

**Vidyasagar College for Women**  
**Intermediate Examination 2020**

**Part-I**  
**Botany Honours**  
**Paper-II**

Full Marks: 100

Time: 2 hours

Paper IIA: **Module III (Theoretical)** Marks: 50

Time: 1 hour

Paper IIB: **Module IV (Practical)** Marks: 50

Time: 1 hour

(Send a single e-mail with separate PDF for each module)

NB: Candidates appearing *Only Theoretical* or *Only Practical*  
must submit their answer script after **1hour**.

**Paper IIA: Module III**

1. Answer the following questions briefly (*any five*) 5×2

- a) Why bryophytes are called amphibian plants
- b) Distinguish between apophysis and calyptra
- c) Give two important evolutionary features of *Anthoceros*
- d) Name the different periods within 'Mesozoic' era.
- e) What is index fossil? Give an example
- f) State the chemical nature of sporopollenin
- g) Draw and label a polar view of tetracolporate pollen grain.

2. Answer the following questions (*any two*) 2×20

- a) Describe the origin of Bryophyta.
- b) Compare the sporophytic plants of *Anthoceros* and *Funaria*.
- c) Describe vegetative reproductive methods of *Marchantia* species. Add a note on dehiscence of capsule in *Funaria*.
- d) Briefly describe the process of petrification. What are the suffix preferred for naming different plant organs, cite any two examples.
- e) Write short note on (*any two*)
  - i. Melissopalynology
  - ii. Forensicpalynology
  - iii. Aeropalynology
- f) Define microsporogenesis. Describe the process of development of pollen grain of angiosperms.

**Paper IIB: Module IV**

3. Answer the following questions (*any five*) 5×10

- a) Draw and mention the identifying characters of the female reproductive structure of *Chara*.
- b) Draw and mention the identifying characters the reproductive structures of *Ectocarpus*.
- c) Draw and mention the identifying characters the zygospore of *Rhizopus*.

- d) Draw the hymenium layer and mention identifying characters of T.S. of fruit body of *Ascobolus*.
- e) Draw and mention the identifying characters of gemma cup of *Marchantia*.
- f) Draw and mention the identifying characters of L.S. of *Funaria* capsule.