

# The comet ii

## Comprehension Check (Page 83)

**1. "For a moment James wondered if he had done his sums right." Why was James doubtful about his sums and calculations?**

**Ans.** James reached his hotel at 1 pm. He looked up from his window and saw the star-studded sky. He couldn't believe that any untoward event could happen on such a peaceful night. He became doubtful about his calculations.

**2. What did the scientists at the conference say about James's 'sums'?**

**Ans.** The scientists attending the conference came to the conclusion that James Forsyth's calculations were correct. The new comet would collide with the earth.

**3. Immediate action was needed, the scientists decided. Give one example each of 'defensive' and 'offensive' action mentioned in the text.**

**Ans.** The approaching comet needed immediate action. The scientists had two options. The defensive measure was that the people should live in bunkers. The offensive action was to do something to deflect the comet from its path. This could be done by exploding a nuclear payload near the comet.

**4. "I am not buying any Christmas presents till December 15". What did Sir John mean by that?**

**Ans.** Sir John was not quite sure about the safety of the earth. So he deferred the buying of Christmas presents till December 15. By that time the situation was sure to become clear.

## Comprehension Check (Page 87)

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

**Ans.** Duttada on the return was expected to take part in a Shanti yajna to pacify evil spirit behind the comet.

**2. What is his reaction to the proposal?**

**Ans.** Duttada was very angry. He called it just a silly superstition to think that comets have ill-effects.

**3. (i) What does "Project Light Brigade" refer to?**

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

**Ans.** (i) "Project Light Brigade" refers to the plan to divert the comet from its path. The plan was to launch a spacecraft and explode the nuclear device near the comet. (ii) The charge of the light Brigade has begun. Let us hope for the best.

**4. Did Sir John Buy Christmas presents on December 15? How did Duttada get to know about it?**

**Ans.** Duttada got to know from the letter that Sir John had bought Christmas presents on Dec 15. It indicated that the Project Light Brigade was successful.

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

**Ans.** Indrani Debi thought that Comet Dutta could not harm the earth because of the Yajna performed at their house. I don't agree with this.

**6. Is Duttada's general outlook**

**(i) rational?**

**(ii) moral?**

**(iii) traditional?**

**Choose the right word. Say why you think it right.**

**Ans.** Duttada's general outlook is rational because he had a scientific temper. He went by reason, not by custom or morality.

### **Exercise (Page 88)**

**Discuss the following topics in small groups. Write your answers afterwards.**

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

**Ans.** No, the scientist tries to discover the truth, the factual position. His findings are based on thorough research. Hence, these should not be suppressed or ignored. Copernicus put forward the theory that the earth moves round the sun. He disproved the belief that the earth was the centre of universe. And he was right. But Galileo had to pay the price of telling a truth with his life. Let truth come to light.

**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?**

**Ans.** Ours is a traditional and conservative society. It is because of ignorance of the people. Our priests have full traditional beliefs in rites and rituals. We try to pacify the evil spirits and please God with offerings. These are futile and foolish practices.

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

**Ans.** Science is pure knowledge, a ceaseless search to know the truth and to make new discoveries. The research is a never ending process. Science has made life comfortable and protected us from fire, floods and diseases. If we misuse the discovery of atomic energy, it is our fault.

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

**Ans.** Science discovered gun powder and hydrogen bombs, lethal gases and other weapons of mass destruction. Instead of generating power from atomic reactors, we try to produce a bomb. Such misuse of science involves enormous loss of life and property.

**MORE QUESTIONS SOLVED**

## SHORT ANSWER TYPE QUESTIONS

**Q1. Duttada was invited to a secret conference. Why was he called?**

**Ans.** Manoj Dutta was Sir John's special invitee to the conference. It was attended by astronomers, biologists and nuclear/space scientists. It lasted for one week. The hidden agenda was to check James Forsyth's findings about Comet Dutta.

**Q2. "I am confident now of buying my Christmas presents on December 15 – John Macpherson." Why had John not been buying presents?**

**Ans.** On December 15, Comet Dutta came closest to the earth-at a distance of 80,000 km. Millions saw it and admired it but very few people knew how close the earth was to total destruction. When the comet passed off, John Macpherson heaved a sigh of relief. His operation had been successful. So he decided to celebrate Christmas.

**Q3. What is the contrast in the character of Duttada's wife. Do you agree to her orthodoxy?**

**Ans.** Duttada's wife is an educated lady with masters degree. Still she believes in superstitions. She gets a yajna performed for the safety and peace. She wants to purify her husband because he had travelled abroad. I don't agree to her orthodoxy. It hampers our progress.

**Q4. How was Duttada received after he returned from London?**

**Ans.** On his return from London Duttada was greeted by the inevitable vast crowd of friends, students and the usual hampers-on. He was loaded with garlands. The media people were also around him with their questions.

## LONG ANSWER TYPE QUESTIONS

**Q1. Duttada and the Defence Advisor became close friends and shared a secret. Elaborate.**

**Ans.** Sir John Macpherson was the Britain's defense advisor. He was shaken by the predictions of James Forsyth about Comet Dutta. The two were confident in each other. They became friends, waiting for the success of "Project Light Brigade". It was a secret operation. Sir John did not want the people to know about the approaching comet and its consequences.

**Q2. What action was needed to be taken to meet the challenge of the new comet?**

**Ans.** The experts at the conference discussed two ways to save human lives. One was defensive measure, and the other was offensive measure. The people could be told to live in underground bunkers until the comet passed by. The other step was to push the comet from its course with the help of nuclear power. This operation was code-named "Project Light Brigade".