

This Question Paper contains 20 printed pages.
(Part - A & Part - B)

Sl.No.

11 (E)
(JULY, 2018)

પ્રશ્ન પેપરનો સેટ નંબર જેની સામેનું વર્તુળ OMR શીટમાં ઘટ્ટ કરવાનું રહે છે.
Set No. of Question Paper, circle against which is to be darken in OMR sheet.

01

Part - A : Time : 1 Hour / Marks : 50

Part - B : Time : 2 Hours / Marks : 50

(Part - A)

Time : 1 Hour]

[Maximum Marks : 50

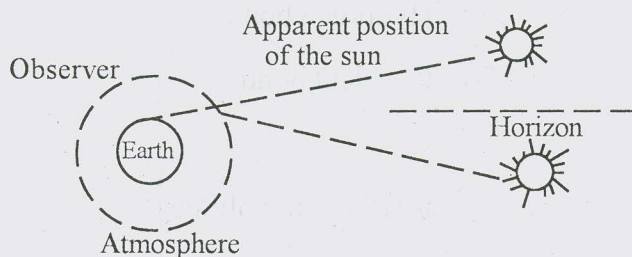
Instructions :

- 1) There are 50 Multiple Choice Questions (M.C.Q.) in Part - A and all questions are compulsory.
- 2) The questions are serially numbered from 1 to 50 and each carries 1 mark.
- 3) Read each question carefully, select proper alternative and answer in the O.M.R. sheet.
- 4) The OMR sheet is given for answering the questions. The answer of each question is represented by (A) O, (B) O, (C) O, (D) O. Darken the circle ● of the correct answer with ball-pen.
- 5) Set No. of Question Paper printed on the upper-most right side of the Question Paper is to be written in the column provided in the OMR sheet.
- 6) Rough work is to be done in the space provided for this purpose in the Test Booklet only.

- 1) Which type of bond carbon atoms forms with other atoms?
(A) Ionic bond (B) Hydrogen bond
(C) Metallic bond (D) Covalent bond
- 2) Which of the following has higher surface area (SA) to volume (V) ratio?
(A) Red blood cell
(B) Bucky ball
(C) DNA
(D) Human Hair

Rough Work

- 3) Which of the following is not a characteristic of light?
- (A) Light travels with $3 \times 10^8 \text{ms}^{-1}$ speed.
- (B) Light is an electromagnetic radiation which produces sensation in our eye
- (C) Light travels on a straight path
- (D) Light is a mechanical wave
- 4) Which of the following formula is wrong in accordance with Snell's law?
- (A) $\frac{n_1}{\sin \theta_1} = \frac{n_2}{\sin \theta_2}$
- (B) $n_{21} = \frac{\sin \theta_1}{\sin \theta_2}$
- (C) $n_1 \sin \theta_1 = n_2 \sin \theta_2$
- (D) $\frac{1}{n_2} \sin \theta_1 = \frac{1}{n_1} \sin \theta_2$
- 5) When sunlight enters into an atmosphere, it gets refracted. Because of this atmospheric refraction, virtual image of sun is formed during sunset and sunrise as shown in below diagram.



Due to this atmospheric refraction, the day _____

- (A) becomes four minutes longer than the actual one.
- (B) becomes four minutes shorter than the actual one.
- (C) becomes longer in summer and shorter in winter.
- (D) length of the day can not be said anything.

