

Marks:20**SCIENCE****Std: X****Chapter : Human Eye and colourful world****Duration:50 minutes**

Q.1. Choose the correct alternative (1 Mark each)

1. The sky appears white during the afternoon because
 - (a) Light is scattered the least
 - (b) Blue does not get scattered
 - (c) Red does not get scattered
 - (d) All colours get scattered

2. When light travels through a prism
 - (a) Only dispersion takes place
 - (b) Only deviation takes place
 - (c) Dispersion and deviation
 - (d) Neither deviation nor dispersion takes place

Q.2. Answer the following

1. Define a rainbow. (1 Mark)

2. Explain the formation of a rainbow with the help of a diagram. (3 Marks)

3. (i) What is the angle of deviation? (1 Mark)

(ii) When is the angle of deviation minimum? (1 Mark)

4. (i) What is a spectrum? (1 Mark)

(ii) Why do different components of white light split up into spectrum when it passes through a triangular glass prism? (1 Mark)

5. Name the colour of spectrum which have
 - (i) Maximum wavelength (1 Mark)
 - (ii) Minimum wavelength (1 Mark)

6. Why do stars twinkle? (3 Marks)

7. Why does the sky appear blue? (3 Marks)

8. What is Tyndall effect? Explain with an example. (2 Marks)