

BMLT

B.Sc. Second Semester End Examination-2024

PAPER: VII

[Human Physiology]

Full Marks: 40

Time: 02Hrs

The figures in the right hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary

1. **Answer any FIVE questions of the following: 5x2= 10**
 - a) State the location and function of 'Lacis cell' and 'Macula densa' cell.
 - b) What do you mean by haemophilia diseases?
 - c) What is Reflex Arch?
 - d) Calculate the heart rate when cardiac output is 6L/min and stroke volume is 80 ml.
 - e) Define oxygen therapy.
 - f) What is H antigen?
 - g) Name four abnormal composition of Urine.
 - h) Name any two teloreceptors.

2. **Answer any FOUR questions of the following: 4x5 = 20**
 - a) Describe the mechanism of hypertonic urine formation in man.

(2)

- b) Write down the role of calcium ion in contraction of skeletal muscles.
- c) Describe the fluid mosaic structure of cell membrane.
- d) Discuss the anatomical organisation of cerebral circulation.
- e) What is chloride shift and how CO_2 is transported through the blood?
- f) Describe the role of different factors on erythropoiesis.

3. Answer any ONE question of the following: $1 \times 10 = 10$

- a) What is ovulation? Describe the four phases of menstrual cycle.
Differentiate estrous and menstrual cycle. $2+6+2$
 - b) Write the regulation of body temperature in human. What are the functions of skin? $6+4$
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