



HDY-003-1143005

Seat No. _____

M. Sc. (Botany) (Sem. III) (CBCS) Examination

November / December – 2017

BOT - 317 : Diversity of Plant Life

(Elective)

Faculty Code : 003

Subject Code : 1143005

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

1 Answer the following : (any seven) **2x7=14**

- (a) Describe vegetative reproduction in bryophyta
- (b) Enlist medicinal uses of bryophyta.
- (c) Describe morphological variation in leaf of bryophyta.
- (d) How does pteridophytes differ from bryophytes ?
- (e) Write general characters of pteridophytes.
- (f) Write classification of gymnosperms.
- (g) Describe economic importance of gymnosperms.
- (h) Describe morphological variation in stem of gymnosperms.
- (i) What are the principles of phylogenetic classification?
- (j) Describe the economic importance of any one family of monocotyledons.

2 Explain in detail any **two** of the following : **2x7=14**

- (a) Anatomical pattern and variation in leaf and stem of bryophyta
- (b) Economic importance of bryophytes
- (c) Life cycle of bryophyte with schematic diagram

- 3** Write short notes on : **2x7=14**
(a) Various steles found in pteridophyta
(b) Life cycle of pteridophyta with schematic diagram

OR

- 3** Write short notes on : **2x7=14**
(a) Anatomical pattern and variation in root and reproductive organ of pteridophyta
(b) Morphological pattern and variation in leaf and stem of pteridophyta

- 4** Describe in detail : **2x7=14**
(a) Evolutionary trends among different groups in gymnosperms.
(b) Life cycle of gymnosperms with schematic diagram.

- 5** Describe briefly any **two** of the following : **2x7=14**
(a) Merits and demerits of Bentham and Hooker classification.
(b) Any two families of Polypetalae order.
(c) Characters of Amaryllidaceae Family.
(d) Any two families of Apetalae order.