Amazon (Aptitude, Reasoning, Technical) Set - I

1. If the ratio of Rate of filling of two Pipes A and B is 3:2. If together they can fill a Tank 5/6th of Tank in 20 minutes. Then in how many does A alone can fill the Tank?

A. 50 Minutes
B. 40 Minutes
C. 30 Minutes
D. 20 Minutes

Answer – B. 40 Minutes
Explanation:
5/6 tank = 20 Min
Full tank = 24 Min
1/2x+ 1/3x = 1/24
x = 20, A= 2x = 40 Min

2. A car covers first 10 km with 40 km/hr next 10km with 60 km and next 10 km in 20 km/hr. What is the average speed of the car?

A. 320/11
B. 330/11
C. 350/11
D. 360/11

Answer – D. 360/11
Explanation:
Average speed = (3*20*40*60)/800+2400+1200 = 360/11

3. The efficiency of P is 25% more then Q and Q take 25 days to complete a piece of work. P started a work alone and then Q joined her 5 days before actual completion of the work. For how many days P worked alone?

A. 9
B. 10
C. 11
D. 12

Answer – C. 11
Explanation:

Efficiency (P: Q) = 5: 4
Number of days(P: Q) = 4x : 5x = 4x : 25
Therefore, Number of days required by P to finish the work alone = 4x
= 4 x 5 = 20.
P and Q work together for last 5 days = 5 x 9 = 45%
Efficiency of P = 5% and Q's efficiency = 4%
Therefore, No. of days taken by P to complete 55% work = 55/5 = 11 days

4. A man borrows Rs 4000 at 8% compound interest for 3 years. At the end of each year, he paid Rs 500. How much amount should he pay at the end of the 3rd year to clear the debt?

A. Rs 3465.2
B. Rs 3485.2
C. Rs 4345.4
D. Rs 3915.6

Answer - D. Rs 3915.6
Explanation:
Amount after 1 yr = 4000[1 + 8/100] = 4320
Paid 500, so P = 4320 – 500 = 3820
Amount after 2nd yr = 3820[1 + 8/100] = 4125.6
So P= 4125.6-500 = 3625.6
Amount after 3rd yr = 3625.6[1 + 8/100] = 3915.6

5. M and N are invested in a business. They earned some profit which they divided in the ratio of 2:3. If M invested Rs.30000, the amount invested by N is

A. Rs.35,000
B. Rs.40,000
C. Rs.45,000
D. Rs.64,000

Answer - C. Rs.45,000
Explanation:
30,000: N = 2:3
N = 90,000/2 = 45,000

6. The parameter of a square is equal to the perimeter of a rectangle of length 16 cm and breadth 14 cm. Find the circumference of a semicircle whose diameter is equal to the side of the square. (Round off your answer to two decimal places)

A. 23.57 cm
B. 77.14 cm
C. 84.92 cm
D. 94.94 cm

Answer - A. 23.57 cm
Explanation:
Let the side of the square be a cm.
Parameter of the rectangle = 2(16 + 14) = 60 cm
Parameter of the square = 60 cm
i.e. 4a = 60
a = 15
Diameter of the semicircle = 15 cm
Circimference of the semicircle
= 1/2(∏)(15)
= 1/2(22/7)(15) = 330/14 = 23.57 cm to two decimal places

7. **A cube of side one meter length is cut into small cubes of side 10 cm each. How many such small cubes can be obtained?**

A. 10
B. 100
C. 1000
D. 10000

Answer - C. 1000
Explanation:
Along one edge, the number of small cubes that can be cut
= 100/10 = 10
Along each edge, 10 cubes can be cut.
Total number of small cubes that can be cut = 10 * 10 * 10 = 1000

8. **FLOOD** is written as **63664**, How **WATER** is written in that code?

A. 51259
B. 23456
C. 23456
D. 15678

Answer – A. 51259
Explanation:
FLOOD => 6 3(1+2) 6(1+5) 6 4 = 63664
WATER => 5(2+3) 1 2(2+0) 5 9(1+8) = 51259

9. **LONDON** is written as **MNPBRK**, How **MOSCOW** is written in that code?

A. NMUBTR
B. NNUART
C. MMBVTR
D. NNAUTY

Answer – B. NNUART

Explanation:
L(+1)O(-1) N(+2)D(-2) O(+3)N(-3)
MN PB RK
Hence, M(+1)O(-1) S(+2)C(-2) O(+3)W(-3)
NN UA RT

10. If Subbu finds that it is seventeenth from the right and eighteenth from the left in a line facing north. How many persons should be added to the line such that there are 40 people in the line?

A. 5
B. 6
C. 8
D. 9

Answer – B. 6
Explanation:
17 + Subbu + 16 + X = 40
X = 6

11. **Choose the word which is different from the rest.**

A. Rhea
B. Trout
C. Lamprey
D. Salmon

Answer - A. Rhea
Explanation:
All except Rhea are kinds of fishes.

12. **Choose the word which is different from the rest.**

A. Circle
B. Ellipse
C. Sphere
D. Cube

Answer - D. Cube
Explanation:
All except Cube are circular figures

13. **Choose the word which is different from the rest.**

A. Iron
B. Nickel
C. Aluminum
D. Cobalt

Answer - C. Aluminum
Explanation:
All except Aluminium all are magnetic materials.

14. **Which of the following is the function of the database administration?**

A. Application checking
B. Database access planning
C. Computer applications management
D. All of these

Answer - B. Database access planning

15. **Pushing an element into stack already having five elements and stack size of 5,
then stack becomes**

A. Underflow
B. User flow
C. Overflow
D. Crash

Answer - C. Overflow

16. **Which of the following applications may use a stack?**

A. Parentheses balancing program
B. Tracking of local variables at run time
C. Compiler syntax analyzer
D. All of the mentioned

Answer - D. All of the mentioned

17. **With what data structure can a priority queue be implemented?**

A. Array
B. List
C. Heap
D. All of the mentioned

Answer - D. All of the mentioned

18. **Express 15 as a 6-bit signed binary number.**

A. 001111
B. 001110
C. 101111
D. 101110

Answer - C. 101111

19. **Which is the predefined method available in Java to convert decimal to binary numbers?**

A. Binary Integer
B. Binary Value
C. Binary Number
D. Binary String

Answer - D. Binary String

20. What is meant by physical size in a dynamic array?

A. The size allocated to elements
B. The size extended to add new elements
C. The size of the underlying array at the back-end
D. The size visible to users

Answer - C. The size of the underlying array at the back-end