



PBK-003-0011004 Seat No. _____

B. Sc. (Sem. I) (CBCS) Examination

November / December - 2018

Botany : B - 101

(Plant Diversity)

Faculty Code : 003

Subject Code : 0011004

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

[Total Marks : 70

Instructions :

- (1) This question paper contains five questions. All questions are compulsory.
- (2) Write answers of all the questions in main answer sheet.
- (3) Draw neat and labelled diagram wherever necessary.
- (4) Figures to the right indicate full marks for the questions.

- 1 (a) Answer the following objective type questions : 4
- (1) Who is known to be the pioneer in the field of plant taxonomy ?
 - (2) What is mycology ?
 - (3) Write down names of kingdoms of Whittaker's classification.
 - (4) Write down the two types of sexual reproduction in *Spirogyra*.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Define : Olericulture and Horticulture.
 - (2) Draw labelled diagram of Sargassum leaf.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Describe : General characters of Kingdom Monera.
 - (2) Describe : Cell structure of *Spirogyra*.

- (d) Write note on : (any 1 out of 2) 5
- (1) Explain : Sexual reproduction in Spirogyra.
 - (2) Explain : Sexual reproduction in Sargassum
- 2** (a) Answer the following objective type questions : 4
- (1) Whose classification you are following to study Fungi ?
 - (2) Mucor is also known as _____.
 - (3) Fruiting body of Agaricus is called _____.
 - (4) How many types of Hypha do fungi contain ? Name them.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) What is Torula condition ? In which fungi of your course you find that ?
 - (2) Write down general characters of Class Basidiomycetes.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Describe : Thallus structure of Agaricus.
 - (2) Describe any three uses of fungi as Medicine.
- (d) Write note on : (any 1 out of 2) 5
- (1) Explain : Asexual reproduction in Mucor.
 - (2) Explain : Internal structure of gills of Agaricus.
- 3** (a) Answer the following objective type questions. 4
- (1) Write any two names of genera that belong to division Hepaticopsida.
 - (2) Why Bryophyta are called amphibian plants ?
 - (3) Write down the classification of Riccia.
 - (4) Which type of Rhizoids are seen in Riccia ?

- (b) Answer in brief : (any 1 out of 2) 2
- (1) Describe the vegetative reproduction through tubes in *Riccia*.
 - (2) Write general characters of class Hepaticopsida.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Describe the external characters of *Riccia*.
 - (2) Describe vegetative reproduction by tubers in *Riccia*.
- (d) Write note on : (any 1 out of 2) 5
- (1) Explain : Alternation of generation in *Riccia*.
 - (2) Explain : Sporophyte of *Riccia*.
- 4 (a) Answer the following objective type questions. 4
- (1) Define : Pteridophyta.
 - (2) Which generation is dominant in Pteridophyta ?
 - (3) Which type of leaf do *Nephrolepis* bear ?
 - (4) The gamatphytic generation of fern is called _____.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Write down classification of *Nephrolepis*.
 - (2) Draw labelled diagram of *Nephrolepis* leaflet.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Describe : Anatomy of *Nephrolepis* root.
 - (2) Describe : Sorus and sporangia of *Nephrolepis*.
- (d) Write note on : (any 1 out of 2) 5
- (1) Explain : Alternation of generation in *Nephrolepis*.
 - (2) Explain : Gamotophytic generation of *Nephrolepis*.

- 5 (a) Answer the following objective type questions : 4
- (1) Scientific name of Sago palm is _____.
 - (2) True or False : *Cycas* is an angiosperm.
 - (3) State true : *Cycas* is monoecious or dioecious.
 - (4) How many types of leaves are found in *Cycas* ?
Name them.
- (b) Answer in brief : (any 1 out of 2) 2
- (1) Why *Cycas* plant is called dioecious ?
 - (2) Describe : Corolloid root.
- (c) Answer in detail : (any 1 out of 2) 3
- (1) Describe : Vegetative Reproduction through bulbil in *Cycas*.
 - (2) Describe external morphology of *Cycas*.
- (d) Write note on : (any 1 out of 2) 5
- (1) Explain : Male cone of *Cycas*.
 - (2) Explain : Anatomy of *Cycas* leaflet.
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