

Tata Consultancy Services (TCS) Placement Papers

Online Questions:

1. Complete the series 26, 19, 17, 13, 11,-, 8, 7 (Ans: 9).

Sol: 26,17,11,8 these are decreasing like 9,6,3 19, 13, 9, 7 these are decreasing like 6, 4,2

- 2. Convert the decimal number 562 into base 7. (Ans: 1432)
- **3.** If QJFBTF is coded as PLEASE then HBJO can be coded as (Ans: GAIN)
- 4. Find odd one? a) SQL Server b) Ingress c) Oracle d) DB2

e) JAVA (Ans: Java)

5. Find odd one? a) SMTP b) ARP c)WAP d)HTTP e)BAAN

(Ans: BAAN) because all protocols except BAAN

6. Which of the following is exact power of 4?

a) 4192 b) 2340 c) 4096 (Ans: C)

7. What is the largest prime number that can be stored in a 6 bit register? **Ans :**61 Sol: $2^{6} = =64$ (with in 64 largest prime no:61)

8. Which will give good standard deviation?

a). 4,0,-4,0,4 b) 4,-4,4,-4,4 c) 4,4,4,4,4

9. Which shape will be obtained by using the following values for X and Y X 0 10 100 1000 9999

Y 0.00001 1.02 1.72 3.00 4.72

Ans: Y= log10(X)

10. What are the number of edges, number of vertices and number of faces of a planar

cube among the following options?

a) 6, 6, 6 b) 4,8,12 c) 12, 8, 6 d) 4,6,12 (Ans: C)

11. What is the value of the following expression M(373,5)+T(7.7)+R(4.4)-T(3.6)

Where M- MODULAS R- ROUNDOFF T- TRUNCATE (Ans: 11) Sol: 3 + 7+ 4 - 3 ==11

12. What is the value of the expression % # % (6) + # % # (6)

Where % means DOUBLING and # means RECIPROCAL

13. Match the following (this type of question but not same) A B

1. Mammal, cow -> a. A type of

2. Snake reptile -> b. A part of

3. Roof – Building \rightarrow c. Not a type of 4. Mushroom - Vegetables -> d. A superset of (Ans: 1-d, 2-c, 3-b, 4-a) **14.** If G(0) = -1 G(1) = 1 and G(N) = G(N-1) - G(N-2) then what is the value of G(6)? (Ans: -3) **Sol:** g(2)=g(1)-g(0) ==1-(-1)=2, similarly g(3),...g(6); **15.** If A= 0 0 0 0 1 1 1 1 B=00110011 C = 0 1 0 1 0 1 0 1Then find the value of [A U C] U B and express it in decimal. (Ans: 151) 16. If A, B, C are the mechanisms used separately to reduce the wastage of fuel by 30%, 40%, 10%. What will be the fuel economy if they were used combine? 1.68.4 2.62.2 3.58 4.27 (Ans: 62.2) sol: (70/100)*(60/100)*(90/100)*100=37.8 Eco = (100-37.8) =62.2 17. Which of the following straight lines are perpendicular to each other? 1)2x+y=8 2)x=4 3)y=6 4)2y=x+3a)1, 3 b)2, 3 c)1, 4 d)3, 4 e)None **18.** In Madras, temperature at noon varies according to $t^2/2 + 4t + 12$ (Read is as: t square /2 + 4t + 12), where t is elapsed time. Find how much percentage of temperature is increased (or decreased) between 5pm and 8pm. (HINT: substitute&subtact values from 5 to 😊 **19.** The size of a program is N. And the memory occupied by the program is given byM =square root of 100N. If the size of the program is increased by 1% then how much more memory is required now? a) 1.0% b) 2.6% c) 0.5% d)1.4% e)2.7% **20.** A power unit is there by the bank of a river of 900 meters. A cable is made from power unit to power a plant opposite to that of the river of 2000mts. The cost of the cable below water is Rs. 5/- per meter and cost of cable on the bank is Rs. 4/- per meter. Then find out the amount to be invested to connect those two stations. (Ans8500) Sol: 900 X 5 == 4500 + 1100 X 4 == 4400 =è 8500 **21.** A can copy 50 papers in 10 hours while both A & B can copy 70 papers in 10 hours. Then how many hours required for B to copy 26 papers? (Ans: 13) **22.** A sequence of letters is given. We've to find out how many V's are there under the

condition that, S should be followed by V and should not be followed by F..... V,S,F,T,W,E,L,B,V,S,L,L,K,S,M,S,V,F,L,S,D,I,...... Like that.

23. In a two-dimensional array, X (7, 9), with each element occupying 8 bytes of

memory, with the address of the first element X (1, 1)=3000; find the starting address of

the element at X (5,8). (Ans: 3172)

Sol: (4 X 9) + 7 = 43 X 4= 172 à 3000+172 == 3172 (i.e completely 4 rows r filled , in

fifth row up 7th cell is filled next cell is required address)

24. In the word ORGANISATIONAL, if the first and second, third and forth, fifth and

sixth, etc words are interchanged, what would be the 12th letter from right? (Ans: A')

25. A Flight takes off at 4 A.M from North-East direction and travels for 7 hours to reach

the destination in the North-West direction. Some latitude and longitude of source and

destination given. Find the local arrival time of destination? (I don't know how to find it)

26. Four 2X2 matrices were given. We've to find out which of them is a singular matrix?

(Hint: try for which matrix det (A) becomes zero (ad - bc).

27. (Momentum*Velocity)/(Acceleration * distance)

a) Newton b) Mass c) Force

29. Based on a Venn diagram. 3 problems were given. All are so easy. No need to worry.

(Once go through R.S AGGARWAL)

30. A bar chart was been given. Two questions based on this. Easy ones. Don't fear.

(Once go through R.S AGGARWAL)

31. One question on curves.(iam not remembering please go through previous papers)

III. Critical reasoning (12M)

In critical section there are three passages, each passage carries 4 marks.

Passage one: A group of 5 people A, B, C, D, and E are there.

A knows Telugu and Hindi.

B knows Oriya and Malalayalam

C knows Telugu and Malayalam

- D knows English and Oriya.
- E knows Telugu and Oriya

1. Technical Interview:

- 1. Tell me about your self?
- **2.** What are your favorite subjects?

3. Two programs? (i.e. one is on C language(pyramid) and other is on java multithreading concepts)

4. What is the difference between C and C++?

- 5. What is **DBMS**?
- 6. What is the difference between DBMS and RDBMS?
- 7. What is an Index?
- 8. What is primary key?
- 9. What is foreign key?
- **10.** What is normalization?
- **11.** He asked some queries, and I write very well?
- **12.** He asked quires on join operation?
- 13. What are the OOPS concepts?
- 14. How many types of data structures?
- 15. How many types of linked lists what are they?
- 16. What are the different types of sorting & searching techniques?
- 17. Difference between over loading and over ridding?
- 18. Some questions on personal details.

19. Finally he offers me to ask any question you want. I ask one question he explained very well.

M.R interview:

1. So r u feeling nervous... (Actually I am felling some tension)

- **2.** Tell me about yourself?
- **3.** He asked my strengths?

4. I said one of my strength was good leader ship quality, he asked how you are good leader and reply well because I am leader in my school days.

- 5. What are the phases in s/w developed life cycle?
- 6. He asks one simple C program? (i.e. fibnoic series)
- 7. What are different types of testing?
- 8. What is block box testing?
- **9.** Questions on my project?
- 10. Why are you not interest in higher studies?
- 11. Some questions on academic details?

12. He given a chance to me, finally I asked a question what are <u>technologies</u> available in TCS, and he replied all technologies are available in TCS. I never forget this round because before interview I have lot of tension and I selected this round. On same day I have my HR interview.

H.R interview:

1. From how long you are waiting for this interview? (Actually my MR was completed around 3.45pm & my HR was started at 8:00pm)

- 2. Tell me about your self? (I face this question third time in TCS)
- 3. What are your strengths?
- 4. What are your achievements?
- 5. How you are good leader?
- 6. What are your weak nesses? How u eliminate your weak ness?
- 7. Tell me about your project?
- 8. Have you done any thing for society?
- 9. What are the advantages of DBMS?
- **10.** Tell about your family?
- 11. What you know about TCS?
- 12. Why you prefer TCS?
- **13.** Where I see you after five years?
- 14. What steps necessary to become a project Manager?
- 15. How you are different from you are competitors?
- **16.** What is the vision of TCS?
- 17. Do you have questions?

I asks one question, how TCS giving performance to the employees and he explained very well. The key in this round is to maintain confidence and communication skills are very important, be cool and confident. Prepare the fallowing subjects for your technical interview (for CSE & IT students)

C &C++ programs: Practice the following programs before the interview:

Factorial, Fibonacci, prime number, palindrome for strings and numbers, swap with out using temporary variables, string copy, concatenate, matrix multiplications, single double linked list by using pointers. Fahrenheit to Celsius conversion program, and practice all simple programs

Operating systems: C (perfect all concepts), C++, JAVA(core)

DBMS: Prepare all DBMS concepts and should perfect in Normalization, SQL, Indexing, Hashing, Cursors, Triggers, Different types of joins. (Practice sql quires very well)

Networks: OSI, <u>TCP</u>/IP reference models, topologies, Ethernet, FDDI, Token ring, Routing, ATM, and IP addressing. Switch, hub and read other protocols. Data structures, Sorting, searching, stack, queue, Linked lists, tree, BFS, DFS. Mainly we should read

- **1.** All algorithom
- 2. Complexities

Software Engineering: software development

models, different strategies of testing (unit testing, integration testing...), Types of testing (white or black box),

Project: It is very important to visit the company site before the interview Anything can be asked depending on the panel member. This is all about my written test, Tech, MR and finally miserable HR interview experiences at TCS. In every round your confidence level and communication are important for success, be cool comfortable & confident.