

FIRST YEAR PHARM. D : SUMMER - 2018

SUBJECT : BIOLOGY

Day : **Wednesday**

Time : **10.00 AM to 01.00 PM**

Date : **18/04/2018**

S-2018-4025

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) Write a note on cymose inflorescence.
- b) Define i) Flower ii) Placentation
- c) Give any four salient features of Division- Algae.
- d) Name various taxa of classification according to hierarchy.
- e) Sketch and label typical leaf.
- f) Write a note on concept of species.

B) Give characteristics of stem. **(03)**

OR

Sketch and label L.S. of typical flower.

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) Describe simple permanent tissues. **(07)**

OR

Give an account of meristematic tissues.

B) Describe essential whorl of a flower. **(05)**

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

- a) Write a note of Rhizome.
- b) What is phyllotaxy? Explain its types.
- c) Write a note on xylem.
- d) Give economic importance of Lichens.

SECTION – II

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

- a) What are glands? Name any two exocrine glands.
- b) Give any one function of
i) Ciliated epithelium and ii) Columnar epithelium.
- c) Distinguish between white fibres and yellow fibres.
- d) Write any two functions of Lysosomes.
- e) Sketch and label cardiac muscle fibre.
- f) Give any four silent features of phylum – porifera.

B) Write the functions of Bone. **(03)**

OR

Write a note on plasmids.

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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