



**PBA-003-001306**

Seat No. \_\_\_\_\_

**B. Sc. (Sem. III) (CBCS) Examination**

**November / December - 2018**

**Botany : B - 301**

*(Plant Diversity and Bio-Resources)*

*(Old Course)*

**Faculty Code : 003**

**Subject Code : 001306**

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

[Total Marks : 70

- Instructions :** (1) This question paper contains three questions, all are compulsory.  
(2) Draw neat and labelled diagram wherever necessary.  
(3) Figures to the right indicate marks.

- 1 Write answer in very short. **20**
- (1) The cell wall in algal cell consist of \_\_\_\_\_.
  - (2) What is the function of flagella?
  - (3) Which algae is present of cytocarp?
  - (4) Give the scientific name of edible fungi?
  - (5) Pythim belongs to which class?
  - (6) Which fungi is found in damping of seedling?
  - (7) Write the parts of sporophyte.
  - (8) The number of teeth in each ring of peristome in funaria is \_\_\_\_\_.
  - (9) What is the function of epidermis?
  - (10) The most primitive types of stele is \_\_\_\_\_.
  - (11) Give two examples of heterospory?
  - (12) Who proposed Telome theory?
  - (13) Mesophyll tissue of pinus needle is made up of \_\_\_\_\_.
  - (14) Which fern is commonly known as maiden hair fern?
  - (15) In which division ovules are found naked?

- (16) Write the scientific name of turmeric?
- (17) *Tinospora cordifolia* belongs to which family?
- (18) Give the scientific name of apocynaceae family.
- (19) Write the use of coconut oil.
- (20) Give the scientific name of Heena.

- 2** (a) Write any **three** out of six. **6**
- (1) Give the classification of Nostoc.
  - (2) What is meant by siphonous type of thallus organization ?
  - (3) Explain vegetative structure of pythium.
  - (4) Write the habitat of Batrachospermum.
  - (5) What is Heterocyst?
  - (6) Define : Gemmae.
- (b) Write any **three** out of six. **9**
- (1) Describe the cell structure of Nostoc.
  - (2) Write the Asexual reproduction in Bactrachospermum.
  - (3) Describe the ultra structure of Eukaryotic algal cell.
  - (4) Describe the structure of Anthoceros of archigonium.
  - (5) Write the Asexual reproduction in Pythium.
  - (6) Describe the external structure of Funaria.
- (c) Write any **two** out of five. **10**
- (1) Describe the sexual reproduction in Batrachospermum.
  - (2) Explain the sporophytic structure of Anthoceros.
  - (3) Explain the algae causing Biological disturbances.
  - (4) Explain ultra structure of Fungal cell.
  - (5) Describe sexual reproduction in Pythium.

- 3 (a) Write any **three** out of six. **6**
- (1) Give classification of Anthoceros.
  - (2) Describe the structure of sporangium of Adiantum.
  - (3) Write the use of Henna.
  - (4) What is Heterospory?
  - (5) Draw the label diagram for L. S of female cone of pinus.
  - (6) Explain the anatomy of Adiantum root.
- (b) Write any **three** out of six. **9**
- (1) Write the economic importance of Bryophytes.
  - (2) Explain the Adiantum prothallus.
  - (3) Write the different method of vegetative reproduction in bryophyte.
  - (4) Explain the external structure of Pinus.
  - (5) Draw floral diagram and floral formula of verbenaceae family.
  - (6) Explain male cone of pinus.
- (c) Write any two out of five. **10**
- (1) Explain Telome theory.
  - (2) What is stele? Describe various types of stellar system found in vascular plants.
  - (3) Describe the embryogeny in pinus.
  - (4) Explain combretaceae family with floral formula and floral diagram.
  - (5) Discuss the theory of rise and fall of gymnosperm.
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