## M.Sc. (Part-II) (Botany) Sem-IV

## **BOT-16.2 - Paper-XVI : Reproductive Biology of Angiosperms (Special-II)**

GUG/S/19/2368 P. Pages: 1 Time: Three Hours Max. Marks: 80 Notes: 1. All questions are compulsory and carry equal marks. 2. Illustrate your answers with suitable examples. Describe in detail various types of endosperms and its chemical composition and role in **16** 1. embryo development. OR Write notes on: Double fertilization and triple fusion. 8 Gynogenesis. 8 b) 2. Write a detailed account on polyembryony. **16** OR Write notes on: Physiology and biochemistry of suspensor. 8 Induction of polyembryony. 8 b) Write a note on concept and scope of biotechnology with special focus on plant tissue **3.** 16 culture. OR Write notes on: a) Pollen analysis of honey. 8 b) Embryogenesis from callus. 8 4. Write on biotransformation and production of useful compounds through cell culture and 16 its applications. OR Write notes on: Isolation of protoplast. a) 8 Production of Hybrids. b) 5. Write short notes on: In-vitro-fertilization. 4 a) b) Zygote. Embryo Culture. c) Bioreactors. d)

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