Second Terminal Evaluation 2025-26 Class 9 - BIOLOGY

Answer Key (Eng medium)

1. a). Statement correct, Reason incorrect. 2. Alcohol, Carbon dioxide.
3. b). P-iv, Q- iii, R- ii, S- i 4. c) i incorrect, ii, iii correct **4x1**

5. When X (Intercostal muscles) and Y (Diaphragm) contract, volume of thoracic cavity increases and air pressure inside the lungs dicreases. Hence, air enter to the lungs (Inspiration).
6. A .a). Water from the cells of mango put in salt, come out /exosmosis.
b). Water enters the cells of the seeds when placed in fresh water.
OR B. a). Through diffusion. b). By facilitated Diffusion / with the help of carrier proteins.
7. Yes, If bacteria in the urinary tract are not eliminated, a urinary tract infection can occur.
8. a). Fluid filled hydroskeleton in X (earthworm) and calcium carbonate exoskeleton in Y(crab).
b). Protection, shape, movement and locomotion ...
9. Due to the high rate of photosynthesis during the day, some of the oxygen produced is used for respiration, and the carbon dioxide released is used for photosynthesis.
10.A a). Hydrogen produced by the splitting of water is used to make glucose..
b). Hydrogen and carbon dioxide. (Energy is required for this)
OR B. a). The glucose thus formed is soluble in water.
b). Starch, sucrose, fructose, protein, fat, vitamins, minerals (Any 2)
11. a). Dairy products, fish, leafy vegetables, eggs, meat ..
b). Sunlight helps in getting vitamin D, which helps in absorbing calcium..
12. a). Systolic pressure, Diastolic pressure.
b). Higher than 120/80mmHg, High blood pressure /Hypertension. **7x2**

13. A a). X- Periosteum. Covers and protects the bone.
b). Calcium, phosphate, collagen, protein and salts.
c). Osteoblast cells deposit minerals in the bones, make them strong and firm, and help in growth and repair.
OR B a). X- Cartilage. b). Reduces friction between bones.
c). Since cartilage does not have blood vessels or nerves, growth is slow.
14. a). Xylem. b). Osmosis, Rootpressure, Cohesion-Adhesin, Transpiration.
c). Because when cells die, the cross-walls between the cells are destroyed.
15. 
a). X- Ligament / Capsule Y- Synovial fluid.
b).Reduce friction between bones to facilitate movement.
16. A. Glycolysis- Takes place in the cytoplasm, does not require oxygen, and glucose participates.
Krebs cycle – Takes place with in mitochondria, requires oxygen, and also participates pyruvic acid. Energy is requeiredfor this process.
OR B a). Each hemoglobin molecule carries four oxygen molecules.
b). It is transported either as bicarbonate dissolved in the water of the RBC or combined with its hemoglobin to form carbaminohemoglobin.
17. a). P- Smooth muscle Q- Skeletal muscle.
b). Spindle shaped cells without striation in smooth muscle.
Cylindrical shaped cells with striation(cross lines) in skeletal muscle.
c). Q- Skeletal musle is voluntary. Seen in limbs, neck, face etc. **6x3**

18. A a). X- Liver Y- Kidney. b). Ammonia combines with carbon dioxide and water to form urea.
c). Ultrafiltration, Reabsorption and Secretion.
d). Because 99% of it is reabsorbed into the blood.
OR B a). X- Afferent vessel, Y- Efferent vessel..
b). Glomerular filtrate. From this, the body reabsorbs what it needs and some is secreted to become urine.
c). Due to the difference between the X(afferent vessel) and Y(efferent vessel) , the pressure required for ultrafiltration process is maintained.
d). Blood with high levels of waste products in the renal artery, and blood with low levels of waste products in the renal vein. **1x4**

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