QUANTITATIVE ABILITY

Q1. In a kilometer race, if A gives B a 40 m start, A wins by 19 s. But if A gives B a 30 s start, B wins by 40 m. Find the time taken by B to run 5,000 m?

a. 150 s   b. 450 s   c. 750 s   d. 825 s

Q2. Pipe A takes 16 min to fill a tank. Pipes B and C, whose cross-sectional circumferences are in the ratio 2:3, fill another tank twice as big as the first. If A has a cross-sectional circumference that is one-third of C, how long will it take for B and C to fill the second tank? (Assume the rate at which water flows through a unit cross-sectional area is same for all the three pipes.)

a. 66/13   b. 40/13   c. 16/13   d. 32/13

Q3. Three consecutive whole numbers are such that the square of the middle number is greater than the product of the other two by 1. Find the middle number.

a. 6   b. 18   c. 12   d. All of these

Q4. The arithmetic mean of 2 numbers is 34 and their geometric mean is 16. One of the numbers will be

a. 4   b. 16   c. 18   d. 12

Q5. If x% of a is the same as y% of b, then z% of b is :

a. (xy/z)% of a   b. (yz/x)% of a   c. (xz/y)% of a   d. None of these

Q6. The letters of the word WOMAN are written in all possible orders and these words are written out as in a dictionary, then the rank of the word 'WOMAN' is

a. 117   b. 120   c. 118   d. 119

Q7. What least number must be subtracted from 9400 to get a number exactly divisible by 65?

a. 40   b. 20   c. 80   d. none of these

Q8. If 2505 / 0.5 = 5010 then 25.05 / 0.5 = ?

a. 5.010   b. 50.10   c. 501.0   d. None of these

Q9. Which pair of rational numbers lie between 1/5 and 2/5 -

a. 262/1000, 275/1000   b. 362/1000, 562/1000

c. 451/1000, 552/1000   d. 121/1000, 131/1000

Q10. What is the value of the following expression: 2 log10 5 + log10 4 ?

a. 2   b. 2.5   c. 3   d. None of these

Q11. If x increases linearly, how will a-x behave (a>1) ?

a. Increase linearly   b. Decrease linearly

c. Increase exponentially   d. Decrease exponentially

Q12. What is the probability of getting the sum 5 in two throws of the dice?

a. 1/12   b. 1/5   c. 1/9   d. None of these

LOGICAL ABILITY

Q1. The question shows a pair of words in which the first is related to the second in some way. It is followed by a single word which bears a similar relation to one of the given alternatives. Find the correct alternative to complete the analogy.

Melt: Liquid:: Freeze: ?

a. Ice   b. Condense   c. Solid   d. Crystal

Q2. Fill in the blank Guilt is to Past as Hope is to ……

a. Present   b. Future   c. Today   d. Despair   e. Hopeless

Q3. From the given choices select the odd man out:

a. Bird   b. Kite   c. Crow   d. Pigeon   e. Sparrow

Q4. Find the missing pattern

BOQD: ERTG:: ANPC : ?

a. DQSF   b. FSHU   c. SHFU   d. DSQF

Q5. Find the missing number 5: 24:: 8:?

a. 65   b. 63   c. 62   d. 64

Q6. From the given choices select the odd man out

a. DFHEG   b. TWXUV   c. OQSPR   d. JLNKM

Q7. If HARD is coded as 1357 and SOFT is coded as 2468, what will 21448 stand for?

a. SHAFT   b. SHORT   c. SHOOT   d. SHART

Q8. Find the next number in the series

1, 6, 13, 22, 33, ……

a. 44   b. 45   c. 46   d. 47

Q9. The question contains some statements followed by some conclusions. Decide which of the given conclusions logically follow from the given statements, disregarding commonly known facts.

Statements:

I) All tomatoes are red.

II) All grapes are tomatoes.

Conclusions:

I) All grapes are red.

II) Some Tomatoes are grapes.

a. Only conclusion I follow.

b. Only conclusion II follows.

c. Neither I nor II follows

d. Both I and II follow.

e. Either I or II follows

Q9. Old woman's son is my daughter's uncle, and then what relation has the old woman to me?

a. Sister   b. Mother   c. Grandmother   d. Mother – in – law

Q10. Ramu was facing east. He walked 4 km forward and then after turning to his right walked 6 km. Again he turned to his right and walked 7 km. After this he turned back. Which direction was he facing at the time?

a. East   b. North   c. South   d. West   e. North-East

Q11. Raman is not wearing purple and Aman is not wearing black. Raman and Sahil wear different colours. Avinash alone wears green. What is Sahil's colour, if all four of them are wearing different colours.

a. Green   b. Black   c. Purple   d. Can't Say

Q12. The question is followed by two arguments numbered I and II. You have to decide which of the arguments a strong argument is and which a weak argument.

Statement:

Should a total ban be put on trapping wild animals?

Arguments:

I. Yes, Trappers are making a lot of money.

II. No, bans on hunting and trapping are not effective.

a. Only argument I is strong.

b. Only argument II is strong.

c. Either I or II is strong.

d. Neither I nor II is strong.

e. Both I and II are strong

Q13. The question contains a statement followed by two Assumptions I and II. Find out which assumption(s) is implicit.

Statements:

Vitamin E tablets improve circulation; keep your complexion in glowing condition.

Assumptions:

I. People like glowing complexion.

II. Complexion becomes dull in the absence of circulation.

a. Only assumption I is implicit

b. Only assumption II is implicit

c. Both assumption I and II are implicit.

d. Neither assumption I nor II is implicit

Q14. Study the statement(s) and the conclusions and select the correct option.

Statement: No country is absolutely self – dependent these days.

Conclusions: I. It is impossible to grow and produce all that a country needs.

II. Countrymen in general have become lazy.

a. Only Conclusion I follow

b. Only Conclusion II follows

c. Both the conclusion I and II follow

d. Either conclusion I or II follows

e. Neither conclusion I nor II follows

Q15. In the question a statement is followed by some courses of action. A course of action is a step or administrative decisions to be taken for improvement, follow-up, or further action in regard to the problem, policy, etc. You have to assume everything in the statement to be true and then decide which of the given suggested course(s) of action logically follows for pursuing.

Statement: 'The World Bank has approved a $ 300 million loan to finance a project to construct coal ports by Madras Port Trusts.

Courses of Action:

I. India should take financial help from other international financial institutions to develop such ports in other places.

II. India should not seek any help from the international financial institutions.

a. Only I follow

b. Only II follows

c. Either I or II follows

d. Neither I nor II follows

e. Both I and II follow.

(Optional module)

Section 4: Computer Programming Principles and Applications

Q1. A 8-bit signed integer has the following range:

a. 0 to 255   b. -128 to 127   c. -255 to 254   d. 0 to 509

Q2. What will be the output of the following code statements?

integer x = 34.54, y = 20, z = -5

print (y > 50 AND z > 10 or x > 30)

a. 0   b. 1   c. -1   d. 10

Q3. Pankaj makes a program to print the product of cubes of the first 10 whole numbers. She writes the following program:

integer x = 0 // statement 1

integer sum = 0 // statement 2

while (x < 10) // statement 3

{

sum = x*x*x // statement 4

x = x + 1 // statement 5

}

print sum // statement 6

Is her program correct? If not, which statement will you modify to correct it?

a. No error, the program is correct.

b. Statement 1

c. Statement 4

d. statement 6

Q4. I have a problem to solve which takes as input a number n. The problem has a property that given the solution for (n-1), I can easily solve the problem for n. Which programming technique will I use to solve such a problem?

a. Iteration

b. Decision-making

c. Object Oriented Programming

d. Recursion

Q5. Given:

integer x = 40, y = 35, z = 20, w = 10

Comment about the output of the following two statements:

print x * y / z – w

print x * y / (z – w)

a. Differ by 80   b. Same   c. Differ by 50   d. Differ by 160

Q6. Data and function in which area of a class are directly accessible outside the class?

a. Public   b. Private   c. Protected   d. None of these

Q7. Here is an infix notation: ((A+B)*C-(D-E))^(F+G) Choose the correct postfix notation of the above from the given options.

a. AB+CD*E–FG+^   b. AB+C*DE–FG+^

c. AB+C*DE-FG-+^   d. A+BC*DE-FG-+^

Q8. If the depth of a tree is 3 levels, then what is the size of the Tree?

a. 2   b. 4   c. 6   d. 8

Q9. One of the following options is a form of access used to add and remove nodes from a queue.

a. LIFO   b. FIFO   c. Both LIFO and FIFO   d. None of these

Q10. What is the time complexity of adding three matrices of size NXN cell-by-cell?

a. O(N)   b. O(N^2)   c. O(N^3)   d. None of these

Q11. Piggy backing is a technique for

a) Flow control   b) Sequence   c) Acknowledgement   d) retransmission

Q12. In OSI, terminal emulation is done in

(a) Sessions layer   (b) application layer   (c) presentation layer   (d) transport layer

Q13. Bit parity check, when performed on a byte, can catch

a) Odd number of errors   b) even number of errors

c)any number of errors   d)none of the above

Q14.In signed magnitude notation what is the minimum value that can be represented with 8 bits

(a) -128   (b) -255   (c) -127   (d) 0

Q15. For 1 MB memory, the number of address lines required

(a) 11   (b)16   (c)20   (d) 24

Q16. For a 25MHz processor, what is the time taken by the instruction which needs 3 clock cycles,

(a)120 nano secs   (b)120 micro secs   (c)75 nano secs   (d)75 micro secs

Q17. Semaphore is used for

(a) Synchronization   (b) dead-lock avoidance

(c) both a and b   (d) none

Q18. Which of the following involves context switch?

(a) System call   (b) privileged instruction   (c) floating point exception   (d) all the above (e) none of the above

Q19.Virtual address are translated to physical address by

(a)the process   (b)operating system   (c)MMU   (d)All of the above   (e) None of the above

Q20. OLE is a mechanism

a) In UNIX for network communication

b) In INTERNET for communication between nodes

c) For communication between processes in a NT system

d) used as a network layer protocol in NT & Windows systems

Q21. An internet IP address of a node

a) has to be unique only for the domain of the node

b) has to be unique in the node's sub-network

c) has to be unique in the country in which the node is present

d) none of the above

Q22. There is an employee table with key fields as employer no. data in every n'th row are needed for a sample. Which of the following queries will get required results?

a) select A employee no. from employee A , where exists (select (max (emp_no)))from employee B where A employee no. >= B employee having (count(*) mod n)=0

b) select employee no. from employee A, employee B where A.employe no.>=B employ no.group by employee no. having(count(*) mod n)=0)

c) both a& b

d) none of the above

Q23. Type duplicates of a row in a table customer with non unique key field customer no. can use

a) delete from customer where customer no. exists (select distinct customer no. from customer having count)

b) delete customer a where customer no. in (select cust no from customer b where a.cust_no=b.cust_no) and

a.rowid>b.rowid

c) delete customer a where custermor no. in (select customer no. from customer a, customer b group by a.cust_no having (count(*)>1) and a.rowid>b.rowid);

d) none of the above

Q24.which of the following is a feature of the ANSI C language and not present in Java?

a) Forward referencing

b) Variable length argument lists

c) Volatile modifier

d) None of the above

Q25.which of the following about the following two declarations is true

i) int *F();   ii)int (*F)();

a)Both are identical

b) The first is a correct declaration and second is wrong

c) The first declaration is a function returning a pointer to an integer and the second is a pointer to a function returning int

d)Both are different ways of declaring pointer to a function

Q26.what are the values printed by the following program?

#define dprintf(expr) printf(#expr=%d\n",expr)

main()

```
{

int x=7;

int y=3;

dprintf(x/y);

}
```

a)#2=2   b)expr=2   c)x/y=2   d)none

Q27.which of the following is true of the following program

```
main ()

{

char *c;

int *ip;

c=(char *) malloc(100);

ip=(int *)c;

free(ip);

}
```

a) The code functions properly by releasing all the memory allocated

b) Results in compilation error as a pointer of various types cannot be equated

c) The program ties to free more memory than allocated and results in run time error

d) Works well except when the machine runs low on memory and malloc is unabel to allocate the memory

Q28.output

```
main()

{

int I;

char *p;

i=0×89;
```

p=(char *)i;p++;

printf("%x\n"p);

}

a)0×8c   b)0×4566788A   c)0×8A   d)0×8B   e)none

Q29. Which of the following is not an ANSI c language keyword?

a)volatile   b) function   c) default   d) const   e) void

Q30.when an array is passed as parameter to a function, which of the following statement is correct

a) the function can change values in the original array

b) in c parameters are passed by value . the function cannot change the original value in the array

c)it results in compilation error. Array cannot be passed as a parameter to a function

d) results in runtime error when the function tries to access the elements in the array

Q31.the type of the controlling expression of a switch statement cannot be of the type

a)int   b)char   c)short   d)float   e)none

Q32.output:

main()

{

int n=2;

printf("%d %d\n"++n,n*n);

}

a)3,6   b)3,4   c)2,4   d)cannot determine

ENGLISH

In the following question select the word which is OPPOSITE in the meaning of the given word.

Q1. INDISCREET

a. reliable   b. honest   c. prudent   d. stupid

Q2. SOLICITUDE

a. insouciance   b. ingenuity   c. propriety   d. austerity

Q3. In the sentence there is a bold word or phrase. One of the words or phrases given in the options conveys almost the same meaning as the bold word or phrase in the sentence. Select that option which is nearest in meaning.

It is preposterous on your part to look for a job without first completing your education.

a. Wise   b. Imperative   c. Advisable   d. Most admirable   e. Very absurd

In the following questions, fill in the blank space.

Q4. The success that he has gained, though striking enough, does not, however, commensurate . . . . the efforts made by him.

a. About   b. From   c. With   d. beside   e. Over

Q5. Vinod took his meals after he . . . .

a. Had completed his work   b. Had been completing his work   c. was completing his work
d. Had been completed his work   e. Had got completed his work

In the following questions, select the word or phrase that is similar in meaning to the given word.

Q6. Nonchalance

a. Neutrality   b. Indifference   c. All-knowing   d. Ignorance   e. Untimeliness

Q7. Conceal

a. Hide   b. Seal   c. Ceiling   d. Horrifying

Q8. Read the sentence to find out whether there is any grammatical error in it. The error, if any, will be in one part of the sentence. The letter of that part is the answer. If there is no error, the answer is 'D'. (Ignore – the errors of punctuation, if any)

(A) The whole thing moves/ (B) around the concept of building a small dynamic/(C) organization into a larger one./(D) No error.

a. (A)   b. (B)   c. (C)   d. (D)

Q9. In the question a part of the sentence is italicized. Alternatives to the italicised part are given which may improve the sentence. Choose the correct alternative. In case no improvement is needed. Option 'D' is the answer. She gave most of her time to music.

a. spent   b. lent   c. devoted   d. No improvement

Q10. The given sentences when properly sequenced form a coherent paragraph. Each sentence is labelled with a number. Choose the most logical order of sentences from among the four given choices to construct a coherent paragraph.

HR INTERVIEW

1. Tell me something about yourself?

2. About software project management (some basics) ?(This question based on your area of interest)

3. Oracle9i and 10g?

4. XML?

5. Basics of java?

6. Advance technologies in java?

7. If I won't select so what will be the reasons?

8. If you don't know any technology and I will give you work based on that tech. How will u do?

9. Difference b/w XP and vista?

10. Your long term and short term goals?

11. Strengths?

12. Sometimes about your project…work

13. Some questions from your resume directly