENCE (CBCS-2018 COURSE)**

T. Y. B. Sc. Sem-VI :SUMMER- 2022

## SUBJECT: BOTANY: BIOLOGY OF SEED PLANTS (GYMNOSPERMS &

## PALEOBOTANY)

Day: Tuesday Time: 11:00 AM-02:00 PM S-18479-2022 Date: 5/7/2022 Max. Marks: 60 N.B. All questions are **COMPULSORY**. 1) Figures to the RIGHT indicate FULL marks. 2) Draw neat and labeled diagram wherever necessary. 3) Attempt ANY TWO of the following: (12)Q.1 Describe coralloid roots of Cycas. a) Give structure of pollen grass in *Pinus*. b) Explain importance of gymnosperm as timber. c) Attempt ANY TWO of the following: (12)**Q.2** Give external morphology of *Thuja*. a) Describe male cone of Zamia. b) Give distribution of gymnosperm in India. c) Attempt ANY TWO of the following: Q.3 (12)Explain structure of ovule in Cycas. Describe structure of seed in *Gnetum*. b) Describe female cone of the Pinus. c) Attempt ANY THREE of the following: (12)**Q.4** Explain importance of mycorrhiza in Pinus. Give external morphology of *Gnetum*. b) Explain the contribution of Birbal Sahani in classification of *Gymnosperm*. c) Describe vegetative reproduction in Cycas. d) Attempt  $\mathbf{ANY}\ \mathbf{FOUR}$  of the following : (12)Q.5 Give affinities of *Gnetum* with angiosperms. a) Explain morphological characters of Cycadeoidea. b) Give anatomicus features of Cycas leaflet. c) Describe outline of Gymnosperm classification according to Chamberlain. d) Explain Lepidocarpon in brief. e) Give process of fossilization. f)

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