

BOT–552**Medicinal Plants and Embryology of
Angiosperms****M. Sc. BOTANY (MSCBOT–12/13/16)****Second Year, Examination, 2017****Time : 3 Hours****Max. Marks : 80**

Note : This paper is of **eighty (80)** marks containing **three (03)** Sections A, B and C. Learners are required to attempt the questions contained in these Sections according to the detailed instructions given therein.

Section–A**(Long Answer Type Questions)**

Note : Section ‘A’ contains four (04) long answer type questions of nineteen (19) marks each. Learners are required to answer *two* (02) questions only.

1. Describe chemical constitution of medicinally-useful plants.
2. Write notes on the following :
 - (a) Indian Aloe
 - (b) Ratan jot
 - (c) Tapetum
 - (d) Synergids
3. Describe the different events that occur in male gametophyte development.

4. What is embryology ? Describe its application in agriculture and horticulture.

Section-B

(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short answer type questions of eight (08) marks each. Learners are required to answer *four* (04) questions only.

1. Describe the structure of microspore.
2. Explain briefly structure and types of tapetum.
3. Give an account of importance of parthenocarpy.
4. Explain the various functions of endosperm.
5. Describe the various kinds of female gametophytes.
6. Describe methods of ethnobotanical studies.
7. What are the causes of sexual incompatibility ?
8. What is experimental embryology ? Describe briefly its significance.

Section-C

(Objective Type Questions)

Note : Section 'C' contains ten (10) objective type questions of one (01) mark each. All the questions of this Section are compulsory.

1. *Acacia catechu* belongs to family.
2. Botanical name of satavari is
3. Central Institute of Medicinal and Aromatic Plants is located at
4. Composite endosperm is formed by the union of more than two developing embryos of the same ovary.

(True/False)

[3]

5. CDRI stands for
6. Perisperm is nucellar tissue that contains toxic substances. (True/False)
7. *Adhatoda vasica* belongs to family Acanthaceae. (True/False)
8. Zygote is the outcome of fertilization. (True/False)
9. Seedless fruits are known as parthenocarpic fruits. (True/False)
10. Opium is terpene. (True/False)

