|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 photosynthesisC peristalsis****D diffusion** | **Q The correct order for the digestive system is?****A stomach****B large intestineC oesophagus****D small intestine** | **Q Useful substances are absorbed from the digestive system into the blood in which organ?****A Stomach****B oesophagusC Small intestine****D Large intestine** | **Q Water is reabsorbed back into the blood by which organ in the digestive system?****A oesophagus****B large intestineC 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** |