

## Wipro Model Placement Paper

This paper consist of some aptitude and technical questions.

### Aptitude Questions

1. 12 members were present at a board meeting. Each member shook hands with all of the other members before & after the meeting. How many hand shakes were there?

- a) 130
- b) 134
- c) 132
- d) 135

Answer : 132

2. An emergency vehicle travels 10 miles at a speed of 50 miles per hour. How fast must the vehicle travel on the return trip if the round-trip travel time is to be 20 minutes?

- a) 75 miles per hour
- b) 70 miles per hour
- c) 65 miles per hour
- d) 80 miles per hour

Answer : 75 miles per hour

3. Mary and John can do a piece of work in 24 days; John and Vino in 30 days; Vino and Mary in 40 days. If Mary, John and Vino work together they will complete the work in :

- a) 10 days
- b) 20 days
- c) 17 days
- d) 15 days

Answer : 20 days.

4. My friend collects antique stamps. She purchased two, but found that she needed to raise money urgently. So she sold them for Rs. 8000 each. On one she made 20% and on the other she lost 20%. How much did she gain or lose in the entire transaction?

- a) She lost Rs 500.67
- b) She lost Rs 666.67
- c) She gain Rs 666.67
- d) She gain Rs 500.67

Answer : She lost Rs 666.67

5. Find the sum of the first 50 common terms of 12,16,20,... and 18,24,30,....

- a) 15900
- b) 12700
- c) 19990
- d) 18400

Answer : 15900

6. The time showed by an analog clock at a moment is 11 am then 1234567890 hours later it will show the time as:

- a)11am
- b)11pm

- c) 5am
- d) 4pm

Answer : 5am

7. Square of two more than a two digit number is multiplied and divided by 2 and 5 respectively. If twice of the result is equal to 500 then find the number?

- a) 45
- b) 23
- c) 87
- d) 47

Answer : 23

8. Name any two models of SDLC (Software Design Life Cycle) ?

- a) Water Fall Mode
- b) Spiral Model
- c) a and b
- d) none of these

Answer : Water Fall Model and Spiral Model.

9. Find X when  $X - Y = 3$  and  $X^2 + Y^2 = 89$  where X and Y are integers.

- a) 10
- b) -5
- c) -10
- d) -3

Answer : -5

10. Find the value of P when the line through the points (2,2) and (5,7) is perpendicular to the line  $3x+Py-9=0$ .

- a)  $\frac{3}{5}$
- b) 5
- c)  $\frac{5}{3}$
- d) 3

Answer : 5

11. Find the missing number in 25, 38, \_\_, 64, -27, 90

- a) -1
- b) 51
- c) 39
- d) -32

Answer : -1

12. What is the sum of the irrational roots of the equation  $(x-1)(x-3)(x-5)(x-7)=9$  ?

- a) 10
- b) 8
- c) 6
- d) 4

Answer : 8

13. There is an element which triplicates in every hour. Each of these 3 items inturn reproduce exactly 3 other items. If a single compound is kept

in a container at noon and the container is full by midnight. After how many hours is the container  $\frac{1}{3}$  full?

- a) 11:00am
- b) 10:00pm
- c) 11:00pm
- d) 10:00am

Answer : 11:00pm

14. A person goes to a bank and Quotes  $x$  Rs and  $y$  paise on a cheque. The cashier misreads it and gives  $y$  Rs and  $x$  paise. The man comes out and donates 5 paise to a beggar. Now, the man has exactly double the amount he has quoted on the cheque.

- a) 35 Rs. and 65 paise.
- b) 32 Rs. and 63 paise.
- c) 30 Rs. and 65 paise.
- d) 31 Rs. and 63 paise.

Answer : 31 Rs and 63 paise.

15. If  $dy = [(\sec x - y) / \tan x]dx$ , then the curve is:

- a)  $y = x(\sin x)$
- b)  $y = x(\cos x)$
- c)  $y = x(\sec x)$
- d)  $y = x(\operatorname{cosec} x)$

Answer :  $y = x(\operatorname{cosec} x)$

16. A can do a piece of work in 100 days, B and C together can do the same work in 20 days. If B can do the work in same time as that of C and A together then how long C alone can do the same work?

- a) 100 days
- b) 50days
- c) 25days
- d) 20 days

Answer : 50 days

17. If PREVENTION is coded as DWDSOOSJNO then how will CONTENTION will be coded ?

- a) DUBPMOSJON
- b)DUMPBOSJNO
- c)OSJDUMPBON
- d)JDMUNOSBOP

Answer : DUMPBOSJNO

18. Unnikrishnan is a famous singer from South India. One should never miss to hear his mellifluous melodies. Question : Pick an appropriate synonym for mellifluous.

- a) Sad
- b) Nostalgic
- c) Pleasant
- d) Priceless

Answer: Pleasant.

19. All of the students at a college are majoring in psychology, business, or both. 73% of the students are psychology majors, & 62% are business majors. If there are 200 students, how many of them are majoring in both psychology & business?

- a) 75
- b) 80
- c) 70
- d) 70

Answer : 70

18. Grass in lawn grows equally thick and in a uniform rate. It takes 24 days for 70 cows and 60 for 30 cows. How many cows can eat away the same in 96 days?

- a) 18
- b) 20
- c) 21
- d) 19

Answer : 18

19. There is a certain four digit number whose fourth digit is twice the first digit. Third digit is three more than second digit. Sum of the first and fourth digits is twice the third number. What was that number?

- a) 2034
- b) 4368
- c) a and b
- d) None of these

Answer : 2034 and 4368

20. A thief steals half the total no of loaves of bread plus  $\frac{1}{2}$  loaf from a bakery. A second thief steals half the remaining no of loaves plus  $\frac{1}{2}$  loaf and so on. After the 5th thief has stolen there are no more loaves left in the bakery. What was the total no of loaves did the bakery have at the beginning?

- a) 35
- b) 41
- c) 28
- d) 31

Answer : 31

21. A person needs 6 steps to cover a distance of one slab. if he increases his foot length(step length) by 3 inches he needs only 5 steps to cover the slabs length. what is the length of the each slab?

- a) 31 inches
- b) 24 inches
- c) 26 inches
- d) 43 inches

Answer : 31 inches

22. A lorry starts from Bangalore to Mysore at 6.00 A.M,7.00am.8.00 am.....10 pm. Similarly one another starts from Mysore to Bangalore at 6.00 am,7.00 am, 8.00 am.....10.00pm. A lorry takes 9 hours to travel from Bangalore to Mysore and vice versa.

- (i) A lorry which has started at 6.00 am will cross how many lorries.
- (ii) A lorry which had started at 6.00pm will cross how many lorries.

- a) 12 lorries and 14 lorries
- b) 10 lorries and 14 lorries
- c) 14 lorries and 10 lorries
- d) 14 lorries and 12 lorries

Answer : 10 lorries and 14 lorries



23. A garrison of 3300 men has provisions for 32 days, when given at a rate of 850 grams per head. At the end of 7 days a reinforcement arrives and it was found that now the provisions will last 8 days less, when given at the rate of 825 grams per head. How, many more men can it feed?

- a) 1700 men
- b) 1800 men
- c) 2000 men
- d) 2500 men

Answer : 1700 men

24. From 5 different green balls, four different blue balls and three different red balls, how many combinations of balls can be chosen taking at least one green and one blue ball?

- a) 3720
- b) 3890
- c) 3520
- d) 3600

Answer : 3720

25. Three pipes, A, B, and C are attached to a tank. A and B can fill it in 20 and 30 minutes respectively while C can empty it in 15 minutes. If A, B & C are kept open successively for 1 minute each, how soon will the tank be filled?

- a) 167 minutes
- b) 177 minutes
- c) 188 minutes
- d) 196 minutes

Answer : 167 minutes

26. A person walking  $\frac{5}{6}$  of his usual rate is 40 minutes late. What is his usual time?

- a) 6 hours 20 minutes
- b) 4 hours 40 minutes.
- c) 3 hours 30 minutes.
- d) 3 hours 20 minutes.

Answer : 3 hours 20 minutes.

27. The minute hand of a clock overtakes the hour hand at intervals of 64 minutes of correct time. How much a day does the clock gain or lose?

- a)  $36 \frac{8}{11}$  minutes
- b)  $32 \frac{11}{8}$  minutes
- c)  $32 \frac{8}{11}$  minutes
- d)  $30 \frac{8}{11}$  minutes

Answer :  $32 \frac{8}{11}$  minutes

28. Solve for x and y:  $\frac{1}{x} - \frac{1}{y} = \frac{1}{3}$ ,  $\frac{1}{x^2} + \frac{1}{y^2} = \frac{5}{9}$ .

- a)  $x = \frac{3}{2}$  or  $-3$  and  $y = 3$  or  $-\frac{3}{2}$ .
- b)  $x = \frac{2}{3}$  or  $-3$  and  $y = 2$  or  $-\frac{3}{2}$ .
- c)  $x = \frac{4}{2}$  or  $-3$  and  $y = 2$  or  $-\frac{3}{2}$ .
- d)  $x = \frac{3}{2}$  or  $-3$  and  $y = 3$  or  $-\frac{2}{3}$ .

Answer :  $x = \frac{3}{2}$  or  $-3$  and  $y = 3$  or  $-\frac{3}{2}$ .

29. Daal is now being sold at Rs. 20 a kg. During last month its rate was Rs. 16 per kg. By how much percent should a family reduce its consumption so as to keep the expenditure fixed?

- a) 30 %.
- b) 25 %.
- c) 35 %.
- d) 40 %.

Answer : 20 %.

30. Find the least value of  $3x + 4y$  if  $x^2y^3 = 6$ .

- a) 13
- b) 10
- c) 14
- d) 15

Answer : 10

31. What is an appropriate synonym for Bifid ?

- a) Divided
- b) Divided in two
- c) Timid
- d) None

Answer : Divided

32. Find the antonym for gaurish .

- a) Cheap
- b) Flashy
- c) Costly
- d) None

Answer : Cheap

33. Choose an appropriate antonym for the word deliberate.

- a) Unintended
- b) Targeted
- c) Focussed
- d) None

Answer : Unintended

34. Which of the following is an appropriate synonym for the word Debauch ?

- a) Demoralize
- b) Encourage
- c) Cultivate
- d) None

Answer : Demoralize

35. Find the sum of the first 14 terms for a sequence starting with 2, ending with 120 and common difference 2.

- a) 845
- b) 854
- c) 800
- d) 860

Answer : 854

36. Find the 10th element in the series 5,15,35,45.....

- a) 85
- b) 95
- c) 90
- d) Cannot be determined

Answer : Cannot be determined

37. Find the difference between last and last but one term in the Sequence 1, 9, 17, 25 which has 40 terms in total...

- a) 8
- b) 16
- c) 24
- d) 12

Answer : 8

38. Find the 7th term in the series 4,8,16

- a) 512
- b) 256
- c) 64
- d) 200

Answer : 256

39. Find the odd man out

- a) 3,6,9,12
- b) 2,4,8,16
- c) 12,24,36,48
- d) 10,13,16,19

Answer: 2,4,8,16

Reason: The second sequence 2,4,8,16 is in geometric progression and not in arithmetic progression. Hence the answer is 2,4,6,8

40. Find the sum of the first 5 terms in 3,9,27

- a) 363
- b) 121
- c) 242
- d) 352

Answer : 363

Reason: Sum to n no of terms in a geometric progression is  $S_n = a(1 - r^n)/(1 - r)$ . Applying  $a = 3$ ,  $n = 5$  and  $r = 3$  we get  $S_5 = 3(1 - 3^5)/(1 - 3) = 363$ . Hence the correct answer is 363.

41. Find the odd man out

- i) 3,9,27
- ii) 2,4,8
- iii) 10,20,40
- iv)  $1, 1/2, 1/4$

- a) 3,9,27
- b) 2,4,8
- c) 10,20,40
- d)  $1, 1/2, 1/4$

Answer :  $1, 1/2, 1/4$

Reason: All the four sequences are in geometric progression. However the last series  $1, 1/2, 1/4$  is an infinite series. This is because the common ratio for this series, which is  $1/2$  is lesser than 1. Hence the correct answer is  $1, 1/2, 1/4$

## Technical Questions

1. Word alignment is

- a) aligning the address to the next word boundary of the machine
- b) aligning to even boundary
- c) aligning to word boundary
- d) none of the above

Answer : Aligning the address to the next word boundary of the machine

2. To send a packet data using datagram, connection will be established..

- a) before data transmission
- b) connection is not established before data transmission
- c) no connection required
- d) none of the above

Answer : No connection required

3. A 2 mb PCM (Pulse Code Modulation) has

- a) 32 voice channels
- b) 30 voice channels and 1 signalling channel
- c) 31 voice channels and 1 signalling channel
- d) 32 channels out of which 30 voice channels, 1 signalling channel and 1 synchronization channel.

Answer : 31 voice channels and 1 signalling channel

4. The status of the kernel is?

- a) task
- b) process
- c) not defined
- d) none of the above

Answer : Process

5 . Explain the use of the WHERE clause.

Answer : It directs SQL to extract data from rows where the value of the column is the same as the current value of the WHERE clause variable.

7. What are the reasons for adding an index to a table ?

Answer : To increase lookup performance. For a unique key to guarantee the uniqueness of the values for a column on a table.

8. What is PL/SQL ?

Answer : A programming language available in Oracle. It is a way of wrapping SQL with 3GL constructs such as IF..THEN..ELSE, WHILE etc.

9. What technique is used to retrieve data from more than one table in a single SQL statement?

Answer : The Join statement combines data from more than two tables

10. What is a foreign key?



Answer : It identifies a related row in another table and establishes a logical relationship between rows in two tables.

11. What happens if a tablespace clause is left off of a primary key constraint clause?

Answer : This results in the index that is automatically generated being placed in the users default tablespace. Since this will usually be the same tablespace as the table is being created in, this can cause serious performance problems.

12. What is locking and what is it used for ?

Answer : Locking is a mechanism to restrict access to data. It prevents one user updating data whilst another user is looking at it.

13. What types of locking are available with Oracle?

Answer : Row locking and table locking.

15. In 8085 microprocessor READY signal does. which of the following is incorrect statements

- a) It is input to the microprocessor
- b) It sequences the instructions
- c) It sequences the output of the microprocessor
- d) None

Answer : It sequences the instructions

16. `int zap(int n)`  
`{`

```
if(n<=1)then zap=1;  
else zap=zap(n-3)+zap(n-1);  
}  
then the call zap(6) gives the values of zap
```

- a) 8
- b) 9
- c) 6
- d) 12

Answer : 9

17. Virtual memory size depends on

- a) address lines
- b) data bus
- c) disc space
- d) a & c

Answer : Address lines

18. A 12 address lines maps to the memory of

- a) 1k bytes
- b) 0.5k bytes
- d) 2k bytes
- d) none

Answer : 0.5k bytes

19. In a processor these are 120 instructions . Bits needed to impliment this instructions

- a) 6
- b) 7

- c) 10
- d) none

Answer : 7

20. In a compiler there is 36 bit for a word and to store a character 8bits are needed. IN this to store a character two words are appended .Then for storing a K characters string, How many words are needed.

- a)  $2k/9$
- b)  $(2k+8)/9$
- c)  $(k+8)/9$
- d)  $2*(k+8)/9$

Answer :  $2k/9$

21.  $n=7623$   
{  
temp= $n/10$ ;  
result=temp\*10+ result;  
n= $n/10$   
}

- a) 3467
- b) 3657
- c) 3267
- d) 3980

Answer : 3267

22. A device can operate without Application layer in a network. State True or False.

- a) False
- b) True

Answer : True. Routing devices like bridges need not necessarily have application layer.

23. OSI stands for

- a) Open Systems Interconnection
- b) Open Systems Integration
- c) Open Servers Interconnection
- d) None

Answer : Open Systems Interconnection

24. Find the odd man out

HTTP, FTP, MPEG, SNMP

- a) HTTP
- b) FTP
- c) MPEG
- d) SNMP

Answer : MPEG - This is a file format and not a Protocol like other options.

25. Amount of work a computer can do in a given period is called

- a)Throughput
- b)Job
- c)Process
- d)None of the above

Answer : Throughput

26. Which of the following addresses is always unique and unchanged for a machine

- a) IP Address
- b) MAC Address
- c) Both of the above
- d) none

Answer : MAC Address

27. What is a running program under execution called?

- a) Task
- b) Job
- c) Process
- d) Any of the above

Answer : Any of the above

28. CPU Scheduling is a function of OS under

- a) Process Management
- b) Memory Management
- c) I/O Management
- d) None of the above

Answer : Process Management

29. Background running processes are typically called

- a) Daemons
- b) Tasks

- c) Processes
- d) None of the above

Answer : Daemons

30. The process in which OS saves all data associated with current process and switches over to the next is called

- a) Process Switching
- b) Task Switching
- c) Context Switching
- d) None

Answer : Context Switching