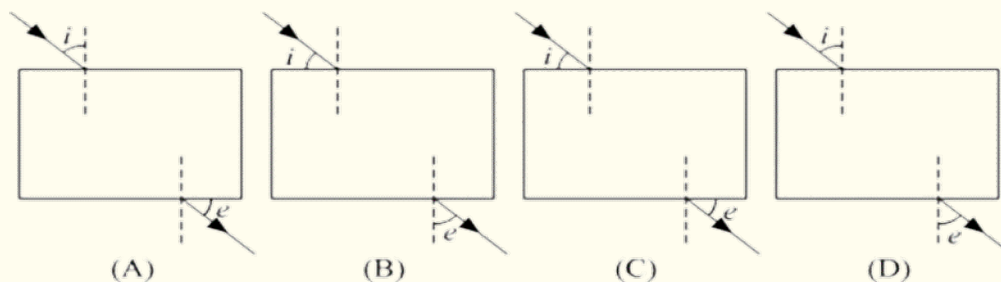


### MATHS

- Q.1 The decimal expansion of the rational number  $37/(22 \cdot 5)$  will terminate after
- (a) one decimal place                      (b) two decimal places
- (c) three decimal places                  (d) more than 3 decimal places
- Q.2 The value of "x" in the polynomial  $3a^2 + 2xa + 3a + 9$  if  $(a + x)$  is one of its factors.
- (a) 9    (b) 3
- (c) 1    (d) 0
- Q.3 Which one of the following is not a quadratic equation?
- (a)  $(x + 6)^2 = 2(x + 2)$                   (b)  $x^2 + 4x = (-1)(1 - x)^2$
- (c)  $(x + 3)(x - 1) = x^2 - 5x - 3$       (d)  $x^3 - x^2 + 2x + 1 = (x + 1)^3$
- Q.4 The missing terms in AP: \_\_, 18, \_\_6, are:
- (a) 11 and 9                                  (b) 25 and 13
- (c) 24 and 12                                (d) 26 and 32
- Q.5 Cards bearing numbers 4 to 20 are placed in a bag and mixed thoroughly. A card is taken out from the bag at random. The probability that the number on the card taken out is an odd number, is
- (a)  $9/17$                                         (b)  $5/17$
- (c)  $1/2$     (d)  $8/17$
- Q.6 If the perimeter of the circle and square are equal, then the ratio of their areas will be equal to:
- (a) 14:11                                      (b) 22:7
- (c) 7:22                                        (d) 11:14

### SCIENCE

- Q.1 In manufacturing cement, Quicklime is used and it is obtained by thermal decomposition of limestone. Write the chemical equation involved in this process
- (a)  $\text{CaO (s)} + \text{H}_2\text{O (l)} \rightarrow \text{Ca(OH)}_2\text{(s)} + \text{Heat}$  (b)  $\text{CaCO}_2\text{(s)} \rightleftharpoons \text{CaO (s)} + \text{CO(s)}$
- (c)  $\text{CaCO}_3\text{(s)} \rightleftharpoons \text{CaO (s)} + \text{CO}_2\text{(s)}$  (d)  $\text{CaO}_2\text{(s)} + \text{H}_2\text{O (l)} \rightarrow \text{Ca(OH)}_3\text{(s)} + \text{Heat}$
- Q.2 Which acid is used present in the apples (green)
- (a) Tantric acid (b) Malic acid (c) Tannic acid (d) Oleic acid
- Q.3 Choose the correct pair
- The function of abscisic acid is
- (i) It cause wilting of leaves (ii) It inhibits the growth of lateral buds
- (iii) It induces the closing of stomata (iv) It promotes seeds germination
- (a) (i) and (ii) (b) (ii) and (iv) (c) (i) and (iii) (d) (ii) and (iii)
- Q.4 The number of oxygen atoms present in ozone are:
- (a) one (b) two (c) three (d) four
- Q.5 Aryan added dilute HCl to a test tube containing zinc granules. Which of the following observations are correct?
- (i) Zinc surface will lose its lustre. (ii)  $\text{H}_2$  will be evolved during reaction.
- (iii) The solution become red.
- (a) (ii) and (iii) (b) (i) and (ii)
- (c) (i) and (iii) (d) (i) , (ii) and (iii)
- Q.6 Which of the following diagram is showing the correct angle of incidence and emergence



- (a) A (b) B (c) C (d) D

### SOCIAL STUDIES

Q.1 The full form of UNCED is:

- (a) United Nations Convention on Energy and Development.
- (b) United Nations Conference on Environment and Development.
- (c) United Nations Commission on Energy and Development.
- (d) None of these.

Q.2 Hydroelectricity to the industries of Maharashtra is provided by some river projects. The name of these projects are:

- (a) Geetenjli Project and Koyna Project
- (b) Hirakund Project
- (c) Pravara Project and Koyna Project
- (d) Rihand project

Q.3 Slash and Burn agriculture is known as Roca in \_\_\_\_\_

- (a) India
- (b) Indonesia
- (c) Brazil
- (d) China

Q.4 What does per capita income hide

- (a) population
- (b) average income
- (c) disparities
- (d) None of above

Q.5 Which of the following statements is true?

- (a) As per Indian law, apart from RBI, other individual or organisation is allowed to issue currency.
- (b) The law legalises the use of rupees as a medium of payment that can be refused in settling transactions in India
- (c) No individual in India can legally refuse a payment made in rupees.
- (d) All of the above.

Q.6 Which one of the following communities constituted majority in Brussels?

- (a) Portuguese Speaking
- (b) Dutch Speaking
- (c) French Speaking
- (d) English speaking

### COMPUTER SCIENCE

Q.1 Which of the following tags do not require a terminator

- (a) <u>
- (b) <br>
- (c) <b>
- (d) none of the above

Q.2 MAC addresses are \_\_\_\_\_ hexadecimal (or 48 bit) numbers.

- (a) 12 digit
- (b) 16 digit
- (c) 32 digit
- (d) 64 digit