

Value Based Questions

1. Two groups of biology students were doing field work of taxonomy in a compost heap. Group A noticed an organism. They noted down its characteristics and made a dichotomous key. Group B noticed another organism. But they instead of noting down the characteristics, photographed the organism.

Answer the following questions based on the above situation:

- (i) Which desired values are reflected in the approach used by Group A but ignored by Group B?**
- (ii) In what way is the observation by Group B different from Group A?**
- (iii) Which group would you like to be in and why?**

Ans. (i) Following scientific protocol, observant, not relying on recalling ability.
(ii) Group B won't be able to draw any conclusions from their observations because a photograph doesn't allow a detailed analysis of the organisms.
(iii) Group A, because this group follows a scientific method and promotes scientific attitude.

2. Raman lives in a coastal village. He is the son of a fisherman. Whenever any unwanted animal comes in the net, instead of killing it, he puts it back in the sea.

Answer the following questions based on above information:

- (i) What would have happened, had he killed those animals?**
- (ii) Give one reason to justify that Raman's action is environment friendly.**
- (iii) How can you contribute in the preservation of flora and fauna around you? Mention any two steps.**

Ans. (i) It would have contributed in disturbing the ecological balance.
(ii) Because he is conserving biodiversity.
(iii) Creating sensitivity, by not using products derived from animals, by spreading awareness in other community members about the importance of biodiversity, by developing empathy and love for all living organisms.

3. During a field-trip, some students visited an agricultural farm and saw a few birds eating earthworms. They enjoyed the scene and then they also started picking and killing the earthworms for pleasure. The farmer strongly objected and asked them to leave the field.

- (i) What could be the reason behind such a behaviour of the farmer?**
- (ii) What values do you find missing in the student's behaviour?**
- (iii) Write two identifying features of earthworm.**

Ans. (i) An earthworm helps in making the soil humus rich, so this was reason on which the farmer reacted.
(ii) Destructive behaviour and no love and care towards the nature which shows cruel

nature of the student.

(iii) Segmented body, clitellum present on 14th segment.

4. Rohit and his mother were walking in the garden. Rohit saw mushrooms growing on decaying leaves. He tried to uproot them. He was stopped by his mother.

(i) Where do you use mushrooms in daily life?

(ii) Write the mode of nutrition exhibited by the mushrooms.

(iii) Why did Rohit's mother stop him?

Ans. (i) They can be cooked and eaten.

(ii) Saprophytic

(iii) It may be poisonous.

5. Rajkumar was playing cricket in the ground with his friends. One of his friends who was standing near the boundary felt something climbing upon his feet. Subsequently he started crying in pain. Rajkumar being class nine student identified the climbing creature as leech and helped removing the leech.

(i) Name the phylum to which leech belongs.

(ii) Write two identifying features of the phylum.

(iii) Enlist two values shown by Rajkumar.

Ans. (i) Annelid

(ii) Segmented body, Bilaterally symmetrical.

(iii) Helping, caring.