

5. SAMPLE QUESTIONS

i. Mathematics:

1. If $M = \{1, 2, 3, 4\}$, $N = \{3, 4, 5, 6\}$ then $M \Delta N$ is
A) $\{1, 2\}$ B) $\{3, 4\}$ C) $\{1, 2, 5, 6\}$ D) $\{5, 6\}$
2. If in a triangle ABC, $(b + c + a)(a + b - c) = 3ab$ then the angle C is
A) 30° B) 45° C) 60° D) 90°
3. If a, b, c are three non zero vectors, no two of which are collinear and the vector $a + b$ is collinear with c , $b + c$ is collinear with a then $a + b + c$ is equal to
A) 0 B) a C) b D) c
4. In an election, number of candidates exceeds the number to be elected by 2. A man can vote in 56 ways. Find the number of candidates.
A) 4 B) 6 C) 7 D) 8
5. For what real value of (x, y) the numbers $-3 + x^2yi$ and $x^2 + y + 4i$ are conjugate complex
A) $(1, 4)$ B) $(-1, 4)$ C) $(4, 1)$ D) $(1, -4)$

ii. Aptitude & Mental ability:

6. A Boolean function $F = xy + x'y'$ then what is the value of $F + F'$
A) 1 B) x C) y D) 0
7. Which of the following circuit is called Latch?
A) AND B) OR C) Flip-flop D) XOR
8. Who is known as the father of Artificial Intelligence?
A) Allen Turing B) Charles Babbage C) Bill Gates D) Neumann
9. Pick out the odd man from (Red, Blue, Indigo, Orange)
A) Red B) Blue C) Indigo D) Orange
10. If MPOEPO represent LONDON, then QBSJT represent?
A) INDIA B) ROMAN C) PARIS D) RABIT

- 1) Read the statements given and classify
Statement: "Gandhi believed in non-violence"
(a) fact (b) prejudice
(c) opinion (d) judgement
- 2) Find next term to complete the series 18,24,31,39,.....
(a)25 (b) 41
(c)55 (d) 48
- 3) Find the word which does not belong to the group
(a) walk (b) run
(c) jump (d) swim
- 4) Fill in the series 47,32,.....,11,5,2
(a) 20 (b) 13
(c) 35 (d) 21
- 5) If MPOEPO means LONDON what does NPTDPX mean?
(a) MOSCOW (b) TRISUR
(c) BRITON (d) KERALA