

GENIUS HIGH SCHOOL :: BHUVANAGIRI
FORMATIVE ASSESSMENT - I

Class : X

Time: 1Hr

Subject : GENERAL SCIENCE

Max marks: 40

General Instructions:

- 1. Write Biology and Physics and Chemistry in separate papers. Write your name on Every paper and the subject Biology or Physics or Chemistry clearly.**
- 2. Maintain neat hand writing and take care while writing the question numbers.**

PHYSICAL SCIENCE

I. Answer the following questions. Each question carries 3 marks

- 1)** Find the refractive index of glass in which velocity of light is $2 \times 10^8 \text{ m/sec}$. Hint: velocity of light in air is $3 \times 10^8 \text{ m/sec}$.
- 2)** From below given data find in which medium light travel faster

Refractive index	Medium
1	Air
1.33	Water
2.42	Diamond

- 3)** Draw a ray diagram for convex lens in which object is placed in between F and O. Where F is principal focus and O is optical centre
- 4)** write any three differences between convex lens and concave lens.

II. Answer the following questions. Each question carries 2 marks

- 1)** Draw ray diagram when object is placed at centre of curvature in case of concave mirror.
- 2)** What type mirror we use in solar cooker, ATM centre, car head lights, intersection of ghat roads respectively?
- 3)** A convex lens has focal length of 50 cm its power is
- 4)** For driving car What type of mirror would you prefer to see traffic at your back and why?



III. Answer the following questions. Each question carries 1 mark

- 1) The Refractive index of water is 1.33. What is the meaning of this statement?
- 2) Write the formula for magnification in case of spherical mirrors and spherical lenses.
- 3) An object is placed in front of convex lens of focal length 20 cm at a distance of 30 cm, then find position of image distance?
- 4) You have two lenses A and B of focal lengths +10 cm and -10 cm respectively. State the nature of two lenses.
- 5) A light ray travels from denser medium to rarer medium it bends towards the normal of medium of separation. Is that statement true or false.

BIOLOGY

SECTION A (3 x 1 = 3)

1. Life processes includes
 - a. Anabolism b. Catabolism c. A&B d. None of these
2. What are the functional units of lungs
 - a. Trachae b. Larynx c. Nose d. Alveoli
3. What is the normal value of Blood pressure in Human beings
 - a. 130/90 mm.Hg b. 140/100 mm.Hg c. 120/80mm.Hg d. 80/120mm.Hg

SECTION B (3 x 2 = 6m)

1. What are capillaries? Explain it briefly?
2. What is double circulation/
3. Write the parts of Alimentary Canal of Man?

SECTION C (2 x 3 = 6m)

1. Differentiate between Aerobic respiration and Anaerobic respiration?
2. Write the circulation process in Human Heart?



