

Raja N. L. Khan Women's College (Autonomous)
End Semester Examinations-2022
BOTANY [PG-CBCS]
[M.Sc] (Theory)
PAPER-BOT 104
Pteridohytes and Gymnosperms

*Full Marks: 40**Time: 02 Hrs*

UNIT 1: PTERIDOPHYTES	20
1. Answer any four questions.	1x4
a) Name oneeusporangiate and one leptosporangiate fern.	
b) Name two important fossil pteridophytes from Rhynie-chert bed.	
c) Name one extinct and one extant ligulatepteridophyte.	
d) What do you mean by incipient heterospory?	
e) What is the valid new name for <i>Rhynia major</i> ? Who cited this name?	
f) Mention two important features of <i>Phylloglossum</i> .	
g) What is false indusium. State its function.	
2. Answer any two questions.	4x2
a) Discuss about the stelarevolution in pteridophytes.	4
b) Characterize Trimerophytosida. Cite two examples	3+1
c) Write a short note on Apospory in Pteridophytes.	4
d) Give the outline classification of the progymnosperms.	4
3. Answer any one question.	8x1
a) Characterize Zosterophylloidsida. Name the important genera belonging to this class. Why is the group regarded as the progenitor of Lycopsida.	4+2+2
b) Define sorus. Describe the evolution of soral structures in the filicalian ferns.	1+7=8
UNIT 2: GYMNOSPERMS	20
1. Answer any four questions.	1x4
a) Distinguish between bract scale and ovuliferousscale.	
b) What is albuminous cell?	
c) Mention two similarities of <i>Gnetum</i> with gymnosperm.	
d) What is cupule? Where does it occur?	
e) Name one halophytic gymnosperm.	
f) What is Bars of Sanio or Crassulae?	
g) What is sperganum cortex?	

- 2. Answer any two questions.** **4x2**
- a) Write a note on the global distribution of extant Cycads. 4
 - b) Write briefly about the male fructifications of *Glossopteris* plant. 4
 - c) Discuss in brief the pre-ovule concept in origin of seed habit. 4
 - d) Write down the medicinal importance of gymnosperms. 4

- 3. Answer any one question.** **1x8**
- a) Give the outline classification of gymnosperms proposed by K.R.Sporne (1965).
Write down the Class characters. 5+3
 - b) Write a brief account on the geographic distribution of modern conifers. Write a
note on gymnosperms as a source of resins. 4+4