

| Question  | Option1   | Option2   | Option3   | Option4   | CorrectAns |
|---|---|---|---|---|------------|
| What does the word "homeostasis" refer to?  | The steps leading to repair of a blood vessel and the coagulation of blood            | The maintenance of internal body conditions within narrow limits                          | The controlled response that opposes the influence that caused it                 | The production of blood cells in active bone marrow                                   | 2          |
| Which of the following is NOT an example of a cell?   | macrophages   | lysosomes   | plasmocytes   | chondroblasts   | 2          |
| Which of the following is NOT an example of connective tissue?                                      | blood   | bone  | tendon  | epidermis   | 4          |
| Skeletal muscle cells have all of the following characteristics EXCEPT?                             | A neuromuscular junction crossed by ACh (acetyl choline).                             | Invaginations of sarcolemma called "T tubules".   | They are branched   | They are striated   | 3          |
| What does "Rhesus positive" refer to?   | The presence of antigen D on the surface of red blood cells                           | The final factor involved in blood clotting   | The presence of the rhesus antibody/agglutinin in the blood                       | A deficiency of factor VIII that results in haemophilia                               | 1          |
| Which of the following feature is NOT characteristic feature of acute inflammation?                 | Accumulation of fluid and plasma at the affected site                                 | Intravascular activation of platelets   | Granulation tissue formation  | Neutrophils as inflammatory cells   | 3          |
| Where is the spleen situated?   | abdominal cavity  | pelvic cavity   | in the neck   | GIT   | 1          |
| Which of the following immune cell is attacked by HIV?  | B lymphocyte  | T helper lymphocyte   | Cytotoxic T cell  | Plasma cell   | 2          |
| Hay fever is example of ..... Hypersensitivity reaction.  | Type I  | Type II   | Type III  | Type IV   | 1          |
| In Rheumatoid arthritis, the circulating rheumatoid factor is .....                                 | Antigen   | Autoantibody  | Antibody  | Autoantigen   | 2          |
| As per Starling's hypothesis which are the forces that cause inward movement of interstitial fluid? | Intravascular hydrostatic pressure and colloid osmotic pressure of interstitial fluid | Intravascular colloid osmotic pressure and colloid osmotic pressure of interstitial fluid | Intravascular hydrostatic pressure and hydrostatic pressure of interstitial fluid | Intravascular colloid osmotic pressure and hydrostatic pressure of interstitial fluid | 4          |
| Which of the following is the microcytic and hypochromic anemia?                                    | Thalassemia   | Megaloblastic anemia  | Hemolytic anemia  | Aplastic anemia   | 1          |
| Which is the principle storage organ for Vitamin B <sub>12</sub> ?                                  | Kidney  | Brain   | Liver   | Heart   | 3          |
| What does the process known as anabolism refer to?  | the use of energy for producing chemical substances                                   | the breaking down phase of metabolism.  | all the chemical process that take place in the organelles of the cells.          | the supply of nutrients to the body's cells.  | 1          |

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| What are lysosomes, centrosomes and ribosomes example of?  | stem cells  | organelles within a cell  | sensory receptors in the dermis  | exocrine glands   | 2 |
| Which of the following is NOT made predominantly from epithelial tissue?   | In the dermis   | In exocrine glands  | In endocrine glands  | In the endothelium of blood vessels   | 1 |
| Of the events that lead to myofilaments sliding over each other, which of the following happens first?   | The myosin head engages with the binding site on actin.   | Troponin changes shape and pulls on tropomyosin.  | Calcium ions enter the cell cytoplasm.                                       | ATP is hydrolysed to ADP and inorganic phosphate.                                       | 3 |
| Which is the LEAST common type of white blood cell?  | Lymphocyte  | Basophils   | Thrombocytes   | Neutrophils   | 2 |
| Which of the following glycoprotein is essential for binding of HIV to CD4 receptor?   | gp 41   | gp 121  | gp 40  | gp 120  | 4 |
| For onset of type IV hypersensitivity reaction, how much time is needed?   | 15-30 min   | 14 days   | 6 hours  | 24 hours  | 4 |
| Which of the following is NOT a cell derived mediator of inflammation?   | Histamine   | Prostaglandin   | Thromboxane A <sub>2</sub>   | Bradykinin  | 4 |
| On which molecule is the energised cross-bridge which produces muscle cell contraction located?  | Fibrin  | Troponin.   | Actin  | Myosin  | 4 |
| Blood clotting is a complicated process with many steps. Which of the following lists comprises substances that are already present in blood, ready to perform their role in clotting when needed? | Thrombin, prothrombinase, tissue plasminogen activator  | Fibrinogen, prothrombin, plasminogen, factor X  | Platelets, fibrinogen, fibrin, fibrinase                                     | Fibrin, thrombin, plasmin, prothrombinase   | 2 |
| The process of "diffusion" through a membrane may be described by which of the following?  | The movement of ions and molecules away from regions where they are in high concentration towards regions where they are in lower concentration | The use of energy from ATP to move ions and small molecules into regions where they are in lower concentration. | The plasma membrane engulfs the substance and moves it through the membrane. | The use of energy from ATP to move water molecules against their concentration gradient | 1 |
| What is the difference between "loose" connective tissue (CT) and "dense" connective tissue?   | Fibres occupy most of the volume in dense CT  | Dense CT includes cartilage, loose CT does not  | Loose CT has a good blood supply while dense CT does not                     | Loose CT has no fibres and dense CT does  | 1 |