

WIPRO

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1. COMPANY PROFILE:

Wipro Technologies is the No.1 provider of integrated business, technology and process solutions on a global delivery platform.

Wipro Technologies is a global services provider delivering technology-driven business solutions that meet the strategic objectives of our clients. Wipro has 40+ 'Centers of Excellence' that create solutions

around specific needs of industries. Wipro delivers unmatched business value to customers through a combination of process excellence, quality frameworks and service delivery innovation. Wipro is the World's first CMMi Level 5 certified software services company and the first outside USA to receive the IEEE Software Process Award.

Wipro's complete range of IT Services addresses the needs of both technology and business requirements to help organizations leverage leading-edge technologies for business improvement.

Wipro takes charge of the IT needs of the entire enterprise. The gamut of services extends from Enterprise Application Services (CRM, ERP, e-Procurement and SCM), to e-Business solutions. Wipro's enterprise solutions have served and continue to serve clients from a range of industries including Energy and Utilities, Finance, Telecom, and Media and Entertainment.

Wipro's TIS is the largest Indian IT infrastructure service provider

Wipro's Technology Infrastructure Services (TIS) is the largest Indian IT infrastructure service provider in terms of revenue, people and customers with more than 200 customers in US, Europe, Japan and over 650 customers in India. It is powered by the expert skills of over 6,500 technical specialists and state-of-the-art BS 15000 certified infrastructure for operations support.

A phased approach towards process standardization, process optimization and process re-engineering.

Wipro BPO provides a broad range of services from customer relationship management, back office transaction processing to industry-specific solutions. The key element of services delivery is an integrated approach towards providing increasing value over the entire course of our client relationships. This involves a phased approach towards process standardization, process optimization and process re-engineering

True value from technology requires an in-depth understanding of business strategy.

Today's businesses need partners who can talk about strategy and technology in the same conversation. At Wipro, we believe true value from technology requires an in-depth understanding of business strategy. Our cross-industry consulting services help you craft a vision for your organization and then provide a specific, practical business and technology framework that will make that vision a reality. Our consulting competencies spread across business, process, quality and technology consulting.

We've developed a model called "Extended Engineering" that leverages synergies across the value chain. As product manufacturers and platform vendors across the world strive to make better products with shorter development cycles and reduced total cost of ownership, we at Wipro Technologies partner with them to provide comprehensive solutions in product lifecycle management and product realization. At Wipro, we've developed a model called "Extended engineering" that allows you to leverage synergies across the value chain and progress swiftly from concept to market. We are now the world's largest contract R&D house for telecom, auto and electronics

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Awards & Recognitions :

- 1.Wipro-only Indian company in the BusinessWeek's IN25 "Champions of Innovation" list.
- 2.Wipro BPO Receives Prestigious 'Outsourcing Excellence' Award
- 3.BEST Award for innovative approaches to workplace learning: ASTD, Oct 2005
- 4.Global MAKE 2005 Award: Most Admired Knowledge Enterprise study: Teleos, Oct 2005

5. Wipro's Gurgaon development centre awarded Platinum rating: US Green Building Council, Sep 2005
6. National Award for Excellence in Corporate Governance: Company Secretaries of India, Dec 2004
7. Wipro among World's 400 Best Big Companies: Forbes, Sep 2004.
8. Among top 10 outsourcing vendors in US:
META Group, Jun 2004
9. Ranked 7th amongst software services companies in the world (BusinessWeek, Infotech 100, November 2002)
10. Among the top 5 IT companies based on return on equity (BusinessWeek, Infotech 100, June 2002)
11. Business Innovation award for offshore development (Electronic and Software Export Promotion Council, 1993)
12. Corporate audit function: Commitment to quality improvement award (Institute of Internal Auditors)
13. "Bravo! Partner of the Year" award from Best Buy (Best Buy recognizes Wipro as their best IS partner for the year 2002)
14. IEEE Award for Software Process Excellence First Company outside of US to be conferred this honor. [Read more](#) (June 4, 2003)
15. HP openview service provider champion award. [Read more](#) (October 09, 2003)
16. 2003 Asian Most Admired Knowledge Enterprise Award. (MAKE, October 16, 2003)
17. ITSMA award for Services Marketing Excellence Integrated Lead Generation program conferred top honors. [Read more](#) (ITSMA, October 29, 2003)
18. IDC CMO Best Practices Awards for Marketing Measurement and Metrics. [Read more](#) (IDC, December 18, 2003)
19. The Golden Web Awards 2003-2004 for the Wipro web

2) TEST PATTERN:

A)Written test:

Time 50 minutes.

Three sections:

- 1)verbal-15 questions
- 2)Aptitude-15 questions
- 3)Technical-20 questions

B)TECHNICAL INTERVIEW:

The test is followed by a Technical and a HR interview. The technical interview is highly specialized and covers almost all subjects you have done in your curriculum. However one is required to name his/her favorite subject on which most of the interview is focused on. Computer Engineers C, Operating Systems, DBMS, Microprocessors are mostly focused upon. Electronics Engineers can be grilled on DCLD, Microprocessors and Communications.

C)HR INTERVIEW:

The HR interview which follows the technical interview is very general. In most cases questions regarding the company are asked for details on the other frequently asked questions

.

3)TEST PAPER1:

1)VERBAL ENGLISH :

Q1)Acme(synonym)

Ans: Highest point

Q2) Bashful (synonym)

Ans: Shy

Q3) Notorious

Ans: Famous for his bad deeds

Q4)correct the spelling:

Ans: Fascinate

Q5)In the following sentence one important punctuation-mark is missing select the suitable signs from the given alternatives. what a pity

a)"" b)? c)! d):

ANS:C

Q6)Select the option that gives the correct meaning of the given idiomatic expression or phase.To put up with

a)to stay with b)to tolerate c)to deal with people d)to keep things up **ANS:C**

Q7)For the following sentence,choose the most suitable word from the given options. In England an Indian _____ does not actually enjoy the same rights as an Englishman.

a)emigrant b)emigrent c)immigrant d)immegrant **ANS:C**

Q8)Select the word among the given choices that is most nearly opposite in meaning to the word RABID

a)Decent b)fair c)rational d)pure **ANS:C**

Q9)Given below are words three of which belong to the same category.Find the word which does not belong to that category

a)danger b)peril c)jeopardy d)innocuous **ANS:D**

Q10)Select among the given choices the word or phrase for each blank that best fits the meaning of the sentence as a whole though business is in a _____ Indian corporates see it as a "learn and innovate" period

a) Slump b)low c)lean d)soup **ANS:C**

Q11) Select the word or phrase among the given choices that is most nearly similar in meaning to the word MINION

a)power b)wing c)small measure d)Hanger-on **ANS:D**

Q12) Choose the lettered pair that expresses a *relationship* most similar to the relationship expressed in the capitalized pair CONTINENT: ISLAND

a)ocean:lake b)isthmus: peninsul c)cape: cove d)river:canal **ANS:B**

Q13) In the following sentence one important punctuation -mark is missing. Select the suitable signs

from the given alternatives Having been disappointed in love he took to alcohol.

a), b). c); d)!

ANS:A

Q14)For the following sentence ,choose the most suitable word from the given options.In the____ of the quarrel,the cabuliwallah had struck him.

a) coarse b) curse c) course d) cause

ANS:A

Q15) First blank is

A)leader B)emotion C) management D) managers

ANS: C

APTITUDE:

Q1) If 15 pens costs Rs.90..then what will be the cost of 22pens??

Ans:Rs132..

Q2) 9 laboures can complete the construction of a wall in 18 days. How many less days will 12 laboures take to complete the same wall?

A)2 1/2 B)4 1/2 C)13 1/2 D)1/2

Ans:C

Q3)The rectangle box with square base is open at the top. The maximum volume of the box made from 1200 m² tin,in m³ is:

A)2000 B)2500 C)3000 D)4000

Q4)A person was fined for exceeding the speed limit by 10 km/hr. Another person was also fined for exceeding the same speed limit by twice the same. If the second person was traveling at a speed of 35km/hr,find the speed limit.

A)19km/hr B)27 km/hr c)30 km/hr D)15 km/hr

Q5)The difference between the compound and simple interest on a certain sum for 2 years at the rate of 8% per annum is Rs.80,What is the sum?

A)11,880 B)12,500 C)13,250 D)14,270

Q6)The ratio between two numbers is 5:7 and their product is 560.What is the difference between these two numbers?

A)8 B)12 C)6 D)21

Q7)In a *family* Reshma is elder sister of Ragini . Soni is Reshma's daughter and Saloni is Soni's cousin. Rgini's mother is Rajani. Ramani is the sister-in-law of Reshma. Who is Soni's grandmother?

A)Reshma B)Ragini C) Rajan D)Ramani

Q8)The mean and the variance of a binomial distribution are 4 and 2 respectively. Then the probability of 2 successes is:

A)37/256 B)219/256 C)128/256 D)28/256

Q9)Take any positive whole number not greater than 50.If the number is even, divide it by 2.If the number is odd,multiply it by 3,and add 1 to the result. Apply the same method to the resulting numbers until you finally arrive at the number 1.shown below is the chain of numbers that results from this method if you begin with 15.

15->46->23->70->35->106->53->160->80->40->20->10->5->16->8->4->2->1

As you can see, the number 15 requires 17 steps to end up at 1. Of the numbers not greater than 50, which takes the longest to reach the number 1 ?

A)26 B)27 C)28 D)17

Q10)After spending $\frac{2}{3}$ of his *salary* on rent and food items and $\frac{1}{4}$ th of the remaining on *transportation*, Rajesh has 6000 with him. How much did he pay on transportation?

A)Rs.2000 B)Rs.4000 C)Rs.6000 D)Rs.1000

Q11)distance $D=rt$ where r & t are +ve and r is constant, as t increases then

D _____

Ans:D increases irrespective of r & t

Q12) $E=I \cdot I \cdot R$ what is the effect of E when I becomes $I/2$

Ans: $\frac{1}{4}E$ (E decreases by 4 times)

Q13) out of 55 eggs 5 are defective. what is % of defective eggs

Ans: $\frac{9}{11}\%$

Q14) salary is 's' per month, 'x'% of salary is given as bonus, if 3 months salary is s_1, s_2 & s_3 then what is his salary.

Ans: $s_1 \cdot x/100 + s_2 \cdot x/100 + s_3 \cdot x/100$

Q15) consider expression 'ab' . what happens when 'a' is divided by 'c' & 'b' is multiplied by 'c'.

Ans:value remains same.

TECHNICAL:

Q1)main()

```
{
int i=1;
for(;i<=32768;i++)
printf("%d",i);
}
```

what will the output ??

ANS:-- infinite loop..bcz when $i=32767$.after that $i++$ means $i=-32768$...it will become 32768..so the result..

Q2)main()

```
{
int a[]={ 1,3,5,7};
printf("%d",&a[3]-&a[1]);
}
```

ANS:2

Q3) what is the output?

Main()

```

{
int i=0;
switch(i)
{
case 0:
i++;
printf("%d..",i);
case 1:
printf("%d..",i);
case 1:
printf("%d..",i);
}
}

```

A)..1..1..0 B) 0..1..1C) 1..1..1 D) None of These

Q4) What will be the O/P?

```

Main()
{

struct xyz {
int i;
};
struct xyz *p;
struct xyz a;
p=&a;
p->i=10;
printf("%d",(*p).i);

```

A) 0 B) 10 C) Garbage Value D) Compile Time Error

Q5)What is the storage required for the name "George"?

QA) Six bits of storage B) Six Bytes of Storage C) Six Pixels of Storage D) One Kilo Byte of Storage

Q6)What is the part of compiler that keeps track of names and their attributes?

A) Compile Table B)Symbol Table C)Table D) Logical Table

Q7) Which of the following operators cannot be overloaded in C++?

A) ?: B)[] C) - D) None of These

Q8) Which constructor is invalid for class cat?

A) void cat :: cat() { feet=4;} B)cat::cat(int f){feet=f;}
C) cat::cat(void){feet=8;} D) cat::cat(int f){this->feet=f;}

Q9) Typical user defined signal handler functions perform actions such as

A) abort process immediately without further ado

- B) Perform minor house keeping prior to resumption
- C) Roll back process state to last checkpoint
- D) Tidy up to process abortion

A) 1&2 B) 2 & 4 C) 3 D) 4

Q10) What is the name given to the process initializing a microcomputer with its OS?

- A) Cold Booting B) Booting C) Warm Booting D) None of these
- Ans: B**

Q11) Desirable attributes for memory management include

- A) Protection- such memory should be protected against being written on by other processes
- B) Encryption- ability to encrypt data with a randomly selected key that is discarded after use without being disclosed so that data can never be read again.
- C) Uniform access rates- ability to retard faster data fetch rates so that all data fetches are uniformly performed at the least fast data fetch rate
- D) None of these

Q12) Major expressions used with find command to select file if it has been accessed in more than 375 days, is

- A) -a time +365 B) -m time +365 C) -a time -365 D) -m time -365

Q13) Which of the following is not a basic computer network topology?

- A) Train topology B) Bus topology C) Star topology D) Ring topology
- Ans: A**

Q14) Which file contains all permanent information and is updated during processing by transactions of data?

- A) Master File B) Local File C) Parent File D) Primary File

Q15) Which set option is used with vi editor to display line numbers on screen?

- A) nm B) nu C) ic D) li
- Ans: B**

Q16) Assuming you have the environment variable ENV=.kshrc set, what is the entry in ur .kshrc or .profile that will save up to ur last 200 commands in a history list?

- A) HISTSIZE=200 B) set history 200 C) HISTORY=200 D) setenv history 200
- Ans: C**

Q17) You have 1MB of memory left on the HDD and when booting the system crashes. What is the reason?

- A) Not enough synchronous buffer
 - B) Not enough contiguous memory in virtual memory
 - C) Not enough space on the hard drive for the swap file.
 - D) Not enough space on the hard drive for working memory.
- Ans: C**

Q18) How do I remove a file with the name '-something' ?

- A) use the "--" flag to rm B) Use "##" flag to rm
- C) Use the "-" flag to rm D) Use the "!" flag to rm.

Q19) The customer is an internet search engine with hits from global customers exceeding 10 million per day. You identify Knowledge Management as the driving business issue. Which feature is most important to this customer solution?

- A) Single system image B) Speed and performance
 - C) Very large memory, very large database D) H/W Partitioning
- Ans: B**

Q20) Unlike function templates, when instantiating a class template, you must explicitly instantiate the

class by giving?

Ans:A

A) The parameters for the class templates B) The arguments for the class templates C) The variables for the class templates D) None

4)TEST PAPER2:

Verbal:

In the following passage some of the words have been left out. First read the passage over and try to understand what it is about. Then fill in the blanks with the help of the alternatives given.

Successful_____ (1)is about understanding people and setting them to share the _____ (2)of the organization. The manager must _____ (3)what is going on at all times and the _____ (4)must know what is _____ (5)of them.

Q1) Second blank is

A)rewards **B)vision C) spoils D)profit

ANS: B

Q2) Third blank is

A)demand B)ink C) manag **D)know

ANS: D

Q3) Fourth blank is

A)employees B)laborers C)workers D) boss

Q4) Fifth blank is

A)expected B)nice C)wanting D)credible

Q5) In the following sentence one important punctuation mark is missing.select the suitable signs from the given alternatives. Rajesh said,"Are you fond of music"

a) ? b)! c). d) ;

Ans:A

Rugby is a sport in which ..1..are allowed to carry,handle and throw the ball,although they may only throw it forwards..2..are scored by touching the ball down over the opponents goat-line called a punt or by kicking it over the crossbar between the goal posts. the sort gets it..3..from the ..4.. school in England..5..it was first plyed in 1823.

Q6) first blank is

Ans:D

a)opponents b)teams c)sides d)players

Q7) second blank is: **Ans:C**

a)marks b)runs c)points d)baskets

Q8) third blank is:
a)source b)money c)sponsor d)name **Ans:C**

Q9) fourth blank is:
a) Oxford b) Rugby c)Cambridge d) Eton **Ans:A**

Q10) fifth blank is:
a)hence b)were c)where d)when **Ans:C**

Q11) select the word among the given choices that is most nearly opposite in meaning to the word.

MAWKISH

A)SENTIMENTAL B)INTILLGENT C)CERTAIN D)CAREFREE

Q12) select among the given choices the word or phrase for each blank that fits the meaning of the sentence as a whole. the *judges* of the family courts have to take..decisions unlike many other courts.

a)impromptu b)judicial c)legal d)adjudicatory **Ans:C**

Q13) choose the letter ed pair that expresses a relationship most similar to the *relationship* expressed in the capitalized pair.

STORY:BUILDING:::

a)plot:outline b)rung:*ladder* c)cable:elevator d)foundation:skyscraper

Q14) OBTRUSIVE(similar word) **Ans:A**

a)Mysterious b)Weird c)Conspicuous d)Anonymous

Q15) CANONIZE:SAINT::

a)train: athiete b)guard:dignitary c)deify:sinner d)lionize:*celebrity*

APTITUDE:

Q1) area of triangle= $1/2*b*h$ base increased by 4 times & height is divided by 2, the net effect of area.

Ans:twice the the original area.

Q2) in base representation for a rupee 100 paise,then base 8 representation what is rupee value .

Ans:144

Q3) $A>B,B>C,C=D,D>E$,then which is greatest

a)A/B b) A/C c) A/E d)none

Ans: C

Q4) to travel 'm' miles the time is 'h' hours,then what is the time taken to travel M miles.

Ans: $M*h/m$

Q5) a sum 's' is divided into 4 parts. second person gets Rs 10 more than

first.3rd person is Rs 10 more than second, 4th is 10 more than 3rd.

how much amount do 1st person get.

Ans: $(s-60)/4$

Q6) fridge cost R Rs,cover value is 5,discount d% then its new cost

Ans: $R-R*d/100-5(1-d/100)$

Q7) $1/8$ is divided by 's' , if 's' is increased by 2 times, what is the result.

Ans: increases two times.

Q8) a c b d f e g i __

Ans: h

Q9) x y z u v w r s t __

Ans: o

Q10) a c f j o __

Ans:u

Q11) $31 - 29 + 2/33 =$ __

Ans: $64/33$

Q12) Mr. Shah decided to walk down the escalator of a tube station. He found that if he walks down 26 steps, he requires 30 seconds to reach the bottom. However, if he steps down 34 stairs he would only require 18 seconds to get to the bottom. If the time is measured from the moment the top step begins to descend to the time he steps off the last step at the bottom, find out the height of the stair way in steps?

Ans:46 steps.

Q13) The average age of 10 members of a committee is the same as it was 4 years ago, because an old member has been replaced by a young member. Find how much younger is the new member ?

Ans:40 years.

Q14) Three containers A, B and C have volumes a, b, and c respectively; and container A is full of water while the other two are empty. If from container A water is poured into container B which becomes $1/3$ full, and into container C which becomes $1/2$ full, how much water is left in container A?

Q15) ABCE is an isosceles trapezoid and ACDE is a rectangle. $AB = 10$ and $EC = 20$. What is the length of AE?

Ans: $AE = 10$.

TECHNICAL:

Q1) In private inheritance derived class members can access base class members that are

1) Public 2) Private 3) Protected

Ans:C

A) 1 & 2 B) 1 & 3 C) 2 & 3 D) 1,2 & 3

Q2)The output of an OR Gate is LOW when

Ans: A

A) All inputs are LOW B) Any Input is LOW C)Any input is high

D) All inputs are HIGH

Q3)The output of the program is

```
Main()
```

```
{
```

```
Int i=3,a=4,n;
```

```
Float t=4.2;
```

```
N=a*a/i+i/2*t+2+t;
```

```
Printf("%d",n);
```

```
}
```

A)14 B)15.4 C)15.0D)None of these

Q4). What is the output?

```
Main()
```

Ans:B

```
{  
Int i=0;  
Switch(i)  
Case 0 : printf("%d",i);break;  
Case 1 : printf("%d",i);break;  
}
```

A) Compile-time error B)0 C)0 1 D) Run-time error

Q5)What is the output of the program

```
Main()
```

```
{  
int q=2,d=3,st;  
st=q*d/4-12/12+12/3*16/d;  
printf("st=%d",st);  
}
```

A) 21 B)21.0 C)21.2 D)None of these

Q6)what is the electronic signal that cause computer to stop current program? **Ans:B**

A)signal B)interrupt C)shell D)command

Q7)which is the language for transformational programming?

A)APP b)KIMWITU c)MEMPHIS d)TXL

Q8)which two entities(reading from left to right) are connected by the dot operator(or class member access operator)?

```
<!--[endif]--><!--[endif]--><!--[endif]--> Ans:A
```

- a) A class member and a class object
- b) A class object and a class
- c) A class and a member of that class
- d) A class object and a member of that class <!--[endif]-->

Q9)What is the cycle speed for high-end business PCs,servers, and workstations?

- a)75-200 MHz
- b)166-233MHz
- c)233-450MHz
- d) over 1 Ghz

Q10) the working set hypothesis in paging schemes for memory management is the hypothesis that

- A)the proportion of a process`s virtual memory that is supported by physical memory should reflect the proportion of its virtual memory that it references frequently
- B) if the memory management system can provide a process with enough memory to hold all the pages

in its working set, then it will experience a low fault rate

c) A process will experience a zero fault rate if all the pages it will reference are brought into memory before it references them

d) none of these

Q11) Return address will be returned by function to

[a] Pushes to the stack by call

Ans : a

Q12)

n=7623

Ans : 3267

```
{
temp=n/10;
result=temp*10+ result;
n=n/10
}
```

Q13) If A>B then

F=F(G);

else B>C then

F=G(G);

in this , for 75% times A>B and 25% times B>C then, is 10000 instructions

are there , then the ratio of F to G

[a] 7500:2500 [b] 7500:625 [c] 7500:625 if a=b=c else 7500:2500

Q14) 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] $2*(k+8)/9$ [e] none

Ans: a

Q15) C program code

```
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

Ans: b

[a] 8 [b] 9 [c] 6 [d] 12 [e] 15

Q16) Virtual memory size depends on

[a] address lines [b] data bus

Ans : a

[c] disc space [d] a & c [e] none

Q17) Critical section is

Ans : b

[a] statements which are not accessing shared resources

[b] statements which are accessing shared resources

Q18) load a
mul a
store t1
load b
mul b
store t2
mul t2
add t1
then the content in accumulator is

Ans : $a^{**2}+b^{**4}$

Q19) Convert the infix to postfix for $A-(B+C)*(D/E)$

Ans: $ABC+DE/*-$

Q20) Assignment operator targets to

Ans: L-value

5)TEST PAPER3:

VERBAL:

Q1) in the following sentence one important punctuation mark is missing. select the suitable signs from the given alternatives.

Today,34 cities have more than five million inhabitants 12 of these cities are in the industrialized countries and 22 in the developing world.

a). b), c): d);

Q2)Management don't need ----- person.

A. Self-appointed B. Recalcitrant C. Culprit D. outspoken

Ans:B

Q3)Horns:bull::

Ans:Antlers: stag

Q4) gullible:duped::

Ans:Malleable: molded

Q5)Antonym of anathematize

Ans:bless

Q6) odd man out

A. elation B. torment C. ecstasy D. felicity

Ans:B

Q7)The global warming causes _____

Ans:1

I. depletion of level of seawater II. deaths of marine animals III. unseasonal rains II and III

Q8)Antonym of SAGE

Ans:fool

Q9) Antonym of orthodox

Ans:unconventionality

Q10)Find odd man out-

tautology:oncology:repetition:redundancy

Ans: oncology

Q11)Find odd man out

enroll:capitulate:enlist:conscript

Ans: capitulate

Q12)The following letters are assigned the codes like a=1, c=2, d=3, r=7, y=9, o=4, i=5, t=6, n=8 then the word dictionary is

Ans: 3526548179

Q13)Which of the following options is related to cricket, tennis, and football

A. carom

Ans:c

B. chess

C. volleyball

D. all

Q14)A sports discussion is taking place in a meeting. All those in the meeting who enjoy the batting of Sachin also enjoy the batting of Lara. Those who enjoy the batting of Lara despise the batting of Rahul. Some of those who enjoy the batting of Lara also enjoy the batting of Saurav; those who enjoy the batting of Rahul also enjoy the batting of Ricky. Some of those who enjoy the batting or Ricky also enjoy the batting of Lara. Some of those who enjoy the batting of Saurav despise the batting of Rahul. All those who enjoy the batting of Ricky also enjoy the batting of Astle. Miss Sujatha enjoys the batting of Rahul. Which of the following must be false?

A. She does not enjoy the batting of Saurav

Ans:A

B. She enjoys the batting of Ricky

C. She may enjoy the batting of Lara

D. She enjoys the batting of Astle

Q15)Mellifluous:cacophony::

Ans:fragrant: noisomeness

APTITUDE:

Q1) In the given figure, PA and PB are tangents to the circle at A and B respectively and the chord BC is parallel to tangent PA. If AC = 6 cm, and length of the tangent AP is 9 cm, then what is the length of the chord BC?

Ans: BC = 4 cm.

Q2) Three cards are drawn at random from an ordinary pack of cards. Find the probability that they will consist of a king, a queen and an ace.

Ans:64/2210.

Q3) A number of cats got together and decided to kill between them 999919 mice. Every cat killed an equal number of mice. Each cat killed more mice than there were cats. How many cats do you think there were ?

Ans: 991.

Q4) If $\log_2 x - 5 \log x + 6 = 0$, then what would the value / values of x be?

Ans: $x = e^2$ or e^3 .

Q5) The square of a two digit number is divided by half the number. After 36 is added to the quotient, this sum is then divided by 2. The digits of the resulting number are the same as those in the original number, but they are in reverse order. The ten's place of the original number is equal to twice the difference between its digits. What is the number?

Ans: 46

Q6) Can you tender a one rupee note in such a manner that there shall be total 50 coins but none of them would be 2 paise coins.?

Ans: 45 one paise coins, 2 five paise coins, 2 ten paise coins, and 1 twenty-five paise coins.

Q7) 6 people A,B,C,D,E and F sit around a table for dinner. Since A does not like C, he doesn't sit either opposite or beside C. B and F always like to sit opposite each other.

If A is beside F then who is are the two neighbours of B?

Ans: (c)

- (a) D and C
- (b) E and C
- (c) D and E
- (d) Either (a) or (b)

Q8) If D is adjacent to F then who is adjacent to C?

Ans:(d)

- (a) E and B
- (b) D and A
- (c) D and B
- (d) either (a) or (c)

Q9) Complete the sequence A, E, I, M, Q, U, _ , _

Ans:(b)

- (a) B, F
- (b) Y, C
- (c) G, I
- (d) K, O

Q10) A person travels 6km towards west, then travels 5km towards north ,then finally travels 6km towards west. Where is he with respect to his starting position?

Ans:(c)

- (a) 13km east
- (b) 13km northeast
- (c) 13km northwest
- (d) 13km west

Q11) If A speaks the truth 80% of the times, B speaks the truth 60% of the times.
What is the probability that they tell the truth at the same time

- (a) 0.8
- (b) 0.48
- (c) 0.6
- (d) 0.14

Ans:(b)

Q12)What is the value of A if A is an integer?

- (I) $A^4 = 1$
- (II) $A^3 + 1 = 0$

Q13) A person travels 12 km in the southward direction and then travels 5km to the right and then travels 15km toward the right and finally travels 5km towards the east, how far is he from his starting place?

- (a) 5.5 kms
- (b) 3 km
- (c) 13 km
- (d) 6.4 km

Ans: (b)

Q14) X's father's wife's father's granddaughter uncle will be related to X as

- (a) Son
- (b) Nephew
- (c) Uncle
- (d) Grandfather

Ans: (c)

Q15) Find the next number in the series 1, 3 ,7 ,13 ,21 ,31

- (a) 43
- (b) 33
- (c) 41
- (d) 45

Ans: (a)

TECHNICAL:

Q1) A byte addressable computer has memory capacity of 2^m Kbytes and can perform 2^n operations

an instruction involving three operands and one operator needs maximum of ---bits

Ans: $3m + n$

Q2) In round robin scheduling, if time quantum is too large then it degenerates to

Ans: FCFS

Q3) A sorting algorithm which can prove to be a best time algorithm in one case and a worst time algorithm in worst case is

Ans: (a)

- (a) Quick Sort

- (b) Heap Sort
- (c) Merge Sort
- (d) Insert Sort

Q4) What details should never be found in the top level of a top-down design?

- (a) Details **Ans: (c)**
- (b) Coding
- (c) Decisions
- (d) None of the above

Q5) In an absolute loading scheme, which loader function is accomplished by assembler

- (a) Reallocation **Ans: (d)**
- (b) Allocation
- (c) Linking
- (d) Both (a) and (b)

Q6) Banker's algorithm for resource allocation deals with

- (a) Deadlock prevention **Ans: (b)**
- (b) Deadlock avoidance
- (c) Deadlock recovery
- (d) None of these

Q7) Thrashing can be avoided if **Ans: (a)**

- (a) The pages, belonging to the working set of the programs, are in main memory
- (b) The speed of CPU is increased
- (c) The speed of I/O processor are increased
- (d) All of the above

Q8) Which of the following communications lines is best suited to interactive processing applications?

- (a) Narrowband channels and band channels **Ans: (b)**
- (b) Simplex channels
- (c) Full-duplex channels
- (d) Mixe

Q9) A feasibility document should contain all of the following except

- (a) Project name **Ans: (d)**
- (b) Problem descriptions
- (c) Feasible alternative
- (d) Data flow diagrams

Q10) What is the main function of a data link content monitor? **Ans: (a)**

- (a) To detect problems in protocols
- (b) To determine the type of transmission used in a data link
- (c) To determine the type of switching used in a data link
- (d) To determine the flow of data

Q11) Which of the following is a broadband communications channel?

- (a) Coaxial cable **Ans: (d)**

- (b) Fiber optic cable
- (c) Microwave circuits
- (d) All of the above

Q12) Which of the following memories has the shortest access time? **Ans: (a)**

- (a) Cache memory
- (b) Magnetic bubble memory
- (c) Magnetic core memory
- (d) RAM

Q13) A shift register can be used for **Ans: (d)**

- (a) Parallel to serial conversion
- (b) Serial to parallel conversion
- (c) Digital delay line
- (d) All the above

Q14) In which of the following page replacement policies, Balady's anomaly occurs?

- (a) FIFO **Ans: (a)**
- (b) LRU
- (c) LFU
- (d) NRU

Q15) Subschema can be used to **Ans: (d)**

- (a) Create very different, personalised views of the same data
- (b) Present information in different formats
- (c) Hide sensitive information by omitting fields from the sub-schema's description
- (d) All of the above

Q16) The format specifier "-%d" is used for which purpose in C

- (a) Left justifying a string **Ans: (a)**
- (b) Right justifying a string
- (c) Removing a string from the console
- (d) Used for the scope specification of a char[] variable

Q17) Virtual functions allow you to

- (a) Create an array of type pointer-to-base-class that can hold pointers to derived classes
- (b) Create functions that have no body
- (c) Group objects of different classes so they can all be accessed by the same function code
- (d) Use the same function call to execute member functions to objects from different classes

Q18) If the time quantum is too large, Round Robin scheduling degenerates to

- (a) Shortest Job First Scheduling **Ans: C**
- (b) Multilevel Queue Scheduling
- (c) FCFS
- (d) None of the above

Q19) What is the output of the following ?

```
int i;  
i=1;  
i=i+2*i++;  
printf("%d,i);
```

Ans: 4

```
Q20) FILE *fp1, *fp2;  
fp1=fopen("one","w")  
fp2=fopen("one","w")  
fputc('A',fp1)  
fputc('B',fp2)  
fclose(fp1)  
fclose(fp2}  
a.error b. c. d.
```

Ans: no error. But It will over writes on same file.

6)TESTPAPER4:

VERBAL:

Q1)star: cluster:: ? :? A. orange : rind B. trees : clump C. mirror : reflection D. sky : blue

Ans:B

Q2) gibble: sense:: ? :?

Ans: vacillate:resolution

Q3) guffaw: laugh:: ?:?

A. sneeze : cough B. whimper : cry C. wheeze : cold

Ans:C

Q4)While facts are _____ and data hard to come by, even scientists occasionally throw side the professional pretense of _____ and tear into each other with shameless appeals to authority and arguments that shameless appeals to authority and arguments that are unabashedly ad hominem

Ans:A

A. elusive; objectivity B. establish; courtesy C. demonstrate; neutrality D. ineluctable; cooperation

Q5) piston: cylinder:: ?:?

A. shaft: elevator B. bullet: revolver C. cylinder: handgun D. grenade: rif

Ans:A

Q6)While the disease is in _____ state it is almost impossible to determine its existence by_____.

A. a dormant; postulate B. a critical; examination C. an acute; analysis D. a latent; observation

Ans: D

Q7)Offhand:premeditation::

A. upright: integrity B. aboveboard: guile C. cutthroat: competition D. backward: direction

Ans:B

Q8)poltergeist: apparition::

A. dwarf: stature B. witch: familiar C. ogre: monster D. sorcerer: spell

Ans: C

Q9)aver: affirmation::

A. proclaim: objection B. denounce: defiance C. refuse: distress D. demur: protest

Ans: D

Q10) limerick: poem:: ?:?

Ans: catch: song

Q11)contemporaneous: events:: ?:?

Ans:adjacent: object

Q12)confine: prisoner:: ?:?

Ans:detain: suspect.

Q13)Distance $D=rt$ where r & t are positive and r is constant as t increases then D _____

Ans: D increases irrespective of r & t

Q14)Antonyms of placate

A. abet B. enrage C. witness D. pacify

Ans:B

Q15) Find the odd one out

A. entice, lure, allure, alarm. B. evince, press, exort, spur

Ans:odd items are A. alarm B. evince

APTITUDE:

Q1) If in a certain code "RANGE" is coded as 12345 and "RANDOM" is coded as 123678. Then the code for the word "MANGO" would be

(a) 82357

Ans: (d)

(b) 89343

(c) 84629

(d) 82347

Q2) If "PROMPT" is coded as QSPLOS ,then "PLAYER" should be

(a) QMBZFS

Ans: (a)

- (b) QWMFDW
- (c) QUREXM
- (d) URESTI

The questions 48-52 are based on the following pattern. The problems below contain a question and two statements giving certain data. You have to decide whether the data given in the statements are sufficient for answering the questions. The correct answer is

- (A) If statement (I) alone is sufficient but statement (II) alone is not sufficient.
- (B) If statement (II) alone is sufficient but statement (I) alone is not sufficient.
- (C) If both statements together are sufficient but neither of statements alone is sufficient.
- (D) If both together are not sufficient.

Q3) What is John's age?

- (I) In 15 years John will be twice as old as Dias would be
- (II) Dias was born 5 years ago

Ans: (c)

Q4) What is the distance from city A to city C in kms?

- (I) City A is 90 kms from City B
- (II) City B is 30 kms from City C

Ans: (d)

Q5) Is $A=C$? A, B, C are real numbers

Ans: (c)

- (I) $A-B=B-C$
- (II) $A-2C = C-2B$

Q6) What is the 30th term of a given sequence ?

Ans: (a)

- (I) The first two terms of the sequence are 1, $1/2$
- (II) The common difference is $-1/2$

Q7) Was Avinash early, on time or late for work?

Ans: (d)

- (I) He thought his watch was 10 minutes fast
- (II) Actually his watch was 5 minutes slow

Q8) A monkey starts climbing up a tree 20ft. tall. Each hour, it hops 3ft. and slips back 2ft. How much time would it take the monkey to reach the top?

Ans: 18 hours.

Q9) What is the missing number in this series?

8 2 14 6 11 ? 14 6 18 12

Ans: 9

Q10) A certain type of mixture is prepared by mixing brand A at Rs.9 a kg. with brand B at Rs.4 a kg. If the mixture is worth Rs.7 a kg., how many kgs. brand A are needed to make 40kgs. of the mixture?

Ans: Brand A needed is 24kgs.

Q11) A wizard named Nepo says "I am only three times my son's age. My father is 40 years more than twice my age. Together the three of us are a mere 1240 years old." How old is Nepo?

Ans: 360 years old.

Q12) One dog tells the other that there are two dogs in front of me. The other one also shouts that he too had two behind him. How many are they?

Ans: Three.

Q13) A man ate 100 bananas in five days, each day eating 6 more than the previous day. How many bananas did he eat on the first day?

Ans: Eight.

Q14) If it takes five minutes to boil one egg, how long will it take to boil four eggs?

Ans: Five minutes.

Q15) 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?

Ans: 32 8/11 minutes.

TECHNICAL:

```
Q1) #define MAN(x,y) (x)>(y)?(x):(y)
{
int i=10;j=5;k=0;
k= MAX(i++,++j)
printf("%d %d %d %d",i,j,k)
}
```

Ans: 10 5 0

```
Q2) struct list{
int x;
struct list *next;
}*head;
the struct head.x =100
```

Is the above assignment to pointer is correct or wrong ?

Ans: Wrong

Q3)What is the output of the following ?

```
int i;
i=1;
i=i+2*i++;
printf("%d,i);
```

Ans: 4

```
Q4) FILE *fp1,*fp2;
fp1=fopen("one","w")
fp2=fopen("one","w")
fputc('A',fp1)
fputc('B',fp2)
fclose(fp1)
fclose(fp2)}
```

.error b. c. d.

Ans: no error. But It will over writes on same file.

```
Q5) #define MAN(x,y) (x)>(y)?(x):(y)
{
inti=10;j=5;k=0;
k= MAX(i++,++j)
```

```
printf("%d %d %d %d",i,j,k)
}
```

Ans: 10 5 0

Q6)What is the output?

```
n=7623
```

```
{
```

```
temp=n/10;
```

```
result=temp*10+ result;
```

```
n=n/10
```

Ans:the variables are not properly initialized for the statements the semicolon is missed.so,it will show some errors

Q7)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. $2*(k+8)/9$ E. none

Ans:2k (E)

Q8)A 12 address lines maps to the memory of

A. 1k bytes B. 0.5k bytes C. 2k bytes D. none

Ans:4Kbits= $4096/8=512$ Bytes =0.5Kbytes.

Q9)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 **Ans:A**

Q10)In a processor these are 120 instructions. Bits needed to implement these instructions

A. 6

Ans:B

B. 7

C. 10

D. none

Q11)You have 1MB of memory left on the HDD and when booting the system crashes. What is the reason?

A) Not enough synchronous buffer

Ans:c

B) Not enough contiguous memory in virtual memory

C) Not enough space on the hard drive for the swap file.

D) Not enough space on the hard drive for working memory

Q12) Which hardware implements stack operation in 8085/8086 A. ROM B. PROM C. RAM D. none of these **Subscribe**

Ans:C

Q13)Which is not a search engine?

A. google B. lycos C. altavista D. none of these **Subscribe**

Ans: D

Q14)

Which of the following is invalid

Ans:B

A. `class<Template t,int I>`

B. `class <Template t==char>`

C. Both A and B

D. none

Q15) How can you represent 64Kb A. 8 8bit words B. 4 4bit words C. 2 16bit words

Ans:A

Q16)Command for reboot in UNIX? Subscribe init 6

Ans:reboot

Q17)Which is a command interpreter?

A. Shell B. Kernel C. Both A and B D. none of these

Ans:A

Q18) How is memory allocated by new?

A. in a heap B. in a stack C. both A and B D. none of these.

Ans:A

Q19) How are objects in cpp passed?

A. By value B. By reference

Ans:A

Q20)If Link list is used to implement a stack what operations should be implemented :

A. insert front, delete front

B. insert front, delete rear

C. insert rear, delete front

D. none of these

Aptitude Questions:

Q1) Solve for x and y:

$$1/x - 1/y = 1/3, 1/x^2 + 1/y^2 = 5/9.$$

Ans: $x = 3/2$ or -3 and $y = 3$ or $-3/2$.

Q2) 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?

Ans: 20 %.

Q3) Find the least value of $3x + 4y$ if $x^2y^3 = 6$.

Ans: 10.

Q4) Can you find out what day of the week was January 12, 1979?

Ans: Friday.

Q5) 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?

Ans: 1700 men.

Q6) 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?

Ans: 3720.

Q7) Three pipes, A, B, & C are attached to a tank. A & B can fill it in 20 & 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?

Ans: 167 minutes.

Q8) A person walking $5/6$ of his usual rate is 40 minutes late. What is his usual time?

Ans: 3 hours 20 minutes.

Q9) John weighs twice as much as Marcia. Marcia's weight is 60% of Bob's weight. Dave weighs 50% of Lee's weight. Lee weighs 190% of John's weight. Which of these 5 persons weighs the least?

- A. Bob
- B. Dave
- C. John
- D. Lee
- E. Marcia

Ans: E

Q10) A trip takes 6 hours to complete. After traveling $1/4$ of an hour, $1-3/8$ hours, and $2-1/3$ hours, how

much time does need to complete the trip?

- A. 2-1/12hours
- B. 2hours, 2-1/2 minutes
- C. 2 hours, 5minutes
- D. 2-1/8 hours

Ans: B

Q11) It takes 30 days to fill a laboratory dish with bacteria. If the size of the bacteria doubles each day, how long did it take for the bacteria to fill one half of dish?

Ans:29days

Q12)A car wash can wash 8 cars in 18 minutes, At this rate, how many cars can the car wash in 3 hours?

Ans:80

Q13)If the ratio of the areas of 2 squares is 2:1, then the ratio of the perimeters of the squares is

Ans: sqrt(2):1

Q14)In a survey of town of Wasco, it was found that 65% of the people surveyed watched the news on television, 40% read newspaper, and 25% read a newspaper and watched the news on television. What percent of the people surveyed neither watched the news on the television or read a newspaper?

Ans:20%

Q15)City B is 5 miles east of City A. City C is 10 miles southeast of City B. Which of the following is the closest to the distance from City A to City C?

Ans:14 miles

Q16) If the area of a square increases by 69%, then the side of the square increased by

Ans: 30%.let the area of sqr is 100.and now it increases to 169.so side is inc by 3 means 30%

Q17)There are 30 socks in a drawer. 60% of the socks are red and the rest are blue. What is the minimum number of socks that must be taken from the drawer without looking in order to be certain that at least two blue socks have been chosen?

Ans: 20

Q18)Out of 55 eggs 5 are defective. What is % of defective eggs?

Ans: 9/11%

Q19)Salary is 's' per month, 'x'% of salary is given as bonus, if 3 months salary is s1, s2, and s3 then what is his salary?

Ans: $s1*x/100 + s2*x/100 + s3*x/100$

Q20)Consider expression 'ab' What happens when 'a' is divided by 'c' & 'b' is multiplied by 'c'.

Ans: value remains same

Q21) Area of triangle= $1/2*b*h$, base is increased by 4 times & height is divided by 2, the net effect of area.

Ans:twice the original area

Q22) In base representation for a rupee 100 paise then base 8 representation. What is rupee value?

Ans: 144

Q23)A>B, B>C, C=D, D>E then which is greatest a) A/B b) A/C c) A/E d) none

Ans: C

Q24)To travel 'm' miles the time is 'h' hours then what is the time taken to travel M miles.

Ans: $M*h/m$

Q25)A sum 's' is divided into 4 parts. Second person gets Rs10 more than first. Third person gets Rs10 more than second, fourth gets Rs10 more than third. How much amount do first person gets.

Ans: $(s-60)/4$

Q26) Fridge cost R Rs, cover value is 5, discount d% then its new cost

Ans: $R-R*d/100-5(1-d/100)$

Q27)1/8 is divided by 's,' if 's' is increased by 2 times, what is the result.

Ans:increases two times

Q28) $abcD+abcd+aBCd+aBCD$ then the simplified function is (Capital letters are compliments of corresponding letters $A=\text{compliment of } A$).

A. a

Ans:A

B.. ab

C. abc

D. $a(bc)^*$

E. $(bc)^*=\text{compliment of } bc$

Q29) If $A>B$ then

$F=F(G)$;

else $B>C$ then

$F=G(G)$;

In this, for 75% times $A>B$ and 25% times $B>C$ then, is 10000 instructions are there, then the ratio of F to G

A. 7500:2500

Ans:A

B. 7500:625

C. 7500:625

Q30) CATG. : DIFFICULT+ CALCULATIVE

40 men can finish a job in 40 days.

5 men leave after every 10th day.

find the no. of days. the job will be done ?

Ans:57days

QUESTIONS ASKED IN TECHNICAL INTERVIEW:

1.Design a zener diode circuit providing constant voltage output? he gave me pen and paper....
i tried but i couldnot remember at that time.....i just draw a zener diode and tried for sometime. then told sir i cant remember..... even though my first qn was tough,,,am not get nervoused,i kept my smiling face.

2.Favourite subject?

i told digital electronics....

3.what is a flipflop?

i told it is a memory element.....

4what are the memories available in market

i told RAM and ROM

5what are the different types of RAMs ?

- static and dynamic RAM
6. what are they?
7. fn code for factorial of a number?
8. pgm to check for palindromes?
9. what is smith chart?
10. thevenin's theorem?
11. kirchoff's law?
12. relate them?
13. jk master slave flipflop?

C-Questions

Q1) What do you know about networking support in Java ?

Ans: Java supports "low-level" and "high-level" classes. "Low-level" classes provide support for socket programming: Socket, DatagramSocket, and ServerSocket

Q2) What is the difference between structures and classes in C++?

Ans: There is only one difference, in classes the members are private by default whereas it is not so in structures. 5. which are things not supported by java? struct, multiple inheritance, pointers

Q3) What are the main differences between Java and C++?

Ans: Everything is an object in Java (Single root hierarchy as everything gets derived from java.lang.Object). Java does not have all the complicated aspects

Q4) How do you achieve multiple inheritance in Java? **Ans: A**

A) Using interfaces. B) Using abstract classes C) Using final classes D) None of the above

Q5) Which java.util classes and interfaces support event handling

Ans: The EventObject class and the ActionListener interface support event processing.

Q6)printf() Function

What is the output of printf("%d")?

Ans: 1. When we write printf("%d",x); this means compiler will print the value of x. But as here, there is nothing after %d so compiler will show in output window garbage value.

Q7)What is the difference between "calloc(...)" and "malloc(...)"?

Ans: 1. calloc(...) allocates a block of memory for an array of elements of a certain size. By default the block is initialized to 0. The total number of memory allocated will be (number_of_elements * size). malloc(...) takes in only a single argument which is the memory required in bytes. malloc(...) allocated bytes of memory and not blocks of memory like calloc(...).

Q8)What is the difference between "printf(...)" and "sprintf(...)"?

sprintf(...) writes data to the character array whereas

printf(...) writes data to the standard output device.

Q9)Compilation How to reduce a final size of executable?_

Ans: Size of the final executable can be reduced using dynamic linking for libraries.

Q10)What will be printed as the result of the operation below:

```
main()
{
int x=20,y=35;
x=y++ + x++;
y= ++y + ++x;
printf("%d%d\n",x,y)
; }
```

Ans : 5794

Q11)What will be printed as the result of the operation below:

```
main()
{
char s1[]="Tech";
char s2[]="preparation";
printf("%s",s1)
; }
```

Ans: Tech

Q12)

```
main()
{
int x=10, y=15;
x = x++;
y = ++y;
printf("%d %d\n",x,y);
}
```

Ans: 11, 16

Q13)What will be printed as the result of the operation below:

```

main()
{
int a=0;
if(a==0)
printf("Tech Preparation\n");
printf("Tech Preparation\n");

}

```

Ans: Two lines with "Tech Preparation" will be printed.

Q14)What will the following piece of code do

```

int f(unsigned int x)
{
int i;
for (i=0; x!0; x>>=1){
if (x & 0X1)
i++;
}
return i;
}

```

Ans: returns the number of ones in the input parameter X

Q15)What does static variable mean?

Ans: there are 3 main uses for the static.

1. If you declare within a function:

It retains the value between function calls

2.If it is declared for a function name:

By default function is extern..so it will be visible from other files if the function declaration is as static..it is invisible for the outer files

3. Static for global variables:

By default we can use the global variables from outside files If it is static global..that variable is limited to with in the file

Q16)What is the difference between a string copy (strcpy) and a memory copy (memcpy)? When should each be used?

Ans: The strcpy() function is designed to work exclusively with strings. It copies each byte of the source string to the destination string and stops when the terminating null character () has been moved. On the other hand, the memcpy() function is designed to work with any type of data. Because not all data ends with a null character, you must provide the memcpy() function with the number of bytes you want to copy from the source to the destination.

Q17)Why n++ executes faster than n+1?

Ans: The expression n++ requires a single machine instruction such as INR to carry out the increment operation whereas, n+1 requires more instructions to carry out this operation.

Q18)What is static memory allocation and dynamic memory allocation?

Static memory allocation: The compiler allocates the required memory space for a declared variable.By using the address of operator,the reserved address is obtained and this address may be assigned to a

pointer variable. Since most of the declared variables have static memory, this way of assigning pointer value to a pointer variable is known as static memory allocation. Memory is assigned during compilation time.

Dynamic memory allocation: It uses functions such as `malloc()` or `calloc()` to get memory dynamically. If these functions are used to get memory dynamically and the values returned by these functions are assigned to pointer variables, such assignments are known as dynamic memory allocation. Memory is assigned during run time.

Q19) How are pointer variables initialized?

Ans: Pointer variables are initialized by one of the following two ways

- Static memory allocation
- Dynamic memory allocation

Q20) Difference between arrays and pointers?

- Pointers are used to manipulate data using the address. Pointers use `*` operator to access the data pointed to by them
- Arrays use subscripted variables to access and manipulate data. Array variables can be equivalently written using pointer expression.

Q21) Is NULL always defined as 0?

Ans: NULL is defined as either 0 or `(void*)0`. These values are almost identical; either a literal zero or a void pointer is converted automatically to any kind of pointer, as necessary, whenever a pointer is needed (although the compiler can't always tell when a pointer is needed).

Q22) What is the difference between NULL and NUL?

Ans: NULL is a macro defined in for the null pointer.

NUL is the name of the first character in the ASCII character set. It corresponds to a zero value. There's no standard macro NUL in C, but some people like to define it.

The digit 0 corresponds to a value of 80, decimal. Don't confuse the digit 0 with the value of `'\0'` (NUL)! NULL can be defined as `((void*)0)`, NUL as `'\0'`.

Q23) Can the sizeof operator be used to tell the size of an array passed to a function?

Ans: No. There's no way to tell, at runtime, how many elements are in an array parameter just by looking at the array parameter itself. Remember, passing an array to a function is exactly the same as passing a pointer to the first element.

Q24) Is using `exit()` the same as using `return`?

Ans: No. The `exit()` function is used to exit your program and return control to the operating system. The `return` statement is used to return from a function and return control to the calling function. If you issue a `return` from the `main()` function, you are essentially returning control to the calling function, which is the operating system. In this case, the `return` statement and `exit()` function are similar.

Q25) Can math operations be performed on a void pointer?

No. Pointer addition and subtraction are based on advancing the pointer by a number of elements. By definition, if you have a void pointer, you don't know what it's pointing to, so you don't know the size of what it's pointing to. If you want pointer arithmetic to work on raw addresses, use character pointers.

Q26) Are pointers integers?

No, pointers are not integers. A pointer is an address. It is merely a positive number and not an integer.

Q27) What is a method?

Method is a way of doing something, especially a systematic way; implies an orderly logical arrangement (usually in steps).

Q28)What is the difference between declaring a variable and defining a variable?

Declaring a variable means describing its type to the compiler but not allocating any space for it. Defining a variable means declaring it and also allocating space to hold the variable. You can also initialize a variable at the time it is defined.

Q29)What does it mean when a pointer is used in an if statement?

Any time a pointer is used as a condition, it means “Is this a non-null pointer?” A pointer can be used in an if, while, for, or do/while statement, or in a conditional expression.

Q30)Differentiate between an internal static and external static variable?

A internal static variable is declared inside a block with static storage class whereas an external static variable is declared outside all the blocks in a file. An internal static variable has persistent storage,block scope and no linkage.An external static variable has permanent storage,file scope and internal linkage.

Q31)What is the difference between a string and an array?

An array is an array of anything. A string is a specific kind of an array with a well-known convention to determine its length.

Q32)storage class?

Advantages of external storage class

- 1)Persistent storage of a variable retains the latest value
- 2)The value is globally available

Disadvantages of external storage class

- 1)The storage for an external variable exists even when the variable is not needed
- 2)The side effect may produce surprising output
- 3)Modification of the program is difficult
- 4)Generality of a program is affected

Q33)What is storage class and what are storage variable ?

A storage class is an attribute that changes the behavior of a variable. It controls the lifetime, scope and linkage.

There are five types of storage classes

- 1) auto
- 2) static
- 3) extern
- 4) register
- 5) typedef

Q34)What is a static function?_

A static function is a function whose scope is limited to the current source file. Scope refers to the visibility of a function or variable. If the function or variable is visible outside of the current source file, it is said to have global, or external, scope. If the function or variable is not visible outside of the current source file, it is said to have local, or static, scope.

Q35)What is a pointer variable?

A pointer variable is a variable that may contain the address of another variable or any valid address in the memory.

Q36)What is a pointer value and address?

A pointer value is a data object that refers to a memory location. Each memory locaion is numbered in

the memory. The number attached to a memory location is called the address of the location.

Q37)What is a modulus operator? What are the restrictions of a modulus operator?

A Modulus operator gives the remainder value. The result of $x\%y$ is obtained by $(x-(x/y)*y)$. This operator is applied only to integral operands and cannot be applied to float or double.

Q38)What is a function and built-in function?

A large program is subdivided into a number of smaller programs or subprograms. Each subprogram specifies one or more actions to be performed for a large program. such subprograms are functions.

The function supports only static and extern storage classes. By default, function assumes extern storage class.functions have global scope. Only register or auto storage class is allowed in the function parameters. Built-in functions that predefined and supplied along with the compiler are known as built-in functions. They are also known as library functions.

Q39)When should a type cast not be used?

A type cast should not be used to override a const or volatile declaration. Overriding these type modifiers can cause the program to fail to run correctly.

A type cast should not be used to turn a pointer to one type of structure or data type into another. In the rare events in which this action is beneficial, using a union to hold the values makes the programmer's intentions clearer.

Q40)What is Difference Between C/C++

C does not have a class/object concept.

C++ provides data abstraction, data encapsulation, Inheritance and Polymorphism.

C++ supports all C syntax.

In C passing value to a function is "Call by Value" whereas in C++ its "Call by Reference"

File extension is .c in C while .cpp in C++.(C++ compiler compiles the files with .c extension but C compiler can not!)

In C structures can not have contain functions declarations. In C++ structures are like classes, so declaring functions is legal and allowed.

C++ can have inline/virtual functions for the classes.

c++ is C with Classes hence C++ while in c the closest u can get to an User defined data type is struct and union.

Q41)In C, what is the difference between a static variable and global variable?

A static variable declared outside of any function is accessible only to all the functions defined in the same file (as the static variable). However, a global variable can be accessed by any function (including the ones from different files).

C++ -Questions

Q1)What is function overloading and operator overloading?

Function overloading: C++ enables several functions of the same name to be defined, as long as these functions have different sets of parameters (at least as far as their types are concerned). This capability is called function overloading. When an overloaded function is called, the C++ compiler selects the proper function by examining the number, types and order of the arguments in the call. Function overloading is commonly used to create several functions of the same name that perform similar tasks but on different data types.

Operator overloading allows existing C++ operators to be redefined so that they work on objects of user-defined classes. Overloaded operators are syntactic sugar for equivalent function calls. They form a pleasant facade that doesn't add anything fundamental to the language (but they can improve understandability and reduce maintenance costs).

Q2)What is the difference between declaration and definition?

Ans: The declaration tells the compiler that at some later point we plan to present the definition of this declaration.

E.g.: void stars () //function declaration

The definition contains the actual implementation.

E.g.: void stars () // declarator

```
{  
for(int j=10; j >=0; j--) //function body  
cout << *;  
cout << endl; }
```

Q3)What are the advantages of inheritance?

Ans: It permits code reusability. Reusability saves time in program development. It encourages the reuse of proven and debugged high-quality software, thus reducing problem after a system becomes functional.

Q4)Write a short code using C++ to print out all odd number from 1 to 100 using a for loop

```
for( unsigned int i = 1; i <= 100; i++ )  
if( i & 0x00000001 )  
cout << i << "\n";
```

Q5)What is public, protected, private?

Ans: Public, protected and private are three access specifier in C++.

Public data members and member functions are accessible outside the class.

Protected data members and member functions are only available to derived classes.

Private data members and member functions can't be accessed outside the class. However there is an exception can be using friend classes.

Q6) Write a function that swaps the values of two integers, using `int*` as the argument type.

```
void swap(int* a, int* b) {  
    int t;  
    t = *a;  
    *a = *b;  
    *b = t;  
}
```

Q7) What are the advantages of inheritance?

- It permits code reusability.
- Reusability saves time in program development.
- It encourages the reuse of proven and debugged high-quality software, thus reducing problem after a system becomes functional.

Q8) What is the difference between an ARRAY and a LIST?

Array is collection of homogeneous elements.

List is collection of heterogeneous elements.

Q9) What is encapsulation?

Ans: Packaging an object's variables within its methods is called encapsulation.

Q10) What is an object?

Ans: Object is a software bundle of variables and related methods. Objects have state and behavior.

Q11) What do you mean by inheritance?

Inheritance is the process of creating new classes, called derived classes, from existing classes or base classes. The derived class inherits all the capabilities of the base class, but can add embellishments and refinements of its own.

Q12) What is namespace?

Namespaces allow us to group a set of global classes, objects and/or functions under a name. To say it somehow, they serve to split the global scope in sub-scopes known as namespaces.

Q13) What is Boyce Code Normal form?

A relation schema R is in BCNF with respect to a set F of functional dependencies if for all functional dependencies in F^+ of the form $a \rightarrow b$, where a and b is a subset of R , at least one of the following holds:

* $a \rightarrow b$ is a trivial functional dependency (b is a subset of a)

* a is a superkey for schema R

Q14) What is virtual class and friend class?

Friend classes are used when two or more classes are designed to work together and need access to each other's implementation in ways that the rest of the world shouldn't be allowed to have. In other words, they help keep private things private. For instance, it may be desirable for class `DatabaseCursor` to have more privilege to the internals of class `Database` than `main()` has.

Q15) What is the word you will use when defining a function in base class to allow this function to be a polymorphic function?

Ans: virtual

Q16) What do you mean by binding of data and functions?

Ans: Encapsulation.

Q17)What is the difference between an object and a class?

A Class is static. All of the attributes of a class are fixed before, during, and after the execution of a program. The attributes of a class don't change.

- The class to which an object belongs is also (usually) static. If a particular object belongs to a certain class at the time that it is created then it almost certainly will still belong to that class right up until the time that it is destroyed.

- An Object on the other hand has a limited lifespan. Objects are created and eventually destroyed. Also during that lifetime, the attributes of the object may undergo significant change.

Q18)Suppose that data is an array of 1000 integers. Write a single function call that will sort the 100 elements data [222] through data [321].

Ans: quicksort ((data + 222), 100);

Q19)What is a class?

Class is a user-defined data type in C++. It can be created to solve a particular kind of problem. After creation the user need not know the specifics of the working of a class.

Q20)What is friend function?

As the name suggests, the function acts as a friend to a class. As a friend of a class, it can access its private and protected members. A friend function is not a member of the class. But it must be listed in the class definition.

Q21)Which recursive sorting technique always makes recursive calls to sort subarrays that are about half size of the original array?

Mergesort always makes recursive calls to sort subarrays that are about half size of the original array, resulting in $O(n \log n)$ time.

Q22)What is abstraction?

Ans:Abstraction is of the process of hiding unwanted details from the user.

Q23)What is a scope resolution operator?

Ans:A scope resolution operator (::), can be used to define the member functions of a class outside the class.

JAVA QUESTINS:

Q1)what is the difference between statis block and static variable?

ANS:Static block is the block which is executed first in the

program. Static variable is the common variable which is shared by all the objects. Static variable is not specific to any object.

Q2)why java does not support multiple inheritance

Ans:Java absolutely support multiple inheritance in terms of Interface.We can extend one class only to avoid ambiguity problem.In interface we have to define the functions.So we don't get any ambiguity.In c++ it is big problem with multiple inheritance but in JAVA this thing is improved by introducing Interfaces

Q3)What is the difference between an Applet and an Application?

Ans:1. Applets can be embedded in HTML pages and downloaded over the Internet whereas Applications have no special support in HTML for embedding or downloading.

Q4)What are the Applet's Life Cycle methods? Explain them?

Ans:init() method - called when an applet is first loaded. This method is called only once in the entire cycle of an applet. This method usually initialize the variables to be used in the applet

start() method - called each time an applet is started

paint() method - called when the applet is minimized or refreshed. This method is used for drawing different strings, figures, and images on the applet window

stop() method - called when the browser moves off the applet's page

destroy() method - called when the browser is finished with the appl

Q5)What is the sequence for calling the methods by AWT for applets?

Ans:init()

start()

paint()

When an applet is terminated, the following sequence of method calls takes place

stop()

destroy()

Q6)Which classes and interfaces does Applet class consist?

Ans: Applet class consists of a single class, the Applet class and three interfaces: AppletContext, AppletStub, and AudioClip

Q7)What is the purpose of HTTP tunneling?

Ans:HTTP tunneling is used to encapsulate other protocols within the HTTP or HTTPS protocols. It is typically used to pass protocols that would normally be blocked by a firewall through the firewall in a controlled manner.

Q8)How does JDBC differ from ODBC?

Ans:ODBC is the industry-standard interface by which database clients connect to database servers.

JDBC is a pure Java solution that does not follow the ODBC standard.

However, there is a bridge between JDBC and ODBC that allows JDBC to access databases that support ODBC.

Q9)what is servlet life cycle?

Ans:The three important functions that implement the life cycle of servlet are init(),service(),destroy().

When a client/user specifies a request by entering the URL in the browser the browser generates an HTTP request for it and sends to the server.

On receiving the HTTP request the server maps a servlet to this request. the servlet is then dynamically retrieved and loaded in the memory.

The server now calls the init() method of the servlet. Parameters can be sent to configure the servlet. This method is called only once when the servlet is first loaded.

When a request arrives for this servlet the server invokes the service() method. this is the method which handles all the HTTP requests and formulates HTTP response. For every request service() method is called.

When the server decides to unload the servlet it calls the destroy() method. Any resources which were used by the servlet or any open files or any database connections can be restored so that the memory used by these objects and the servlet can then be garbage collected.

Q10)What is the content of the Java 2 security policy file?

Ans:The security policy file contains a series of grant entries that identify the permissions granted to an applet or application based on its source and signatures.

Q11)what is diff string and stringbuffer

Ans: string is immutable, that is it can not be extended.whereas StringBuffer is mutable and can be extended.

Fro example :

Consider 2 statement : "Welcome " and "to Java World".
now assign first statement to string and string buffer.

```
String str = "Welcome" & StringBuffer strBuff = new  
StringBuffer("Welcome");
```

Now if we add 2nd statement to both then :

str= str + "to Java World" -> In this case, it would dump all the memory allocated with "welcome" and allocate a new memory space to the entire string "Welcome to Java World" .
On the other hand, in StringBuffer :-
strBuff.append("to Java World") -> if simply allocate a new memory space to only 2nd statement and add to link to previous name.

Q12)what is the difference between static block and static variable

Ans:Static block is the block which is executed first in the program. Static variable is the common variable which is shared by all the objects. Static variable is not specific to any object.

Q13)what does a constructor does.

Ans:Constructor is a member function of class that is used to create objects of that class.

we can also initialise instance variables.

Q14)How is database middleware used to access legacy databases?

Ans: Database middleware enables legacy databases to be accessed from Java by translating between JDBC and the drivers that are supported by the legacy databases.

Q15)How do you create Connection?

Ans:After loading the driver in order to refer the what kind of database u communicate we Establish the connection with the help of a static method called GETCONNECTION this is from DRIVER MAMAGER.GETCONNECTION. accepting arguments as JDBC URL ,USER NAME , PASSWORD

EX: DriverManager.getConnection
("jdbc:odbc:sid", "scott", "tiger");

here jdbc,odbc,sid -> is url and sid is service id.
scott - > is user name.
tiger - > is password.

Q16)In JDBC, All the API's are interfaces? Where is the actual implementation?

Ans:JDBC accomplishes its goals through a set of Java interfaces, each implemented differently by individual vendors. The set of classes that implement the JDBC interfaces for a particular database engine is called a JDBC driver. In building a database application, you do not have to think about the implementation of these underlying

classes at all; the whole point of JDBC is to hide the specifics of each database and let you worry about just your application

Q17)What are different types of transactions?

Ans:There are 3 different type of transactions:

- 1)Autocommit(default)
- 2)Explicit
- 3)Implicit

Q18)what is CallableStatement and what is its usage?

Ans:Callable statement is the one of the SQL statement.

Callable statement usage, to execute stored procedures using preparecall() method.

Q19)What is Statement and PreparedStatement? whatz the difference?

Ans:When you execute a SQL query with Statement. It parses and executes in the database each time. Where as in PreparedStatement, first time it parses and executes and subsequent times, it directly substitute the values in the query and executes. It is faster than Statement

Q20)What is meant by a ResultSet?

Ans:A Resultset is a pointer pointing to the data retrieved into database buffer.Hence for this reason,Resultset object exist only as long as client connected with database.
-Resultset maintains cursor pointing to each record retrieved into DB buffer.
-its cursor position starts from 'before first record' to 'after last record' .
-Resultset allows unidirectional navigation and also allows us to retrieve data only once in the life span of the object.

Q21)What type of drivers are used for web application?

Ans:type-3 drivers thatis IntermediateDataAccess Driver

Q22)What type of driver you use in real-time projects?

Ans:We can use the type-4 driver in Real-Time Projects

Q23)What are stored procedures? How to call them?

Ans:Stored procedures are stored programs in jdbc.pl/sql is a stored procedure.they can be called from java by callable statement.

```
CallableStatement st=con.prepareCall("{----}");
```

HR INTERVIEW:

Q1. Tell about your family background?

Q2. Why do you like to join in Wipro?

it is one of leading and top most company of India and its my ambition.

Q3. What do you know about Wipro?

Q4. Why should I hire you?

First learn about the position for which you are applying.

Then, correlate your qualification and experience with that.

So, you can say, u require _____ skill set or tools, I have __ years exp in that tools. So I would definitely be a good resource for WIRO if you select me. As I was in this process, I know about these tools.

Q5. What are your achievements?

Q6. Do you have any question to ask?

For this question, the answer should not about your salary and money matter. It must be like.. Please tell me about the training that i am given during the training period and when shall i join.. this gives the positive impression.

Q7. How would you manage stress at job?

I would see to that i meet up the deadlines on time and if possible even earlier than the deadlines.... so i wouldn't have to feel the stress.

(or)

When i start to feel stress coming on, immediately try relaxing the muscles and fill my mind with thoughts of peace, tranquility, confidence, strength, happiness. Repeat these and other calming words to myself now and again. Take notice of, and enjoy my surroundings all through the day. Look at, listen to, smell the limitless variety of things natural everywhere

Q8. where do you see your self after three years?

During the next two years I will enhance my skills as a software developer and after that I will plan to reach at the top managerial level in the next 5 years.

(or)

i am a fast learner,i would see myself as a project leader in the next three years .

Q9.Why you are applying for this post? or What qualities do you have for applying for this job?

i apply for this post becoz i have a selfconfidence.

To help solve a difficult problem or to cut down on worrying about making a decision, analyze the situation, determine what must be done and carry it out in our company.

Q10.As you are a Non-IT student why are you preferring IT field only?Please give me valuable suggestions

INTERVIEW TIPS:

Entering the room

Prior to the entering the door, adjust your attire so that it falls well.

Before entering enquire by saying, "May I come in sir/madam".

If the door was closed before you entered, make sure you shut the door behind you softly.

Face the panel and confidently say 'Good day sir/madam'.

If the members of the interview board want to shake hands, then offer a firm grip first maintaining eye contact and a smile.

Seek permission to sit down. If the interviewers are standing, wait for them to sit down first before sitting.

An alert interviewee would diffuse the tense situation with light-hearted humor and immediately set rapport with the interviewers.

Enthusiasm

The interviewer normally pays more attention if you display an enthusiasm in whatever you say.

This enthusiasm come across in the energetic way you put forward your ideas.

You should maintain a cheerful disposition throughout the interview, i.e. a pleasant countenance hold s the interviewers interest.

Humor

A little humor or wit thrown in the discussion occasionally enables the interviewers to look at the pleasant side of your personality,. If it does not come naturally do not contrive it.

By injecting humor in the situation doesn't mean that you should keep telling jokes. It means to make a passing comment that, perhaps, makes the interviewer smile.

Eye contact

You must maintain eye contact with the panel, right through the interview. This shows your self-confidence and honesty.

Many interviewees while answering, tend to look away. This conveys you are concealing your own anxiety, fear and lack of confidence.

Maintaining an eye contact is a difficult process. As the circumstances in an interview are different, the value of eye contact is tremendous in making a personal impact.

Be natural

Many interviewees adopt a stance which is not their natural self.

It is amusing for interviewers when a candidate launches into an accent which he or she cannot sustain consistently through the interview or adopt mannerisms that are inconsistent with his/her personality.

Interviewers appreciate a natural person rather than an actor.

It is best for you to talk in natural manner because then you appear genuin

QUESTIONS TO ASK TO HR:

1. What kinds of assignments might I expect the first six months on the job?
2. How often are performance reviews given?
3. Please describe the duties of the job for me.
4. What products (or services) are in the development stage now?
5. What are your growth projections for next year?
6. Does your company encourage further education?
7. Do you offer flextime?
8. What is the usual promotional time frame?
9. Does your company offer either single or dual career-track programs?
10. What do you like best about your job/company?
11. Do you fill positions from the outside or promote from within first?
12. Is this a new position or am I replacing someone?
13. May I talk with the last person who held this position?
14. What qualities are you looking for in the candidate who fills this position?
15. What skills are especially important for someone in this position?
16. What characteristics do the achievers in this company seem to share?
17. Who was the last person that filled this position, what made them successful at it, where are they today, and how may I contact them?
18. Will I have the opportunity to work on special projects?
19. Where does this position fit into the organizational structure?
20. What is the next course of action? When should I expect to hear from you or should I contact you?

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