1. 120 men consume 720 kg of rice in 30 days. In how many days can 90 men consume 270 kg?
(A) 18
(B) 12
(C) 9
(D) 15
2. $A$ and $B$ can together complete a task 40 days. They worked together for 30 days and then left. A finished the remaining task in next 22 days. In how many days $A$ alone can finish the task?
(A) 88 days
(B) 48 days
(C) 30 days
(D) 40 days
3. If $A: B=2: 3, B: C=6: 11$ then what is the value of $C: B$ : $A$ ?
(A) 11: 6: 2
(B) 22: 6: 4
(C) 11: 3: 2

## UPSC / STATE PCS NOW STUDY ONLINE FROM HOME SSC / BANK

(D) 11: 6: 4
4. In bag there are coins of 25 paisa, 50 paisa and 1 rupee in the ratio of 3 : 4 : 5. If there are in all Rs.31, then how many 1 rupee coins are there in the bag?
(A) 12
(B) 16
(C) 24
(D) 20
5. A reduction of $\mathbf{2 0 \%}$ in the price of sugar enables a housewife to purchase 6 kg . more for Rs. 240. What is the original price per kg. of sugar?
(A) Rs. 25 per kg
(B) Rs. 18 per kg
(C) Rs. 15 per kg
(D) Rs. 10 per kg
6. Cost of two articles were in the ratio of 16: 23. The cost of first article increases by $10 \%$ and that of second by Rs.477. Now the costs of two articles are in the ratio of 11: 20. The price of the second article (in Rs.) in the beginning was-

## UPSC / STATE PCS

(A) 1912
(B) 1251
(C) 1521
(D) 1219
7. Anoop travels first $1 / 3$ of the total distance at the speed of 10 $\mathbf{k m} / \mathrm{hr}$. and the next $1 / 3$ distance at the speed of $\mathbf{2 0} \mathbf{~ k m} / \mathrm{hr}$. and the last $\mathbf{1 / 3}$ distance at the speed of $\mathbf{6 0} \mathbf{~ k m} / \mathrm{hr}$. The average speed of Anoop is-
(A) 18
(B) 21
(C) 14
(D) 16
8. A train $\mathbf{4 0 0} \mathbf{m}$ long passes a pole in $\mathbf{2 0}$ seconds. What is the speed of the train?
(A) $70 \mathrm{~km} / \mathrm{hr}$
(B) $68 \mathrm{~km} / \mathrm{hr}$
(C) $72 \mathrm{~km} / \mathrm{hr}$
(D) $64 \mathrm{~km} / \mathrm{hr}$
9. A train 300 m . long is running with a speed of $54 \mathrm{~km} / \mathrm{hr}$. In what time will it cross a telephone pole?

## UPSC / STATE PCS NOW STUDY ONLINE FROM HOME SSC / BANK

(A) $\mathbf{1 6} \mathbf{~ s e c}$
(B) 20 sec
(C) 18 sec
(D) 22 sec
10. Two train approach each other at 30 km/hr and 27 km/hr. From two places 342 km. apart. After how much time will they meet? (in hours)
(A) 9
(B) 6
(C) 8
(D) 5
11. At what rate percent per annum will a sum of Rs. 5000 amount to Rs. 6000 in 4 years?
(A) 5\%
(B) 6\%
(C) 3.5\%
(D) 4\%
12. A certain sum (in Rs.) is invested at simple interest at $x \%$ p.a. for 5 years. Had it been invested at $(x+5) \%$ p.a, the simple interest sum?
(A) Rs. 36,800
(B) Rs. 36,400
(C) Rs. 35,800
(D) Rs.40,000
13. If four coins are tossed together, what is the probability of at least getting 2 heads?
(A) $13 \backslash 16$
(B) $11 \backslash 16$
(C) $9 \backslash 16$
(D) $15 \backslash 16$
(E) None of these
14. In how many different ways can the letters of the word 'DESIGN' be arranged so that the vowels are at the two ends?
(A) 48
(B) 72
(C) 36
(D) 24

## UPSC / STATE PCS

(E) None of these
15. An accurate clock shows 8 o'clock in the morning. Through how may degrees will the hour hand rotate when the clock shows 2 o'clock in the afternoon?
(A) $150^{\circ}$
(B) $144^{\circ}$
(C) $180^{\circ}$
(D) $168^{\circ}$
16. The angle between the minute hand and the hour hand of a clock when the time is 4.20 , is:
(A) $10^{\circ}$
(B) $0^{\circ}$
(C) $20^{\circ}$
(D) $5^{\circ}$
17. An article was sold for Rs.4000. Had a discount of $10 \%$ was being offered, the profit would have been 20\%. The cost price of the article was:
(A) Rs. 3000
(B) Rs. 3600
(C) Rs. 3200
(D) Rs. 3310
18. A discount of $\mathbf{2 0 \%}$ in the price of rice enables $X$ to buy $\mathbf{5} \mathbf{~ k g}$ more rice for RS. 100. What is the reduced price of rice per $\mathbf{k g}$ ?
(A) RS. 4
(B) RS. 2
(C) RS. 1
(D) RS. 3
19. A vessel contains some litres of pure milk. If 25 litre of water is added to the vessel, then ratio between milk and water becomes 12:5, 17 litres of mixture is drawn from the vessel and 10 litre of water is added to the mixture. Find the new ratio between milk and water.
(A) 6:5
(B) $5: 6$
(C) $8: 5$
(D) $5: 8$
20. Two vessels $A$ and $B$ contain spirit and water mixed in the ratio 5:2 and 7:6 respectively. Find the ratio in which these mixture be mixed to obtain a new mixture in vessel $C$ containing spirit and water in the ratio 8:5?
(A) $9: 7$
(B) $2: 3$
(C) $7: 5$
(D) $5: 7$
(E) $7: 9$

## ANSWERS

1. D
2. $A$
3. D
4. D
5. D
6. D
7. A
8. C
9. B
10. B
11. A
12. A
13. B
14. A
15. C
16. A
17. A
18. A
19. C
20. E
