

First Professional B.S.M.S Degree Regular Examinations August 2023

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

- Post office of the cell
 - Lysosomes
 - Golgi apparatus
 - Endoplasmic reticulum
 - Mitochondria
- Which of the following are not mediated through negative feedback mechanism.
 - Blood pressure
 - GH mechanism
 - Thrombus formation
 - ACTH releasing
- ESR is also called.
 - Biernacki reaction
 - Finkelstein reaction
 - Frankland reaction
 - Balz Schiemann reaction.
- Polycythemia vera occurs in _____ disorder
 - Neurological
 - Autoimmune
 - Congenital
 - Myeloproliferative
- Resting membrane potential of a skeletal muscle fiber is _____
 - 70 mV
 - 90 mV
 - 50 mV
 - 80 mV
- Kinesthetic receptors are
 - Chemoreceptors
 - Baroreceptors
 - proprioceptors
 - Telereceptors
- Volume of succus entericus.
 - 1200 ml/day
 - 1400 ml/day
 - 1600 ml/day
 - 1800 ml/day
- _____ is also known as Gluten Sensitive Enteropathy
 - Zollinger – Ellison syndrome
 - Crohn's disease
 - Celiac disease
 - Ulcerative colitis
- A female patient failed to take hormonal therapy post bilateral adrenalectomy. What would you expect in her
 - Cushing disease
 - Addison's disease
 - Conn's disease
 - Adreno genital syndrome
- Blood calcium level is decreased by,
 - PTH
 - Calcitriol
 - Growth hormone
 - Calcitonin
- Ovulation occurs under the influence of
 - LH
 - FSH
 - Estrogen
 - Progesterone

(PTO)

- xii. The volume of semen per ejaculation is
 a) 2 – 6 ml b) 2 – 7 ml c) 2 – 4 ml d) 2 – 5 ml
- xiii. Glomerular capillary pressure
 a) 60 mmHg b) 45 mmHg c) 25 mmHg d) 15 mmHg
- xiv. Which one of the following is incorrect, Stimuli for renin secretion is due to,
 a) Low blood pressure b) Low ECF volume
 c) Parasympathetic stimulation d) Low plasma sodium
- xv. Partial pressure of CO₂ in alveoli is
 a) 46 mm Hg b) 40 mm Hg c) 48 mm Hg d) 52 mm Hg
- xvi. Surfactant is secreted by
 a) Histiocytes b) Granular pneumocytes
 c) kupffer cells d) Type I alveolar cells
- xvii. Duration of fourth heart sound
 a) 0.02 – 0.04 sec b) 0.02 – 0.03 sec
 c) 0.02 – 0.05 sec d) 0.02 – 0.06 sec
- xviii. Water hammer pulse not seen in
 a) Cardiac tamponade b) Patent ductus arteriosus
 c) Aortic regurgitation d) Arterio venous fistula
- xix. Which one is responsible for Blood Brain Barrier
 a) Oligodendrocytes b) Microglia
 c) Astrocytes d) Schwann cells
- xx. Loss of taste sensation is called
 a) Hypogeusia b) Dysgeusia c) Ageusia d) Taste bud less

Short Answer Questions

(8x5=40)

2. Describe about the primary active transport of sodium and potassium
3. Sarcomere.
4. Spermatogenesis.
5. Write detail about Role of kidney in acid base balance.
6. Explain Lung volumes and Lung capacity.
7. Write in detail about physiology of pain.
8. Functions of Hypothalamus.
9. Explain mechanism of hearing.

Long Answer Questions

(4x10=40)

10. Define Erythropoiesis, explain the stages of Erythropoiesis and factors affecting it.
11. What are the different types of salivary glands, Describe the composition, functions and regulation of salivary secretions.
12. Write in detail about the adrenal medullary hormone, functions & applied physiology.
13. Describe the various events of cardiac cycle.
