Total pages: 2

PG CBCS

M.Sc. Semester-I Examination, 2020

BOTANY

PAPER: BOT 104

PTERIDOPHYTES & GYMNOSPERMS

Full Marks: 40 **Time: 2 Hours**

Write the answer for each unit in separate sheet

BOT 104.1

PTERIDOPHYTES

1. Answer any two questions from the following: 10 x 2 =20

I. Characterize Filicopsida. Mention the major extant clads of Filicopsida. Discuss the evolution of sorus in ferns through phyletic slide. 3+3+4

II. Characterize Zosterophyllopsida. How does the group differ from Rhyniopsida? Mention four genera of the group. Why the group is regarded as the progenitor of Lycopsida? 3+2+2+3

III. Who discovered the group Progymnospermopsida. Write down the basis of the discovery. Mention the families of the group. Discuss about different leaf forms of Archaeopteridales. 1+3+3+3

IV. Characterize Trimerophytopsida. Mention two genera of the group. Why Trimerophytopsida is regarded as the cardinal group in evolution of higher clads of pteridophytes? 4+2+4

V. Characterize Trimerophytopsida. Mention two genera of the group. Why Trimerophytopsida is regarded as the cardinal group in evolution of higher clads of pteridophytes? 3+5+2

BOT 104.2

GYMNOSPERMS

2. Answer any two questions from the following: 10 x 2 = 20

I. Illustrate different fossil taxa of *Pentoxylon* plant. 10

II. How seed habit is being achived by the higher plants from heterospory? Discuss. 10

III. Illustrate different fossil taxa of *Glossopteris* plant. 10

(P. T. O)

IV. Characterize the order cycadales. Name the extant taxa of this group. Discuss the evolution of megasporophylls among the different cycadalean taxa. 3+3+4

V. Write short notes on the following – 5+5

a) *Lagenostoma ovule.*

b) Gymnosperm as a source of wood and resin.

****