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| --- | --- | --- | --- | --- | --- | --- |
| **Topic heading** | **Syllabus Ref** | **Idea cluster** | **Question 1** | **Question 2** | **Question 3** | **Question 4** |
| **Organisation** | **BOr1** | **Organisation principles** | **Q A group of cells with the same structure and function is called?**  **A a tissue**  **B an organ**  **C an organ system**  **D a sample** | **Q The job of something biological is scientifically known as?**  **A its structure**  **B its function**  **C its organisation**  **D its organ** | **Q Put these things in order from largest to smallest**  **A organ**  **B tissue**  **C cell**  **D organ system** | **Q Which one of the following structures is only found in a plant cell?**  **A cytoplasm**  **B nucleus**  **C chloroplast**  **D cell membrane** |
|  |  |  | **A** | **B** | **D A B C** | **C** |
| **Organisation** | **BOr2** | **Structure and function of digestive organs** | **Q What is the scientific name for muscles moving food along the digestive system?**  **A active transport**  **B photosynthesis C peristalsis**  **D diffusion** | **Q The correct order for the digestive system is?**  **A stomach**  **B large intestine C oesophagus**  **D small intestine** | **Q Useful substances are absorbed from the digestive system into the blood in which organ?**  **A Stomach**  **B oesophagus C Small intestine**  **D Large intestine** | **Q Water is reabsorbed back into the blood by which organ in the digestive system?**  **A oesophagus**  **B large intestine C small intestine**  **D stomach** |
|  |  |  | **C** | **C A D B** | **C** | **B** |
| **Organisation** | **BOr3** | **Enzymes and digestion** | **Q Enzymes are made of which chemical?**  **A Fat**  **B Protein**  **C Carbohydrate**  **D DNA** | **Q which of these is true for an enzyme reaction?**  **A the substrate stays the same and enzyme changes**  **B the substrate changes and the enzyme changes**  **C the substrate stays the same and the enzyme stays the same**  **D the substrate changes and the enzyme stays the same** | **Q Digestion is a process to produce which of these to pass into the blood?**  **A Small insoluble molecules**  **B Large insoluble molecules**  **C Large soluble molecules**  **D Small soluble molecules** | **Q Enzymes are able to do what to molecules?**  **A build them up and break them down**  **B build them up but not break them down**  **C not build them up but break them down**  **D not build them up and break them down** |
|  |  |  | **B** | **B** | **D** | **A** |
| **Organisation** |  |  | **Question 5**  **Q Which of these are proteins broken down into?**  **A Amino acids**  **B Fatty acids**  **C Glycerol**  **D Simple sugars** | **Question 6**  **Q Which of these are carbohydrates broken down into?**  **A Fatty acids**  **B Glycerol**  **C Amino acids**  **D Simple sugars** | **Question 7**  **Q Where is bile made and stored in the digestive system?**  **A made in the small intestine stored in the stomach**  **B made in the liver stored in the gall bladder**  **C made in the gall bladder stored in the liver**  **D made in the liver stored in the small intestine** | **Question 8**  **Q What is the role of bile indigestion?**  **A emulsify amino acids and neutralise stomach acid**  **B emulsify amino acid and increase stomach acid**  **C emulsify fat and increase stomach acid**  **D emulsify fat and neutralise stomach acid** |
|  |  |  | **A** | **D** | **B** | **D** |
| **Organisation** | **BOr4** | **Factors affecting enzymes** | **Q Increasing the temperature of an enzyme catalysed reaction does what to the rate of reaction?**  **A increases the rate of reaction exponentially**  **B decreases the rate of reaction**  **C increases the rate of reaction to a point**  **D does not affect the rate of reaction** | **Q Enzymes do not work well above certain temperatures because**  **A The active site stays the same shape**  **B The active site changes shape**  **C They die**  **D The substrates move too quickly** | **Q What do enzymes do above their optimum temperature?**  **A Die**  **B Work faster**  **C Denature**  **D Work at the same rate** | **Q What do enzymes do below their optimum temperature as it decreases?**  **A Denature**  **B Die**  **C Become inactive**  **D Work at the same rate** |
|  |  |  | **C** | **B** | **C** | **C** |
| **Organisation** | **BOr5** | **Heart and lungs** | **Q The heart pumps blood to the lungs and upon return out to the body. In the correct order which chambers do this?**  **A Right ventricle, right atrium**  **B Right ventricle, left ventricle**  **C Left ventricle, right ventricle**  **D Left ventricle, left atrium** | **Q The name of the blood vessel that goes to the lungs and the name of the blood vessel to the body is:**  **A pulmonary artery, aorta**  **B vena cava, coronary artery**  **C pulmonary vein, vena cava**  **D vena cava, aorta** | **Q Which of the following is not a blood vessel of the body?**  **A vein**  **B capillary**  **C artery**  **D circulation** | **Q What is the order that air enters the body?**  **A nose, bronchi, trachea**  **B Trachea, alveoli, bronchi**  **C Trachea, bronchi, alveoli**  **D bronchi, alveoli, nose** |
|  |  |  | **B** | **A** | **D** | **C** |
| **Organisation** | **BOr5** | **Blood and blood vessels** | **Q Blood is a tissue consisting of a what liquid in which cells and platelets are suspended?**  **A plasm**  **B plast**  **C plasma**  **D marrow** | **Q The function of the red blood cell is best described as to:**  **A carry oxygen bound to haemoglobin**  **B deposit carbon dioxide to the lungs**  **C combine with carbon monoxide**  **D make the blood red so it carries oxygen** | **Q Which one of these is not a function of a white blood cell:**  **A make bone marrow**  **B engulf and digest**  **C make antitoxins**  **D make antibodies** | **Q Haemophilia is a disease where the platelets don’t work properly which means a person would have problems with:**  **A carrying oxygen**  **B fighting disease**  **C making antibodies**  **D clotting when cut** |
|  |  |  | **C** | **A** | **A** | **D** |
| **Organisation** | **BOr6** | **Non-communicable diseases** | **Q Heart surgery is a serious procedure – a doctor and patient evaluate what before it is carried out?**  **A side effects v hospital stay length**  **B benefits v risks**  **C opportunity v costs**  **D age v weight** | **Q**  **The risk of a heart attack is increased if:**  **A the coronary arteries are widened**  **B the coronary arteries are narrowed**  **C blood pressure is low**  **D the patient takes statins** | **Q What do heart valves do?**  **A Let blood flow both ways**  **B Stop blood flowing forward at times**  **C Stop blood flowing backwards**  **D Lower blood pressure** | **Q What are statins used for?**  **A Lowering blood pressure**  **B Lowering heart rate**  **C Lowering cholesterol**  **D Stating cholesterol levels** |
|  |  |  | **B** | **B** | **C** | **C** |
| **Organisation** | **BOr7** | **Cancer** | **Q Cancer is when cells:**  **A lump together which then splits into other cells changing their DNA**  **B stop dividing but grow bigger into a lump**  **C are inherited that are abnormal and die early**  **D change DNA which leads to uncontrollable growth and division** | **Q Malignant melanoma is a type of skin cancer. Which of these methods is not helpful to prevent it?**  **A keeping covered in the sun**  **B applying sunscreen**  **C checking moles**  **D sunbathing** | **Q Growths of abnormal cells contained within one area, usually in a membrane that do not invade other parts are called:**  **A malignant tumours**  **B local tumours**  **C benign tumours**  **D harmless tumours** | **Q There are many successful treatments for cancer now. Choose the answer that is used to diagnose rather than treat cancer:**  **A chemotherapy**  **B CAT scan**  **C surgery**  **D radiotherapy** |
|  |  |  | **D** | **D** | **C** | **B** |
| **Organisation** | **BOr7** | **Plant tissues, organs and organ systems** | **Q Which of the following is a plant tissue related to transporting substances:**  **A meristem tissue**  **B spongy mesophyll**  **C epidermal tissue**  **D xylem and phloem** | **Q The palisade mesophyll is characterised by cells that have many:**  **A nuclei**  **B vacuoles**  **C chloroplasts**  **D cytoplasms** | **Q Where does most photosynthesis take place?**  **A**  **B**  **C**  **D** | **Q Guard cells surrounding stomata control which process most:**  **A photosynthesis**  **B respiration**  **C transpiration**  **D neutralisation** |
|  |  |  | **D** | **C** | **A** | **C** |