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8163

Your Roll No.

Subsidiary for B.Sc. Honours

HS

I Examination

BOTANY – Paper I

(Plant Diversity)

(NC : Admissions of 2003 and onwards)

Time : 3 hours

Maximum Marks : 50

*(Write your Roll No. on the top immediately
on receipt of this question paper.)*

Question 1 is compulsory.

Attempt any four from the rest of the questions.

*All questions carry equal marks. All parts
of a question should be answered together.*

1. Give the botanical names and mention the plant part used in : (1×10=10)

- (i) A fibre yielding plant
- (ii) A medicinal plant
- (iii) A spice
- (iv) A beverage

P.T.O.

- (v) Source of sugar
- (vi) Timber
- (vii) A vegetable
- (viii) A source of essential oil
- (ix) A cereal
- (x) A legume

2. Write short notes on : (2½×4=10)

- (i) Spore dispersal in *Equisetum/Funaria*
- (ii) Xerophytic characters of *Pinus*
- (iii) Rhizophore
- (iv) Sexual reproduction in *Spirogyra*

3. Draw neat labelled diagrams of any **four** of the following : (2½×4=10)

- (i) Bacteriophage
- (ii) Fern prothallus
- (iii) L.S. archegoniophore of *Marchantia*
- (iv) V.S. leaf through sordorus
- (v) Trichome of *Nostoc*

4. What are the means of genetic recombination in bacteria? (10)

OR

Enumerate the life cycle of a disease causing fungus.

5. (a) The sporophyte of *Funaria* is partially independent. Comment.
- (b) Bryophytes are known as the amphibious of plant kingdom. Comment.
- (c) Enumerate the characteristic features of Pteridophytes. (3+3+4=10)
6. Discuss the contributions of any five of the following :- (2×5=10)
- (i) W.M. Stanley
 - (ii) F. Griffith
 - (iii) C. Linnaeus
 - (iv) Lederberg and Tatum
 - (v) Frankel and Conrat
 - (vi) Hershey and Chase

7. Fill in the blanks :- (1×10=10)

- (i) Virus carrying double stranded RNA is _____ .
- (ii) DNA showing left handed helical structure is called as _____ .
- (iii) The cell wall in fungi is made of _____ .
- (iv) Elaters are seen in _____ .
- (v) The wood in *Pinus* is _____ and _____ .
- (vi) The taxonomic category "Order" ends in suffix _____ .
- (vii) Agar Agar is produced by _____ .
- (viii) Reserve food material in fungi is _____ .
- (ix) Pond silk is the common name of _____ .