



KMTC UASIN GISHU CAMPUS
Anatomy & physiology

September 2017 class Duration: 2hrs Date: College
No.....

Instructions: Attempt all questions in this paper Present your work neatly on the foolscaps provided Write your college number on every sheet you use Examination rules and regulations apply

Section 1.

1. (i) All pre-ganglionic autonomic neurons secrete

- (a) Acetylcholine**
- (b). Epinephrine**
- (c) Dopamine**
- (d) 5-Hydroxy tryptamine (1M)**

(ii) In cell cycle significance of s-phase is

- (a) Cell maturation**
- (b) DNA synthesis**
- (c) Resting stage**
- (d) None of the above. (1M)**

(iii) ----- joint does not come under synovial joint

- (a) Ball & socket joint**
- (b) Pivot joint**
- (c) Saddle joint**
- (d) None of the above (1M)**

(iv) The component of plasma responsible for maintaining the osmotic pressure of blood is

- (a) Plasmin**
- (b) Albumin**
- (c) Fibrinogen**
- (d) Gamma Globulin. (1M)**

(v) Which of the following represents the outermost layer of the heart

- (a) Myocardium**
- (b) Endocardium**
- (c) Pericardium**
- (d) None of the above (1M)**

(vi) Each hemoglobin contains ----- molecules of iron

- (a) 4**
- (b) 6**
- (c) 2**
- (d) 5 (1M)**

(vii) ----- blood vessel contains valve system

- (a) Arteries**
- (b) Veins**
- (c) Capillaries**
- (d) All of the above (1M)**

(viii) Outer layer of the cell contains ----- ions

- (a) Na⁺**
- (b) K⁺**
- (c) Ca⁺**
- (d) Cl⁻ (1M)**

(ix) Apoptosis is caused by ----- organelle

- (a) Ribosome**
- (b) Lysosome**
- (c) Sarcoplasmic Reticulum**
- (d) All of the above (1M)**

(x) ----- organ doesn't have parasympathetic innervations

- (a) Stomach**
- (b) Skin**
- (c) Brain**
- (d) Lungs (1M)**

(xi) Trochlear nerve comes under ----- nerve category

- (a) Sensory**
- (b) Motor**
- (c) Mixed**
- (d) None of the above (1M)**

(xii) In ECG T-wave represents -----

- (a) Ventricle contraction
- (b) Auricle contraction
- (c) Ventricle dilation
- (d) Auricle dilation. (1M)

(xiii) ----- neurons forms plexus

- (a) Cervical
- (b) Cranial
- (c) Lumbar
- (d) Sacral. (1M)

(xiv) ----- blood group is called Universal Recipient

- (a) A positive
- (b) B positive
- (c) AB positive
- (d) O positive. (1M)

(xv) Neurotransmitters are stored in vesicles that are located primarily in specialized portions of the

- (a) Soma
- (b) Axon
- (c) Dendrite
- (d) Perikaryon (1M)

(xvi) Haematopoiesis means formation of

- (a) Basophil
- (b) Neutrophil
- (c) Eosinophil
- (d) All of the above. (1M)

(xvii) Junction between post synaptic neuron and muscle is called as

- (a) Synapse
- (b) Ganglia
- (c) Neuromuscular junction
- (d) None of the above (1M)

(xviii) ----- matured cell does not have nucleus (a) RBC

- (b) WBC
- (c) Platelets
- (d) All of the above (1M)

(xix) Which lymphatic organ has the largest amount of lymphatic tissue?

- (a) Thymus

- (b) Spleen**
- (c) Tonsils**
- (d) Appendix. (1M)**

- (xx) The tissue that lines and covers the body is (a) Epithelial**
- (b) Muscle**
 - (c) Nervous**
 - (d) All of the above (1M)**

Part 2

2.

a) Write a note on Cranial nerves. (5M)

b) Describe the functions of bones. (5M)

3.

a) Describe the structure and functions of eye. (5M)

b) Describe the functions of reticulo endothelial system. (5M)

4.

a) Describe the structure and functions of skin. (5M)

b) Describe the structure and functions of epithelial tissue. (5M)

PART 3

5. Describe the functions of cell and its composition. (5M)

6. Write a note on pathophysiology of muscle contraction. (5M)

7. Write a note on the origin and functions of sympathetic nervous system. (5M)

8. Describe the structure and functions of arteries. (5M)

9. Write a note on synaptic signaling. (5M)

10. Write a note on conduction system of heart. (5M)

11. Write a note on transport across cell membrane. (5M)

12. Write a note on structure and functions of neuron. (5M)

13. Write a note on functions of neuromuscular junction. (5M)