

Question	Answer
On whom do animals depend for food?	Directly or indirectly on plants.
Where do animals digest their food?	In an internal cavity.
In what form do animals store food reserves?	Glycogen or fat.
What is the mode of nutrition in animals?	Holozoic nutrition by ingestion of food.
Why were viruses not included in classification systems?	Because they are not considered truly living as they lack cellular structure.
What is the structure of viruses outside the host cell?	An inert crystalline structure.
What happens when viruses infect a host cell?	They take over the machinery of the host cell to replicate themselves, killing the host.
Who recognised the causal organism of tobacco mosaic disease in 1892?	Dmitri Ivanowsky.
Why were viruses considered smaller than bacteria?	Because they passed through bacteria-proof filters.
What name did Beijerinck give to the infectious fluid?	Contagium vivum fluidum.
Who showed that viruses could be crystallised?	W.M. Stanley (1935).
What do virus crystals mainly consist of?	Proteins.
What is the nature of viruses outside their host cell?	Inert.
What type of parasites are viruses?	Obligate parasites.
What genetic material is found in viruses?	Either RNA or DNA.
Can a virus contain both RNA and DNA?	No, no virus contains both RNA and DNA.
What is a virus chemically described as?	A nucleoprotein.
What type of genetic material is usually found in plant viruses?	In general, single-stranded RNA.
What type of genetic material is found in animal viruses?	Either single or double-stranded RNA or double-stranded DNA.
What are bacteriophages?	Viruses that infect bacteria.
What type of genetic material do bacteriophages usually possess?	Double-stranded DNA.
What is the protein coat of a virus called?	Capsid.
What are capsomeres?	Small subunits forming the capsid.
In what forms are capsomeres arranged?	Helical or polyhedral geometric forms.

Question	Answer
Name four diseases caused by viruses mentioned in the text.	Mumps, smallpox, herpes and influenza.
Which viral disease in humans is specifically mentioned?	AIDS.
Mention symptoms of viral diseases in plants.	Mosaic formation, leaf rolling and curling, yellowing, vein clearing, dwarfing and stunted growth.
Who discovered viroids?	T.O. Diener (1971).
Which disease is caused by viroids?	Potato spindle tuber disease.
How are viroids different from viruses?	Viroids are free RNA lacking a protein coat.
What is the molecular weight characteristic of viroid RNA?	Low molecular weight.
What are prions?	Infectious agents made of abnormally folded proteins.
Which disease in cattle is caused by prions?	Bovine spongiform encephalopathy (mad cow disease).
Which human disease is analogous to mad cow disease?	Creutzfeldt - Jacob disease (CJD).
What are lichens?	Symbiotic associations between algae and fungi.
What is the algal component of lichens called?	Phycobiont.
What is the fungal component of lichens called?	Mycobiont.
Which component of lichens is autotrophic?	Phycobiont.
Which component of lichens is heterotrophic?	Mycobiont.
What role does the algal partner play in lichens?	It prepares food for fungi.
What role does the fungal partner play in lichens?	It provides shelter and absorbs mineral nutrients and water.
Why are lichens considered good pollution indicators?	They do not grow in polluted areas.
Who first proposed biological classification on the basis of simple morphological characters?	Aristotle.
Which scientist classified living organisms into Plantae and Animalia?	Linnaeus.
Which scientist proposed the five kingdom classification?	Whittaker.
Name the five kingdoms proposed by Whittaker.	Monera, Protista, Fungi, Plantae and Animalia.

Question	Answer
Which kingdom includes bacteria in the five kingdom classification?	Kingdom Monera.
What type of distribution do bacteria show?	Cosmopolitan distribution.
Which organisms show the most extensive metabolic diversity?	Bacteria.
What are the two modes of nutrition in bacteria?	Autotrophic and heterotrophic.
Which kingdom includes all single-celled eukaryotes?	Kingdom Protista.
Name the groups included under Protista.	Chrysophytes, Dinoflagellates, Euglenoids, Slime-moulds and Protozoans.
What cellular structures are present in protists?	Defined nucleus and membrane-bound organelles.
How do protists reproduce?	Both asexually and sexually.
What mode of nutrition is common in most fungi?	Saprophytic mode of nutrition.
Name the four classes of Kingdom Fungi.	Phycomycetes, Ascomycetes, Basidiomycetes and Deuteromycetes.
Which organisms are included in Kingdom Plantae?	All eukaryotic chlorophyll-containing organisms.
Name the plant groups included in Plantae.	Algae, bryophytes, pteridophytes, gymnosperms and angiosperms.
What phenomenon is shown in the plant life cycle?	Alternation of generations.
What are the two generations involved in alternation of generations?	Gametophytic and sporophytic generations.