



Kingdom > Phylum > Class > Order > Family > Genus > Species

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- 1 Which group of plant is called cryptogamy? Give two example 1
- Ans Plants group with hidden reproductive organs are called cryptogamy eg. algae, lichens, mosses, etc.  
The thallophytes, the bryophytes and the pteridophytes(any one)
- 2 What are the modification produced by Car Woese, in the classification proposed by Whittaker 1
- Ans The modification Woese divide the kingdom Monera into Archaeobacteria (or Archaea) and Eubacteria (or Bacteria)
- 3 Name one mammal that lay eggs 1
- Ans The platypus and the echidna
- 4 Classify the following into respective Phylum/class: jellyfish; Earthworm; cockroach; Rat 2
- Ans: Jellyfish - Coelenterate    Cockroach - Arthropoda    Rat - Mammalian    Earthworm - Annelida
- 5 Select the odd one out with respect to classification giving reason for your choice (a) Mango, Gram , 2  
rice, Apple (b) Prawn, Scorpion, Octopus, Butterfly
- Ans: (a) Rice – a monocotyledonous other are dicotyledonous  
(b) Octopus which belong to Mollusca other are Arthropoda
- 6 (a) Give one characteristic difference between primitive and advanced organisms. 2  
(b) Name the phylum to which the following are included.  
(i) Spider (ii) Cockroach (iii) Prawn (iv) Housefly]
- Ans: (a) The activities of life are performed by a single cell in primitive organisms while there are different organs for performing various functions in advanced organisms.  
(b) (i) Spider – Arachnida (ii) Cockroach – Dictyoptera (iii) Prawn – Arthropoda (iv) Housefly – Arthropoda
- 7 Enlist any two characteristics which are present in animals which belong to phylum chordata. 2
- Ans All chordates possess the following features:  
(i) have a notochord (ii) have a dorsal nerve cord (iii) are triploblastic (iv) have paired gill pouches
- 8 Write three distinguish feature of phylum Echinodarmata. Give one example. 3
- Ans Three distinguish feature of phylum Echinodarmata :  
(i) Free-living marine animals (ii) triploblastic (ii) have a coelomic cavity  
Examples are starfish and sea urchins
- 9 Explain, What are organ specific manifestation and tissue specific manifestations? 3
- Ans: When a microbe infects the specific organ of an individual in a particular type of disease, it is termed as organ specific manifestation. For example, in tuberculosis the microbe infects the specific organ i.e. lungs of an



individual.

When a microbe infects the tissues of the body of an individual in a particular type of disease, it is termed as tissue specific manifestation. For example, in HIV the virus infects the tissue and cells of the organism making decreasing his/her immunity.

10 What are the advantage of classifying organism? (3 point) 3

- Ans:
1. Classification helps in identify the living organisms easily.
  2. It makes study of such a wide variety of bio-life in systematic manner.
  3. Enables us understand how complex organisms evolve over the time.
  4. Classification help us understand the inter-relationships among different groups.

11 Write one point difference between each , between the following 3

- (a) Annelids and arthropods
- (b) Thallophytes and petridophytes
- (c) periferan and Coelenterates

- Ans
- (a) Annelids have closed circulatory systems in which the heart pumps blood into vessels where as Arthropods, however, have open circulatory systems, so the blood actually pumps the blood into parts of the body cavity known as sinuses
  - (b) Thallophytes do not have well-differentiated body design and petridophytes easily differentiated into roots, stem and leaves
  - (c) Porifera have very minimal body design differentiation whre as Coelenterates show more body design differentiation.

12 write the aproprate term for 3

- (a)Animals that are able to maintain a certain body temp over a wide range of temp in the environment
- (b) Plants bear naked seeds
- (c) Plants which have Pseudocoelom

- Ans
- (a) warm blooded animals- mammals and aves
  - b) Gymnosperms
  - (c) Nematode

13 Write one point difference between each , between the following 3

- (a) Amphibian and Reptiles
- (b) Aves and mamals
- (c) Gymnosperm and angioosperm

- Ans:
- (a) Reptiles lay eggs with tough coverings and do not need to lay their eggs in water, unlike amphibians.
  - (b) Aves are warm-blooded animals and have a four-chambered heart. They lay eggs. Whereas mamals are



warm-blooded animals and have a four-chambered heart. They have mammary gland and give birth to child.

(c) Gymnosperm bear naked seeds where as angiosperm bear seeds inside fruit

14 Why is there a need for systematic naming of living organisms? 3

Ans The scientific name for an organism is essential to identify living organisms anywhere in the world.

15 Write three convention that are followed while writing scientific names of the species 3

Ans The system of scientific naming or nomenclature we use today was introduced by Carolus Linnaeus

Certain conventions are followed while writing the scientific names:

1. The name of the genus begins with a capital letter.
2. The name of the species begins with a small letter.
3. When printed, the scientific name is given in italics.
4. When written by hand, the genus name and the species name have to be underlined separately

