

Class 10th ICSE Biology Mock Test
Topics: Human circulatory system, Human excretory system
& Human nervous system

Time Allowed: 90 min

M.M: 50

Each question carries 1 mark

- White blood cells engulf bacteria in a process called:
(a) diapedesis (b) phagocytosis
(c) active transport (d) passive transport
- The nearest organ to which the heart supplies oxygenated blood is
(a) Lung (b) Stomach
(c) Intestine (d) Heart itself
- Angina Pectoris is due to
(a) defective nutrition
(b) chest pain due to an inadequate supply of oxygen to the heart muscle
(c) defective functioning of mitral valve
(d) infection by a virus
- The chief function of lymph nodes is to
(a) produce WBCs (b) produce hormones
(c) destroy old RBCs (d) destroy pathogens
- Heart sounds are produced due to
(a) closure of tricuspid and bicuspid valves
(b) rushing of blood through valves producing turbulence
(c) closure of atrioventricular and semilunar valves
(d) entry of blood into auricles
- Maximum amount of water from the glomerular filtrate is reabsorbed in
(a) proximal convoluted tubule. (b) descending limb of loop of Henle.
(c) ascending limb of loop of Henle. (d) distal convoluted tubule.
- Which one of the following in real sense is not an excretory activity?
(a) Giving out carbon dioxide (b) Passing out faecal matter
(c) Sweating (d) Removal of urea

8. Excretion primarily involves
- removal of all byproducts during catabolism
 - removal of byproducts during anabolism
 - removal of nitrogenous wastes
 - throwing out excess of water
9. Which one of the following pairs of brain part and its function is not correctly matched?
- Cerebrum - memory
 - Cerebellum - balance of body
 - Medulla oblongata - controls activities of internal organs
 - Pons - consciousness
10. A mixed nerve is one which
- Carries sensation from 2 or more different sense organs
 - Contains both sensory and motor fibres
 - Has a common root but branches into two or more nerves to different organs
 - Has two or more roots from different parts of the brain
11. Reflex action is controlled by
- brain
 - spinal cord
 - autonomic
 - peripheral nervous system

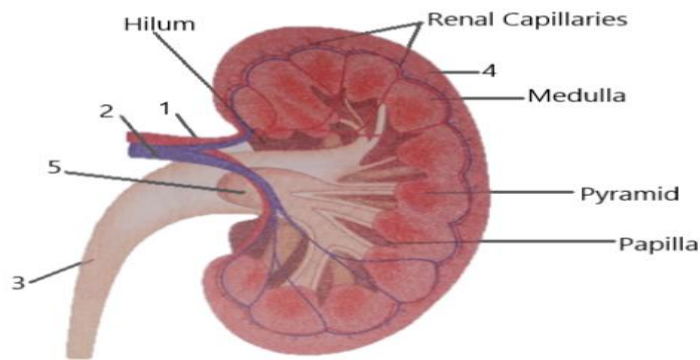
Each question carries 2 marks

12. Differentiate between Cerebrum and cerebellum
13. Draw a labelled diagram of a myelinated neuron
14. State whether the following statements are true (T) or false (F).
- The main component of the white matter of the brain is perikaryon.
 - The arachnoid layer fits closely inside the pia mater.
15. Match the items in column 'A' with those in column 'B'. Rewrite the correct matching pairs.
- | Column A | Column B |
|--------------------------------------|--|
| (a) SA Node | (i) Plasma |
| (b) Defective haemoglobin in RBC | (ii) Serum |
| (c) Muscle fibres located in heart | (iii) Pacemakers |
| (d) The liquid squeezed out of blood | (iv) Sickle cell anaemia during clothing |
16. Write the main steps in coagulation of blood in their correct sequence?

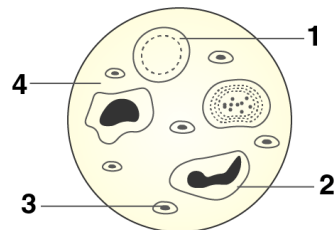
17. What is a uriniferous tubule? How does it function?
18. Why is it necessary to maintain a normal osmotic concentration of the blood?

Each question carries 3 marks

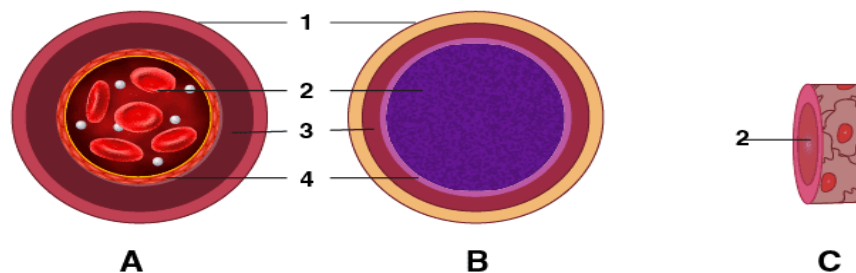
19. Look at the figure given below. It is a section of human kidney as seen from the front.



- (a) Is it a longitudinal section or a cross-section?
- (b) Name the parts numbered 1-5.
20. Given alongside is a diagram of a smear of human blood. Study the same and answer the questions that follow:



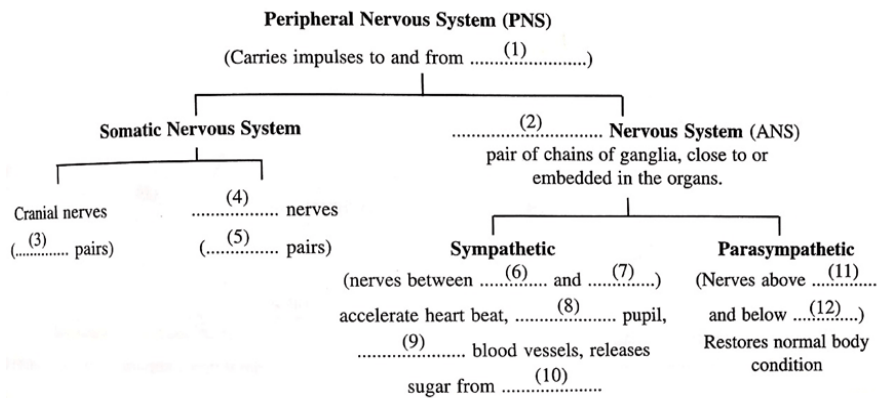
- (a) Name the parts 1, 2, 3 and 4 indicated by guidelines.
- (b) What is the main function of the parts labelled 1, 2 and 3 respectively?
- (c) What is the life span of the part labelled "1"?
21. The figures given below show diagrammatic cross-sections of three kinds of blood vessels.



- (a) Identify the blood vessels A, B and C.

- (b) Name the kinds of blood that flow through A and through B respectively.
 (c) In which one of the above vessels referred to in (a) above does the exchanges of gases actually take place

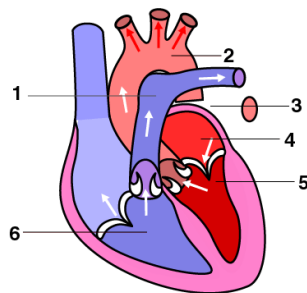
22. Given below is the partially incomplete scheme of the components of peripheral nervous system. Fill up the blanks numbered (1)-(12):



23. Write the difference between
 (a) reflex action and voluntary activities
 (b) sensory nerve and motor nerve
 (c) Sympathetic and parasympathetic nervous system

Each question carries 5 marks

24. The diagram given below represents the human heart in one phase of its activity. Study the same and then answer the questions that follow:



- (a) Name the phase
 (b) Which part of the heart is contracting in this phase?
 (c) Name the parts numbered 1 to 6.
 (d) How many valves are closed in this phase?
25. Explain the following terms
 (a) Endothelium (b) diastole (c) synapse (d) cerebrospinal fluid
 (e) micturition