

I - B. Optom - Sem - I : SUMMER - 2018
SUBJECT : HUMAN BIOLOGY

Section – A is given on a **SEPARATE** sheet and has to be answered on the same sheet. This sheet should be completed within the first **30** minutes of starting of the examination. This sheet with Section – A only will be collected by the supervisor.

No. _____

Day: Tuesday
Date : 17-04-2018

S-2018-3557

SECTION – A

Q. 1 State True or False: (10)

- a) Any plane parallel to the median plane is sagittal plane.
- b) Digestive juice secreted by small intestine is gastric juice.
- c) Structural and functional unit of CNS is Neuron.
- d) Origin of cardiac impulse takes place in AV node.
- e) Hormone for calcium metabolic is parathyroid hormone.
- f) Life span of RBC is 120 days.
- g) Deficiency of Vit. D causes scurvy.
- h) Normal cardiac output in a 70 kg man is 70ml/min.
- i) Central artery of retina is end artery.
- j) Cartilage has no nerves.

Q. 2 Fill in the Blanks: (05)

- a) _____ is junction between two or more bones.
- b) _____ are networks of microscopic vessels which connect arterioles with venules.
- c) Tissue fluid flowing into lymphatics is _____.
- d) There are _____ pairs of spinal nerves.
- e) Body temperature regulation center is located in _____.

Q. 3 Match the following: (05)

- | | |
|---------------------------------------------------|----------------------|
| a) Squamous epithelium | i) Voluntary |
| b) Gomphosis | ii) Alveoli of lungs |
| c) Skeletal muscle | iii) Cornea |
| d) Cardiac muscle | iv) Tooth in socket |
| e) Non keratinized stratified squamous epithelium | v) Involuntary |

Marks Obtained: _____

Signature of Invigilator: _____

Signature of Examiner : _____

I-B.Optom. SEM-I : SUMMER - 2018
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Day : Tuesday
Date : 17/04/2018

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Time : 02.00 PM TO 05.00 PM
Max. Marks : 70

N. B. :

- 1) There are **THREE** sections as –
Section – A : Objective types questions = 20 Marks
Section – B : Long questions = 20 Marks
Section – C : Short questions = 30 Marks
- 2) Section – A is given on a **SEPARATE** sheet and has to be answered on the same sheet. This sheet should be completed with the first **30** minutes of starting of the examination. This sheet with Section – A only will be collected by the Supervisor.
- 3) Section – B has three long questions and any two questions have to be answered on the separate answer sheet.
- 4) Section – C has short questions and **ANY FIVE** questions have to be answered on the **SEPARATE** answer sheet.
- 5) Draw neat and labelled diagrams **WHEREVER** necessary.

SECTION – B

- Q. 4** Answer in detail **ANY TWO** of the following: (20)
- a) Define reflex action. Draw reflex arc. Enumerate properties of reflex action and describe any two in detail.
 - b) Describe composition and functions of blood. Classify White blood corpuscles and describe functions of each type.
 - c) Define blood pressure. Enumerate mechanisms regulating blood pressure and describe any one in detail.

SECTION – C

- Q. 5** Write in short **ANY FIVE** of the following: (30)
- a) Lung volumes and Capacities
 - b) Functions of Saliva
 - c) Carbohydrate metabolism
 - d) Types and functions of connective tissue cells
 - e) Classify and give characteristics of types of muscles
 - f) Cell organelles

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