

Chapter – 10

The Comet – II

Comprehension Check

Q1. “For a moment James wondered if he had done his sums right.” Why was James doubtful about his sums and calculations?

Answer. James became doubtful about his sums and calculations when he looked up from his window and saw a star-studded night sky. He knew that somewhere amongst those stars was Comet Dutta, which was heading for a collision with the earth. It was hard for him to believe the calamity of the future on such a peaceful night.

Q2. What did the scientists at the conference say about James’s ‘sums’?

Answer. The scientists said that James’ ‘sums’ were correct and that there was no escape from the direct hit predicted by him. There was a small chance that the comet might just graze the atmosphere of the earth and not collide. In that case, the loss of life and property would not be total. However, that was hardly reassuring. Therefore, they decided to take some action.

Q3. Immediate action was needed, the scientists decided. Give one example each of ‘defensive’ and ‘offensive’ action mentioned in the text.

Answer. The defensive action discussed by the scientists was to live in underground bunkers. The offensive action was to marginally deflect Comet Dutta from its path by giving it a push. This could be done by placing nuclear payload in a spaceship, sending it to intercept the approaching comet and detonating it by remote control.

Q4. “I am not buying any Christmas presents till December 15.” What did Sir John mean by that?

Answer. Sir John meant that he was not very sure that they would succeed in their operation. December 15 was the date when if the experiment failed, the comet would hit the earth.

Q5. What is Duttada expected to do on his return from London?

Answer. Duttada was expected to perform a shanti yajna on his return from London. This yajna was to be performed to pacify the supposed evil spirit behind the comet.

Q6. What is his reaction to the proposal?

Answer. Duttada reacted very angrily to the proposal and said that it was all superstition. He also said that such superstitious behaviour could be understood in the olden times because back then man did not know the true nature of comets. However,

in modern times, such behaviour was unacceptable. He said that it had been clearly established by statistical studies that their visits have no correlations with disasters on the earth.

Q7. (i) What does 'Project Light Brigade' refer to?

(ii) What does Sir John say about the Project in his letter to Duttada in October?

Answer. (i) Project Light Brigade was the code name for the operation that the scientists were carrying out to stop the collision of the comet with the earth. The project involved placing nuclear payload in a spaceship, sending it to intercept the approaching comet, and detonating it by remote control. December 15 was the date when if the experiment failed, the comet would collide with the earth. However, if it did not, then the comet would pass by at a near but safe distance.

(ii) In his letter to Duttada in October, Sir John said that the charge of the Light Brigade had begun and that they hoped for the best. It meant that the spaceship with the payload had been launched on time.

Q8. Did Sir John buy Christmas presents on December 15? How did Duttada get to know about it?

Answer. Yes, Sir John bought Christmas presents on December 15. Duttada got to know about it in the letter that Sir John had written to him, saying that he was confident of buying Christmas presents on December 15, indicating that the project was successful.

Q9. Why, according to Indrani Debi, had the comet not been disastrous? Do you agree with her?

Answer. According to Indrani Debi, the comet had not proved to be disastrous because of the yajna that had been performed in their house. No, the yajna had no impact upon the comet. The project undertaken by the scientists prevented the comet from colliding with the earth, thereby saving earth and all its inhabitants from destruction.

Q10. Is Duttada's general outlook

(i) rational?

(ii) moral?

(iii) traditional? Choose the right word. Say why you think it right.

Answer. Duttada's general outlook was rational. He did not believe in superstitions. He only believed in what he saw and in his calculations. When Indrani Debi said that she wished he had not discovered the comet as it brought ill-luck, he laughed and said that

even an M.A. degree had not cured her of her superstitions. Later when Indrani Debi asked him to perform a yajna so that the comet would not harm him, he reacted very angrily. He said that such superstitious behaviour could be understood in the olden times because back then man did not know the true nature of comets. However, in modern times, such behaviour was unacceptable. He said that it had been clearly established by statistical studies that their visits have no correlations with disasters on the earth. In the end, when she told him that they made Khoka perform the yajna, he formed a mental picture of Khoka performing the yajna and uttering mantras dictated to him, which he did not understand. At the same moment, he thought of an assembly of scientists analysing the problem, devising solutions and executing them rationally. He wondered if the gap between the superstitious and the rational would ever be eliminated.

Exercise

Q1. Should a scientist's findings be suppressed if they seem disturbing? Give reasons for and against the topic.

Answer. This question requires you to use your own perspective as well as your analytical skills. The answer to the question would vary from one person to another. It is suggested that you read the text carefully and try attempting it on your own.

Q2. Do you think ours is a traditional society? What are some of the things we do to be called traditional? Do you find these things useless or useful?

Answer. This question requires you to use your own perspective as well as your analytical skills. The answer to the question would vary from one person to another. It is suggested that you read the text carefully and try attempting it on your own.

Q3. Give two or three examples to show how science has been useful to us.

Answer. This question requires you to use your own perspective as well as your analytical skills. The answer to the question would vary from one person to another. It is suggested that you read the text carefully and try attempting it on your own.

Q4. Give one example to show how science has been misused, and has as a result been harmful to us.

Answer. This question requires you to use your own perspective as well as your analytical skills. The answer to the question would vary from one person to another. It is suggested that you read the text carefully and try attempting it on your own.