

First Year Pharm-D- SUMMER-2022

SUBJECT : BIOLOGY

Day : Wednesday

Date : 18.05.2022

Time : 2:00 P.M TO 5:00

Max. Marks : 70 P.M.

S-21324-2022

N. B. :

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

SECTION - I

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

- a) Give the characteristics of stem.
- b) Write a note on crossing over.
- c) Distinguish between Dicot and monocot.
- d) Define : i) Phyllotaxy ii) Aestivation.
- e) Give any four distinguishing features of Algae.
- f) Sketch and label various regions of typical root.

B) Give diagrammatic representation of cell cycle. (03)

OR

Write a note Metaphase of mitosis.

Q.2 With the help of labelled diagrams describe the family Solanaceae. (12)

OR

With the help of labelled diagrams describe the family Liliaceae.

Q.3 A) Give an account of typical flower of Angiosperm. (07)

OR

What is fruit? Describe various types of fruit with examples.

B) Give salient features of class-Pteridophyta. (05)

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

- a) Parenchyma
- b) Stem tuber
- c) Kingdom -Monera
- d) Binomial Nomenclature

P.T.O

SECTION – II

- Q.5** A) Answer any **FOUR** of the following: **(08)**
- a) Sketch and label the ultrastructure of Mitochondria.
 - b) Write a note on plasmids.
 - c) Sketch and label T.S. of pancreas.
 - d) Distinguish between fibrous and elastic cartilage.
 - e) Define : **i)** Tissue **ii)** Assimilation
 - f) Write the functions of Biomembrane

- B) Sketch and label Human digestive system. **(03)**

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

OR

With the help of well labelled diagram describe histological structure of small intestine of Human.

- Q.7** A) Give an account of class – Pieces. **(07)**

OR

Give outline of classification of non-chordata. Mention the examples of each phylum.

- B) Give an account of Lysosomes. **(05)**

- Q.8** Write short note on any **THREE**: **(12)**

- a) Inhalation and Exhalation
- b) Squamous epithelium
- c) Areolar connective tissue
- d) Non-striated muscles

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