



**JAF-003-001306**

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

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

**November - 2019**

**Botany : B - 301**

**(Plant Diversity & Bio-Resources) (Old Course)**

**Faculty Code : 003**

**Subject Code : 001306**

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

[Total Marks : 70

1 Answer the following objective type questions. All are compulsory : **20**

- (1) Define Coenobial form of Algae.
- (2) Give example of Rhizopodial form of algae.
- (3) What is Glomerule ?
- (4) What is the name of female reproductive structure in *Batrachospermum* ?
- (5) What are the common names often given to *Nostoc* ?
- (6) How many neck canal cells are present in the neck of the archegonium of *Funaria* ?
- (7) Which bryophyte is used as surgical pad ?
- (8) Cup shaped fungi's name is ?
- (9) Ascus consists of how many ascospores ?
- (10) Define : fossil
- (11) Write only floral formula of *Menispermaceae*.
- (12) What is Telome ?
- (13) The process of 'syngensis' in the telome concept is called what ?
- (14) Write the name of Periods of Mesozoic Era.
- (15) Write note on the name of Periods of Paleozoic Era.
- (16) Name the species of *Pinus* from which *Chilgoza* is obtained ?
- (17) Name the family in which is Versatile anther.
- (18) Write the floral formula of *Verbenaceae*.
- (19) Give the name of edible fungi.
- (20) Give the botanical name of Flower dye.

2 (a) Answer in brief : (any 3 out of 6) **6**

- (1) Define Dendroid form with example.
- (2) *Cystocarp* consists of .....
- (3) Give an account of the occurrence of *Nostoc*.
- (4) Which part of *funaria* is parasite ?
- (5) Write function of eleter.
- (6) Is *Anthoceros* symbiosis ? Why ?

- (b) Answer in detail : (any 3 out of 6) 9
- (1) Ectophloic siphonostele and amphiphloic siphonostele make differ by using only diagrammatic diagram.
  - (2) Draw floral diagram of Brassicaceae with F.F.
  - (3) Give the Botanical name of any three plants of Combretaceae.
  - (4) Write only substele of protostele.
  - (5) Draw floral diagram of Commelinaceae with F.F.
  - (6) Draw the T.S. of *Adiantum* petiole.
- (c) Write notes on : (any 2 out of 5) 10
- (1) Explain : The methods of reproduction in *Nostoc*.
  - (2) Describe : Ultrastructure of Prokaryotic cell.
  - (3) Classify Apocynaceae with floral formula and F.F.
  - (4) Draw only well labelled diagram of *Anthoceros sporophyte*.
  - (5) L.S. of *Pinus* female cone (only diagram).
- 3** (a) Answer in brief : (any 3 out of 6) 6
- (1) Write two economic importance of Fungi.
  - (2) Write function of Heterocyst.
  - (3) Give formula for fungus Chitin.
  - (4) Define: Lomasome.
  - (5) Why *Adiantum* is commonly known as 'Maiden hair fern' ?
  - (6) Define: Ethnobotany.
- (b) Answer in detail : (any 3 out of 6) 9
- (1) Describe : wood dye.
  - (2) Write note on *Batrachospermum* cell structure.
  - (3) Write note on characteristics of ascospore.
  - (4) Describe: Dictyostele.
  - (5) Write merits of Telome Theory.
  - (6) Write F.F. of Cassuraceae.
- (c) Write notes on : (any 2 out of 5) 10
- (1) Describe: Algae causing Biological disturbances.
  - (2) Describe: Gametophyte phase of *Adiantum*.
  - (3) Write economic importance of bryophyte.
  - (4) *Pinus* Needle (only diagram with labels).
  - (5) Write note on economic importance of Coconut.