

123/2015

Maximum : 100 marks

Time : 1 hour and 15 minutes

1. Which is the smallest number when increased by 5 is divisible by 27 and 21?  
(A) 179 (B) 164  
(C) 184 (D) 189
2. The cost price of 10 articles is equal to the selling price of 8 articles. Find the profit percent:  
(A) 50 (B) 25  
(C) 12.5 (D) 20
3. In an election between two candidates, the candidate who secures 30% votes is defeated by 4360 votes. Find the number of votes secured by the winning candidate:  
(A) 7490 (B) 7630  
(C) 7080 (D) 7070
4. A purse contains coins of 2 Rupees, 1 Rupee, 50 paise and 25 paise in the ratio 1:2:4:8. If the total amount is Rs.600, then the number of 25 paise coins exceeding those of 50 paise coins is :  
(A) 300 (B) 200  
(C) 100 (D) 400
5. A train 240 m long is moving at a speed of 25 Km/hr. In how much time will it cross a man coming from the opposite direction at a speed of 2 Km/hr :  
(A) 36 sec (B) 42 sec  
(C) 46 sec (D) 32 sec
6. When the minute and hour hands of a clock shows 7'O clock, the angle between them is :  
(A)  $90^\circ$  (B)  $130^\circ$   
(C)  $150^\circ$  (D)  $120^\circ$
7. A and B together can do a work in 24 days. A alone can do it in 40 days. In how many days can B do it alone?  
(A) 60 (B) 120  
(C) 80 (D) 96

8. If a sum of money at simple interest doubles in 7 years, it will become four times in :
- (A) 12 years (B) 18 years  
(C) 14 years (D) 21 years
9. Three years ago, Sanju's age was double of Sheeja's. Seven years hence the sum of their ages will be 86 years. The age of Sanju today is :
- (A) 44 (B) 30  
(C) 47 (D) 36
10. A sphere of maximum size is carved out of a solid wooden cylinder of diameter 15 cm and height 12 cm. Find the volume of the sphere in  $\text{cm}^3$  :
- (A)  $248\pi$  (B)  $288\pi$   
(C)  $276\pi$  (D)  $236\pi$
11. Compute  $\frac{1}{0.1} + \frac{0.1}{0.01} + \frac{0.01}{0.001} + \frac{0.001}{0.0001}$  :
- (A) 0.004 (B) 4  
(C) 40 (D) 1.111
12. Find the next term in the sequence:  
B, C, E, G, K :
- (A) M (B) N  
(C) O (D) P
13. Find the next term in the sequence:  
2, 9, 28, 65, 126 :
- (A) 260 (B) 257  
(C) 217 (D) 327
14. If FRIEND is coded as GQJDOC then ENEMY is coded as :
- (A) DODNX (B) FMFLZ  
(C) DMDLX (D) FOFNZ
15. Ramu, who is facing east, turns  $405^\circ$  in the anti-clock-wise direction and then  $45^\circ$  in the clock wise direction. Which direction is he facing now?
- (A) North East (B) West  
(C) North West (D) East