HCU-003-001306 Seat No. _____

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

October / November – 2017

Botany : B - 301

(Plant Diversity & Bio Resources)

(Old Course)

Faculty Code : 003

Subject Code : 001306

Time : $2\frac{1}{2}$ Hours] [Total Marks : **70**

Instruction : (1) This question paper contains three 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 side indicate full marks for the questions.

1 Objective type questions : **20**

(1) The number of ascospores in the ascus of Peziza is _____.

(2) In Anthoceros, archegonia and antheridia are embedded in _____ surface of the thallus.

(3) Who proposed the stellar theory in pteridophytes?

(4) Write the scientific name of Desi Badam.

(5) In Batrachospermum, branches of limited develop from _____ of the axis.

(6) What do you mean by polypetalous flower?

(7) Give the name of any one alga which possess Siphonaceous thallus.

(8) Assign the following plants into family.

(i) Tinospora cordifolia.

(ii) Catharanthus roseus

(9) Peziza is commonly known as :

(10) Write the floral formula of Amaryllidaceae family.

(11) Actinomorphic condition in flower is represented as _____.

(12) Pythium is belongs to _____ order.

(13) In cyanophycean cell, the nuclear material occurs in the _____.

(14) Which types of phases are generally present in alternation of generation in bryophyte?

(15) Write the dominant pigments of Nostoc algae.

(16) Explain the term Sporophyll.

(17) Yeast is an important source of _____.

(18) Which plant is commonly known as' Maiden hair fern'?

(19) _____ colony of algae is look like branches of plant.

(20) The most primitive type of stele is _____.

2 (A) Answer in brief : (any **three**) **6**

(1) Explain vegetative structure of Pythium.

(2) Explain the term ethnobotany.

(3) Draw a labelled diagram of internal structure of Anthoceros thallus.

(4) Write any two economic importance of bryophyte.

(5) Write the features of Pinus pollen with diagram.

(6) Draw a labelled diagram of Eukaryotic cell structure of algae.

(B) Answer any **three** : **9**

(1) Describe sexual reproduction in Pythium.

(2) Describe the structure of Anthoceros antheridia.

(3) Write the morphological features of Adiantum.

(4) Explain - Nostoc cell structure.

(5) Explain Pinus female cone.

(6) Describe Heena leaves as dye yielding plant.

(C) Answer in detail : (any **two**) **10**

(1) Describe asexual reproduction in Pythium.

(2) Write an essay on the harmful effects of algae, which causing biological disturbance.

(3) Explain the structure of sporophyte of Funaria.

(4) Explain internal structure of Pinus needle.

(5) Give systematic position, distinguishing characters of Apocynaceae family with floral formula and diagram.

3 (A) Answer in brief : (any **three**) **6**

(1) Explain filamentous forms of algae.

(2) Write the floral formula of Menispermaceae family.

(3) Which types of leaves are found in Pinus?

(4) What is heterospory?

(5) Describe the fertilization process of Bryophyte.

(6) Give the scientific name of any two plants belong to Brassicaceae family.

(B) Answer any **three** : **9**

(1) Describe wood catechu (Katha) as dye yielding plant.

(2) Write a note on Telome theory.

(3) Explain Adiantum sori.

(4) Describe sexual reproduction in Batrachospermum.

(5) Describe the structure of Peziza apothecium.

(6) Write the general characters of Amaryllidaceae family.

3 (C) Answer in detail: (any **two**) **10**

(1) Discuss the vegetative reproduction method of bryophyte.

(2) Write scientific name, family and economic ` importance of Coconut.

(3) Give distinguishing characters of Verbenaceae family with floral formula and floral diagram.

(4) Explain the internal structure of Pinus root.

(5) Give an account of mushroom cultivation.
