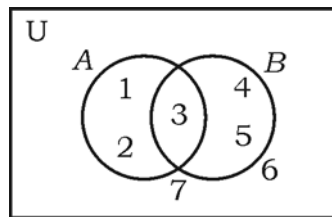


- I. Four alternatives are given for each of the following questions / incomplete statements. Only one of them is correct or most appropriate. Choose the correct alternative and write the complete answer along with its letter of alphabet.

$$8 \times 1 = 8$$

1. In the given Venn diagram $n(A)$ is



- (A) 3 (B) 1
(C) 5 (D) 2
2. Sum of all the first 'n' terms of even natural number is
(A) $n(n+1)$ (B) $n(n+2)$
(C) n^2 (D) $2n^2$
3. A boy has 3 shirts and 2 coats. How many different pairs, a shirt and a coat can he dress up with ?
(A) 3 (B) 18
(C) 6 (D) 5
4. In a random experiment, if the occurrence of one event prevents the occurrence of other event is
(A) a complementary event (B) a certain event
(C) not mutually exclusive (D) mutually exclusive event

5. The polynomial $p(x) = x^2 - x + 1$ is divided by $(x - 2)$ then the remainder is
- (A) 2 (B) 3
(C) 0 (D) 1
6. The distance between the co-ordinates of a point (p, q) from the origin is
- (A) $p^2 - q^2$ (B) $\sqrt{p^2 - q^2}$
(C) $\sqrt{p^2 + q^2}$ (D) $q^2 - p^2$
7. The equation of a line having slope 3 and y -intercept 5 is
- (A) $3y = 5x + 3$ (B) $5y = 3x + 5$
(C) $y = 3x - 5$ (D) $y = 3x + 5$
8. The surface area of a sphere of radius 7 cm is
- (A) 88 cm^2 (B) 616 cm^2
(C) 661 cm^2 (D) 308 cm^2