

# Previous Years Paper

10<sup>th</sup> June 2023 (Shift - 3)

**Q1.** Justice DY Chandrachud has become the new \_\_\_\_\_ Chief Justice of India?

- (a) 55<sup>th</sup>
- (b) 50<sup>th</sup>
- (c) 45<sup>th</sup>
- (d) 52<sup>th</sup>

**Q2.** Choose that set of numbers from the four alternative sets, that is similar to the given set.

Given set: (265, 392, 285)

- (a) (373, 472, 366)
- (b) (343, 482, 360)
- (c) (363, 482, 361)
- (d) (373, 482, 366)

**Q3.** Who was the first Indian Nobel Laureate?

- (a) Dr. C.V Raman
- (b) ST Radha Krishnan
- (c) Rabindranath Tagore
- (d) S.N. Bose

**Q4.** Which of the following statements are true for rectangles?

- A. All interior angles are right angles.
- B. Diagonals are perpendicular to each other.
- C. Diagonals are equal
- D. Opposite angles are supplementary

Choose the **correct answer** from the options given below:

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

**Q5.** If A(2, 3), B(2, 4) C(4, 9) and D(x, 8) are the vertices of a parallelogram ABCD, then find the value of x.

- (a) 8
- (b) 16
- (c) 5
- (d) 4

**Q6.** What is the prescribed strength of judges in the constitutional bench of supreme Court?

- (a) 2 Judges
- (b) At least 5 Judges
- (c) 3 judges
- (d) 4 judges

**Q7.** Three dice are thrown. The probability of getting a sum of numbers which is a perfect cube, is:

- (a)  $\frac{1}{6}$
- (b)  $\frac{1}{8}$
- (c)  $\frac{5}{36}$
- (d)  $\frac{7}{12}$

**Q8.** Consider the following statements:

- A. Antigen A and antibody 'a', Antigen 'B' and antibody 'b' cannot live together.
- B. Blood group 'O' is called universal Donor.
- C. Blood group 'AB' is called Universal Receptor.
- D. At the time of Blood transfusion RH-factor is also tested.

E. Main function of blood platelets is to protect the body from the disease.

Choose the **most appropriate** answer from the options given below:

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

**Q9.** How many times in a day hour hand and minute hand of a clock will coincide?

- (a) 24 times
- (b) 22 times
- (c) 44 times
- (d) 48 times

**Q10.** Study the following information and answer the question given below:

A family has 5 members P, Q, R, S and T, each have a different weight.

- i. P weighs twice as much as Q
- ii. Q weighs four and a half times as much as R
- iii. R weighs half as much as S
- iv. S weighs half as much as T
- v. T weighs less than P but more than R

Which of the following member of a family is the lightest in weight?

- (a) P
- (b) Q
- (c) R
- (d) S

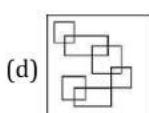
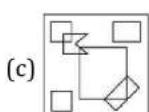
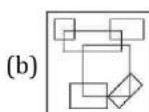
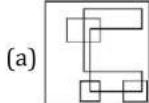
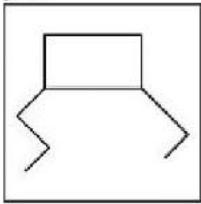
**Q11.** Match **List-I** with **List-II**:

List-I (Name of Prime Ministers)		List-II (Tenure)	
(A)	Shri Inder Kumar Gujral	(I)	1964-1966
(B)	Morarji Desai	(II)	1998-2004
(C)	Atal Bihari Vajpayee	(III)	1977-1979
(D)	Lal Bahadur Shastri	(IV)	1997-1998

Choose the **most appropriate** answer from the options given below:

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

**Q12.** Find the alternative which contains figure (A) as its part



**Q13.** The value of a car depreciates every year by 10%. What will be its value after 3 years if its present value is ₹ 6,25,000?

(a) ₹4,50,000  
 (b) ₹52,250  
 (c) ₹455,625  
 (d) ₹4,62,500

**Q14.** The average of a positive number, its square and 3 is 5. Find the number.

(a) 2  
 (b) 3  
 (c) 1  
 (d) 4

**Q15.** If Anil's salary is 20% less than that of Rama, then by what percent is Rama's salary more than that of Anil?

(a) 20%  
 (b) 25%  
 (c) 15%  
 (d) 30%

**Q16.** Akshay is the son of Kapil. Simar, Kapil's sister, has a son Montu and daughter Sara. Pawan is the maternal uncle of Montu. How is Akshay related to Montu?

(a) Sister-in-law  
 (b) Mother  
 (c) Sister  
 (d) Cousin

**Q17.** Lalit Kala Akademi, the National Academy of Art, was set up in \_\_\_\_\_

(a) 1968  
 (b) 1964  
 (c) 1954  
 (d) 1951

**Q18.** Given below are two statements: one is labelled as **Assertion A** and the other is labelled as **Reason R**

**Assertion A:** Forest cutting is desirable from the point of view of soil erosion.

**Reason R:** Cutting of forests reduces the interception of rain water.

In the light of the above statements, choose the **correct** answer from the options given below.

(a) Both A and R are true and R is the correct explanation of A  
 (b) Both A and R are true but R is NOT the correct explanation of A  
 (c) A is true but R is false  
 (d) A is false but R is true

**Q19.** Which term of the AP: 3, 7, 11, ..., 147 is its middle term?

(a) 18<sup>th</sup>  
 (b) 19<sup>th</sup>  
 (c) 20<sup>th</sup>  
 (d) 21<sup>st</sup>

**Q20.** Which of the following Mughal rulers set up a new religion called Din-i-Illahi?

(a) Aurangzeb  
 (b) Humayun  
 (c) Akbar  
 (d) Shah Jahan

**Q21.** If the average of 15, 25, 19, 20, 23, 18 and  $(x - 3)$  is 20. then Find the average of  $x$ ,  $(x + 6)$ ,  $(2x - 1)$  and 23.

(a) 20  
 (b) 27  
 (c)  $28\frac{1}{2}$   
 (d) 30

**Q22.** The ratio between length and breadth of a rectangle is 3 : 2. If area of the rectangle is 96 cm<sup>2</sup>, then length of the rectangle is

(a) 6 cm  
 (b) 12 cm  
 (c) 8 cm  
 (d) 16 cm

**Q23.** 'Shramvev Jayate' scheme was announced on \_\_\_\_\_ by GOI.

(a) 10 October, 2013  
 (b) 16 October, 2014  
 (c) 12 October, 2012  
 (d) 13 October, 2015

**Q24.** A 180 m long train crosses a man standing on the platform in 6 seconds. What is the speed of the train?

(a) 90 km/h  
 (b) 108 km/h  
 (c) 120 km/h  
 (d) 88 km/h

**Q25.** Which of the given conclusions logically follows the given two statements.

**Statements:**

All apples are Banana  
 No Banana is Grape  
 Some Grape are Orange

**Conclusions**

I. Some Banana are Orange  
 II. No Apple is Orange  
 III. All Banana are Orange is a possibility  
 (a) Only I follow  
 (b) Only II conclusion follow  
 (c) Only III follow  
 (d) All conclusion follows

**Q26.** Match List-I with List-II:

Match List-I with List-II:

List-I (Device)		List-II (Purpose)	
(A)	Microphone	(I)	Use in vehicles to measure distance
(B)	Audiometer	(II)	For measuring the force and velocity of wind
(C)	Odometer	(III)	Converts sound waves to electrical vibrations
(D)	Anemometer	(IV)	Measures intensity of sound

Choose the **most appropriate** answer from the options given below:

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

**Q27.** Choose the assumption which is implicit in context of the given statement.

**Statement-** "Z- perfume is ideal as a gift for someone you love" - An Advertisement

**Assumptions**

I. People generally give gifts to loved one.  
 II. Such advertisements generally influence people.  
 III. Perfume can be considered as a gift item.

Choose the **most appropriate** answer from the options given below:

(a) I and II are implicit  
 (b) I and III are implicit  
 (c) All are implicit  
 (d) II and III are implicit

**Q28.** If two squares X and Y have each side of 10 m and 20 m respectively, then the side of the square Z whose area is equal to the sum of the areas of square X and square Y is:

(a)  $10\sqrt{3}$  m  
 (b)  $10\sqrt{2}$  m  
 (c)  $10\sqrt{7}$  m  
 (d)  $10\sqrt{5}$  m

**Q29.** In how many years a sum placed on compound interest becomes 8 times of itself, if it becomes twice in 6 years?

(a) 20  
 (b) 18  
 (c) 15  
 (d) 12

**Q30.** If some words are coded from artificial language: like "Botlo Pono" means Drink water  
 "Maroh pono" means chew water  
 "Pono ajebo" means save water  
 Which code could mean "Save Drink"?  
 (a) Botlo ajebo  
 (b) Botlo pono  
 (c) Pono ajebo  
 (d) Maroh Botlo

**Q31.** Match List-I with List-II:

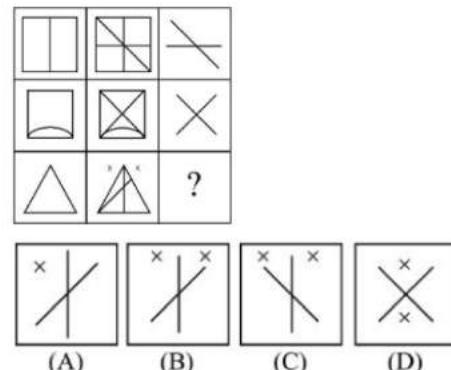
List-I (Mineral)		List-II (States)	
(A)	Coal	(I)	Madhya Pradesh
(B)	Gold	(II)	Gujarat
(C)	Diamond	(III)	Chhattisgarh
(D)	Petroleum	(IV)	Karnataka

Choose the **most appropriate** answer from the options given below:

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

**Q32.** Who fought the Battle of Tarain and won twice against Mohammad Ghori?

(a) Maharana Pratap  
 (b) Jai Chand  
 (c) Rana Sangram Singh  
 (d) Prithviraj Chauhan

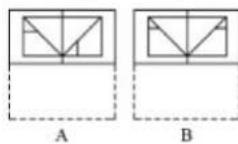
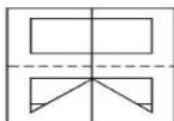
**Q33.** Find out which of the answer figures (A), (B), (C) and (D) completes the figure matrix

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

**Q34.** The \_\_\_\_\_ lies above the mesosphere.

(a) Troposphere  
 (b) Thermosphere  
 (c) Exosphere  
 (d) Stratosphere

**Q35.** Find out which option figure resembles the pattern formed when sheet is folded along the dotted line?



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

**Q36.** At what time between 4 0' clock and 5 0' clock hour hand and minute hand will coincide?

- (a)  $4: 18\frac{9}{11}$
- (b)  $4: 22\frac{9}{11}$
- (c)  $4: 21\frac{9}{11}$
- (d)  $4: 23\frac{9}{11}$

**Q37.** A solid hemisphere of radius 24 cm is melted and identical cones each of base radius 8 cm and height 6 cm are formed. How many such cones are formed?  
(a) 144  
(b) 96  
(c) 72  
(d) 24

**Q38.** Sourav completes a journey in  $5\frac{1}{2}$  hours. If he covers half of the distance at 5 km/h and the remaining distance at 6 km/h, then find the total distance covered by him.  
(a) 30 km  
(b) 35 km  
(c) 33 km  
(d) 39 km

**Q39.** Who is the winner of UNESCO Peace Prize 2022?  
(a) Volodymyr Zelenskyy  
(b) Tadashi Hattori  
(c) Swati Piramal  
(d) Angela Merkel

**Q40.** If  $\cos 6\theta = \sin 3\theta$ , then the value of  $\theta$  is:  
(a)  $9^\circ$   
(b)  $12^\circ$   
(c)  $10^\circ$   
(d)  $6^\circ$

**Q41.** Simon Commission came to India in \_\_\_\_\_.  
(a) 1925  
(b) 1928  
(c) 1923  
(d) 1930

**Q42.** In a school, ratio of number of boys to that of girls was 6:5. In the next year, number of boys increased by 20% and number of girls increased by 10% resulting in an increase of 119 students in the school. How many students were there in the school initially?  
(a) 680

- (b) 750
- (c) 770
- (d) 780

**Q43.** Find the missing term which can be filled at "?" place  
1, 3, 7, 22, 67, ? 1077

- (a) 269
- (b) 263
- (c) 362
- (d) 267

**Q44.** In a certain code, 'lee ra de' means 'Upanishads are it', 'mo nil' means 'you read', 'nil pom ra' means 'you like it' and 'tok lee fo' means 'They are immortal'. How will you write 'Upanishads you like' in that code?

- (a) de nil pom
- (b) de nil ra
- (c) mo nil pom
- (d) nil tok lee

**Q45.** Choose the alternative which most closely resembles the minor image of the given combination.

**SACRIFICE4**

- (a) 4 E C I F A C S
- (b) S A C R I F I C E 4 (b)
- (c) S A C R I F I C E 4
- (d) S A C R I F I C E 4

**Q46.** White revolution refers to \_\_\_\_\_.

- (a) Cotton textile Industry
- (b) Marble Industry
- (c) Cement Industry
- (d) Dairying

**Q47.** If today is Saturday, then day after 53 days will be:

- (a) Friday
- (b) Monday
- (c) Tuesday
- (d) Wednesday

**Q48.** A shopkeeper sold  $\frac{2}{3}$  of his stock of rice at a profit of 5% and the remaining stock at a loss of 2%. If his total profit was ₹1000, then the cost price of the whole stock of rice is:

- (a) ₹24,800
- (b) ₹32,600
- (c) ₹37,500
- (d) ₹48,000

**Q49.** Which is the largest salt water inland lake of India, that provides sanctuary to lakhs of migratory birds during winter?

- (a) Pachpadra Lake
- (b) Chilika Lake
- (c) Pangong Lake
- (d) Lomar Lake

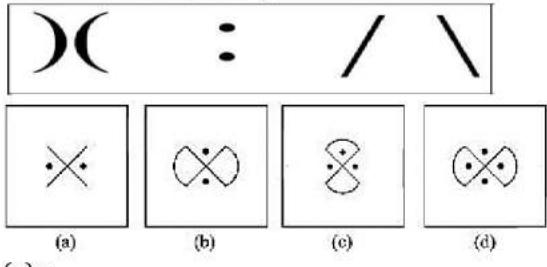
**Q50.** Mean, Median and Mode of a data are related by the relation

- (a) 3 Mode - 2 Median = Mean
- (b) 3 Mean - 2 Mode = Median
- (c) 3 Median - 2 Mode = Mean
- (d) 3 Median - 2 Mean = Mode

**Q51.** The first Vice-President of India was \_\_\_\_\_.

- (a) Dr. S. Radhakrishnan
- (b) Dr. Zakir Hussain
- (c) C. Rajagopalachari
- (d) Krishan Kant

**Q52.** Among four answer figures which one can be formed from the cut-out pieces given below:



- (a) a
- (b) b
- (c) c
- (d) d

**Q53.** The book titled "Exam Warriors" is written by:

- (a) L.K. Advani
- (b) P. Chindambaram
- (c) Jairam Ramesh
- (d) Narendra Modi

**Q54.** A and B can do a work in 10 days and 15 days respectively. They worked together for 5 days, then B left the work and A alone did the remaining work. The whole work got completed in:

- (a)  $6\frac{2}{3}$  days
- (b) 7 days
- (c)  $7\frac{1}{2}$  days
- (d)  $6\frac{1}{2}$  days

**Q55.** Six persons A, B, C, D, E, and F are sitting in two rows with three persons in each row. People of both the rows are facing each other. E is not at the end of any row. D is second to the left of F. C is the neighbour of E and diagonally opposite to D. B is the neighbour of F. Who is in front of F?

(a) A

(b) B

(c) C

(d) D

**Q56.** Which is the only metal that is liquid at room temperature?

- (a) Bromine
- (b) Mercury
- (c) Tungsten
- (d) Gallium

**Q57.** Rinki ranked 10<sup>th</sup> from the top and 28<sup>th</sup> from the bottom in a class. How many students are there in the class?

- (a) 27
- (b) 37
- (c) 38
- (d) 39

**Q58.** Simplify the following  $\frac{(3+7)\times 2-4}{(3+7)\times(2-4)} + \frac{3+7\times 2-5}{3+7\times(2-5)}$

- (a) 2
- (b)  $-\frac{2}{5}$
- (c)  $-\frac{22}{15}$
- (d)  $-\frac{7}{5}$

**Q59.** C.V. Raman got Nobel Prize in 1930 for his discovery of:

- (a) Research into the nature of chemical bonding
- (b) Raman Effect
- (c) Studies of the Photoelectric Effect
- (d) Discovery of the Phenomenon of Radioactivity

**Q60.** Find the odd one out from the given series

- 3, 12, 27, 48, 76, 108
- (a) 27
- (b) 48
- (c) 76
- (d) 10

## SOLUTIONS

**S1. Ans. (b)**

**Sol.** Justice DY Chandrachud has become the 50th Chief Justice of India.

**S2. Ans. (d)**

**Sol.**  $265 = 2 + 6 + 5 = 13$

$392 = 3 + 9 + 2 = 14$

$285 = 2 + 8 + 5 = 15$ .

Similar set of number from the four alternatives is option (d).

**S3. Ans. (c)**

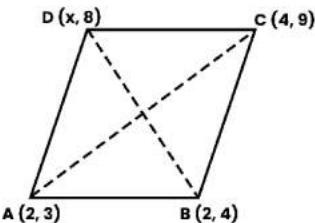
**Sol.** The first Indian to win a Nobel Prize was Rabindranath Tagore. In 1913, he was awarded the Nobel Prize in Literature for his collection of poems "Gitanjali."

**S4. Ans. (d)**

**Sol.** A, C and D only are true for rectangles.

**S5. Ans. (d)**

**Sol.**



Midpoint of BD = Midpoint of AC

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

$$x = 4$$

**S6. Ans. (b)**

**Sol.** A constitutional bench of the Supreme Court must have a minimum of five judges, as stated in Article 124(1) of the Indian Constitution.

**S7. Ans. (d)**

**Sol.** The probability of getting a sum of numbers which is perfect cube is  $\frac{7}{12}$ .

**S8. Ans. (b)**

**Sol.** A, B, C and D are the correct statements.

**S9. Ans. (b)**

**Sol.** The minute and hour hand coincide every 65 minutes and not 60 minutes. So, we can say that the two hands coincide exactly 11 times in a 12-hour span. We have to find the number of times in a day so we have 24 hours in a day. Therefore, the number of times the two hands coincide  $= 2 \times 11 = 22$  times.

**S10. Ans. (c)**

**Sol.** Let weight of R = x

So, weight of Q will be  $= 4.5x$  and weight of P will be  $= 9x$ .

Now S weighs half as much as T, so weight of S will be  $= 2x$ .

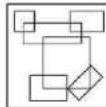
Therefore  $P > Q > S > R$ . It is given that T weighs more than R. Therefore, R is lightest member in the family,

**S11. Ans. (d)**

**Sol.** (A)-(IV), (B)-(III), (C)-(II), (D)-(I)

**S12. Ans. (b)**

**Sol.**



**S13. Ans. (c)**

**Sol.** Original price is ₹25,000

Rate of increment = 10%

$$\text{Price after 1 year} = 625000 \times \left(1 - \frac{10}{100}\right) = 625000 \times \frac{90}{100} = 5,62,500$$

$$\text{Price after 2 years} = \left(1 - \frac{10}{100}\right) = 562500 \times \frac{90}{100} = 506250$$

$$\text{Price after 3 years} = 506250 \times \frac{90}{100} = ₹455.625$$

**S14. Ans. (b)**

**Sol.** By putting option,

$$\frac{3+9+3}{3} = 5$$

**S15. Ans. (b)**

**Sol.** Let Rama's salary be Rs. 100

Anil's salary is 20% less than Rama's salary

Salary of Anil = 80% of 100 = Rs. 80

Rama's salary is Rs. 20 more than that of Anil.

Now, the required percentage =  $\frac{20}{8} (100)\% = 25\%$

Rama's salary is 25% more than Anil's salary.

**S16. Ans. (d)**

**Sol.** Kapil is brother or sister of Montu's mother. So, Akshay, who is son of Kapil would be cousin of Kapil.

**S17. Ans. (c)**

**Sol.** Lalit Kala Akademi (National Academy of Art), New Delhi was inaugurated on 5th August 1954 by the then Minister for Education, Maulana Abul Kalam Azad.

**S18. Ans. (d)**

**Sol.** Forest cutting is not desirable from the point of view of soil erosion. Therefore, A is false but R is true.

**S19. Ans. (b)**

**Sol.** Here,  $a = 3$ ,  $x_n = 147$ , common difference  $d = 4$

$$x_n = a + (n - 1)d$$

$$147 = 3 + (n - 1)4$$

$$n - 1 = 36, n = 37$$

Thus the given series consist of 37 terms.

Therefor its middle term will be  $\frac{37+1}{2} = 19^{\text{th}} \text{ term}$

**S20. Ans. (c)**

**Sol.** Akbar, the third ruler of the Mughal Empire, founded the Din-i-Ilahi in the late 16th century.

**S21. Ans. (d)**

**Sol.** We know,  $Mean = \frac{\text{Sum of all observation}}{\text{Total number of observation}}$

$$20 = \frac{15 + 25 + 19 + 20 + 23 + 18 + (x - 3)}{7}$$

$$140 = 117 + x$$

$$x = 23$$

Then  $x + 6 = 29, 2x - 1 = 45$

$$\text{Average} = \frac{23+29+45+23}{4} = 30$$
**S22. Ans. (b)**

**Sol.** Let the length and breadth of the rectangle be  $3x$  and  $2x$  respectively.

Now,  $3x \times 2x = 96$

$$x^2 = \frac{96}{6}$$

$$x = 4 \text{ cm}$$

Length =  $3x = 12 \text{ cm}$

**S23. Ans. (b)**

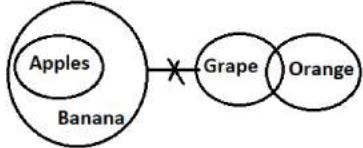
**Sol.** 'Shramav Jayate' scheme was announced on October 16, 2014, by the Government of India.

**S24. Ans. (b)**

**Sol.** Speed =  $180/6 = 30 \text{ m/s}$   
Convert m/sec into km/hr,  $30 \times \frac{18}{5} = 108 \text{ km/hr}$

**S25. Ans. (c)**

**Sol.**

**S26. Ans. (b)**

**Sol.** (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

**S27. Ans. (c)**

**Sol.** Clearly, all the three directly follow from the given statement.

**S28. Ans. (d)**

**Sol.** Area of squares X =  $10^2 = 100 \text{ m}^2$   
Area of the square Y =  $20^2 = 400 \text{ m}^2$   
Area of square Z =  $100 + 400 = 500 \text{ m}^2$   
Side of square Z =  $\sqrt{500} = 10\sqrt{5} \text{ m}$

**S29. Ans. (b)**

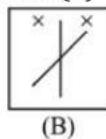
**Sol.** A certain sum at C.I becomes  $n$  times in  $t$  years then,  $n$  times  $\rightarrow t$  years  
 $n^m$  times  $\rightarrow (m \times t)$  years  
A sum of money placed at C.I doubles itself in 6 years  
2 times  $\rightarrow 6$  years  
8 times  $\rightarrow 2^3$  times =  $3 \times 6$  years = 18 years

**S30. Ans. (a)**

**Sol.** Botlo  $\rightarrow$  Drink  
Pono  $\rightarrow$  Water  
Maroh  $\rightarrow$  Chew  
Ajebo  $\rightarrow$  Save  
Therefore, code for 'Save Drink' would be 'Botlo Ajebo'.

**S31. Ans. (c)****S32. Ans. (d)**

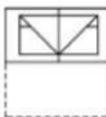
**Sol.** Prithviraj Chauhan fought the battle of Tarain and won twice against Mohammad Ghori.

**S33. Ans. (b)****S34. Ans. (b)**

**Sol.** The thermosphere is the layer of the atmosphere that lies above the mesosphere.

**S35. Ans. (b)**

**Sol.**

**S36. Ans (c)**

**Sol.** The hour hand of a clock covers  $360^\circ$  in 12 hrs or  $30^\circ$  in 1 hour or  $0.5^\circ$  in 1 min.  
At 4: 00, the minute hand has covered  $0^\circ$  and the hour hand has covered  $120^\circ$ .  
Let the time after which the hands coincide be  $x$  min.

So, the hour hand covers  $120 + \frac{x}{2}$  up to that time and the minute hand covers  $6x^\circ$  up to that time.  
When they coincide, the angles should be the same.  
So, we can write  $120 + \frac{x}{2} = 6x$

$$\frac{12x-x}{2} = 120$$

$$x = \frac{240}{11} = 21\frac{9}{11}$$

Therefore, they will coincide at  $4: 21\frac{9}{11}$ .

**S37. Ans. (c)**

**Sol.** ATQ, Volume of hemisphere = Volume of cone  
 $\frac{2}{3} \times 24^3 = \frac{1}{3} \times 8^2 \times 6$   
Number of cones =  $\frac{\frac{2}{3}\pi r^3}{\frac{2}{3}\pi r^3} = \frac{\frac{2}{3}\times 24^3}{\frac{2}{3}\times 8^2 \times 6} = 72$

**S38. Ans. (a)**

**Sol.** Let the distance travelled by man is  $2d$

$$\frac{d}{5} + \frac{d}{6} = 5\frac{1}{2}$$

$$\frac{11d}{30} = \frac{11}{2}$$

$$d = 15$$

Then distance travelled by man =  $2d = 30 \text{ km}$

**S39. Ans. (d)**

**Sol.** Former German chancellor Angela Merkel has been awarded the 2022 UNESCO Peace Prize for "her efforts to welcome refugees".

**S40. Ans. (c)**

**Sol.** putting  $\theta = 10^\circ$   
 $\cos 60^\circ = \sin 30^\circ$   
 $\frac{1}{2} = \frac{1}{2}$   
Thus  $\theta = 10^\circ$

**S41. Ans. (b)**

**Sol.** Simon Commission came formed in 1927 but came to India in 1927. But in official answer key 1927 is the correct answer.

**S42. Ans. (c)**

**Sol.** Let the initial number of students be  $x$

$$\text{Then, Number of boys} = \frac{6}{6+5}x = \frac{6x}{11}$$

$$\text{Similarly, Number of girls} = \frac{5x}{11}$$

$$20\% \text{ increment in number of boys} = \frac{6x}{11} + 20\% \text{ of } \frac{6x}{11}$$

$$10\% \text{ increment in number of girls} = \frac{5x}{11} + 10\% \text{ of } \frac{5x}{11}$$

$$\text{ATQ, } \frac{6x}{11} + 20\% \text{ of } \frac{6x}{11} + \frac{5x}{11} + 10\% \text{ of } \frac{5x}{11} = x + 119$$

$$\frac{6x}{11} + \frac{6x}{55} + \frac{5x}{11} + \frac{x}{22} = x + 119$$

$$127x - 110x = 119 \times 110$$

$$x = 770$$

Thus, number of students initially in the school is 770.

**S43. Ans. (a)**

**Sol.** The sequence is

$$1 \times 2 + 1 = 3$$

$$3 \times 2 + 1 = 7$$

$$7 \times 3 + 1 = 22$$

$$22 \times 3 + 1 = 67$$

$$\mathbf{67 \times 4 + 1 = 269}$$

$$269 \times 4 + 1 = 1077$$

**S44. Ans. (a)**

**Sol.** lee → are

de → Upanishads

nil → you

ra → it

pom → like

So 'Upanishads you like' will be written as 'de nil pom' in that code.

**S45. Ans. (b)**

**Sol.** SACRIFICE

**S46. Ans. (d)**

**Sol.** The White Revolution in India, also known as Operation Flood, was a successful program implemented to increase milk production and make the country self-sufficient in milk and dairy products.

**S47. Ans. (d)**

**Sol.** A week has 7 days " Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday".

$$53 / 7 = 7 \text{ (Remainder} = 4)$$

So we can say that after multiples of 7 days, the day will repeat itself as Saturday. Hence after 49 days Saturday will occur again.

So, we calculate after the remainder (4), the answer is Wednesday.

**S48. Ans. (c)**

**Sol.** Let the cost price of the rice is Rs. X

$$\frac{2}{3}x \times \frac{5}{100} - \frac{1}{3}x \times \frac{2}{100} = 1000$$

$$10x - 2x = 300000$$

$$x = 37500$$

Thus, the cost price of the whole stock of rice is ₹37,500.

**S49. Ans. (b)**

**Sol.** The largest saltwater inland lake in India that provides sanctuary to a large number of migratory birds during winter is Chilika Lake.

**S50. Ans. (d)**

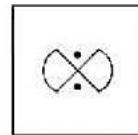
**Sol.** 3 Median - 2 Mean = Mode

**S51. Ans. (a)**

**Sol.** The first Vice-President of India was Dr. S. Radhakrishnan.

**S52. Ans. (b)**

**Sol.**

**S53. Ans. (d)**

**Sol.** The book titled "Exam Warriors" is written by Narendra Modi.

**S54. Ans. (a)**

**Sol.** A can do a work in 10 days, thus A's one day work =  $1/10$

B can do a work in 15 days, thus B's one day work =  $1/15$

$$A \text{ and } B \text{ 's one day work} = \frac{1}{10} + \frac{1}{15} = \frac{1}{6}$$

5 days' work of A and B will be  $5/6$

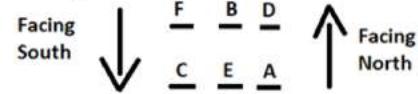
$$\text{Remaining work after } B \text{ left} = 1 - \frac{5}{6} = \frac{1}{6}$$

$$A \text{ will finish remaining work in} = \frac{1}{6} \times 10 = 1\frac{2}{3}$$

Total number of days to complete the work is  $= 1\frac{2}{3} = 6\frac{2}{3}$  days

**S55. Ans. (c)**

**Sol.** Clearly C is in front of F.

**S56. Ans. (b)**

**Sol.** The only metal that is liquid at room temperature is Mercury (Hg).

**S57. Ans. (b)**

**Sol.** Number of students in class =  $28 + 10 - 1 = 37$

**S58. Ans. (c)**

$$\text{Sol. } \frac{(3+7) \times 2 - 4}{(3+7) \times (2-4)} + \frac{3+7 \times 2 - 5}{3+7 \times (2-5)} = -\frac{22}{15}$$

**S59. Ans. (b)**

**Sol.** C.V. Raman got the Nobel Prize in 1930 for his discovery of the Raman Effect.

**S60. Ans. (c)**

**Sol.** The pattern is +9, +15, +21, +27 and so on. So instead of 76, 75 should be there. Therefore, 76 is odd one out.