

BPCL Placement Paper Questions

1. A is 6 times as fast as B and takes 100 days less to complete a work than B. find the total no of days taken by A and B to complete the work.

- A. 17/7 days
- B. 120/7 days
- C. 121/7 days
- D. none of these

Explanation:

According to question A is 6 times as fast as B

So, Ratio of time taken by A and B will be 1:6

Let time taken by A is= x.

and time taken by B is= 6x.

According to the question, A take 100 days less.

$$\Rightarrow 6x - x = 100.$$

$$\Rightarrow x = 20.$$

So, A takes 20 days and B takes 120 days to complete the work.

A's 1-day work = $1/20$.

B's 1-day work = $1/120$.

(A+B)'s 1-day work = $1/20 + 1/120 = 7/120$.

Total time taken = $120/7$ days.

2. The speed of a car increases by 2 kms after every one hour. If the distance travelling in the first one hour was 35 kms. what was the total distance travelled in 12 hours?

- A. 456 kms
- B. 482 kms
- C. 552 kms
- D. 556 kms

Explanation:

Since, the speed of the car is in AP.

At first we need to find no. of term in the series of speeds.

$$\Rightarrow a + (n-1)d = 57$$

$$\Rightarrow 35 + (n-1) \cdot 2 = 57.$$

$$\Rightarrow 33 + 2n = 57.$$

$$\Rightarrow n = 24/2 = 12.$$

Total distance traveled = $(n/2) [2a + (n-1)d]$.

$$\Rightarrow (12/2) [2 \cdot 35 + 11 \cdot 2]$$

$$\Rightarrow 6 \cdot [70 + 22] = 92 \cdot 6 = 552.$$

3. Of the three numbers, second is twice the first and is also thrice the third. If the average of the three numbers is 44, the largest number is:

- A. 24
- B. 36
- C. 72
- D. 108

Explanation:

Let numbers be a, b, c.

Second is twice the first and three times the third, (so b is the largest).

$$a = (1/2) b$$

$$c = (1/3) b$$

Now we can express average in terms of b.

$$\text{Average} = b [1/2 + 1 + 1/3]/3 = (11/18) b = 44.$$

$$\text{Largest, } b = 18 \cdot 44/11 = 72.$$

4. In seven given numbers, the average of first four numbers is 4 and that of last four numbers is also 4. if the average of these seven numbers is 3, the fourth number is?

A. 3

B. 4

C. 7

D. 11

Explanation:

Let 7 numbers are a,b,c,d,e,f,g.

given average of first 4 num's are 4...i.e. $(a+b+c+d)/4=4$.

$$\Rightarrow a+b+c+d=16$$

Given average of last 4 num's are also 4...i.e. $(d+e+f+g)/4=4$.

$$\Rightarrow d+e+f+g=16$$

$$\Rightarrow e+f+g=16-d$$

Given, average of 7 num's are 3.... i.e. $(a+b+c+d+e+f+g)/7=3$

$$\Rightarrow a+b+c+d+e+f+g=21$$

$$\Rightarrow 16+16-d=21$$

$$\Rightarrow d=32-21$$

$$\Rightarrow d=11.$$

5. In what proportion must walnut at Rs. 62/kg be mixed with walnut at Rs. 72/kg in order to obtain a mixture worth Rs. 65/ kg?

A. 3: 1

B. 5 :3

C. 6: 7

D. 7: 3

Explanation:

The required ratio is $(72-65)/ (65-62) = 7/3$.

6. If the operation, ^ is defined by the equation $x \wedge y = 2x + y$, what is the value of 'a' in $2 \wedge a = a \wedge 3$?

A. -2

B. -1

C. 0

D. 1

Explanation:

$$2 \wedge a = 2 \cdot 2 + a \dots\dots (i)$$

$$\Rightarrow a^3 = 2a + 3 \dots\dots (ii)$$

$$\Rightarrow 4 + a = 2a + 3$$

$$\Rightarrow a=1.$$

7. The ratio between speed of d 2 trains is 7:8. if d 2nd train runs 400km in 4 hrs., wat is d speed of d 1st train?

- A. 85kmph
- B. 87.5kmph
- C. 90kmph
- D. 92.5kmph

Explanation:

If the speed of the trains are 7x & 8x respectively.

2nd train's speed(kmph)=400/4=100 =8x, x=100/8=25/2.

So, 1st train's speed=7x=7*25/2= 87.5.

8. A man speaks truth 3 out of 4 times. He throws a dice and reports it to be 6. What is probability of it being 6?

- A. 1/8
- B. 3/8
- C. 3/4
- D. 1/6

Explanation:

Man speaks truth 3 out of 4 times=3/4.

Probability of getting 6 on throwing a dice is 1/6.

So, the required probability = (3/4) *(1/6) =1/8.

BPCL Logical Reasoning Test

9. Introducing a man, a woman said "His wife is the only daughter of my father". How is that man related to the woman?

- A. Husband
- B. Brother
- C. Father-in-law
- D. Maternal Uncle
- E. None of these

Answer: A.

10. Find the next number in the series:

2,5,1,8,11,7,25,28,24,122,125,121,548,551,____?

- A. 547
- B. 550
- C. 565

D. 525

Explanation:

If we break the series in group of three numbers, then

middle number = first + 3

third number = first - 1.

So, the next number is $548 - 1$ i.e. 547.

11. Question: Madan is elder than Kamal and Sharad is younger than Arvind. Who among them is the youngest?

Statements:

(I) Sharad is younger than Madan.

(II) Arvind is younger than Kamal.

A. I alone is sufficient while II alone is not sufficient

B. II alone is sufficient while I alone is not sufficient

C. Either I or II is sufficient

D. Neither I nor II is sufficient

E. Both I and II are sufficient

Explanation:

As given, we have: $M > K$, $A > S$.

From II, $K > A$. Thus, we have: $M > K > A > S$.

So, Sharad is the youngest. From I, $M > S$. Thus, we have: $M > K > A > S$ or $M > A > K > S$ or $M > A > S > K$.

12. Jumbled Sentences:

S1: While talking to a group, one should feel self-confident and courageous.

P: Nor is it a gift bestowed by providence on only a few.

Q: One should also learn how to think calmly and clearly.

R: It is like the ability to play golf.

S: It is not as difficult as most men imagine.

S6: Any man can develop his capacity if he has the desire to do so.

The Proper sequence should be:

A. SQPR

B. QSPR

C. QRSP

D. RSQP

Answer: B.

13. In a certain code language, 'STARK' is written as 'LBFMG' and 'MOBILE' is written as 'TNRSPJ'. How will 'BLAME' be written in that same code?

A. TSFRJ

B. RPFTJ

C. NJFTP

D. TSFGJ

Answer: B.

14. In a March Past, seven persons are standing in a row. Q is standing left to R but right to P. O is standing right to N and left to P. Similarly, S is standing right to R and left to T. Find out who is standing in the middle.

- A. P
- B. Q
- C. R
- D. O

Explanation:

The order of persons is NOPQRST.

15. Rohit walked 25 meters towards South. Then he turned to his left and walked 20 meters. He then turned to his left and walked 25 meters. He again turned to his right and walked 15 meters. At what distance is he from the starting point and in which direction?

- A. 35 meters, North
- B. 30 meters, South
- C. 35 meters, East
- D. 30 meters, North

Answer: C.

BPCL Technical Test

16. In an absolute loading scheme, which loader function is accomplished by assembler

- A. Reallocation
- B. Allocation
- C. Linking
- D. Both (a) and (b)

Answer: D.

17. Which of the following memories has the shortest access time?

- A. Cache memory
- B. Magnetic bubble memory
- C. Magnetic core memory
- D. RAM

Answer: A.

18. What will be the output of the following program on GCC compiler?

```
#include
int main() {
char str[20] = "Hello";
char *const p=str;
*p='M';
printf("%s\n", str);
```

```
return 0;  
}
```

- A. Mello
- B. hello
- C. HMello
- D. MHello

Explanation:

Here, 'p' is a constant pointer which can't point to another string but the string can be changed. The base address of the string 'str' is assigned to 'p'. Thus, '*p' denotes 'value at the address at p' i.e. 'H'. By the expression " *p='M' ", character 'M' is assigned at the place of 'H'. Now, the value of 'str' is "Mello".

19. Virtual memory size depends on

- A. address lines
- B. data bus
- C. disc space
- D. a & c
- E. none

Answer: A.

20. Three standards ways of traversing a binary tree T with root R are

- A. Prefix, infix, postfix
- B. Pre-process, in-process, post-process
- C. Pre-traversal, in-traversal, post-traversal
- D. Pre-order, in-order, post-order

Answer: D.

21. The searching technique that takes $O(1)$ time to find a data is

- A. Linear Search
- B. Binary Search
- C. Hashing
- D. Tree Search

Answer: C.

22. If a node in a BST has two children, then its inorder predecessor has

- A. no left child
- B. no right child
- C. two children
- D. no child

Answer: B.

23. Which of the following concepts means waiting until runtime to determine which function to call?

- A. Data hiding
- B. Dynamic casting

- C. Dynamic binding
- D. Dynamic loading

Answer: C.

BPCL Verbal Ability Test

24. Fill in the blanks:

The _____ on some of the towns has created _____ among the residence of the other part of the country.

- A. attack, ambition
- B. raid, awareness
- C. bombardment, panic
- D. spell, satisfaction
- E. shower, dampness

Answer: C.

25. Fill in the blank:

Rakesh had bought the book for me. I _____ him Rs. 500.

- A. Owe
- B. lend
- C. give
- D. borrow

Answer: A.

26. Synonym:

RECKLESS

- A. Courageous
- B. Rash
- C. Bold
- D. Daring

Answer: B.

27. Synonym:

EGREGIOUS

- A. pious
- B. outrageous
- C. anxious
- D. sociable
- E. gloomy

Answer: B.

28. Antonym:

HONORARY

- A. Dishonorable
- B. Reputed
- C. Paid
- D. Official

Answer: C.

29. Antonym:

SACROSANCT

- A. Irreligious
- B. Unethical
- C. Irreverent
- D. Unholy

Answer: D.

30. Sentence correction:

The orator had been left the auditorium before the audience stood up.

- A. had been leaving
- B. was left
- C. had left
- D. would leave

Answer: C.