

I -B.OPTOM. SEM – I : WINTER - 2018

Monday
26/11/2018

SUBJECT : HUMAN BIOLOGY

W-2018-3717

N. B. :

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.

Seat No. _____

Date: _____

SECTION – A

Q. 1 Fill in the blanks: **(10)**

- a) Structural and functional unit of kidney is _____.
- b) There are _____ pairs of cranial nerves.
- c) Normal cardiac cycle time is _____ sec.
- d) One gram of fat gives _____ k cal.
- e) Gaseous exchange in alveoli is by _____ diffusion.
- f) Temperature regulating centre is located in _____.
- g) Rickets is caused by deficiency of vitamin _____ in children.
- h) Thyroxine is secreted by _____ gland.
- i) Surface tension lowering substance in alveoli is _____.
- j) Normal cardiac output in a 70 kg man is _____ lit.

Q. 2 State True or False : **(05)**

- a) Difficulty in breathing is called as asphyxia.
- b) Excess secretion of growth hormone leads to cretinism.
- c) Skin is largest sensory organ.
- d) Diabetes mellitus is caused due to deficiency of Insulin.
- e) Respiratory centers are located in cerebral cortex.

Q. 3 Match the following: **(05)**

- | | |
|---------------------------------|------------------|
| a) Junction between two neurons | i) 125 ml/min |
| b) Glomerular filtration rate | ii) 300 – 500 ml |
| c) Xerophthalmia | iii) Synapse |
| d) Normal stroke volume | iv) Vitamin A |
| e) Normal tidal volume | v) 70 ml |

* * * * *

I-B Optom Sem-I: Winter-2018

SUBJECT : HUMAN BIOLOGY

Day : Monday
Date: 26-11-2018.

Time : 10:00AM TO 1:00PM.
Max. Marks : 70

W-2018-3717

N. B. :

- 1) There are **THREE** section 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 labeled diagrams **WHEREVER** necessary.

SECTION – B

- Q. 4** Attempt **ANY TWO** of the following: (20)
- a) Describe carbohydrate metabolism.
 - b) Name the cells in blood. Describe functions of any one cell.
 - c) Draw and label optic pathway and describe various lesions leading to visual field defects.

SECTION – C

- Q. 5** Write short notes on **ANY FIVE** of the following: (30)
- a) Origin and spread of cardiac impulse
 - b) Enumerate endocrine glands of body. State function of each gland.
 - c) Fat soluble vitamins
 - d) ABO blood group system
 - e) Function of Liver
 - f) Nerve supply of extra ocular muscles

* * * * *