

# CHAPTER - 7

## A TRULY BEAUTIFUL MIND

### Extract Based Questions(3 marks each)

Read the passage given below and answer the questions that follow:

**Q.1.** A headmaster once told his father that what Einstein chose as a profession would not matter, because

“he will never make a success at anything”. Einstein began learning to play the violin at the age of six, because his mother wanted him to. He later became a gifted amateur violinist, maintaining this skill throughout his life.

**(i)** What was the headmaster’s opinion about Einstein ?

**(ii)** Why did Einstein learn to play violin ?

**(iii)** Find a word from the passage that means “having great natural ability”. (Board Term 1,2012, ELI-013)

**Ans.** (i) The headmaster’s opinion about Einstein was that he would never be successful in his life.

(ii) Einstein learnt to play the violin to fulfil the desire of his mother.

(iii) Gifted.

**Q.2.** Einstein was deeply shaken by the extent of the destruction. This time he wrote a public missive to the United Nations. In it he proposed the formation of a world government. Unlike the letter to Roosevelt, this one made no impact.

**(i)** What did Einstein write and to whom ?

**(ii)** Why did he write a letter to Roosevelt earlier ?

**(iii)** Find the word from the extract that means – “a long and official letter”.

(Board Term 1,2012, ELI-027)

**Ans.** (i) Einstein wrote a public missive to the United Nations proposing the formation of a world government.

(ii) He wrote a letter to Roosevelt earlier in which he warned him by saying, “a single bomb of this type might very well destroy the whole part with some of the surrounding territory”, i.e., a letter warning him for a bomb blast. ,

(iii) Missive.

**Q.3.** “The pair finally got married in January 1903, and had two sons. But a few years later, the marriage faltered”.

**(i)** Name the “pair” referred to in the above lines.

**(ii)** What happened to their marriage ?

**(iii)** Which word from the extract means “became weak” ? (Board Term 1,2012, ELI-029)

**Ans.** (i) The pair referred to in the above lines is of Albert Einstein and Mileva.

- (ii) Their marriage was not successful.
- (iii) Faltered.

**Q.4. He also felt a special interest in a fellow student, Mileva Marie, whom he found to be a "clever creature". This young serb had come to Switzerland because the University in Zurich was one of the few in Europe where women could get degrees. Einstein saw in her an ally against the "philistines"- those people in his family and at the university with whom he was constantly at odds.**

- (i) Who is "clever creature" and "young serb" in the passage ?**
- (ii) Why did the young serh come to Switzerland ?**
- (iii) What was the attitude of Einstein towards the young serb ? (Board Term 1,2012, ELI-025)**

**OR**

- (i) Who felt special interest in Mileva Marie and why ?**
- (ii) Why did Mileva Marie come to Switzerland ?**
- (iii) Which word in the passage means "softness" ? (Board Term 1,2012, ELI-036)**

**Ans.** (i) Mileva Marie, a fellow student with Einstein is referred to as a "clever creature" and "young serb".

(ii) The young serb had come to Switzerland because the university in Zurich was one of the few in Europe where women could get degrees.

(iii) Einstein was attracted to her and he wanted to join her.

**OR**

- (i) Albert Einstein felt a special interest in Mileva Marie as he thought her to be a clever creature.
- (ii) Mileva Marie came to Switzerland as the University of Zurich was one of the few places of Europe where women could get degrees.
- (iii) Tenderness.

### **Short Answer Type Questions (2 marks each) (About 30-40 words each)**

**Q.1. Why did the people call Einstein a world citizen ? (Board Term 1,2012, ELI-014)**

**Ans.** People called Einstein a world citizen because he campaigned for peace and democracy and was agitated against arms and bombs especially after the bombing of Hiroshima and Nagasaki.

**Q.2. Why did Albert Einstein leave his school ? (Board Term 1,2012, ELI-015)**

**Ans.** Albert Einstein left his school because he was not happy with the education system. He was not at ease with the strict regimentation of the school. He felt suffocated because of which he had to leave school.

**Q.3. Why did Einstein hate school ? (Board Term 1,2012, ELI-018)**

**Ans.** He hated school regimentation because of its extreme sense of discipline. He felt tired and suffocated with this atmosphere. He often clashed with his teacher.

**Q. 4. Why does the world remember Einstein as a world citizen ? (Board Term 1,2012, ELI-019)**

**Ans.** The world remembers Einstein as a world citizen as he was deeply hurt by the mass destruction in Japan and campaigned for peace and democracy – worked for humanity.

**Q. 5. Why did Einstein write a letter to Franklin Roosevelt ?(Board Term 1,2012, ELI-020)**

**OR**

**Why did Einstein write a letter to the American President Roosevelt ?(Board Term 1,2012, ELI-042)**

**Ans.** Einstein wrote a letter to Franklin Roosevelt when the Nazis were in Germany and he had to migrate from there. The discovery of Nuclear fission in Germany made the American physicists upset that the Nazis could use an atom bomb.

**Q.6.What is Einstein's Special Theory of Relativity ? (Board Term 1,2012, ELI-021)**

**Ans.** According to Einstein's special theory of relativity, time and distance are not absolute. From this followed the world's most famous formula which describes the relationship between mass and energy i.e.,  $E = mc^2$ .

**Q. 7. Why did Einstein's play mates call him "Brother Boring" ? (Board Term 1,2012, ELI-023)**

**Ans.** Einstein could not mix up with other children. He did not find their games interesting. He often uttered every word twice. He was often teased for his abnormally huge head. And so his friends nicknamed him "Brother Boring."

**Q. 8. How was Einstein's private life unraveling after he finished his studies ?(Board Term 1,2012, ELI-026)**

**Ans.** He had wanted to marry Mileva but his mother was against it. She thought Mileva was three years older than her son and too intelligent for him.

**Q.9. What did Einstein call his desk drawer at the patent office and why ?(Board Term 1,2012, ELI- 028)**

**Ans.** Einstein called his desk drawer at the patent office the "bureau of theoretical physics" because he was working as a technical expert in the patent office in Bern where he was supposed to be assessing other peoples' inventions.

**Q.10. How did Einstein react to the bombing of Hiroshima and Nagasaki ?(Board Term 1,2012, ELI-034)**

**Ans.** Einstein was shocked at the extent of destruction caused by the bombing. He wrote a long letter to the United Nations and suggested that there should be a World Government.

### **Long Answer Type Questions (4 marks each) (About 80-100 words each)**

**Q.1. Write down the achievements of Albert Einstein. (Board Term 1,2012, ELI-022)**

**Ans.** Albert Einstein was really a scientific genius. He felt at home in Mathematics but he showed keen interest in physics. After graduating from the university in Zurich he started working vigorously. With his university education he was working on relativity. After his graduation, he remained jobless. So, he gave private lessons. In 1902, he secured a job as a technical expert in the patent office in Bera. But he went on developing his own ideas. The world showered on him honors invitations. He was honored with Noble prize in 1921.

**Q.2. Einstein was an unusual child with no indication of his potential greatness.**

**Comment.(Board Term 1,2012, ELI-039)**

**Ans.** Einstein's head was larger than the usual head. He was called "Brother Boring" because he never mixed up with his classmates. He left school because he was not happy with the strict regimentation. He loved mechanical toys and thought his sister to be a toy. The head master thought him to be stupid and good for nothing and that he would never succeed in life.

He also told Einstein's father that whatever profession he chose would not matter, because "he will never make a success at anything". This proves that Einstein was an unusual child with no indication of his potential greatness.

**Q. 3. What was the outcome of Einstein's letter which he wrote to the American President, Roosevelt ? Did his warning have any impact on America ?(Board Term 1,2012, ELI-051)**

**Ans.** On his colleague's insistence, Einstein wrote a letter to the American President, Roosevelt when the Nazis were in Germany and he had to migrate from there. The discovery of Nuclear fission in Germany made the American physicists upset that the Nazis could use the bomb. He warned him of the consequences of the atomic bomb. His words had a great impact. The Americans developed the atomic bomb secretly. They dropped it on the Japanese cities of Hiroshima and Nagasaki in August 1945. Einstein was greatly moved by the destruction. He wrote a long letter to the United Nations and suggested that there should be a world government. This definitely helped ending the world war.

### **Value Based Question (4 marks)**

**Q.1. Do you think that in today's context national boundaries are overcome by global issues ?**

**Ans.** The world is undoubtedly a global village. Any issue cannot be resolved at the national level alone. This has been reflected in the case of Albert Einstein. He wrote to the President of the U.S.A. about the evils of a nuclear war, requesting him to take some measures. It is definitely the responsibility of each one of us to shoulder the responsibility of protecting the world.