

First Year Pharm. D : SUMMER - 2019

SUBJECT: BIOLOGY

Day : **Saturday**
Date : **20/04/2019**

S-2019-4504

Time : 10.00 A.M. TO 01.00 P.M.
Max. Marks : 70

N.B.:

- 1) Q.1 and Q.5 are **COMPULSORY**. Out of the remaining answer any **TWO** questions from each Section.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answer to each section should be written in **SEPARATE** answer book.

SECTION – I

Q.1 A) Answer any **FOUR** of the following: **(08)**

- a) Define i) Placentation and ii) Phyllotaxy
- b) Write a note on parasitic root
- c) Sketch and label typical fruit
- d) Write the functions of leaf
- e) Write any four salient features of gymnosperm
- f) What is meristem? Mention its types.

B) Write a note on phylloclade. **(03)**

OR

Write a note on epiphytic root.

Q.2 With the help of diagrams describe the family Liliaceae. **(12)**

OR

With the help of diagrams describe the family solanaceae.

Q.3 A) Give an account of Binomial Nomenclature. **(07)**

OR

Give an account of typical flower.

B) What is inflorescence? Explain its types with examples. **(05)**

Q.4 Write short notes on any **THREE** of the following: **(12)**

- a) Distinguish between Dicotyledonae and monocotyledonae
- b) Give salient features of Division –Pteridophyta.
- c) Describe the structure of xylem.
- d) Describe types of fruits with examples.

SECTION – II

Q.5 A) Answer any **FOUR** of the following: **(08)**

- a) Give any two functions of plasma membrane.
- b) Distinguish between yellow fibres and white fibres.
- c) Sketch and label squamous epithelium.
- d) Write functions of i) Centriole ii) Vacuole
- e) Explain mechanism of digestion in mouth cavity of human.
- f) Give any four characteristics of class-aves.

B) Write the functions of Liver in man. **(03)**

OR

Explain the role of Stomach in digestion.

P.T.O.

Q.6 With the help of well labeled diagram describe male reproductive system of frog. **(12)**

OR

With the help of well labeled diagrams describe the histological structure of small intestine of human.

Q7 A) Give an account of Lysosomes.. **(07)**

OR

Describe the structure of Bone.

B) Give salient features of phylum-Arthropoda. **(05)**

Q.8 Write short notes on any **THREE** of the following: **(12)**

- a)** Sketch and label Multipolar neuron.
- b)** Write a note on plasmids
- c)** Explain the structure of cardiac muscles.
- d)** Give salient features of class-mammalia.

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