|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Topic heading** | **Syllabus Ref** | **Idea cluster** | **Question 1** | **Question 2** | **Question 3** | **Question 4** |
| B4 Ecosystems |  | Biodiversity | What do food chains show?  A. The animals that eat each other  B. How energy is transferred from producer to consumer and beyond  C. How much of each plant and animal is involved  D. The longer the chain the better the energy transfer | Myxomatosis is a disease that kills rabbits. What would happen to the predators of rabbits if this happened?  A. They would increase  B. They would decrease  C. No change.  D. Increase rapidly. | Human activity can negatively affect populations through:  A. Building zoos  B. Use of herbicides and pesticides  C. Adopting animals that are endangered  D. Breeding programmes | Put these into the correct order for the levels of organisation in an ecosystem:  A. Individual, population, community, ecosystem  B. Population, Community, Individual, Ecosystem  C. Ecosystem, Community, Population, Individual  D. Individual, community, population, ecosystem |
|  |  |  | B | B | B | A |
| B7 Growing our food |  | Pollination, Fertilisation and plant growth | Pollination is the transfer of pollen from:  A. stigma to anther  B. anther to stigma  C. pollen tube to ova  D. inset to anther | The main function of the root of a plant is to:  A. hold it upright  B. absorb water to provide it to the plant  C. balance it underground  D. store water underground | During fertilisation in a plant, what happens?  A. Pollen goes from the anther to the stigma  B. A pollen tube develops.  C. The pollen fuses with the ovum.  D. The ovum gets smaller | Bees are important pollinators and we have been encouraged to plant bee-friendly plants. Why is pollination so important?  A. Ensures gardens have lots of flowers  B. Keeps flowers growing and increasing in number  C. Is important in looking after living things.  D. In important for human food security. |
|  |  |  | A | B | C | D |
| B8 Genetics and Evolution |  | Variation and inheritance | Where is the genetic information, DNA, found in a cell?  A. Nucleus  B. Mitochondria  C. Cytoplasm  D. Chloroplast | Natural selection is a theory of how evolution occurs and was proposed by:  A. Darwin  B. Galileo  C. Lamarck  D. Galapagos | An example of discontinuous variation is:  A. height  B. weight  C. blood group  D. all of the above. | Variation (and diversity) in a gene pool is good for:  A. species evolution and survival.  B. survival and cloning  C. cloning and population growth  D. evolution only. |
|  |  |  | A | A | C | A |
| B9 Plants |  | Plants | What factors affect the rate of photosynthesis?  A Temperature, light, carbon dioxide  B Water, light, oxygen  C oxygen, temperature, glucose  D Carbon dioxide, water, glucose | Light is absorbed by what:  A nucleus  B chloroplasm  C chlorophyll  D cytoplasts | Glucose made in respiration is used for which of the following:  A respiration  B cellulose cell walls  C stored as oil/starch  D all of the above | Plants require nutrients NPK which are absorbed in water. These are:  A Nitrogen, Phosfuma, Karotene  B Nitrogen, Potassium, Kerosene  C Nitrogen, Phosphorus, Potassium  D Neon, Phosphorus, Potassium |
|  |  |  | A | C (in chloroplasts) | D | C |