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End Semester Examination of Semester-I, 2015

Subject: BOTANY (HONS.) (UG)
Paper: I (Theory)

Full Marks: 40
Time: 2 Hrs

The figures in the margin indicate the marks corresponding to the question

Candidates are requested to give their answers in their own word as far as practicable.

Illustrate the answers wherever necessary.

## Group A

A. Answer any two out of four questions: 10x2=20

1. What is double fertilization? How many types of endosperm formation are found in angiosperm? Mention them. What do you mean by polyembryony? 2+6+2=10

2. Describe with example the different types of root-stem transition system. What do you mean by organoleptic study of a drug? Distinguish between the ring-porous and diffuse porous wood. What is Quiescent centre?

(5+2)+1+1+1=10

3. Describe the different range of thallus structure in algae. Write down the different types of asexual reproduction found in *Vaucharia*. What is diatomite. 5+4+1

4. Write short notes on (any two): 5+5=10

- a) Meristematic tissue.
- b) Dry dehiscent Fruits.
- c) Inter-xylary phloem formation in Strychnos.

## Group B

B. Answer any two out of four questions: 5x2=10

- a) Describe with suitable diagram & example, the special types of cymose inflorescence.
- b) Give examples (Scientific names) of: 1+1+1+1=5
  - i) Basal placentation.
  - ii) Twisted aestivation.
  - iii) Synamdrous stamens
  - iv) Gynobasic style.
  - v) Pepo fruit.
- c) i) Characterise Cyanophyceae. 3+2=5
  - ii) Name two contrivances for cross pollination. 3+2=5
- d) What do you mean by organoleptic study? Mention the active principles, common adutarants and use of <u>Zingiber</u> (rhizome) and <u>Adhatoda</u> (leaf).

  2+1-1-5

## Group C

C. Answer any five out of ten questions: 2x5=10

- i) What do you mean by floral formula & floral diagram?
- ii) What is Agar-Agar? Give its source.
- iii) Name two Algae used as food and fodder.
- iv) Differentiate between ornithophily and entomophily.
- v) What is helobial type of endosperm formation?
- vi) Give example of extrastellar cambium. What does it produce?
- vii) Distinguish between epigynous flower and perigynous flower with example.
- viii) What are corona and papus?
- ix) What is Palmella stage? Mention the name of a semiparasite alga.
- x) Distinguish between "Berry" and "Pepo" type of fruit.