Time: 3 Hours **Marks:75**

Q. 1 Attempt all multiple-choice questions (MCQ) **20M**

Sr No	Questions		Options
1	The only movable bone of the skull is	a	Maxilla
		b	Mandible
		c	Temporal bone
		d	Frontal bone
2	Plasma membrane is made up of……..	a	A protein, a lipid and a cellulose layer
		b	A protein layer between two lipid layers
		c	A lipid layer between two protein layers
		d	Bimolecular lipid layer surrounded by protein layers
3	In the electrocardiogram, the----------	a	T wave is due to repolarization of the ventricles
		b	RT interval is related to ventricular action potential duration
		c	R-R interval normally varies during the respiratory cycle
		d	All of the above

4	For Cardiac output identify the false statement	a	Is normally expressed as the output of one ventricle in litres/minute
		b	May not increase when heart rate rises
		c	Usually rises when a person lies down
		d	Does not increase in exercise following denervation of the heart
5	Nervous tissue is not found in……	a	brain
		b	tendons
		c	nerves
		d	spinal cord
6	The study of joints is known as ……..	a	Archaeology
		b	Arthrology
		c	Osteology
		d	Anthropology
7	_____ is called the "Graveyard" of RBC.	a	Thymus
		b	Spleen
		c	Kidney

		d	Stomach
8	Arterioles…….	a	Have a smaller wall:lumen ratio than have arteries
		b	Play a major role in regulating arterial blood pressure
		c	Have a larger total cross-sectional area than do the capillaries
		d	A and C
9	Involuntary oscillatory eye movements (nystagmus)…….	a	Do not occur in healthy people
		b	May result from cochlear disease
		c	Occur in cerebellar disease
		d	Both A and B
10	The Purkinje tissue cells in the heart (identify the false statement)……..	a	Conduct impulses faster than some neurones
		b	Are larger than ventricular myocardial cells
		c	Lead to contraction of the base before the apex of the heart
		d	Are responsible for the short duration of the QRS complex
11	In long-sightedness (hypermetropia)……	a	Objects at infinity cannot be focused sharply on the retina

		b	Objects at the usual near-point are focused behind the retina
		c	Ciliary muscle contracts more strongly to bring objects in mid-visual range into clear focus
		d	Both B and C
12	In the brachial artery…….	a	Pulse waves travel at the same velocity as blood
		b	Pulse pressure falls with decreasing elasticity of the wall
		c	Pressure rises markedly when the artery is occluded distally
		d	Pressure falls when the arm is raised above head level
13	Person with Blood group _____have Red blood cells that do not contain either A or B antigens on their surface.	a	O
		b	A
		c	AB
		d	A
14	Thymosin from epithelial cells is secreted by _____	a	Spleen
		b	Thymus
		c	Lymph node
		d	Lumph

15	_____ is the primary function of platelets.	a	Helps in transport of gases
		b	Protects body from infection
		c	Prevent and stop bleeding
		d	Acts as a covering
16	Sympathetic effect on pupil is _____	a	Dilation
		b	Constriction
		c	No change
		d	Pupil turns upward
17	_____is the longest bone in the body.	a	Humerus
		b	Tibia
		c	Fibula
		d	Femur
18	Preganglionic fiber neurotransmitter in sympathetic division is _____	a	Adrenaline
		b	GABA
		c	Acetylcholine
		d	Noradrenaline

19	Tibia is a bone found in the	a	Skull
		b	Leg
		c	Face
		d	Arm
20	The study of the nervous system and its disorder is called	a	Urology
		b	Herpetology
		c	Hematology
		d	Neurology

Q 2.A. Attempt ANY TWO of the followings (2×10=20M)

i. Explain the Structure of Cardiac Muscle and the Cardiac Conduction System

ii. Explain the anatomy of the eye. Add a note on the visual projection pathway.

iii. Classify peripheral nervous system. Write a detailed note on the Parasympathetic nervous system.

Q 2.B. Attempt ANY SEVEN of the followings (7×5=35M)

i. Define Tissue. Classify & Explain Location, Structure & Function of Epithelial Tissue

ii. Define cardiac output. Describe the factors affecting stroke volume.

iii. Classify bones. Explain structure of the long bone.

iv. Discuss the anatomy and physiology of spleen.

v. Give functional classification of Joints. Explain the structure of Synovial Joint.

vi. Describe the properties and types of Sensory Receptors.

vii. Explain the regulation of Heart Rate. Describe autonomic and chemical regulation of heart rate.

viii Compare and contrast autonomic nervous system and somatic nervous system.

ix. Define Blood. Give composition of blood with the help of schematic representation. Give functions of blood.

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