

### NTSE Q Bank (Life Processes)

- 1 ) The concentration of urea is least in:  
(a) Renal artery (b) Renal vein (c) Post canal (d) Dorsal aorta
- 2 ) Blood is composed of \_\_\_\_\_  
(a) Plasma and red blood cells (b) Plasma and formed elements  
(c) Red and white blood cells and platelets (d) Red blood cells, white blood cells
- 3 ) Stomata are present on the \_\_\_\_\_ of the leaves.  
(a) Upper surface only (b) Lower surface only (c) Mostly upper surface (d) Mostly lower surface
- 4 ) The ascent of sap in plants takes place due to \_\_\_\_\_  
(a) Root pressure (b) Transpiration pull (c) Both (a) and (b) (d) Osmosis
- 5 ) \_\_\_\_\_ carries oxygenated blood  
(a) Pulmonary artery (b) Hepatic portal vein (c) Pulmonary vein (d) All of the above
- 6 ) The main cells present in lymph are \_\_\_\_\_  
(a) Red blood cells (b) Platelets (c) Lymphocytes (d) Monocytes
- 7 ) The numbers of ATP molecules produced during aerobic and anaerobic respiration are \_\_\_\_\_ and \_\_\_\_\_ respectively.  
(a) 2 and 38 (b) 0 and 2 (c) 38 and 0 (d) 38 and 2
- 8 ) Respiratory surface should be \_\_\_\_\_  
(a) Permeable (b) Thin (c) Richly supplied with blood vessels (d) All of the above
- 9 ) Sneezing can be best described as \_\_\_\_\_  
(a) Forceful sudden expiration  
(b) Jerky incomplete inspiration  
(c) Vibration of the soft palate during breathing while sleeping  
(d) Something you should never do when someone is going out
- 10 ) In the lunch, you ate boiled green vegetables, a piece of cooked meat, one boiled egg and a sugar candy. Which one of these foods may have been digested first?  
(a) Boiled green vegetables (b) The piece of cooked meat  
(c) Boiled egg (d) Sugar candy
- 11 ) In mitochondrion, the proton gradient required ATP synthesis develops across \_\_\_\_\_  
(a) Inner membrane (b) Inter-membrane space (c) Outer membrane (d)  $F_0-F_1$  particles
- 12 ) Bicuspid and tricuspid valves are open during:  
(a) Ventricular systole (b) Ventricular diastole (c) Atrial systole (d) Late joint diastole
- 13 ) Typical 'lubb-dupp' sounds heard during heartbeat are due to:  
(a) Closing of bicuspid and tricuspid valves  
(b) Closing of semi luna valves  
(c) Blood under pressure through aorta  
(d) Closure of bicuspid-tricuspid valves followed by semilunar valves

- 14 ) In adult man, normal BP is :  
 (a) 100/80 mm Hg (b) 120/80 mm Hg (c) 100/120 mm Hg (d) 80/120 mm Hg
- 15 ) Polycythemia is-  
 (a) Increased RBCs count  
 (b) Decreased WBCs count  
 (c) Increased WBCs count  
 (d) Decreased platelets count
- 16 ) The coagulation of blood occurs due to  
 (a) Change of fibrinogen in the network of fibre (b) Destruction of erythrocytes  
 (c) Destruction of leucocytes (d) Formation of serum.
- 17 ) William Harvey is known for discovery of  
 (a) Blood circulation (b) Blood clotting (c) Respiration (d) Digestion
- 18 ) Cardiac cycle in man takes about  
 (a) 0.5 seconds (b) 0.3 seconds (c) 1.2 seconds (d) 0.8 seconds
- 19 ) Substrate which is not filtered through glomerulus:  
 (a) Plasma (b) Glucose (c) Blood corpuscles (d) Urea
- 20 ) The interior of a cow-dung pile kept for a few days is quite warm. This is mostly because:  
 (a) Cellulose present in the dung is a good insulator  
 (b) Bacterial metabolism inside the dung releases heat  
 (c) Undigested material releases heat due to oxidation by air.  
 (d) Dung is dark and absorbs a lot of heat
- 21 ) In man, which blood vessel takes away blood from kidney?  
 (a) Afferent arteriole (b) Efferent arteriole (c) Renal artery (d) Renal portal vein
- 22 ) In which of the three groups of the following mammals is uric acid also excreted out:  
 (a) Carnivora, insectivora and marsupials (b) Elephants, chiroptera, primates  
 (c) Logomorpha, man, horse (d) Man, apes, dalmatian dog
- 23 ) Waste product/s produced by plants is/are  
 (a) CO<sub>2</sub> (b) Water (c) Oxygen (d) All of these
- 24 ) Salivary amylase converts starch into  
 (a) maltose (b) sucrose (c) glucose (d) none of the above
- 25 ) Mastication occurs in  
 (a) Mouth (b) Oesophagus (c) Stomach (d) Ileum
- 26 ) Normal human breathing rate is  
 (a) 20-25 times per minute (b) 15-18 times per minutes  
 (c) 72 times per minute (d) 40-45 times per minute
- 27 ) \_\_\_\_\_ is the only fluid tissue in our body  
 (a) blood (b) hormones (c) enzymes (d) urine
- 28 ) Which blood cells helps in clotting of blood?  
 (a) RBC (b) WBC (c) Platelets (d) All of the above

- 29 ) \_\_\_\_\_ is the instrument used to measure blood pressure  
(a) Stethoscope (b) Sphygmomanometer (c) Electro cardiogram  
(d) Haemocynometer
- 30 ) The function of tracheal hairs is to -  
(a) pass mucus out (b) pass mucus in (c) pass air out (d) pass air in
31. The raw materials for photosynthesis are  
(a) CO<sub>2</sub> & O<sub>2</sub> (b) sunlight and CO<sub>2</sub> (c) water and chlorophyll (d) CO<sub>2</sub> and water.
32. Most of the photosynthesis (80%) which takes place on this earth is carried out by  
(a) green plants on land  
(b) algae found in ocean  
(c) algae present in fresh water  
(d) algae present in ocean and fresh water sources
33. Which of the following has no digestive enzyme ?  
(a) Saliva (b) Bile (c) Gastric juice (d) Intestinal juice
34. Plants are green in colour because  
(a) they absorb green light but reflect all other lights (b) they reflect green light  
(c) they absorb green light only (d) none of the above are correct.
35. Full name of NADP is  
(a) Nicotinamide dinucleotide phosphate (b) Nicotine adenine dinucleotide phosphate  
(c) Nicotinamide adenine dinucleotide phosphate (d) None of the above
36. Wavelength of visible light is  
(a) 200 - 400 nm (b) 400 - 700 nm (c) 700 - 900 nm (d) 100 - 200 nm
37. The presence of sugar in onion leaves can be tested with  
(a) iodine (b) copper sulphate solution  
(c) lime water (d) benedict's solution
38. Chemical reaction takes place during dark reaction of photosynthesis is  
(a) photolysis (b) hydrolysis  
(c) carbon dioxide is bonded with RUBP (d) nitrogen fixation
39. Dark reaction and light reaction of photosynthesis takes place in  
(a) stroma and grana of chloroplast respectively (b) grana and stroma of chloroplast respectively  
(c) grana only (d) stroma only
40. CO<sub>2</sub> acceptor during dark reaction of photosynthesis is  
(a) RUBP (b) PEP (c) NADPH (d) ATP