



Total Questions : 50

Time : 1 hr.

PATTERN & MARKING SCHEME			
Section	(1) Logical Reasoning	(2) Science	(3) Achievers Section
No. of Questions	10	35	5
Marks per Ques.	1	1	3



Scan the QR code for more details

SYLLABUS

Section – 1 : Verbal and Non-Verbal Reasoning.

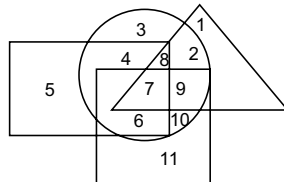
Section – 2 : Chemical Reactions and Equations, Acids, Bases and Salts, Metals and Non-metals, Carbon and Its Compounds, Life Processes, Control and Coordination, Reproduction in Organisms, Heredity, Light-Reflection and Refraction, Human Eye and Colourful World, Electricity, Magnetic Effects of Electric Current, Our Environment and Its Management.

Section – 3 : Higher Order Thinking Questions - Syllabus as per Section – 2.

LOGICAL REASONING

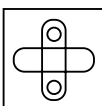
1. In a certain code language, 'si po re' means 'book is thick', 'ti ma re' means 'bag is heavy', 'ka si' means 'interesting book' and 'de ti' means 'that bag'. Which of the following means 'that is interesting' in that code language?
- (A) ka de re (B) ti po ka
(C) de si re (D) ka re ma

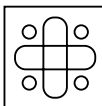
2. In the given figure, rectangle, square, circle and triangle represents the regions of wheat, gram, maize and rice cultivation respectively.

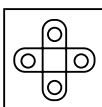


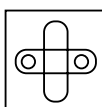
- Which area is cultivated by rice and maize only?
- (A) 9 (B) 8
(C) 2 (D) 7

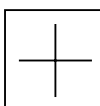
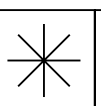
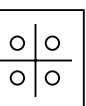
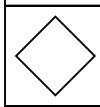
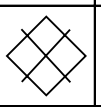
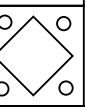
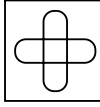
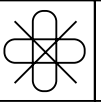
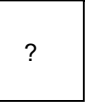
3. Which of the following figures will complete the given figure matrix?

(A) 

(B) 

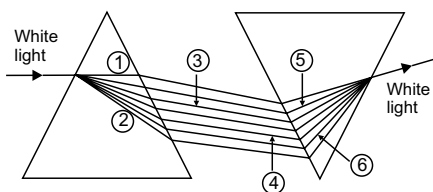
(C) 

(D) 

SCIENCE

4. The given figure shows the phenomenon of recombination of the spectrum of white light using two prisms.

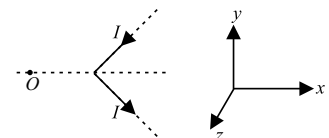


If V, I, B, Y, O and R denote violet, indigo, blue, yellow, orange and red colours respectively, then which of the following options correctly lists the colour of marked rays?

- | | | | | | | |
|-----|---|---|---|---|---|---|
| | ① | ② | ③ | ④ | ⑤ | ⑥ |
| (A) | R | V | B | Y | I | O |
| (B) | R | V | Y | B | O | I |
| (C) | V | R | B | Y | I | O |
| (D) | V | R | Y | B | O | I |

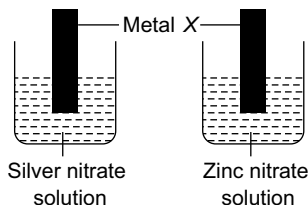
5. The given figure shows a V-shaped wire lying in x-y plane. A current of I ampere flows in the wire. The direction of the magnetic field at point O which lies in the same plane is along

- (A) Positive z-axis
(B) Positive x-axis
(C) Negative z-axis
(D) Negative x-axis.



6. Which of the following statements is true with respect to diamond ?
- The carbon atoms are connected to each other by metallic bonds.
 - In the diamond crystal, the carbon atoms are very loosely packed.
 - Each carbon atom in the crystal is surrounded by four other carbon atoms forming a rigid 3-D structure.
 - Diamond can be synthesised by subjecting pure carbon to very low pressure and temperature.

7. Strips of metal X were dipped into two different solutions as shown :



A greyish metallic deposit was found on both strips. Which of the following could be metal X?

- Cu
- Mg
- Pb
- Fe

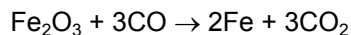
8. Identify the given developmental stage of human embryo and select the correct option regarding it.



Developmental stage	Site of implantation
(A) Blastocyst	Uterine wall
(B) Morula	Uterine wall
(C) Blastula	Mid part of Fallopian tube
(D) Gastrula	Mid part of Fallopian tube

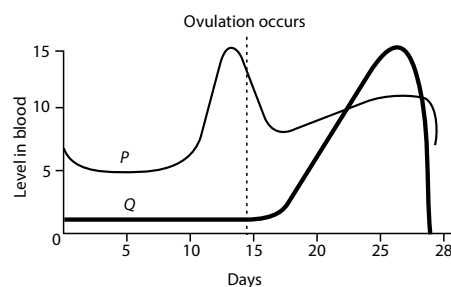
ACHIEVERS SECTION

9. Which of the following statements about the given reaction are not correct?



- Fe_2O_3 is getting oxidised to Fe.
 - Fe_2O_3 is acting as a reducing agent.
 - CO is acting as a reducing agent.
 - CO is getting reduced to CO_2 .
- I and III only
 - I, II and IV only
 - II and IV only
 - I and III only

10. The given graph shows the hormonal changes during a normal menstrual cycle. What would be a likely consequence if the hormone represented by graph Q is lacking in an adult female?



- The uterine lining might not be sufficiently stable to support an implanted embryo.
- Levels of the hormone represented by graph P would be higher than normal.
- Fertilization of ovum would fail to occur.
- There would be no significant effect since the functions of the hormones overlap.

SPACE FOR ROUGH WORK

ANSWERS

NSO – 1. (A) 2. (C) 3. (B) 4. (B) 5. (C) 6. (C) 7. (B) 8. (A) 9. (B) 10. (A)