

Q.P. Code:136005

Reg. No.....

**First Professional B.S.M.S Degree Regular/Supplementary Examinations
June 2024**

Udal Thathuvam (Physiology) Paper II (SIDUG-UT)

(2021 Scheme)

Time: 3 hrs

Max. Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

1. Multiple Choice Questions

(20x1=20)

The Answers to MCQ questions (Q.No.i to Q.No.xx) shall be written continuously on the first two writing sheets (ie Page No. 3 & 4) only

- 'Homeostasis'- refers to...
 - Maintenance of constant body internal environment
 - Cessation of blood flow
 - Blood coagulation
 - Intra and extracellular fluid
- Cell membranes are composed of.....
 - Protein and lipid
 - Carbohydrate
 - Lipid
 - Protein
- 'Hyperplasia is.....'
 - Increase in size of a cell
 - The increase in number of cells
 - Abnormal change in size and shape of cell
 - Type of cell replacement
- 'Erythropoietin is.....'
 - An enzyme
 - A plasma protein
 - A hormone
 - A drug
- 'Pernicious anaemia is caused by'
 - Lack of Vitamin B₁₂
 - Iron deficiency
 - Lack of Vitamin C
 - Lack of folic acid
- Normal GFR in healthy adult is approximately.....
 - 7.5 L / min
 - 125 ml / min
 - 180 L / hr
 - 150 ml / min
- 'Xerostomia is'
 - Deficient of gastric secretion
 - Deficient of pancreatic secretion
 - Deficient of salivation
 - Deficient of Vitamin A storage
- The primary hormone secreted by thyroid gland is
 - Thyroxine (T₄)
 - Triiodothyronine (T₃)
 - Reverse triiodothyronine (RT₃)
 - Calcitonin
- The biological half life of insulin is.....
 - 20 minutes
 - 10 minutes
 - 5 minutes
 - 30 minutes
- What type of sensory impulses is carried by lateral spinothalamic tract
 - Proprioception
 - Tactile sensation
 - Crude touch
 - Pain and temperature
- Intention tremor - is the clinical symptom of.....
 - Parkinson's disease
 - Cerebellar disorder
 - Hyperthyroidism
 - Hemiplegia

(PTO)

- xii. Ageusia is
- a) Decrease in taste sensation b) Loss of taste
c) Increase in taste d) Loss of smell
- xiii. Normal duration of cardiac cycle is.....
- a) 0.9 second b) 0.8 second c) 0.72 second d) 0.60 second
- xiv. First heart sound is caused by.....
- a) Closure of semi lunar valves b) Closure of A-V valves
c) Closure of aortic valve d) Closure of pulmonary valve
- xv. In normal ECG, T – wave is caused by.....
- a) Atrial depolarization b) Ventricular repolarization
c) Ventricular depolarization d) Atrial repolarization
- xvi. Which one of the feature is not the characteristic of REM sleep
- a) Associated with active dreaming
b) The brain is highly active
c) More difficult to arouse by sensory stimuli
d) Sometimes even nightmares do occur
- xvii. Most common types of cerebral stroke caused by blockage in
- a) Posterior cerebral artery b) Middle cerebral artery
c) Anterior cerebral artery d) Basillar artery
- xviii. What is the non-invasive instrument used for assessment of blood oxygenation
- a) Doppler flow meter b) Pulse oximeter
c) Spirometer d) Galvanometer
- xix. In normal human, an average amount of air inspired and expired per breath is
- a) 5000 mL b) 500 mL c) 600 mL d) 450 mL
- xx. What is hyperpnoea
- a) Difficult or laboured breathing
b) An increase in the rate or depth of breathing
c) Rapid, shallow breathing
d) Intermittent breathing

Short Answer Questions

(8x5=40)

2. Immunity
3. Active transport
4. Concentration of urine
5. Functions of bile juice
6. Non-respiratory functions of respiratory tract
7. ECG
8. Defecation reflex
9. Auditory pathway

Long Answer Questions

(4x10=40)

10. Erythropoiesis and factors affecting erythropoiesis
11. Hormonal regulation of menstrual cycle and changes occur in ovaries and uterus
12. Exchange and Transport of Respiratory Gases
13. Corticospinal tract (CST), and describe the physiological basis of features of lesion of CST
