

CUET 2022 SOLVED PAPER

(Held on 6 Aug. 2022)

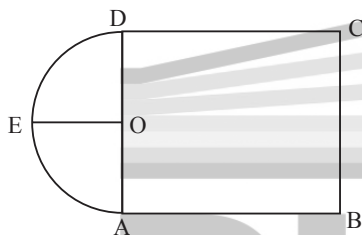
Numerical Ability & Quantitative Reasoning

- Given set is (2, 17, 31) is set of:
(A) Prime numbers (B) Whole numbers
(C) Odd numbers (D) Even numbers
Choose the correct answer from the options given below:
(a) (A) only (b) (A) and (B) only
(c) (B) only (d) (C) and (D) only
- Which of the following represents $x:y=64$?
(a) $8:x=8:y$ (b) $x:8=y:8$
(c) $x:16=y:4$ (d) $32:x=y:2$
- Ratio $5^{8.14}:5^{5.14}$ is equal to:
(a) 1:5 (b) 5:1
(c) 25:1 (d) 125:1
- The LCM and HCF of two numbers are 35 and 15 respectively. The product of these numbers is _____.
(a) 625 (b) 525
(c) 425 (d) 325
- The value of $3-3 \div 3$:
(a) 2 (b) 4
(c) 0 (d) 1
- The value of $x^{a-b} \times x^{b-c} \times x^{c-a}$ is:
(a) 1 (b) 0
(c) -1 (d) x
- The sum of the ages of 5 children born at intervals of 3 years each is 50 years. What is the age of the youngest child?
(a) 4 years (b) 7 years
(c) 9 years (d) 10 years
- The average of 3 even consecutive integers is 12. What is their product?
(a) 1640 (b) 1690
(c) 1650 (d) 1680
- Find the average of following numbers.
12, 15, 18, 14, 16, 13, 25, 28, 23, 27
(a) 18.25 (b) 12.5
(c) 19.1 (d) 16.1
- What percent decrease in salaries would exactly cancel the 20 percent increase?
(a) $15\frac{1}{3}\%$ (b) $14\frac{2}{3}\%$
(c) $16\frac{2}{3}\%$ (d) $33\frac{1}{3}\%$
- If 20% of a number is 30, then the number is:
(a) 6 (b) 150
(c) 60 (d) 15
- An amount becomes its 3 times in 20 years. What is the rate of simple interest per annum?
(a) 15% (b) 10%
(c) 6.67% (d) 6%
- What will be the simple interest earned on an amount of 22000 in 8 months at $8\frac{1}{4}\%$ per annum?
(a) 1013 (b) 1012
(c) 1210 (d) 1215
- P, Q and R can complete a work in 12, 9 and 15 days respectively. Working together, they will complete the same work in:
(a) $3\frac{39}{47}$ days (b) $5\frac{15}{42}$ days
(c) $3\frac{38}{47}$ days (d) $5\frac{39}{47}$ days
- If 36 farmers can do a piece of work in 24 hours, In how many hours will 18 farmers do it?
(a) 36 hours (b) 42 hours
(c) 48 hours (d) 56 hours
- A 400 m long train passes a railway platform in 20 seconds with speed 90 km/hr. What is the length of platform?
(a) 105 m (b) 102 m
(c) 99 m (d) 100 m
- Consider a watch becomes fast by 10 minutes everyday. By what percent does it become fast?
(a) $\frac{5}{12}\%$ (b) $\frac{1}{6}\%$
(c) $\frac{25}{36}\%$ (d) 2.5%
- Please read the following carefully and answer the questions:
The marks of 7 students in a unit test are given below :
9, 10, 7, 6, 9, 3, 5
The mode of the data is :
(a) 7 (b) 9
(c) 10 (d) 6
- Please read the following carefully and answer the questions :
The marks of 7 students in a unit test are given below :
9, 10, 7, 6, 9, 3, 5
Median of the data is :
(a) 6 (b) 10
(c) 9 (d) 7
- Please read the following carefully and answer the questions:
The marks of 7 students in a unit test are given below :

9, 10, 7, 6, 9, 3, 5

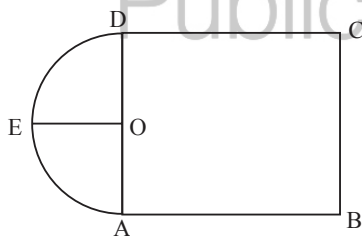
Mean of the data is :

- (a) 9 (b) 10
(c) 7 (d) 6
21. The value of x in the equation $2x - 3 = 7 - 3x$
(a) 10 (b) 2
(c) -2 (d) 5
22. If lengths of two diagonals of rectangle are $(2x - 3)$ cm and $(x + 2)$ cm, then the value of x is :
(a) 1 (b) 5
(c) $5/2$ (d) $5/3$
23. If a square has a diagonal of length $6\sqrt{2}$ cm, then the area of square is :
(a) 48 cm^2 (b) 72 cm^2
(c) 16 cm^2 (d) 36 cm^2
24. Please read the following carefully and answer the questions:
In the given figure ABCD is square and $OE = 7$ cm.



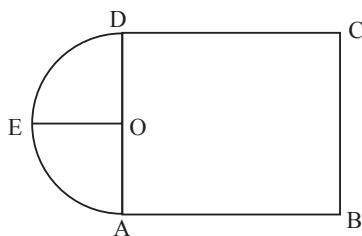
The perimeter of the figure is :

- (a) 42 cm (b) 44 cm
(c) 64 cm (d) 86 cm
25. Please read the following carefully and answer the questions:
In the given figure ABCD is square and $OE = 7$ cm.



Length of diagonal of the square is :

- (a) $14\sqrt{2}$ cm (b) $7\sqrt{2}$ cm
(c) 14 cm (d) 7 cm
26. Please read the following carefully and answer the questions : In the given ABCD is a square and $OE = 7$ cm



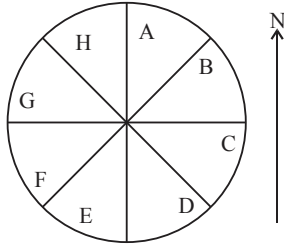
Area covered by the figure is :

- (a) 350 cm^2 (b) 273 cm^2
(c) 372 cm^2 (d) 237 cm^2
27. If two adjacent angles of a parallelogram are $(2x + 30)^\circ$ and $(3x - 15)^\circ$. Then the value of x is :
(a) 36 (b) 39
(c) 33 (d) 35

General Mental Ability & Logical and Analytical Reasoning

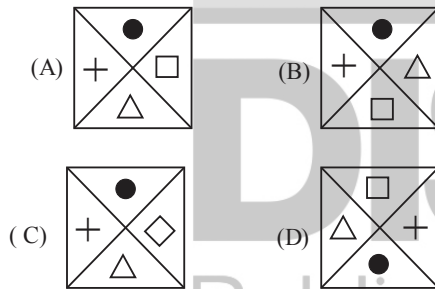
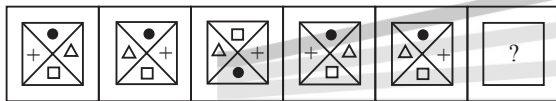
28. In the given question, select the related word from the alternatives:
Man : Biography :: Nation :
(a) Population (b) Autobiography
(c) History (d) People
29. In the given question select the related letters / words / numbers from the given alternatives:
Mirage : Desert ::
(a) Rain : Rainbow (b) Rainbow : Sky
(c) Image : Water (d) Sky : Illusion
30. There are three words given which have something in common among themselves. Out of the four alternatives, choose the most appropriate description about these words.
Prakrit : Pali : Sanskrit
(a) They are classical languages of Asia and Europe
(b) The vedas are written in these languages
(c) They are old languages of India
(d) They are dead languages
31. Among the four options given below, three have similarities. Find the odd one out.
(a) Sepals (b) Petals
(c) Petiole (d) Stamen
32. Match List-I with List-II.
- | List-I | List-II |
|--------|----------|
| (A) OZ | (I) 23 |
| (B) KL | (II) 27 |
| (C) PK | (III) 16 |
| (D) DL | (IV) 41 |
- Choose the correct answer from the options given below:
- | A | B | C | D |
|-----------|------|-------|-------|
| (a) (IV) | (II) | (I) | (III) |
| (b) (III) | (I) | (II) | (IV) |
| (c) (IV) | (I) | (II) | (III) |
| (d) (I) | (IV) | (III) | (II) |
33. Kalam says, "Ravi's mother is the only daughter of my mother", How is Kalam related to Ravi?
(a) Father
(b) Brother
(c) Maternal Uncle
(d) Uncle
34. Introducing a man X, Y said "His wife is the only daughter of my father." How is X related to Y?
(a) Brother (b) Uncle
(c) Husband (d) Father-in-law

35. Eight friends A, B, C, D, E, F, G and H are placed in this manner.



All are facing outward. If all of them move one position in clockwise direction, then the direction, E will be facing is:

- (a) South West
(b) South East
(c) South
(d) West
36. Find the next figure of given series



37. If A means Addition, B means Division, C means Multiplication and D means Subtraction. Then find the value of $49B7D9A15C6 = ?$

- (a) -180
(b) 180
(c) 88
(d) 38

38. If * stand for addition
⊗ stand for subtraction
÷ stand for division
↑ stand for multiplication

≠ stand for equal to

Then which of the following alternatives is correct?

- (a) $2 \uparrow 5 \otimes 6 * 2 \neq 6$
(b) $5 * 7 \otimes 4 \div 2 \neq 4$
(c) $3 \uparrow 6 \div 2 * 3 \otimes 6 \neq 5$
(d) $4 \div 7 * 4 \neq 2 \uparrow 3 \otimes 1$

39. Arrange the given words in the sequence in which they occur in the dictionary.

- (A) Bishop
(B) Bifocal
(C) Bicycle
(D) Bitter
(E) Brink

Choose the correct answer from the options given below.

- (a) (E), (B), (A), (D), (C)
(b) (B), (C), (D), (A), (E)
(c) (C), (B), (A), (D), (E)
(d) (A), (C), (D), (E), (B)

40. Arrange the given words in the sequence in which they occur in the dictionary.

- (A) Leprosy
(B) Lessen
(C) Lesson
(D) Language
(E) Languid

Choose the correct answer from the options given below:

- (a) (A), (D), (E), (B), (C)
(b) (D), (E), (A), (B), (C)
(c) (A), (C), (D), (E), (B)
(d) (A), (B), (C), (D), (E)

41. From the given options which word can't be formed by using the letters of the word :

"CATERING"

- (A) CREATING
(B) REACTING
(C) RETIRING
(D) ARGENTIC

Choose the correct answer from the options given below:

- (a) (A)
(b) (B)
(c) (C)
(d) (D)

42. Arrange the given words in the sequence in which they occur in the dictionary

- (A) Amphibian
(B) Amorphous
(C) Amphidextrous
(D) Ambiguous
(E) Ambivalent

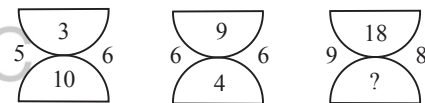
Choose the correct answer from the options given below:

- (a) (A), (C), (D), (E), (B)
(b) (E), (B), (C), (D), (A)
(c) (A), (C), (D), (B), (E)
(d) (D), (E), (B), (A), (C)

43. Which letters exactly are midway between F and S in the English alphabet?

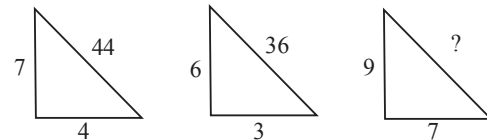
- (a) LM
(b) MN
(c) KL
(d) JK

44. Which number will replace the question mark?



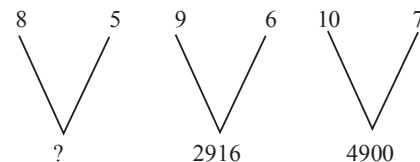
- (a) 9
(b) 3
(c) 8
(d) 4

45. Find the missing number from the following given options:



- (a) 64
(b) 63
(c) 16
(d) 66

46. Find the missing number from the following given options.



- (a) 400
(b) 169
(c) 1600
(d) 80

47. Five statements are given below followed by options consisting of three statements put together in a specific order. Choose the option which indicates a conclusion drawn from the preceding two statements.

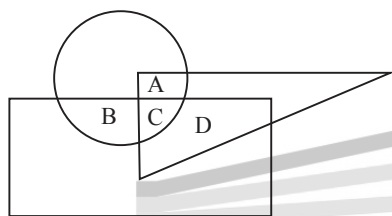
(A) All models are Pretty
 (B) Some models are popular
 (C) Ruby is Pretty
 (D) Ruby is a popular heroine
 (E) Some popular girls are Pretty

Choose the correct answer from the options given below:

(a) (A), (B), (E) (b) (A), (C), (D)
 (c) (D), (C), (A) (d) (E), (D), (C)

48. Please read the details carefully:

In the following diagram, the triangle represents doctors, the circle represents players and the rectangle represents singers.

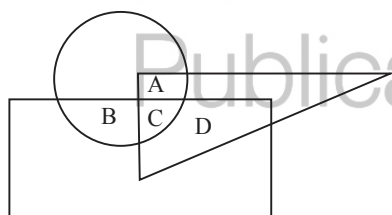


Which region represents doctors who are singers but not players?

(a) A (b) B
 (c) C (d) D

49. Please read the details carefully:

In the following diagram, the triangle represents doctors, the circle represents players and the rectangle represents singers.

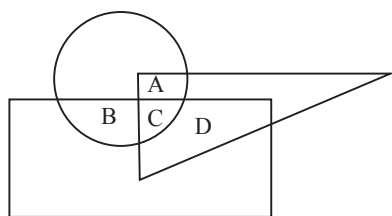


Which region represents the doctors who are players but not singers?

(a) A
 (b) B
 (c) C
 (d) D

50. Please read the details carefully:

In the following diagram, the triangle represents doctors, the circle represents players and the rectangle represents singers.

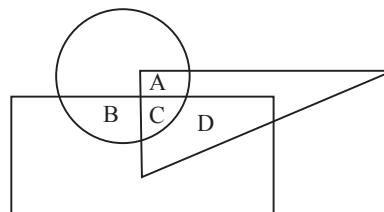


Which of the region represents doctors who are players as well as singers too?

(a) A (b) B
 (c) C (d) D

51. Please read the details carefully:

In the following diagram, the triangle represents doctors, the circle represents players and the rectangle represents singers.



Which region represents the individual who are players as well as singers but not a doctor?

(a) A (b) B
 (c) C (d) D

General Knowledge & Current Affairs

52. Which king had the title of kaveriya or king of poets?

(a) Chandra Gupta Mourya
 (b) Samundra Gupta
 (c) Skand Gupta
 (d) Ashoka

53. Arrange the following in chronological order :

1. Tughlaqs 2. Lodis
 3. Sayyids 4. Ilbari Turks
 5. Khiljis
 (a) 1, 2, 3, 4, 5 (b) 5, 4, 3, 2, 1
 (c) 2, 4, 5, 3, 1 (d) 4, 5, 1, 3, 2

54. Who was the founder of The Servants of India Society?

(a) G.K. Gokhale (b) M.G. Ranade
 (c) B.G. Tilak (d) Bipin Chandra Pal

55. Mahatma Gandhi was profoundly influenced by the writings of

(a) Bernard Shaw (b) Karl Marx
 (c) Lenin (d) Leo Tolstoy

56. The monk who influenced Ashoka to embrace Buddhism was

(a) Vishnu Gupta (b) Upa Gupta
 (c) Brahma Gupta (d) Brihadratha

57. The Lodi dynasty was founded by

(a) Ibrahim Lodi (b) Sikandar Lodi
 (c) Bahlol Lodi (d) Khizr Khan

58. Match List-I with List-II.

List-I

Pass

(A) Bomdila
 (B) Banival
 (C) Rohtang
 (D) Nathula

List-II

State

(I) Jammu and Kashmir
 (II) Sikkim
 (III) Arunachal Pradesh
 (IV) Himachal

Choose the correct answer from the options given below

- | | A | B | C | D |
|-----|-------|-------|------|------|
| (a) | (III) | (I) | (II) | (IV) |
| (b) | (I) | (III) | (IV) | (II) |
| (c) | (III) | (I) | (IV) | (II) |
| (d) | (I) | (III) | (II) | (IV) |

59. Which among the following is a kharif crop?

- (a) Wheat (b) Peas
(c) Mustard (d) Maize

60. Who among the following were elected as the President and Vice-president both?

- (A) Zakir Hussain (B) Neelam Sanjeev Reddy
(C) Jai Singh (D) K.R. Narayanan
(E) Shankar Dayal Sharma

Choose the correct answer from the options given below:

- (a) (A), (C) and (D) only
(b) (B), (D) and (E) only
(c) (B), (C) and (E) only
(d) (A), (D) and (E) only

61. Match List-I with List-II.

List-I

- (A) Botany
(B) Zoology
(C) Pathology
(D) Haematology

List-II

- (I) Animals
(II) Blood
(III) Plants
(IV) Diseases

Choose the correct answer from the options given below:

- | | A | B | C | D |
|-----|-------|-------|-------|------|
| (a) | (II) | (III) | (IV) | (I) |
| (b) | (I) | (II) | (III) | (IV) |
| (c) | (III) | (I) | (IV) | (II) |
| (d) | (IV) | (II) | (III) | (I) |

62. Which among the following is a super computer of America?

- (a) Param (b) Mira
(c) Anupam (d) SAGA-220

63. Which was the first Spacecraft to carry man on the Moon?

- (a) Sputnik-08 (b) Sputnik-10
(c) Apollo-11 (d) Apollo-15

64. Match List-I with List-II

List-I

- (A) Cerebrum
(B) Diencephalon
(C) Cerebellum
(D) Medulla oblongata

List-II

- (I) Involuntary muscular co-ordination
(II) Regulate heart rate
(III) Intelligence
(IV) Heat, cold and pain control

Choose the correct answer from the options given below:

- | | A | B | C | D |
|-----|-------|-------|------|-------|
| (a) | (III) | (IV) | (I) | (II) |
| (b) | (II) | (III) | (I) | (IV) |
| (c) | (IV) | (I) | (II) | (III) |
| (d) | (I) | (III) | (IV) | (II) |

65. Which among the following is a base?

- (a) NaCl (b) NaOH
(c) HCl (d) MgCl₂

66. The Escape velocity at the Earth's surface is:

- (a) 11.2 km/sec (b) 112 km/sec
(c) 11.2 km/minute (d) 112 km/hour

67. The contribution of agriculture sector to the GDP of India is around _____ at current Prices.

- (a) 10% (b) 12%
(c) 20% (d) 25%

68. Indian Army organized. "Bijoya Sanskritik Mahotsav" from 26 to 29 September 2021 in

- (a) Pune (b) Kolkata
(c) Kanpur (d) Prayagraj

69. The International Day of Sign Languages (IDSL) is celebrated annually across the world on

- (a) 10 April (b) 23 September
(c) 20 November (d) 10 December

70. International Literacy Day is observed globally on _____ every year.

- (a) 5 September (b) 5 October
(c) 8 September (d) 8 October

71. The world's highest movie theatre has recently been inaugurated in

- (a) Ladakh (b) Himachal Pradesh
(c) Jammu and Kashmir (d) Sikkim

72. Who created history as she became the first Indian woman finalist at the World Wrestling Championship 2021 and also the first female player from India to claim a silver medal?

- (a) Alka Tomar (b) Vinesh Phogat
(c) Anshu Malik (d) Sakshi Malik

73. Form the following pairs, select the combination of right pairs

- (A) Netherlands: Euro (B) UAE: Dinar
(C) Russia: Rouble (D) Turkey: Lira
(E) Korea: Rial

Choose the correct answer from the options given below.

- (a) (B), (D), (C) (b) (A), (C), (D)
(c) (B), (E), (D) (d) (C), (A), (B)

74. Which city of the world is known as "the city of Golden Gate"?

- (a) Jaipur (b) Amritsar
(c) San Francisco (d) Washington

75. Match List-I with List-II

List-I

- (A) Raj Ghat
(B) Vijay Ghat
(C) Abhay Ghat
(D) Mahaprayan Ghat

List-II

- (I) Dr. Rajendra Prasad
(II) Morarji Desai
(III) Mahatma Gandhi
(IV) Lal Bahadur Shastri

Choose the correct answer from the options given below:

- | | A | B | C | D |
|-----|-------|-------|------|-------|
| (a) | (IV) | (I) | (II) | (III) |
| (b) | (III) | (IV) | (II) | (I) |
| (c) | (II) | (III) | (I) | (IV) |
| (d) | (II) | (III) | (IV) | (I) |

HINTS & EXPLANATIONS

1. (b) The given set (2, 17, 31) is both prime and whole numbers.

2. (d) Solve using options:

$$32 : x = y : 2$$

$$\Rightarrow \frac{32}{x} = \frac{y}{2} \Rightarrow 32 \times 2 = x \cdot y$$

$$\Rightarrow x \cdot y = 64$$

3. (d) $5^{8.14} : 5^{5.14}$

$$\Rightarrow \frac{5^{8.14}}{5^{5.14}} = \frac{5^{(8.14-5.14)}}{1}$$

$$\Rightarrow \frac{5^3}{1} = \frac{125}{1}$$

4. (b) Product of two number = HCF \times LCM

$$= 15 \times 35$$

$$= 525$$

5. (a) $3 - 3 \div 3 = 3 - \frac{3}{3} = 3 - 1 = 2$

6. (a) $x^{(a-b)} \times x^{(a-c)} \times x^{a-b+c-a}$ (as we know in multiplication if base is same then power added)
 $x^{a-b+b-c+c-a} \Rightarrow x^0 = 1$

7. (a) Let ages of 5 children are x, x + 3, x + 6, x + 9 and x + 12 years.

According to question

$$x + x + 3 + 6 + x + 12 = 50$$

$$\Rightarrow 5x = 50 - 30$$

$$\Rightarrow 5x = 20$$

$$\Rightarrow x = 4 \text{ years (age of youngest child)}$$

8. (d) Let 3 even consecutive integers are x, x + 2, x + 4.

According to question,

$$\frac{x + x + 2 + x + 4}{3} = 12$$

$$\Rightarrow 3x + 6 = 36$$

$$\Rightarrow 3x = 36 - 6 = 30$$

$$\Rightarrow x = 10$$

$$\text{Hence, their product} = 10 \times (10 + 2) \times (10 + 4) = 1680$$

9. (c) Required average = $\frac{\text{Sum of all numbers}}{\text{Total given numbers}}$

$$\frac{191}{10} = 19.1$$

10. (c) Let salary is 100.

$$\therefore \text{Increased salary} = \frac{100 \times 120}{100} = 120$$

$$\text{Hence, required decrease in percentage} = \frac{120 - 100}{120} \times 100$$

$$= \frac{20}{120} \times 100$$

$$= 16\frac{2}{3} \%$$

11. (b) Let number is x.

According to question,

$$\frac{x \times 20}{100} = 30$$

$$\Rightarrow x = 30 \times 5 = 150$$

12. (b) Let principal = a

$$\therefore \text{Amount} = 3a$$

$$\text{S.I.} = \text{Amount} - \text{Principal}$$

$$= 3a - a = 2a$$

$$\therefore \text{S.I.} = \left(\frac{P \times R \times T}{100} \right)$$

$$2a = \left(\frac{a \times R \times 20}{100} \right)$$

$$\Rightarrow \text{Rate} = \left(\frac{2a \times 100}{a \times 20} \right) \% = 10\% \text{ (Simple interest)}$$

13. (c) Principal = ₹ 22000

$$\text{Rate} = 8\frac{1}{4} = \frac{33}{4} \%$$

$$\text{Time} = 8 \text{ month} = \frac{8}{12} = \frac{2}{3} \text{ years}$$

$$\text{Hence, S.I.} = \frac{P \times R \times T}{100}$$

$$= \frac{22000 \times 33 \times 2}{4 \times 3 \times 100} = ₹ 1210$$

14. (a) P's one day work = $\frac{1}{12}$

$$\text{Q's one day work} = \frac{1}{9}$$

$$\text{R's one day work} = \frac{1}{15}$$

$$\therefore (P + Q + R)'s \text{ one day work} = \frac{1}{12} + \frac{1}{9} + \frac{1}{15}$$

$$= \frac{15 + 20 + 12}{180} = \frac{47}{180}$$

Hence, all together complete the same work in

$$= \frac{180}{47} = 3\frac{39}{47} \text{ days.}$$

15. (c) According to question,

$$M_1 \times H_1 = M_2 \times H_2$$

$$\Rightarrow 36 \times 24 = 18 \times H_2$$

$$\Rightarrow H_2 = \frac{36 \times 24}{18} = 48 \text{ hours}$$

16. (d) Given,
- $L_1 = 400 \text{ m}$

 $L_2 = \text{Length of platform} = ?$ $T = 20 \text{ sec}$

$$\text{Train's speed} = 90 \text{ km/hr} = 90 \times \frac{5}{18} = 25 \text{ m/s}$$

According to question,

$$T = \frac{L_1 + L_2}{S}$$

$$\Rightarrow 20 = \frac{400 + L_2}{25}$$

$$\Rightarrow 500 = 400 + L_2$$

$$\Rightarrow L_2 = 100 \text{ m (Platform length)}$$

17. (c) Total minute in one day
- $= 24 \times 60 = 1440 \text{ min.}$

Watch gain = 10 min every day

$$\text{Hence, watch becomes fast} = \frac{10}{1440} \times 100$$

$$= \frac{100}{144} = \frac{25}{36} \%$$

18. (b) Arrange data in sequence = 3, 5, 6, 7, 9, 9, 10

As only digit 9 repeat twice.

Hence, Mode = 9.

19. (d) Arrange data in Ascending order

3, 5, 6, 7, 9, 9, 10

Number of observation = 7 (odd)

$$\therefore \frac{n+1}{2} = \frac{7+1}{2} = \frac{8}{2} = 4 \text{th observation}$$

Hence, Median = 7

20. (c) Given Data = 9, 10, 7, 6, 9, 3, 5

$$\text{Hence, Mean} = \frac{\text{Sum of all numbers}}{\text{Total numbers}} = \frac{49}{7} = 7$$

21. (b)
- $2x - 3 = 7 - 3x$

$$\Rightarrow 2x + 3x = 7 + 3$$

$$\Rightarrow 5x = 10$$

$$\Rightarrow x = 2$$

22. (b) We know that length of diagonals of Rectangle are same.

$$\therefore 2x - 3 = x + 2$$

$$\Rightarrow 2x - x = 2 + 3$$

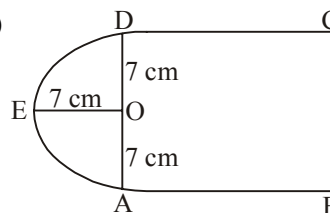
$$\Rightarrow x = 5 \text{ cm.}$$

23. (d) As we know that,

$$\text{Side of square} = \frac{\text{Diagonal}}{\sqrt{2}} = \frac{6\sqrt{2}}{\sqrt{2}} = 6 \text{ cm}$$

$$\text{Hence, area of square} = (\text{side})^2 = (6)^2 = 36 \text{ cm}^2$$

24. (c)



$$\text{Perimeter of semi-circle} = \pi r = \frac{22}{7} \times 7 = 22 \text{ cm}$$

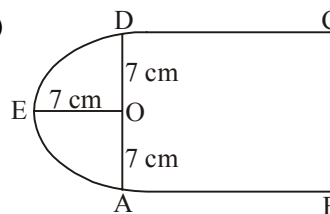
$$\text{Side of square (AD)} = 7 + 7 = 14 \text{ cm.}$$

$$\text{Hence, perimeter of figure} = 22 + DC + CB + BA$$

$$= 22 + 14 + 14 + 14$$

$$= 64 \text{ cm}$$

25. (a)



$$\text{Side of square (AD)} = 14 \text{ cm}$$

$$\text{Hence, length of diagonal} = \sqrt{2} \times \text{side}$$

$$= 14\sqrt{2} \text{ cm}$$

26. (b) Side of square (AD) = 14 cm

$$\therefore \text{Area of semicircle} = \frac{1}{2} \pi r^2 = \frac{1}{2} \times \frac{22}{7} \times 7 \times 7 = 77 \text{ cm}^2$$

$$\text{And, area of square} = (\text{side})^2 = 14^2 = 196 \text{ cm}^2$$

$$\text{Hence, area covered by figure} = 77 + 196$$

$$= 273 \text{ cm}^2$$

27. (c) As we know that sum of two adjacent angle of parallelogram is
- 180°
- .

$$\therefore (2x + 30) + (3x - 15) = 180^\circ$$

$$\Rightarrow 5x + 15 = 180^\circ$$

$$\Rightarrow 5x = 180 - 15 = 165^\circ$$

$$\Rightarrow x = \frac{165}{5} = 33^\circ$$

28. (c) As, past things about man is Biography. Similarly, past things about nation is History.

29. (b) As, Mirage is shown in desert. Similarly, Rainbow is shown in sky.

30. (c) Opposite to each other

31. (c) Except Petiole, rest are part of flower.

32. (c) The pattern is:

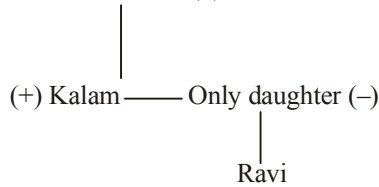
$$O(15) + Z(26) = 41 - \text{(iv)}$$

$$K(11) + L(12) = 23 - \text{(i)}$$

$$P(16) + K(11) = 27 - \text{(ii)}$$

$$D(4) + L(12) = 16 - \text{(iii)}$$

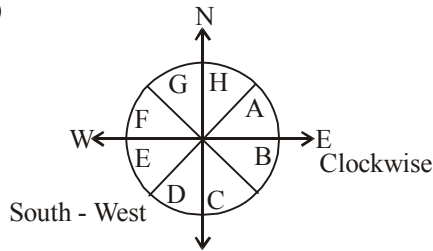
33. (c) Kalam's Mother (-)



Hence, Kalam is maternal Uncle of Ravi.

34. (c)

35. (a)



Hence, E will be facing South-West.

36. (d) Given elements in figure change their position alternatively.

37. (c) Replacing letters with sign,
 $49 \div 7 - 9 + 15 \times 6 = 7 - 9 + 90$
 $\Rightarrow 81 + 7 = 88$

38. (a) Solving using options,
 $2 \times 5 - 6 + 2 = 6$
 $10 - 6 + 2 = 6$
 $6 = 6$

39. (c) Words in sequence according dictionary:
 Bicycle (C), Bifocal (B), Bishop (A), Bitter (D), Brink (E).

40. (b) Words in sequence according to dictionary:
 Language (D) - 1
 Languid (E) - 2
 Leprosy (A) - 3
 Lessen (B) - 4
 Lesson (C) - 5

41. (c) RETIRING can't formed because there are 2 times I not present in given word.

42. (d) Words in sequence according to dictionary:

| | | |
|-------------------|---|---|
| Ambiguous (D) | - | 1 |
| Ambivalent (E) | - | 2 |
| Amorphous (B) | - | 3 |
| Amphibian (A) | - | 4 |
| Amphidextrous (C) | - | 5 |

43. (a) Arrange according English alphabet-



44. (d) The pattern is :

$$10 \times 3 = 5 \times 6 = 30$$

$$9 \times 4 = 6 \times 6 = 36$$

$$9 \times 8 = 18 \times ? = 72.$$

$$\Rightarrow ? = \frac{72}{18} = 4$$

45. (a) The pattern is:

$$(7 + 4) \times 4 = 44$$

$$(6 + 3) \times 4 = 36$$

$$(9 + 7) \times 4 = 64$$

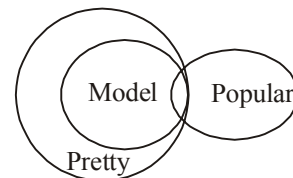
46. (c) The pattern is:

$$9^2 \times 6^2 = 81 \times 36 = 2916$$

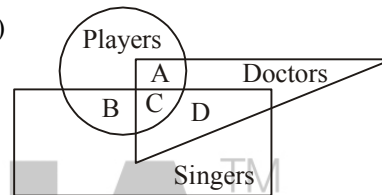
$$10^2 \times 7^2 = 100 \times 49 = 4900$$

$$\text{Hence, } 8^2 \times 5^2 = 64 \times 25 = 1600$$

47. (a) (A) All model are pretty (Statement)
 (B) Some models are popular (Statement)
 (C) Some popular girls are pretty (Conclusion)



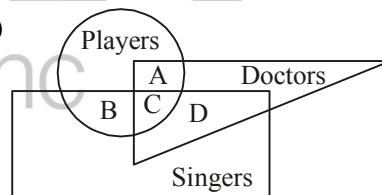
48. (d)



Hence, D represents doctors who are singers but not players.

49. (a) Hence, A represents the doctors who are players but not singers.

50. (c)



Hence, C represents doctors, who are players as well as singers.

51. (b) Hence, B represents players, who are singers but not doctors.

52. (b) Samudra Gupta

53. (d) Ilbari Turks = AD 1206-1290

Khilji dynasty = AD 1290 - 1320

Tughluk dynasty = AD 1320 - 1413

Sayyid dynasty = AD 1414 - 1450

Lodi dynasty = AD 1451 - 1526

54. (a) The Servants of India Society was formed in Pune, Maharashtra, on June 12, 1905 by Gopal Krishna Gokhale, who left the Deccan Education Society to form this association.

55. (d)

56. (b) Upagupta (c. 3rd Century BC) was a Buddhist monk. According to some stories in the Sanskrit text

- Ashokavadana, he was the spiritual teacher of the Mauryan emperor Ashoka.
57. (c) The Lodi dynasty in India arose around 1451 after the Sayyid dynasty. The Lodhi Empire was established by Bahlol Lodi, the Ghizlai tribe of the Afghans.
58. (c) **List- (Pass)** **List-II (State)**
 (a) Bomdila — Arunachal Pradesh
 (b) Banival (Banihal) — Jammu and Kashmir
 (c) Rohtang — Himachal Pradesh
 (d) Nathula — Sikkim
59. (d) Maize is a kharif crop.
 Wheat, Peas, Mustard are the rabi crops.
60. (d) Zakir Hussain, K.R. Narayanan, Shankar Dayal Sharma were elected as the President as well as Vice-president of India.
61. (c) Botany - Plants
 Zoology - Animals
 Pathology - Diseases
 Haematology - Blood
62. (b) Mira is a super computer of America. Param, Anupam and SAGA-220 are the super computers of India.
63. (c) Apollo-11 was the American spacecraft that first landed humans on the moon in 1969.
64. (a) Cerebrum - Intelligence
 Diencephalon Heat, Cold and panic control
 Cerebellum - Involuntary muscular co-ordination
 Next live. Medulla oblongata - Regular heart rate
65. (b) In general, metal hydroxides are basic in nature.
66. (a) Escape velocity at Earth's surface is 11.2 km/sec
67. (c) The share of agriculture in GDP increased to 19.9%.
68. (b) Indian Army will organize "Bijoya Sanskritik Mahotsav" from 26 to 29 September in Kolkata. This Mahotsav will be observed to mark the golden jubilee of the India-Pak war 1971.
69. (b)
70. (c)
71. (a) Ladakh has its first mobile digital movie theatre at an altitude of 11,562 feet which makes it the highest theatre in the world.
72. (c) Tokyo Olympian Anshu Malik progressed to the final of the women's 57kg category at the World Wrestling Championships 2021 in Oslo, Norway and also the first female player from India to claim a Silver medal.
73. (b)
74. (c) San Francisco is known as "the city of Golden Gate" The Golden Gate connects San Francisco Bay to the Pacific Ocean.
75. (b) Raj Ghat → Mahatma Gandhi
 Vijay Ghat → Lal Bahadur Shastri
 Abhay Ghat → Morarji Desai
 Mahaprayan Ghat → Dr. Rajendra Prasad