

Class: 10

Subject:physics

Date: 12/1/2021

worksheet No. 6.5



Lesson & LO:VISION AND THE WORLD OF COLOURS

1 (a) In which colour does the Newton's disc appear when rotated fast? Give reason.



- b) An image remains in the retina of our eye for a time interval of 1/16 second. What is this phenomenon called?
- c) Give any two examples of persistence of vision.
- 2. When sunlight passes through the atmosphere, rays of light are reflected by the tiny particles and dust particles of the atmosphere.
- a) Name this phenomenon.
- 3 (a) Do all the colours of sunlight undergo similar type of scattering?
- b) Give an experiment to prove this.List out the materials required for this experiment.Explain the experimental procedure.
- 4 (a) Which colour of the sunlight undergoes maximum scattering?
- b) Which colour of the sunlight undergoes least scattering?
- c) What is the relation between scattering and wavelength?

- d) How is the rate of scattering and the size of the particles related?
- e) Under which circumstance, the scattering is same for all colours?

