## MATHS

## **Data Interpretation Worksheet**

For students preparing for MAH-B.BCA/BBA/BMS/BBM CET 2025 and CUET General Test Paper 3 for admission to BCA, BBA, BMS, BBM

**Directions (1 - 3):** The pie chart represents the favorite stars (Bollywood stars SRK, SK, AK, HR and VD of the people of a family.



Consider the pie chart and answer questions based on it

1. If there are 40 people in the family, what is the difference between those who like AK and those who like VD?

- A. 2
- B. 3
- C. 4
- D. 6

2. The sector angle corresponding to the HR is

- A. 36°
- B. 72°
- C. 54°
- D. 108°

3. The ratio of people who like SRK to those who like SK is

- A. 6/5
- B. 5/6
- C. ½
- D. 2/1

**Direction** (4 – 6). Comprehension: Study the following table and answer the questions based on it.

Below is the Household Expenditure (in Thousand Rupees) per annum.

| Veen | Household Expenditure |      |         |     |       |  |  |
|------|-----------------------|------|---------|-----|-------|--|--|
| rear | Grocery               | Rent | Leisure | EMI | Taxes |  |  |
| 2010 | 32                    | 12   | 5       | 3.4 | 9     |  |  |
| 2011 | 37                    | 13   | 6.5     | 4.5 | 13    |  |  |
| 2012 | 46                    | 14   | 7.3     | 5.6 | 17    |  |  |
| 2013 | 48                    | 16   | 7.9     | 6.4 | 18    |  |  |
| 2014 | 52                    | 18   | 8.5     | 7.4 | 19    |  |  |

4. What is the total Household Expenditure for the year 2012?

- A. Rs. 89,900
- B. Rs. 87,120
- C. Rs. 89,100
- D. Rs. 88,200

**5. Expenditure on EMI forms what percentage of expenditure on Grocery for the year 2014?** 

- A. 11.34%B. 14.23%
- C. 13.22%
- D. 15.55%

6. What is the average spending on Leisure per annum?

- A. Rs. 7,040B. Rs. 6,500C. Rs. 7,100
- D. Rs. 7,400

**Directions** (7-9): Study the following table and answer the questions based on it.

VISION ACADEMY EDUCATION | <u>YT: @VisionAcademyEducation</u> | (1) <u>updatestoday.in</u> Telegram: <u>https://t.me/visionacademyeducation</u> WhatsApp Channel: <u>https://whatsapp.com/channel/0029VaXH5G0GuflzfqQyW313</u> Given below is the list of expenditures (in lakh rupees) per annum of Company Z over the years.

|      | Expenditure Items for Company Z |             |       |          |       |  |
|------|---------------------------------|-------------|-------|----------|-------|--|
| Year | Salary                          | Fuel and    | Bonus | Interest | Taxes |  |
|      | _                               | Transport o |       | on       |       |  |
|      |                                 |             |       | Loans    |       |  |
| 2011 | 412                             | 227         | 15    | 133.4    | 98    |  |
| 2012 | 557                             | 233         | 16.5  | 142.5    | 138   |  |
| 2013 | 656                             | 245         | 17.3  | 151.6    | 174   |  |
| 2014 | 680                             | 260         | 17.9  | 166.4    | 188   |  |
| 2015 | 720                             | 284         | 18.5  | 179.4    | 198   |  |

7. What is the average amount of Bonus per year?

- A. Rs. 17.04 Lakhs
- B. Rs. 17 Lakhs
- C. Rs. 17.4 Lakhs
- D. Rs. 16.8 Lakhs

8. What is the total expenditure of Company Z in the year 2011?

- A. Rs. 897.2 Lakhs
- B. Rs. 827.5 Lakhs
- C. Rs. 885.4 Lakhs
- D. Rs. 727.1 Lakhs

9. What is the expenditure on Fuel and Transport as a percentage of expenditure on Salary for the year 2012?

- A. 41.8<mark>%</mark>
- B. 40.1%
- C. 43.1%
- D. 44.2%

**Direction (10-12):** Study the diagram given below and answer the questions based on it.  $\triangle$  represents Students who have chosen Arts course

O represents Students who have chosen Science course

□ represents Students who have chosen Dance course

10. How many students have chosen the Science course?

| A. | 141 |
|----|-----|
| B. | 185 |

- C. 113
- D. 145

11. How many students have chosen Dance course and Science course but not the Arts course?

A. 43

B. 44

- C. 12
- D. 23

12. How many students have chosen Arts course and Science course but not the Dance course?

- A. 23
- B. 12
- C. 35

D. 44

13. Following figure shows the number of 5 students in Mathematics out of 10 marks



How much more marks did student 3 & 5 got than 4 & 1?

| A. | 2 |
|----|---|
| B. | 1 |
| C. | 3 |
| D. | 4 |
|    |   |

**Direction (14-16**): Study the following diagram and answer questions based on it. The diagram represents the likes of kids of a class







14. The ratio of kids who like only Mars to those who like all the three is

- A. 7/5
- B. 7/8
- C. 7/6
- D. 14/13

15. What is the difference between the kids who like Mercury and Jupiter?

- A. 6
- B. 8
- C. 10
- D. 12

16. How many people who like Mars like Jupiter also?

- A. 45
- B. 29
- C. 26
- D. 13

**Directions (17-19):** The following table represents the percentage marks of four students in six subjects.

Consider the table and answer questions based on it.

| Student | Maths | Science | History | Geography | English | Hindi |
|---------|-------|---------|---------|-----------|---------|-------|
| Shamita | 75    | 80      | 65      | 68        | 75      | 65    |
| Smita   | 80    | 85      | 75      | 65        | 70      | 70    |
| Shilpa  | 82    | 88      | 70      | 69        | 71      | 70    |
| Sheela  | 78    | 87      | 65      | 70        | 75      | 74    |

17. The average marks obtained by the students in Geography and History are

- A. 68.75 and 68
- B. 70.5 and 69
- C. 68 and 68.75
- D. 68.75 and 68.5

18. Average marks obtained in Science is higher than that of Math's by

- A. 1.5
- B. 20

- C. 6.25
- D. 40

19. Who has the highest total marks?

- A. Shamita
- B. Smita
- C. Shilpa
- D. Sheela

20. The income of a person has been shown in the pie-chart. If his total income is 3,60,000 rs. Then find the income of his second week.



**Directions (21-23):** Study the following diagram and answer questions based on it.

The diagram represents the likes of children in a society



21. The difference between children who like leopard to those who like tiger is

| A. | 50 |
|----|----|
| B. | 35 |
| C. | 30 |

D. 5

22. How many children like both lion and leopard?

- A. 35
- B. 55
- C. 90
- D. 95

 23. How many children who like lion, also like the tiger?

- A. 5
- B. 15
- C. 35
- D. 40

**Directions (24-26):** The bar chart represents percentage marks scored by four students U, V, W and X in History and Geography. Consider the bar chart and answer questions based on it.



24. Who scored the highest percentage in both the subjects combined?

- A. Both V and W
- B. V
- C. W
- D. U

25. What is the percentage of marks obtained in Geography and History together by W?

- A. 75.8%
- B. 80%
- C. 77.5%
- D. 75%

26. What is the average percentage marks obtained in History by all students?

- A. 78%
- B. 75%
- C. 72.5%
- D. 70%

27. Eggs sold by a shopkeeper over a week is given in the table below. Eggs sold in dozens

| Day       | Sales in dozen |
|-----------|----------------|
| Sunday    | 12             |
| Monday    | 8              |
| Tuesday   | 11             |
| Wednesday | 5              |
| Thursday  | 9              |
| Friday    | 10             |
| Saturday  | 10             |

If the price of one egg was Rs. 2.50, how much more did he earn on Friday than on Monday?

- A. 55 rupees
- B. 60 rupees
- C. 45 rupees
- D. 62 rupees

**Direction (28-30):** The following table represents the rainfall (in mm) of five states from June to September in a year. Consider the information and answer questions based on it

Q28. Which state has the lowest average rainfall?

A. JK

B. HP

|    | C. WB |      |        |           |
|----|-------|------|--------|-----------|
|    | June  | July | August | September |
| JK | 1100  | 1100 | 1000   | 1200      |
| HP | 1100  | 1100 | 1000   | 1300      |
| WB | 1400  | 1300 | 1200   | 1000      |
| Ga | 1000  | 1300 | 1500   | 1700      |
| TN | 1200  | 1050 | 1000   | 1100      |
|    |       |      | •      |           |



Q29. Which state shows a gradual increase in its rainfall from June to September?

- A. HP
- B. WB
- C. GA
- D. TN

Q30. Which month received the lowest rainfall in the year?

- A. June
- B. July
- C. August
- D. September

## **Answer Key**

| 1. A  | 2. B  | 3. B  | 4. A  | 5. B  | 6. A  | 7. A  | 8. C  | 9. A  | 10. A |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 11. B | 12. A | 13. C | 14. D | 15. A | 16. B | 17. C | 18. C | 19. C | 20. B |
| 21. B | 22. C | 23. D | 24. D | 25. D | 26. C | 27. B | 28. D | 29. C | 30. C |
| 31. C | 32. C | 33. B | 34. C | 35. A | 36. D | 37. A | 38. B | 39. B | 40. C |

## **HINTS & SOLUTIONS**

1. Ans. A Sol. AK =  $\frac{15}{100} \times 40 = 6$ VD =  $\frac{10}{100} \times 40 = 4$  $\therefore$  Difference = 2

2. Ans. B **Sol.** Sector angle =  $\frac{20}{100} \times 360^\circ = 72^\circ$ 

3. Ans. B **Sol.**  $\frac{SRK}{SK} = \frac{25}{30} = \frac{5}{6}$ 

4. Ans. A **Sol**. Total household expenditure for the year 2012 = 46 + 14 + 7.3 + 5.6 + 17 = 89.9 × 1000 = 89,900

5. Ans B **Sol**. Required % =7.4/52 × 100 = 14.23%

6. Ans. A Sol. Required value =  $\frac{5+6.5+7.3+7.9+8.5}{5} \times 1000$ = 7040

7. Ans A Sol. Average Bonus =  $\frac{15+16.5+17.3+17.9+18.5}{5}$ =  $\frac{85.2}{5}$  = 17.04

8. Ans C **Sol.** Total expenditure in 2011 = 885.4 lakh

9. Ans A **Sol**. In 2012 = fuel and Transport = 233 lakhs Salary in 2012 = 557 lakhs  $\% = \frac{233}{557} \times 100 = 41.8\%$ 10. Ans. A Sol. 62+44+12+23=141 11. Ans B Sol. 44 12. Ans A Sol. A 13. Ans C Sol. Required = (10 + 7) - (6 + 8)Difference = 3

14. Ans. D **Sol**. 14/13

15. Ans. A **Sol**. Required difference = (10+12+13) – (16+13) =6

16. Ans. B **Sol**. 13+16 = 29

**17.** Ans. C **Sol.** Ave marks of geography  $=\frac{68+65+69+70}{4} = 68$ Avg marks of History  $=\frac{65+75+70+65}{4} = 68.75$ 

18. Ans. C **Sol.** Avg marks of Science =  $\frac{80+85+88+87}{4}$  = 85 Avg marks of maths =  $\frac{75+80+82+78}{4}$  = 78.75 Difference = 85 - 78.75 = 6.25

19. Ans C WB = 4900 **Sol**. Shilpa = 450 GA = 5500 Sheela = 449Shamita = 428 Smita = 445 29. C Hence, Shilpa 30. C 20. Ans. B **Sol**. June = 5800 **Sol.** Earning is  $2^{nd}$  week =  $\frac{120}{360} \times 360000 = 120,000$ July = 5850Aug = 5700 (lowest) Sep = 630021. Ans. B **Sol**. Difference = (30 + 20 + 35 + 35) – (35 + 5 + 45) = 120 - 85 = 3522. Ans. C **Sol**. Required number = 20 + 35 + 35 = 9023. Ans. D **Sol**. Required number = 35 + 5 = 4024. Ans. D **Sol.** Percentage of U =  $\frac{75+80}{200} \times 100 = 77.5\%$ Percentage of V =  $\frac{63+87}{200} \times 100 = 75\%$ Percentage of W =  $\frac{80+70}{200} \times 100 = 75\%$ Percentage of X =  $\frac{72+75}{200} \times 100 = 73.5\%$ 25. Ans. D **Sol**. Percentage of marks obtained by w=75% 26. Ans. C **Sol.** Average percentage in History =  $\frac{75+63+80+72}{4}$  $=\frac{290}{4}=72.5\%$ 27. Ans B **Sol**. Earning on Monday = 12×2.5×12=360 Earning on Friday= 12×10×2.5 = 300 ∴ Required difference = 360–300=Rs.60

28. D Sol. TN = 4350 (lowest) JK = 4400 HP = 4500