

Aptitude

Questions = 50 ; time limit = 50 minutes. no negative marking. Offline (paper & pen) test

Section1- English, 15 questions

Directions 1-5 : Pick out the most effective word from the given words to fill in the blank to make the sentence meaningfully complete

1. 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 hominid.

- a. elusive...objectivity
- b. establish...courtesy
- c. demonstrate .. neutrality
- d. ineluctable...cooperation

ANS: (A)

2. 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)

3. The storehouse was infested.....rats.

A) by B) of C) with D) in

Ans: C

4. Please distribute these sweets.....the children

A) in B) between C) amid D) among

Ans: D

5. This custom seems to have originatedand East European country

A) in B) from C) by D) with

Ans: A

Directions 6-10: The following questions, consist of two words each that have a certain relationship to each other, followed by four lettered pairs of words. Select the lettered pair that has the same relationship as the original pair of words.

6. OFFHAND : PREMEDITATION : :

a. upright : integrity b. aboveboard : guile c. cutthroat : competition d. backward : direction

ANS: (b)

7. POLTERGEIST : APPARITION::

a. dwarf : stature b. witch : familiar c. ogre : monster d. sorcerer : spell

ANS: (c)

8. AVER : AFFIRMATION : :

a. proclaim: objection b. denounce : defiance c. refuse : distress d. demur : protest

ANS. (d)

9. Duralumin : Aircraft

A) Brass : Alloy B) Stone : Sculptor C) Iron : Steel D) Bronze : Statue

Ans: D

10. Cool : Frigid

A) Livid :Lurid B) Pool : Placid C) Tepid : Torried D) Lack : Abundant

Ans : C

Direction 11-13 : In each of the following questions, find out which part of the sentence has an error. if there is no mistake the answer is 'no error'

11. If I was you / I would have / terminated his services then and there / No error

A B C D

Ans : A

12. as soon as I will reach Bombay / I will send / you the books / you have asked for / No error

A B C D E

Ans: A

13. Our conception of / what should a science of mental life be / has changed considerably since James' time / No error

A B C D

Ans : B

Directions 14-15 : In each of the following questions, a sentence has been given in Active (or passive) voice. Out of the four alternatives suggested select the one which best express the same sentence in Passive (or Active) Voice.

14. Do you imitate others ?

A) Are others imitated by you ?

B) Are others being imitated by you ?

C) Were others being imitated by you ?

D) Have others been imitated by you ?

Ans : A

15. I saw him conducting the rehearsal.

A) He was seen conducting the rehearsal

B) I saw the rehearsal to be conducted by him

C) He was seen by me to conduct the rehearsal

D) I saw the rehearsal being conducted by him

Ans : D

SET -2

The questions 1-2 are based on the following data

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.

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

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

Ans. (c)

2. If D is adjacent to F then who is adjacent to C?

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

Ans.(d)

3. Complete the sequence A, E, I, M, Q, U, __, __

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

Ans.(b)

4. If the letters of the word "rachit" are arranged in all possible ways and these words are written out as in a dictionary, what is the rank of the word "rachit".

- (a) 485

- (b) 480
- (c) 478
- (d) 481

Ans. (d)

5. Ravi's salary was reduced by 25%. Percentage increase to be effected to bring the salary to the original level is

- (a) 20%
- (b) 25%
- (c) $33 \frac{1}{3}\%$
- (d) 30%

Ans. (c)

6. A and B can finish a piece of work in 20 days .B and C in 30 days and C and A in 40 days. In how many days will A alone finish the job

- (a) 48
- (b) $34 \frac{2}{7}$
- (c) 44
- (d) 45

Ans. (a)

7. How long will a train 100m long travelling at 72kmph take to overtake another train 200m long travelling at 54kmph ?

- (a) 70sec
- (b) 1min
- (c) 1 min 15 sec
- (d) 55 sec

Ans. (b)

8. What is the product of the irrational roots of the equation $(2x-1)(2x-3)(2x-5)(2x-7)=9$?

- (a) $\frac{3}{2}$
- (b) 4
- (c) 3

(d) $\frac{3}{4}$

Ans. (a)

9. The total population of a village is 5000. The number of males and females increases by 10% and 15% respectively and consequently the population of the village becomes 5600. what was the number of males in the village ?

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

Ans : C

10. Fresh fruit contains 68% water and dry fruit contains 20% water. How much dry fruit can be obtained from 100 kg of fresh fruits ?

A) 32 kg B) 40 kg C) 52 kg D) 80 kg

Ans : B

11. If "segment" is coded as rffndou, then "ritual" is coded as

- (a) shutbm
- (b) qjutbk
- (c) qhutbk
- (d) qhubtk

Ans. (c)

12. If "football" is "cricket" , "cricket" is "basketball" , "basketball" is "volleyball" , "volleyball" is "khokho" and "khokho" is cricket, which is not a ball game?

- (a) cricket
- (b) football
- (c) khokho
- (d) basketball

Ans. (a)

13. Which of the following is a recursive set of production

- (a) $S \rightarrow a|A, A \rightarrow S$
- (b) $S \rightarrow a|A, A \rightarrow b$
- (c) $S \rightarrow aA, A \rightarrow S$
- (d) None of these

Ans. (c)

14. 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: $(s-60)/4$

15. One ship goes along the stream direction 28 km and in opposite direction 13 km in 5 hrs for each direction. What is the velocity of stream?

Ans: 1.5 kmph

Section3-technical ,20 questions

1. What sorting algos have their best and worst case times equal ?

Ans. $O(n \log n)$ for mergesort and heap sort

2. What page replacement algorithm has minimum number of page faults ?

Ans. Optimality algorithm

3. What is the use of virtual base class in c++

Ans. Multiple lines between derived classes.

4. Assignment operator targets to _____

Ans. l-value

5. 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. $3m + n$

6. In round robin scheduling, if time quantum is too large then it degenerates to

Ans. FCFS

7. What data structures you should use for dictionary searching and it should be capable of doing spell check also ?

Ans: Hashing

8. What is the value of 121 base 4 + 84 base 16 ?

Ans : 2130

9. When the fn. is called where the return address is stored?

Ans. stack

10. 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

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

Ans: b

11. Virtual memory size depends on

[a] address lines [b] data bus

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

Ans : a

12. Critical section is

Ans: statements which are accessing shared resources

13. In which layer ROUTING is performed ?

Ans. Network Layer

14. What is the output of the following code snippet

```
main()
{
printf(5+"Fascimile");
}
```

Ans. mile

15. Which one has no L-Value

A a[i] B. i C. 2 D. *(a+i)

Ans . C

16. Which is true for binary search ?

A Traversal scheme B. Greedy algorithm

C. Divide and conquer algorithm D. none of these

Ans. C

17. What is the protocol used for getting the physical address by supplying IP address of a node ?

A. ARP B. RARP C. BOOTP D. DHCP

Ans. A

18. Which is not an OS?

a) Win 3.1 b) Win 95

c) Win 98 d) Win 2000

Ans. a

19. Tcp/ip is

a) connectionless b) connection oriented c) both a & b d) none

Ans: b

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

(a) Quick Sort (b) Heap Sort (c) Merge Sort (d) Insert Sort

Ans. (a)