Conversion of Information to data - Collection, compilation and presentation of data tables, graphs, diagrams - Analytical interpretation of data

1. Count the number of rectangles in the following figure

(A) 8
(B) 17
(C) 18
(D) 20

Answer: (C) 18.
2. The graph given below shows linear path of a car with uniform speed. The speed of the car is

(A) $60 \mathrm{Km} / \mathrm{hr}$
(B) $50 \mathrm{Km} / \mathrm{hr}$
(C) $55 \mathrm{Km} / \mathrm{hr}$
(D) $45 \mathrm{Km} / \mathrm{hr}$

Answer: (C) $55 \mathrm{Km} / \mathrm{hr}$
3. In the graph of $y=-3 x^{2}$, what is the value of ordinate when the abscissa is -2 ?
(A) 12
(B) -12
(C) $\frac{2}{3}$
(D) $\sqrt{\frac{2}{3}}$

Answer: (B) -12.
4. How many hours does a school student spend at school and doing homework from the pie diagram given below: Time spent by a school student per day ( 24 hrs ).

(A) 6 hrs
(B) 3 hrs
(C) 9 hrs
(D) 4 hrs

Answer: (C) 9 hrs.
5. Price movements in different months


Silver (Rs. per Kg)


If X represents the price of 10 gm of gold in May and Y represents the price of 1000 grams of silver in June, then the relationship between the two prices can best be expressed by the equation
(A) $Y=2 x+630$
(B) $x=2 y+630$
(C) $y / x=2.23$
(D) $3 x / y=2.39$

Answer: $(\mathrm{A}) \mathrm{Y}=2 \mathrm{x}+630$
6. There are 600 creatures in a zoo as per list below

| Creatures | Wild Animal | Birds | Other Land <br> Animals | Water <br> Animals | Reptiles |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> Creatures | 200 | 100 | 160 | 65 | 75 |

To represent this by a pie chart, the central angle of the sector of the circle representing birds is
(A) $360^{\circ}$
(B) $120^{\circ}$
(C) $60^{\circ}$
(D) $96^{\circ}$

Answer: (C) $60^{\circ}$.

Ans: c
7. How much money does a family earning Rs. 4,800 per month spend on House rent and education and on food alone respectively from the pie diagram below

(A) Rs. 1920 \& Rs. 1280
(B) Rs. 1920
(C) Rs. 1280 \& Rs. 1920
(D) Rs. 3200

Answer: (C) Rs. 1280 \& Rs. 1920
8. In which year the production of scooters of all types taken together exceeds the average annual production from the table given below:

| Year / Type | 2007 | 2008 | 2009 | 2010 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 16 | 20 | 8 | 21 | 65 |
| B | 14 | 10 | 16 | 12 | 52 |
| C | 16 | 17 | 21 | 13 | 67 |


| D | 10 | 6 | 4 | 20 | 40 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| E | 19 | 18 | 25 | 14 | 76 |
|  | 75 | 71 | 74 | 80 | 300 |

Production of scooters by a company
(A) 2010
(B) 2007
(C) 2009
(D) 2008

Answer: (A) 2010.
9. Percentage of girls in each of the colleges in shown in the figure. Total number of girls is 1800. What is the number of girls in college D ?

(A) 188
(B) 198
(C) 176
(D) 164

Answer: (B) 198
10. The sum of numbers common to two diagrams is

(A) 8
(B) 9
(C) 10
(D) 11

Answer: (D) 11.
11. From the cyclic quadrilateral find $x$

(A) 90 degree
(B) 60 degree
(C) 30 degree
(D) 20 degree

Answer: (D) 20 degree.
12. The number of teachers less than 50 years of age, from the histogram given below is

(A) 18
(B) 28
(C) 29
(D) 30

Answer: (D) 30
13. From the graph given below, find out during how many years the growth rate was below the average growth rate over the given years

(A) 3
(B) 4
(C) 5
(D) 2

Answer: (B) 4
14. The ratio of number of students taking cricket to the number of students taking tennis in class C from the following diagram is

(A) $9: 11$
(B) $11: 9$
(C) $9: 2$
(D) $2: 9$

Answer: (A) 9:11
15. The number of triangles in the below figure is

(A) 20
(B) 24
(C) 28
(D) 32

Answer: (C) 28
16. How many squares are there in the following figure

(A) 16
(B) 17
(C) 25
(D) 30

Answer: (D) 30
17. How many rectangles are there in the figure below:

(A) 6
(B) 7
(C) 8
(D) 9

Answer: (D) 9
18. The circle graph given here shows the spending of a country on various sports during a particular year. Study the graph and answer the question: If the total

(A) Rs.8,00,000
(B) Rs.80,00,000
(C) Rs.120,00,000
(D) Rs.160,00,000

Answer: (B) Rs.80,00,000
19. The distance travelled by a car in 4.5 hours from the graph below is

(A) 180 Km
(B) 140 Km
(C) 200 Km
(D) 220 Km

Answer: (A) 180 Km
20. How many triangles are there in the figure given below

(A) 16
(B) 18
(C) 19
(D) 20

Answer: (C) 19.
21. The circle graph given here shows the spendings of a country on various sports during a particular year. Study the graph and answer the question.

(A) $22 \frac{2}{9} \%$
(B) $27 \%$
(C) $33 \frac{1}{3} \%$
(D) $37 \frac{1}{2} \%$

Answer: (C) $33 \frac{1}{3} \%$
22. How many triangles are there in the given figure

(A) 28
(B) 26
(C) 24
(D) 22

Answer: (A) 28.
23. How many squares are there in the given figure

(A) 9
(B) 14
(C) 16
(D) 18

Answer: (B) 14.
24. How many straight lines are there in the figure below.

(A) 10
(B) 12
(C) 16
(D) 8

Answer: (B) 12.
25. How many squares are there in the figure given below

(A) 4
(B) 5
(C) 6
(D) 7

Answer: (D) 7.
26. How many triangles are there in the following figure?

(A) 10
(B) 14
(C) 20
(D) 22

Answer: (C) 20.
27. How many squares are there in the figure below

(A) 16
(B) 15
(C) 14
(D) 12

Answer: (B) 15.
28. Count the number of triangles in the figure

(A) 17
(B) 13
(C) 15
(D) 16

Answer: (D) 16.
29. From the following graph which of the following years was the ratio of income to expenditure the minimum

(A) 1996
(B) 1995
(C) 1998
(D) 2000

Answer: (B) 1995.
30. Percent profit earned by a company over the years is given in the following graph using the formulae $\%$ profit $=\frac{\text { Income }- \text { expenditure }}{\text { expenditure }} \times 100$


If the income in 1998 was Rs. 264 crores, what was the expenditure in $1998 ?$
(A) 160 crores
(B) 145 crores
(C) 104 crores
(D) 185 crores

Answer: (A) 160 Crores.
31. The circle graph given here shows the spendings of a country on various sports during a particular year. Study the graph and answer the question.


What percent of the total spendings is spent on Tennis?
(A) $12.5 \%$
(B) $22.5 \%$
(C) $25 \%$
(D) $45 \%$

Answer: (A) 12.5\%
32. Monthly expenditure of a person whose monthly salary is 9000 is as shown in the diagram. The percentage of money spent for medical expenses is

(A) $10 \%$
(B) $20 \%$
(C) $30 \%$
(D) $40 \%$

Answer: (B) 20\%.
33. A man earns Rs. 28000 as monthly salary. His expenditure and savings are given in the diagram. How much he spent every month other than food as expenditure.

(A) 11200
(B) 11300
(C) 15400
(D) 12500

Answer: (A) 11200
34. From the pie diagram given below find the central angle E degree

(A) 25 degrees
(B) 45 degrees
(C) 50 degrees
(D) 60 degrees

Answer: (B) 45 Degrees.
35. The sum of numbers common to two diagrams is

(A) 118
(B) 110
(C) 108
(D) 130

Answer: (A) 118.
36. The ratio of the number of students in the class VII to class IX is

(A) $2: 3$
(B) $1: 1$
(C) $3: 4$
(D) $1: 2$

Answer: (C) 3:4.

