SHIKSHA CLASSES

Sub. : Science | **Question Paper** | **Marks : 20**

Std. : VIIIth - S.B. | **15. Sound, 16. Reflection of Light** | **Time : 45 min.**

Q.1(A) : Choose the correct alternative 2

1) If the angle made by the incident ray with the surface of a plane mirror is 30°, the angle of reflection must be ……. .

a) 30° b) 90° c) 60° d) 15°

2) In the experiment to show that a medium is necessary for propagation of sound, as the quantity of air inside the bell jar decreases, the level of ringing sound heard outside …… .

a) increases b) decreases

c) fluctuates randomly d) changes at regular intervals

Q.1(B) : Solve any one of the following question 1

1) Find the odd one out

a) Sitar, Violin, Guitar, Flute

b)Plane mirror,Plywood, Wood,Rugh tile

2) On which properties the working of kaleidoscope based?

3) Write True or False.

Sound waves cannot travel through vaccum.

Q.2(A) : Give reason (Any One) 2

1) Astronauts on the moon cannot hear each other directly.

2) Kaleidoscope and periscope both use the properties of reflection

Q.2(B): Solve any two of the following question. 4

1) How will you explain the statement 'We cannot see the objects in a dark room'?

2) How is sound produced in a human larynx ?

3) If the angle between the plane mirror and the incident ray is 40°, what are the angles of incidence and reflection?

4) What is the relation between the frequency of vibration and the vibrating length (or height) of the air column?

Q.3 : Solve any two of the following question. 6

1) State the laws of reflection of light & What will happen when a light ray is incident perpendicular to the mirror?

2) How are different sound notes generated in musical instruments like guitar, which uses strings for sound generation, and flute, which uses blown air for sound generation ?

3) Draw a figure showing the following

a) Incident Ray b) Angle of incidence c) Angle of reflection

d) Point of incidence e) Reflected ray f) Normal

4) Draw the diagram of internal construction of a loudspeaker.

Q.4 : Solve any One of the following question. 5

1) Explain the experiment, with a neat diagram, to prove the following:

'Sound needs a material medium for propagation.

2) Write a short note on periscope.

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