

RANIGANJ GIRLS' COLLEGE

MODEL QUESTIONS

BOTANY [HONOURS]

PAPER- C7

F.M: 40

The figure in the right-hand margin indicates marks. Candidates are required to give their answer in their own words as far as practicable.

Pteridophyte and Gymnosperms

1. Answer any five questions of the following: **2×10=20**
 - (a) State two difference between *Agalophyton major* and *Rhynia gwnny-vaughanii*.
 - (b) Whate is gradate sorus? Where do you find it?
 - (c) Define apospory.
 - (d) Write down the significance of mitosis.
 - (e) Write two fern characters of *cycas*.
 - (f) What is girdeling of leaf trace?
 - (g) Difference between radiospermic and platispermic seed.
2. Answer any two questions of the following: **5×2=10**
 - (a) Give an comparative account of gametophytic structures of *Lycopodium*.
 - (b) Write down the morphological and anatomical features of *Lepidodendron* stem.
 - (c) Discuss about the morphological nature of rhizophore of *Selaginella*. What is glossopodium.
 - (d) Describe the female gametophytic development of *cycas*.
 - (e) Draw and describe the t.s of *Pinus* needle.
3. Answer any two questions of the following: **10×2=20**
 - a) what is heterospory? Why it is regarded as pre-requisite of seed-habit? How far *Selaginella* approaches towards seed-habit? **2+4+4=10**
 - b) Write down 2 each gymnospermic and angiospermic characters of Gnetum. With suitable diagram describe the male and female gametophyte development of Gnetum. **4+6=10**
 - c) Describe the gametophyte development of *Lycopodium* with suitable illustration. Name one epiphytic species of *Lycopodium*. **9+1=10**
 - d) Write down the morphological nature of *Pinus* ovuliferous scale. Distinguish between simple and cleavage polyembryonae. **7+3=10**

