

# **APTITUDE TEST**

## **Analytical Reasoning**

**Directions for questions 1-5:**

**The questions are based on the information given below**

**There are six steps that lead from the first to the second floor. No two people can be on the same step**

**Mr. A is two steps below Mr. C**

**Mr. B is a step next to Mr. D**

**Only one step is vacant (No one standing on that step)**

**Denote the first step by step 1 and second step by step 2 etc.**

**1. If Mr. A is on the first step, which of the following is true?**

- (a) Mr. B is on the second step**
- (b) Mr. C is on the fourth step.**
- (c) A person Mr. E, could be on the third step**
- (d) Mr. D is on higher step than Mr. C.**

**Ans: (d)**

**2. If Mr. E was on the third step & Mr. B was on a higher step than Mr. E which step must be vacant**

- (a) Step 1**
- (b) Step 2**
- (c) Step 4**
- (d) Step 5**
- (e) Step 6**

**Ans: (a)**

**3. If Mr. B was on step 1, which step could A be on?**

- (a) 2&e only**
- (b) 3&5 only**
- (c) 3&4 only**
- (d) 4&5 only**
- (e) 2&4 only**

**Ans: (c)**

**4. If there were two steps between the step that A was standing and the step that B was standing on, and A was on a higher step than D , A must be on step**

- (a) 2**
- (b) 3**
- (c) 4**
- (d) 5**
- (e) 6**

**Ans: (c)**

5. Which of the following is false?

- i. B&D can be both on odd-numbered steps in one configuration
- ii. in a particular configuration A and C must either both an odd numbered steps or both an even-numbered steps
- iii. A person E can be on a step next to the vacant step.

- (a) i only
- (b) ii only
- (c) iii only
- (d) both i and iii

Ans: (c)

Directions for questions 6-9: The questions are based on the information given below

Six swimmers A, B, C, D, E, F compete in a race. The outcome is as follows.

- i. B does not win.
- ii. Only two swimmers separate E & D
- iii. A is behind D & E
- iv. B is ahead of E , with one swimmer intervening
- v. F is a head of D

6. Who stood fifth in the race ?

- (a) A
- (b) B
- (c) C
- (d) D
- (e) E

Ans: (e)

7. How many swimmers separate A and F ?

- (a) 1
- (b) 2
- (c) 3
- (d) 4
- (e) cannot be determined

Ans: (d)

8. The swimmer between C & E is

- (a) none
- (b) F
- (c) D
- (d) B
- (e) A

Ans: (a)

9. If the end of the race, swimmer D is disqualified by the Judges then swimmer B finishes in which place

- (a) 1

- (b) 2
  - (c) 3
  - (d) 4
  - (e) 5
- Ans: (b)

**Directions for questions 10-14: The questions are based on the information given below**

**Five houses lettered A,B,C,D, & E are built in a row next to each other. The houses are lined up in the order A,B,C,D, & E. Each of the five houses has a colored chimney. The roof and chimney of each house must be painted as follows.**

- i. The roof must be painted either green, red, or yellow.**
- ii. The chimney must be painted either white, black, or red.**
- iii. No house may have the same color chimney as the color of roof.**
- iv. No house may use any of the same colors that the every next house uses.**
- v. House E has a green roof.**
- vi. House B has a red roof and a black chimney**

**10. Which of the following is true ?**

- (a) At least two houses have black chimney.**
- (b) At least two houses have red roofs.**
- (c) At least two houses have white chimneys**
- (d) At least two houses have green roofs**
- (e) At least two houses have yellow roofs**

**Ans: (c)**

**11. Which must be false ?**

- (a) House A has a yellow roof**
- (b) House A & C have different color chimney**
- (c) House D has a black chimney**
- (d) House E has a white chimney**
- (e) House B&D have the same color roof.**

**Ans: (b)**

**12. If house C has a yellow roof. Which must be true.**

- (a) House E has a white chimney**
- (b) House E has a black chimney**
- (c) House E has a red chimney**
- (d) House D has a red chimney**
- (e) House C has a black chimney**

**Ans: (a)**

**13. Which possible combinations of roof & chimney can house**

- I. A red roof & a black chimney**
- II. A yellow roof & a red chimney**
- III. A yellow roof & a black chimney**

- (a) I only
- (b) II only
- (c) III only
- (d) I & II only
- (e) I&II&III

Ans: (e)

14. What is the maximum total number of green roofs for houses

- (a) 1
- (b) 2
- (c) 3
- (d) 4
- (e) 5

NOTE: The questions from 15-27 are multiple choice in the paper

15. What is the selling price of a car? If the cost of the car is Rs.60 and a profit of 10% over selling price is earned

Ans: Rs 66/-

16. If PQIRST is a parallelogram what is the ratio of triangle PQS & parallelogram PQIRST .

Ans: 1:2

17. The cost of an item is Rs 12.60. If the profit is 10% over selling price what is the selling price ?

Ans: Rs 13.86/-

18. There are 6 red shoes & 4 green shoes . If two of red shoes are drawn what is the probability of getting red shoes

Ans:  $\frac{6 \times 5}{10 \times 9}$

19. To 15 lts of water containing 20% alcohol, we add 5 lts of pure water. What is % alcohol.

Ans : 15%

20. A worker is paid Rs.20/- for a full days work. He works  $1\frac{1}{3}, 2\frac{2}{3}, 1\frac{3}{4}$  days in a week.

What is the total amount paid for that worker ?

Ans : 57.50

21. If the value of x lies between 0 & 1 which of the following is the largest?

- (a) x
- (b)  $x^2$
- (c) -x
- (d)  $\frac{1}{x}$

**Ans : (d)**

**Data Sufficiency**

**Directions : For questions in this section mark**

- (a) If condition (i) alone is sufficient**
- (b) If condition (ii) alone is sufficient**
- (c) If both conditions together are sufficient**
- (d) If condition (i) alone & (ii) alone are sufficient**
- (e) information not sufficient**

**22. A man 6 feet tall is standing near a light on the top of a pole What is the length of the shadow cast by the man.**

- (i) The pole is 18 feet high**
- (ii) The man is 12 feet from the pole**

**Ans: (c)**

**23. Two pipes A and B emptied into a reservoir , pipe A can fill the reservoir in 30 minutes by itself. How long it will take for pipe A and pipe B together to fill up the reservoir.**

- (i) By itself, pipe B can fill up the reservoir in 20 minutes**
- (ii) Pipe B has a larger cross-sectional area than pipe A**

**Ans: (a)**

**24. K is an integer. Is K is divisible by 12**

- (i) K is divisible by 4**
- (ii) K is divisible by 3**

**Ans: (c)**

**25. What is the distance from A to B**

- (i) A is 15 miles from C**
- (2) C is 25 miles from B**

**Ans: (e)**

**26. Was Melissa Brown's novel published?**

- (i). If Melissa Brown's novel was published she would receive atleast \$1000 in royalties during 1978**
- (ii). Melissa Brown's income for 1978 was over \$1000**

**Ans: (e)**

**27. Does every bird fly?**

- (i) Tigers do not fly.**
- (ii) Ostriches do not fly**

**Ans: (b)**

**28. How much does John weigh? Jim weighs 200 pounds.**

- (i) Toms weight plus Moes weight equal to John's weight.  
(ii) John's weight plus Moe's weight equal to Twice Tom's weight.  
Ans: (c)

**Infosys paper**  
**Arithmetic Section**

29. If the total distance of a journey is 120 km .If one goes by 60 kmph and comes back at 40kmph what is the average speed during the journey?  
Ans: 48kmph

30. An equilateral triangle of sides 3 inch each is given. How many equilateral triangles of side 1 inch can be formed from it?  
Ans: 9

31. 20% of a 6 litre solution and 60% of 4 litre solution are mixed. What percentage of the mixture of solution  
Ans: 36%

32. Which of the following fractions is less than  $\frac{1}{3}$   
(a)  $\frac{22}{62}$   
(b)  $\frac{15}{46}$   
(c)  $\frac{2}{3}$   
(d) 1  
Ans: (b)

Directions for questions 15-17: The questions are based on the information given below

Miss Dean wants to rennovate her house. She hires a plumber, a carpenter, a painter, an electrician and an interior decorator. The work to be finished in one working (Monday - Friday ).

Each worker will take the full day to do his job. Miss Dean permits only one person to work each day.

I. The painter can work only after the plumber and the carpenter have finished their jobs

II. The interior decorator must do his job before the electrician.

III. The carpenter cannot work on Monday or Tuesday

33. If the painter work on Thursday, which one of the following alternatives is possible?

- (a) The electrician works on Tuesday.  
(b). The electrician works on Friday.  
(c) The interior decorator works after the painter does.  
(d). The painter works on consecutive days.  
(e). Miss Dean cannot fit all of the workers int schedule

Ans: (b)

34. If the painter works on Friday which of the following must be false?

- (a) . The carpenter may works on Wednesday
- (b). The carpenter and the electrician may work on consecutive days
- (c). If the carpenter works on Thursday, the electrician has to work on Wednesday
- (d). The plumber may work before the electrician does
- (e). The electrician may work on Tuesday

Ans: (c)

35. Which argument is possible?

- (a). The electrician will works on Tuesday and the interior decorator on Friday
- (b). The painter will work on wednesday and plumber on thursday
- (c). The carpenter will works on Tuesday and the painter on Friday
- (d). THe painter will work on Monday and the carpenter on Thursday
- (e). The carpenter will work on Wednesday and the plumber on Thursday

Ans: (e)

36.The total no. of numbers that are divisible by 2 or 3 between 100 and 200(both inclusive) are

Ans:6

37. A cube of 12 mm is painted on all its side. If it is made up of small cubes of size 3mm. If the big cube is splitted into those small cubes,  
the number of cubes that remain unpainted is

Ans:

38.You are having 31kg of rice. You are provided with a 1kg stone for weighing. In how many weights the 31kg of rice can be weighed.

Ans: 5

39. B is 50% faster than A. If A starts at 9 A.M. and B starts at 10 A.M. A travels at a speed of 50 km/hr.

If A and B are 300 kms apart, The time when they meet when they travel in opposite direction is

Ans:12 noon

C-Skills

40. Struct x

```
{  
    int i;  
    char c;  
}
```

```
union y{  
    struct x a;  
    double d;
```

};

printf("%d",sizeof(union y));

- a)8
- b)5
- c)4
- d)1

ans:8

41. enum x {a=1,b,c,d,f=60,y}

printf("%d",y);

- a)5
- b)61
- c)6
- d)60

ans:b

42. #include<stdio.h>  
#define const const  
void main(int argc)  
{  
const int x=0;  
}

a) compilation error, b) runs fine, c) runtime error, d) none  
of these

ANS:b

43. int i=10;  
a.declaration  
b.definition  
c.both  
d.none  
ans:c

44. what is the output of the following code?

```
#include<stdio.h>
void main()
{
printf("%d",printf(" hello world "));
}
```

a) 13, b) hello world 13, c) hello world, d) error

ANS:b

45. 4 men can cross a bridge in 3,7,13, 17 minutes. Only two can cross the bridge at a time. The minimum time taken by the four to cross the bridge is equal to.

a) 20



b)40

c)23

d)10

ans a)

46. There are 9 coins. One of 9 is less weighted and others have equal weights. Find the minimum no of balances to find the defective coin?

Ans. 2