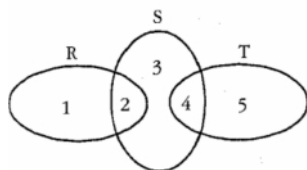


1. A survey is conducted to find the most popular food among eighth-grade students at a school. Which of the following sampling methods would give the most accurate results?

- A. Choose every fourth student in an alphabetical list of all eighth-grade students
- B. Choose every eighth-grade teacher and every eighth-grade parent
- C. Choose every fourth student in an alphabetical list of all eighth-grade girls
- D. Choose every eighth-grade student athlete

2. In the given diagram, R represents businessmen, S represents rich men and T represents honest men. Which number will represent honest rich men?



- A. 2
- B. 3
- C. 5
- D. 4

3. Find the missing symbol $(8 \times 8) \div (7 \times 7) = 15$

- A. +
- B. -
- C. \times
- D. \div

4. Gaurav, Prahat, Ravi, and Saloni each grew a crystal for a school project. They measured and recorded the heights of their crystal in millimeters, as shown below.

Student	Height (mm)			
	Start	Day 2	Day 4	Day 6
gaurav	0	2	6	12
prabhat	0	1	2	6
Ravi	0	4	8	12
saloni	0	4	12	4

Which student's crystal grew proportionally over time?

- A. Gaurav
- B. Prabhat
- C. Ravi
- D. Saloni

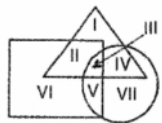
5. If in a certain code 'Master' is written as 'Samret', then how will 'carrot' be written in the same code?

- A. Armotr
- B. Rcator
- C. Ractor
- D. Rcatro

6. The triangle, square and circle shown in the figure respectively represent the urban, hard- working and educated people.

Which one of the areas marked

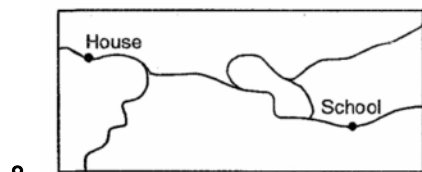
I -VII is represented by the urban educated who are not hard-working?



- A. I
- B. II
- C. III
- D. IV

7. Different designs can be made by placing a maximum of nine matchsticks. Which is the design that cannot be made at all?

- A.
- B.
- C.
- D.



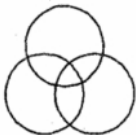
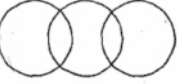
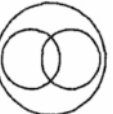
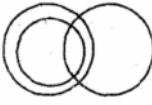
On the map shown above, 1 inch represents 50 miles. The distance between house and school is 2.5 inches. What is the actual distance between them?

- A. 2.5 miles
- B. 20 miles
- C. 52.5 miles
- D. 125 miles

9. If 10th day after 15th of the month be Thursday, what day was the 1st of the same month?

- A. Saturday
- B. Tuesday
- C. Monday
- D. Sunday

10. Which one of the following diagrams correctly represents the relationship among tennis fans, cricket players and students?

- A. 
- B. 
- C. 
- D. 

11. 10 pencils and 15 erasers cost as much as 15 pencils and 10 erasers. How do you compare the cost of the two?

- A. Pencils are as costly as erasers
 B. Pencils are costlier than erasers
 C. Erasers are costlier than pencils
 D. Nothing can be found from the given data

12. What is the next number in this sequence?

15 60 240 960 2

- A. 1,240
 B. 1,275
 C. 1,920
 D. 3,840

13. A club is planning two trips. Three members in the club are Mr. I, Mr. J and Mrs. K. Each club member will go on only one trip. Also either Mr. I or Mr. J, but not both, goes on the first trip. Either Mr. J or Mrs. K, but not both, will go on a given trip. More people go on the first trip than the second trip. Which of the following must be true?

- A. Mrs. K and Mr. I go on the first trip
 B. Mr. I and Mrs. K go on the second trip
 C. Mrs. K goes on the second trip
 D. Mrs. K does not go on the first trip

14. Look for the pattern in the sequences of numbers given below.

2, 4, 6, 8, 10

7, 14, 21, 28, 35

11, 22, 33, 44, 55

Each sequence is an example of which kind of numbers?

- A. Even numbers
 B. Multiples

- C. Primes
- D. Odd numbers

15. A hunter aims his gun at a point between the eyebrows of a monkey sitting on the branch of a tree. Just as he fires, the monkey jumps down. The bullet will

- A. Hit the monkey at the point aimed
- B. Hit the monkey below the point aimed
- C. Hit the monkey above the point aimed
- D. Miss the monkey altogether

16. The antivirus softwares that are installed in RAM and continue to operate in the background while other software applications are running are

- A. Heuristic detectors
- B. Memory resident
- C. TSR's
- D. Checksum

17. Microsoft Power Point is a kind of

- A. System software
- B. Development software
- C. Application software
- D. Utility program

18. A file that simply contains characters such as word processing application normally have the extension

- A. .DOC
- B. .TXT
- C. .BMP
- D. .EXE

19. The unit of time used to measure the speed of RAM is -

- A. Nanobytes
- B. Nanopixels
- C. Nanoseconds
- D. Nanomoles

20. When a computer is released to do other things while still printing, it is called.....

- A. Pooling up
- B. Spooling
- C. Printing
- D. Pretty printing

21. A central computer surrounded by one or more satellite computers is called a

- A. Bus network
- B. Ring network
- C. star network
- D. All of these

22. Software means

- A. Program
- B. Operating System
- C. Applications program
- D. Both (B) and (C)

23. Match the following

I.	II.
(Technology)	(Name of Computer)
p. Vacuum Tubes	(i) IBM 360
q. Integral Circuits	(ii) ATLAS
r. Transistors	(iii) ICL 2900
s. Very large scale integration	(iv) ENIAC

- A. p - (iv),
q - (i),
r- (ii),
s - (iii)
- B. p - (i),
q - (ii),
r- (iii),
s- (iv)
- C. p- (ii),
q- (iii),
r- (iv),
s- (i)
- D. p- (iii),
q- (ii),
r- (iv),
s-(i)

24. The series of codes, represented by numbers (ones and zeros) used to communicate directly with the internet instructions of the PC's microprocessor is

- A. Machine language
- B. High level language
- C. Assembly language
- D. Programming language

25. An operator placed the diskette over the ventilations slot provided on the top of the computer cabinet. The computer started behaving erratically. It could be due to

- A. Electromagnetic interference
- B. Rise in temperature
- C. Shorting of some connections

D. Pollution of data

26. Which is not an application of computers?

- A. Computers in submarines
- B. Computers for air reservations
- C. Computers for reservations in railways
- D. Computers for driving buses

27. The viruses that change their appearance to avoid detection are

- A. MBR viruses
- B. DBR viruses
- C. Parasitic viruses
- D. Polymorphic viruses

28. Field that allows large blocks of text to be stored in table is

- A. Logical field
- B. Memo field
- C. Character field
- D. General field

29. Total height of a line of text including extra spacing is

- A. Height spacing
- B. Width spacing
- C. Line spacing
- D. Horizontal spacing

30. The most widely used and popular Word processor is

- A. Microsoft Excel
- B. Microsoft Access
- C. Microsoft Front Page
- D. Microsoft Word

31. DBF is an extension for the

- A. Data base file
- B. Numeric file
- C. Document file
- D. Text file

32. The information on the internet is searched using

- A. Magnifiers
- B. Search vehicles
- C. Search engines

D. Internet tools

33. Find the odd term out

- A. Decimal number system
- B. Binary number system
- C. Number system
- D. Octal number system

34. In MS Word, page setup option under file menu is used for

- A. Adjusting margins
- B. Adjusting layout
- C. Page size and orientation
- D. All of these

35. Speed of computer system is measured in terms of

- A. Bits
- B. Bytes
- C. Seconds
- D. MIPS

36. The base of a triangle is 3 units more than h , its height. Which expression represents its area?

- A. $\frac{1}{2}h(h-3)$
- B. $h(h-3)$
- C. $\frac{1}{2}h(h+3)$
- D. $h(h+3)$

37. The expression $3(6-4x)+5$ is simplified in the following steps.

Step 1 : $3(6-4x)+5 = 18-12x+5$

Step 2 : $=18+5-12x$

Step 3 : $=23-12x$

Which property was applied in step 1?

- A. Associative property
- B. Multiplicative property
- C. Commutative property
- D. Distributive property

38. In the star shape shown in figure, the sum of the angles marked at the corners A, B, C, D, E is



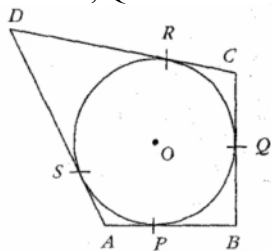
- A. 90°
- B. 135°
- C. 180°
- D. 140°

39. In a college, $\frac{1}{5}$ th of the girls and $\frac{1}{8}$ th of the boys took part in a social camp.

What fraction of the total number of students in the college took part in the camp, if the ratio of girls to the boys in 1 : 2 ?

- A. $\frac{13}{40}$
- B. $\frac{13}{40}$
- C. $\frac{3}{20}$
- D. Data inadequate

40. In the given figure the sides AB, BC, CD and DA of a quadrilateral ABCD are tangents to a circle with centre O at the points P, Q, R and S respectively. Is $AB + CD = AD + BC$?



- A. Yes
- B. No
- C. Can't say
- D. Information incomplete

41. Which number replaces the “?” in the table?

n	-3	-2	-1	0	1	2
3^n	$\frac{1}{27}$?	$\frac{1}{3}$	1	3	9

- A. -9
- B. -1
- C. $\frac{1}{9}$
- D. $\frac{1}{81}$

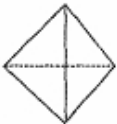

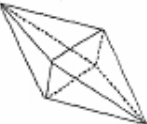

42. A's money is to B's money as 4: 5 and B's money is to C's money as 2: 3. If A has Rs. 800, C has

- A. Rs. 1000
- B. Rs. 1200
- C. Rs. 1500
- D. Rs. 2000

43. Mona gave the following description of a three-dimensional figure

- The solid has 6 faces
- The solid has 8 vertices
- The solid has 12 edges.

Which of the following figures matches Mona's description?

- A. 
- B. 
- C. 
- D. 

44. Beena bought one box of 356 beanbag toys for Rs. 180. She made a profit of Rs. 87 after selling all the toys. Each toy was sold at the same price. Use the equation given below to find t, the selling price of one toy. $356t - 180 = 87$ What was the selling price of one toy?

- A. Rs. 0.75
- B. Rs. 0.89
- C. Rs. 1.33
- D. Rs. 1.76

45. $\frac{\sqrt{2}-1}{\sqrt{2}+1} = ?$ $\frac{\sqrt{2}-1}{\sqrt{2}+1} = ?$

- A. $3 - 2\sqrt{2}$
- B. $3 + 2\sqrt{2}$
- C. $\frac{1}{\sqrt{2}}$
- D. 1.632

46. Kapil, Lily, and Maya made a table of their history quiz grades during the grading period. Which matrix best organizes the data?

Kapil	B	B	C	C	B	A	B	A	C	B	C	B
Lily	C	A	B	C	A	A	C	B	B	B	C	A

Maya	A	A	A	A	B	A	B	B	A	A	A	B
------	---	---	---	---	---	---	---	---	---	---	---	---

A.

	A	B	C
Kapil	2	6	4
Lily	4	4	4
Maya	8	4	0

B.

	A	B	C
Kapil	3	5	4
Lily	4	4	4
Maya	8	4	0

C.

	A	B	C
Kapil	2	6	4
Lily	4	4	4
Maya	8	3	1

D.

	A	B	C
Kapil	2	6	4
Lily	5	4	3
Maya	8	4	0

47. What is the value of $\frac{y^2}{5} + y^2 - 12$, when $y = 5$?

- A. 22
B. 13
C. 16
D. 18

48. What kind of answer results when a rational number is multiplied by zero ?

- A. The answer is zero
B. The answer is the original number
C. The answer depends on the original number
D. The answer is the opposite sign of the original number

49. In the questions below are given two statements, followed by 4 conclusions lettered (A), (B), (C) and (D). You have to take the two given statements to be true even if they seem to be at variance from the commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the two given statements.

Statements:

All knowledge is good.

All knowledge is difficult.

Conclusions:

- A. Some good things are difficult
B. All difficult things are knowledge
C. All good things are difficult
D. Easy things are not knowledge

50. $9^{3.04} : 9^{2.04} = ?$

- A. 1: 9
- B. 3 : 2
- C. 76: 51
- D. None of these

Yagna Innovation