
DSQ PAPER.

Technical aptitude test

1. the 2's complement number of 110010 is

ans; none of those

2.Truth table of a logic function

ans: displays all its input output possibilities

3.The process of varying one signal according to the pattern provided by another signal is

ans:modulation

4.The octal equivalent of hexa number 123 is

ans:443

.Determine how many times the given loop is executed

5.m=3 while (m<18) do {m=m+2;m=m-1 }

ans:15

6.m=1;a=30;while (m>1) do {m=m+1;a=a-1;}

7.m=1;a=30;while (e*m-5<a) do {m=m+1;a=a-2}

ans:9

in questions 8 to 12 find the values of a and b at the end of the execution of the program segment

8.a=2;b=1;x=1;while(x<=4)do {a=a+b;x=x+1 }

ans:(5,1)

9.a=1;b=2;x=1 while (x<=5)do {b=a+b;x=x+1;}

ans:(1,6)

10.a=0;b=0;x=1;while (x<=4){a=a+x;b=b-x;x=x+1;}

ans:(10,-10)

In questions 11-15 find the odd man out

11.address

12.cmos

13.lisp (from 11-15 these are the answers dont confuse)

14.mouse

15.csh

16.The complexity of bubble sort is $O(n^2)$, then kequals

ans:2

17.In BCD,the decimal number 516 is

ans:10101110

18. RS 232 is standards for

ans:physical layer

19. which of the following is not true of a DBMS

ans:maintain integrity

20.the method of access used for obtaining a record from a tape is

ans:sequential

21.Which of the following is an universal gate

ans:nor

22.an ASCII text file containing 500 characters will have size approximately

ans:500bytes

23.which of the following is a vector

ans:force

- 24.The lowest attainable temperature
ans 0k
- 25.viscosity is most similar to
ans:friction
- 26.The elapsed time between the submission of the job and getting the output is
ans:seek time
- 27.the earliest calculating device still in use is
ans: abacus
- 28.an acronym for the organisation that publishes programming language standards is
ans:ANSI
- 29.Quantities used to bring fields to standard size are
ans:pixels
- 30.the base of a number system is called as
ans:radix
- 31.An 8kb computer will have addresses -----
ans:8191
- 32.Arranging data in a specific form is called
ans: sorting
- 33.A translator which reads an entire programme written in a high level language and converts it into machine language code is
ans: interpreter
- 34.a data hierarchy in ascending order is
ans:bit-byte -field-record-file-database
- 35.a computer generated output that lets programmer follow the execution of the program line by line is
- 36.data items grouped together for storage form a
37. the most dangerous aspect of computer viruses is their ability to
ans: change system memory
- 38.a distributed data processing configuration in which all activities must pass through a centrally located computer is called a
ans: ring network
- 39.communication circuits that transmit data in both directions but not at the same time are operating in
- 40.which of the following is not an application software
ans:unix
- 41.For which of the following computer applications is real time processing not essential
ans;
- 42.a data structure with one to many relationship is a
ans:tree
43. which of the following hardware components is most important to operation of a database management system
ans:high speed,large capacity disk
44. computer viruses can spread from one system to another by means of
ans:all the above
45. a front end processor is usually used in
ans: multi processing
- 46.a radioactive material of mass 16 grms in 10 years due to radiation. how many years will it take for the material to attain a mass of 1 gm
ans:30

ans: all the above

[illegible]

10.squash

16. FIND THE NEXT letter in the series C,O,M,P,U,T,E,---ANS:R

20.find the next number in the series 0,3,8,15,,24,48,63--ans:80

ans) 2-R

23. -----is to animal as ----is to plants
ans)blood-sap (4-S)

25. -----is to myopia as long sight is to -----
(ans)

27) -----is to christian as synage gue is to -----
ans)church-Jaws

29) -----is to sentence as act is to-----
ans) paragraph -scene

31) -----is to london as yamuna is to -----
ans)thames-delhi

33) ----- is to proton as cathode is to-----
ans)electron -anode

35) -----is to proofread as account is to -----
ans)proof -audit

[illegible]

9. the ages of two brothers are now in the ratio 4:3 but fifteen

years ago, they were in the ratio 3:2 the present age are

ans:45

10. if z is the arithmetic mean between x and y , then the value of $x/(x-z) + y/(y-z)$

is ans:2

11. the least integer n for which the sum $1+3+5+\dots+(2n+1)$ exceeds

9999 is ans:100

12. the number of subsets of a set S is 64, then S has

a: 8 b:6 c:4 d: 16 elements

13. if n is a natural number, then $n(n+1)(n+5)$ is

ans: a multiple of 6

14. a sphere circumscribes a cylinder. then the ratio of the surface

area of the sphere to the curved surface area of the cylinder is

ans:3:2

15. $ax/b + b = bx/a + a, a/b$. then x equals

ans: $ab/(a+b)$

16. if $\log_5(5x) = 1$, then x equals

ans:

17. which of the following triplets cannot be sides of a right angled

triangle

ans: $(p-q), (p+q), \sqrt{p+q}$

18. in what time will RS. 3200 amount to RS. 3528 at 5% annum compound interest

ans:2 years

19. if the price of orange falls by 20% one can buy 5 dozens more

for RS 300, THEN THE ORIGINAL price per dozen is

ans:15

20. the triangle formed by $(0,0), (0,4), (3,8)$ is

ans: right angled triangle

21. The area of parallelogram $(0,0), (0,4), (3,8)$ is

a:12 b:6 c:24 d:25

22. A man can do a piece of work in 9 days, a woman can do $3/4$ as

much work as a man in one day and a boy in twice the time that a man

takes. How many days will 2 men, 3 women and 5 boys together take to do the work?

ans: $4/3$ days

23. The probability of getting at least one head in a single throw of

three coins is

ans: $7/8$

24. A problem is given to two students A and B whose respective

chances of solving it are $1/2$ and $2/3$. IF BOTH OF THEM TRY TO SOLVE THE

PROBLEM INDEPENDENTLY, THE PROBABILITY that the problem will be solved is

ans: $5/6$

25. In a single throw of 3 dice, the chance of throwing a total of 15

is

ans: a. $1/15$ b. $5/216$ c. $1/3$ d. $1/4$

26. $(3x-2)/(x-2) < 0$, then

ans: $2/3 < x < 2$

40. P and Q are positive integers with their average 15, find how

many different values can one take

ans:29

41. The hands of clock coincide after every 66 min of correct time.

How much does the clock gain or lose in a day.

ans: gains 11 min

42. If x to the power of 5 = 4 and x to the power of 4 = $5/y$, then x equals

ans: $4y/5$

43. if x, y, z are natural numbers, and if $2x=y$ and $y=3z$, which of the following numbers could be $x+y+z$

ans: 44

44. The pipes can fill a cistern in 1.5 hours and 2 hours respectively. A waste pipe can empty a full cistern in 3 hours. If the cistern is empty and all three pipes are opened together, in how many min will the cistern be half full

ans: 36

45. The members $a, b, 12$ form a geometric progression and the nos $a, b, 9$ form an arithmetic progression. find the value of $a+b$

ans: 9 or 45

46. In a group of 15, 7 can speak spanish, 8 can speak french, and 3 can speak neither. How much of the group can speak both french and spanish

ans: $2/3$

47. Oranges are bought at 11 for Rs. 10 and sold at 10 for Rs. 11 the profit is

ans: 21%

48. If $x/y = 2/3$ then y^2/x^2 is equal to

ans: $9/4$

49. the coordinates of A, b, c are respectively $(2,3), (4,4)$ AND $(0,-2)$. If $abcd$ is a parallelogram. The coordinates of D are

ans: $(-1,-3)$

50. If n is odd which of the following statements is true

ans: 1. n is odd 2. n^2 is odd 3. n^2 is even

a. 1 only b. 2 only c. 3 only d. 1 & 2 only

ALL THE BEST