

Q.P. Code:136005

Reg. No.....

**First Professional B.S.M.S Degree Supplementary Examinations  
January 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

- Which is taste center
  - Lower part of hypothalamus
  - Lower part of post central gyrus
  - Upper part of medulla
  - Upper part of pons
- The chemical that inhibits the impulses of pain sensation in posterior grey horn of spinal cord is
  - Serotonin
  - Histamine
  - Dopamine
  - Acetylcholine
- Oxygen carrying capacity of one gram of hemoglobin is
  - 1ml/g
  - 2.34ml/g
  - 1.34ml/g
  - 1.04ml/g
- The volume of air remaining in lungs after forced expiration is called as
  - Functional residual capacity
  - Residual volume
  - Tidal volume
  - Vital capacity
- Which one is low threshold substance
  - Uric acid
  - Creatinine
  - Aminoacid
  - Vitamins
- Nerve of emptying in the urinary bladder is
  - Pudendal nerve
  - Sympathetic nerve
  - Para sympathetic nerve
  - Urethral nerve
- The condition characterized by the lack of sperm in semen is called
  - Oligospermia
  - Azoospermia
  - Hypospermia
  - Aspermia
- The process by which spermatids become matured spermatozoa is
  - Spermiation
  - Spermatogenesis
  - Spermigenesis
  - Oogenesis
- Insulin secretion is increased by which substance
  - Gastrin
  - Noradrenalin
  - Serotonin
  - Somatostatin
- Hormone secreted by adrenal medulla
  - Dopamine
  - Aldosterone
  - Histamin
  - Cortisol
- The condition for excessive secretion of hydrochloric acid is
  - Acalasia cardiac
  - GERD
  - Zollinger Ellison syndrome
  - Xerostomia

(PTO)

- xii. Choleric action means
  - a) Secretion of bile from liver
  - b) Release of bills from liver
  - c) Secretion of bile from gall blader
  - d) Release of bile from gall bladder
- xiii. Repolarization of muscles is caused by
  - a) Sodium channel opened
  - b) Sodium channel closed
  - c) Influx of potassium channel
  - d) Na, K pump
- xiv. Which type of immunity developed by T cells
  - a) Innate immunity
  - b) Humoral immunity
  - c) Cell mediated immunity
  - d) Passive immunity
- xv. The presence of abnormal hemoglobin is called
  - a) Aplastic anemia
  - b) Thalassemia
  - c) Hemorrhagic anemia
  - d) Normocytic anemia
- xvi. Extracellular moleculer enter through one side of the cell is called
  - a) Exocytosis
  - b) Phagocytosis
  - c) Transcytosis
  - d) Pinocytosis
- xvii. Which one is not a function of peroxisomes
  - a) Beta oxidation
  - b) Detoxification
  - c) Degrade purine to uric acid
  - d) Inhibit the gluconeogenesis
- xviii. Significance of isometric contraction of ventricle
  - a) Increased ventricular pressure
  - b) Closure of semi lunar valve
  - c) Increased atrial pressure
  - d) Decreased ventricular pressure
- xix. Causes of third heart sound
  - a) Closure of aortic valve
  - b) Closure of tricuspid valve
  - c) Rushing of blood into ventricle
  - d) Contraction of atrial musculature
- xx. Continues and partial contraction of muscles with certain degree of tension is called
  - a) Muscle power
  - b) Muscle tone
  - c) Muscle reflex
  - d) Rigor mortis

**Short Answer Questions**

**(8x5=40)**

2. Describe acidosis, alkaloids
3. Explain the generation of action potential and resting membrane potential
4. Ovarian changes during menstrual cycle
5. Renal auto regulations
6. How the lung prevents from collapsing tendency
7. Pathophysiology of myasthenia gravis
8. Physiology of sleep
9. Explain the pathway for light reflex

**Long Answer Questions**

**(4x10=40)**

10. What is haemostasis and explain in detail the stages of it
11. Explain following headings
  - a) Regulation of pancreatic secretion
  - b) Sequence of events during deglutition
12. Physiological action, regulation and effect of altered secretion of Neurohypophysis
13. How the arterial blood pressure regulated by neural and renal mechanism

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