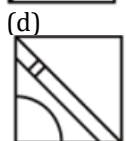
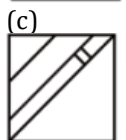
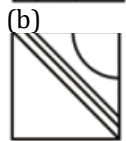
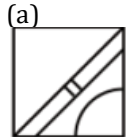
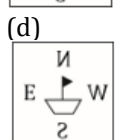
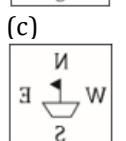
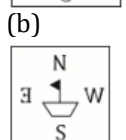
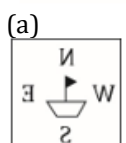
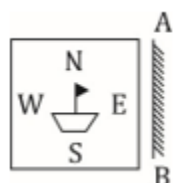


## RPF Constable Free Mock

**Q1.** Which answer figure will complete the pattern in the question figure?



**Q2.** If a mirror is placed on the line AB, then which of the answer figure is the right image of the given figure?



**Q3.** In the following question, select the related word pair from the given alternatives.

Truth : Lie :: ? : ?

- (a) Big : Small
- (b) Pink : Colour
- (c) Big : Huge
- (d) Lawyer : Black

**Q4.** In the following question, select the related number from the given alternatives.

5 : 25 :: 6 : ?

- (a) 39
- (b) 37
- (c) 28
- (d) 36

**Q5.** In the following question, select the related letter pair from the given alternatives.

FMR : ELQ :: ? : ?

- (a) PEN : QFO
- (b) ZEN : XCL
- (c) TGA : SFZ
- (d) SMP : UOR

**Q6.** Arrange the given words in the sequence in which they occur in the dictionary.

1. Sonorous
2. Sometimes
3. Somber
4. Solution
5. Solve

- (a) 42513
- (b) 45321
- (c) 12543
- (d) 32415

**Q7.** In the following question, select the missing number from the given series.

2187, 729, 243, 81, 27, ?

- (a) 10
- (b) 9
- (c) 13
- (d) 11

**Q8.** A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

BKP, EMQ, IPS, NTV, ?

- (a) TYZ
- (b) SXY
- (c) SYZ
- (d) TXY

**Q9.** In a row of trucks, Ashok is at 17th position from the left end. Bharat is 19 places to the right from Ashok and is at the exact centre of the row. How many trucks are there to the right of Ashok truck?

- (a) 53
- (b) 54
- (c) 52
- (d) 19

**Q10.** From the given alternatives, select the word which CANNOT be formed using the letters of the given word.

Accounting

- (a) Count
- (b) Actually
- (c) Acting
- (d) Ant

**Q11.** In following question some statements followed by some conclusions are given. Taking the given statements to be true even if they seem to be at variance from commonly known facts, read all the conclusions and then decide which of the given conclusion logically follows the given statements.

**Statements:**

- I. All girls are mad
- II. Some boys are mad

**Conclusions:**

- I. Some mad are girls
- II. All boys are girls
- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Both I and II follow
- (d) Neither of them follows

**Q12.** In following question some statements followed by some conclusions are given. Taking the given statements to be true even if they seem to be at variance from commonly known facts, read all the conclusions and then decide which of the given conclusion logically follows the given statements.

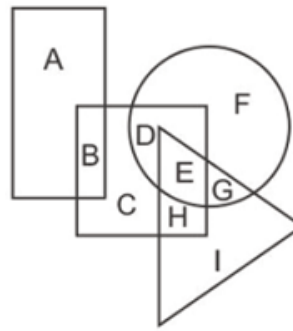
**Statements:**

- I. All cups are books
- II. All books are shirts

**Conclusions:**

- I. Some cups are not shirts
- II. Some shirts are cups
- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Both I and II follow
- (d) Neither of them follows

**Q13.** In the following figure, rectangle represents Chefs, circle represents Choreographers, triangle represents Divers and square represents Americans. Which set of letters represents Americans who are either Choreographers or Divers?



- (a) CD
- (b) EG
- (c) DH
- (d) BC

**Q14.** Hansh's birthday is on Monday 5th June. On what day of the week will be Tushar's Birthday in the same year if Tushar was born on 11th December?

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

**Q15.** Select the missing number from the given responses.

10	4	2	12
7	?	3	15
8	5	1	3

- (a) 9
- (b) 1
- (c) 25
- (d) 2

**Q16.** Which one set of letters when sequentially placed at the gaps in the given letter series shall complete it?

W \_ U W W \_ \_ W \_ X U W \_ X \_ W

- (a) XUWUWX
- (b) XWUUXW
- (c) XXUWWU
- (d) XXWWUU

**Q17.** If FIREWOOD is written as ERIFDOOW, then the code for the word FRACTION is written as

- (a) ARFITCNO
- (b) NOITCARF
- (c) CARFNOIT
- (d) CRAFNOIT

**Q18.** Which of the following interchange of signs would make the given equation correct?

$$5 + 6 \div 3 - 12 \times 2 = 17$$

- (a)  $\div$  and  $\times$
- (b)  $+$  and  $\times$
- (c)  $+$  and  $\div$
- (d)  $+$  and  $-$

**Q19.** A Nurse moved 90 m in the East in a hospital to look for her duty Doctor, then she turned right and went 20m. After this she turned right and after going 30 m she reached I.C.U. but the Doctor was not there. From there she went 100 m to her north and met her doctor. What is the minimum distance between the starting point of Nurse and Final position of Duty Doctor?

- (a) 80m
- (b) 120 m
- (c) 100 m
- (d) 140 m

**Q20.** Pointing to a man, a woman said, "His mother is the only daughter of my mother." How is the women related to the man?

- (a) Mother
- (b) Daughter
- (c) Grand-mother
- (d) Sister

**Q21.** If P denotes '÷' Q denotes '×', R denotes '+' and S denotes '-', then

18 Q 12 P 4 R 5 S 6 =?

- (a) 36
- (b) 53
- (c) 34
- (d) 65

**Q22.** How many triangles are there in the given figure?

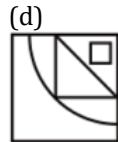
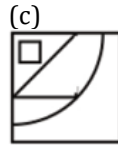
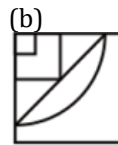
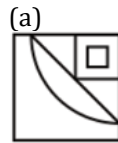


- (a) 15
- (b) 14
- (c) 16
- (d) 13

**Q23.** Pointing towards a boy, a lady said, that boy is the brother of my husband's only daughter's daughter. "How is that lady's son related to that boy?"

- (a) Father
- (b) Uncle
- (c) Brother
- (d) Son

**Q24.** Which answer figure will complete the pattern in the question figure?



**Q25.** In a certain code language, "FRONT" is written as "618151420" and "BORNE" is written as "21518145". How is "MORNS" written in that code language?

- (a) 1315181419
- (b) 1314161718s
- (c) 81291114
- (d) 141154321

**Q26.** In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

**Statement:**

- (I) Some flipflops are slippers
- (II) Some footwear are flipflops

**Conclusion:**

- (I) All slippers are footwear
- (II) All footwear are slippers
- (a) Only conclusion I follows
- (b) Only conclusion II follows
- (c) Both conclusions I and II follow
- (d) None of these

**Q27.** Select a figure from the given four options, which when placed in the blank space of problem figure(?) world complete the pattern.

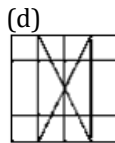
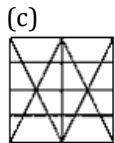
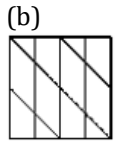
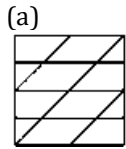


**Answer Figures.**

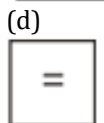
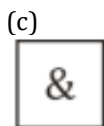
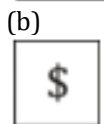
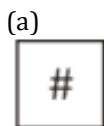
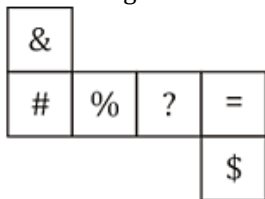


- (a) 1
- (b) 2
- (c) 3
- (d) 4

**Q28.** Form the given answer figures select the one in which the question figure is hidden/embedded.



**Q29.** Which symbol lie opposite to the face having symbol '%', when the figure is folded to form a cube?



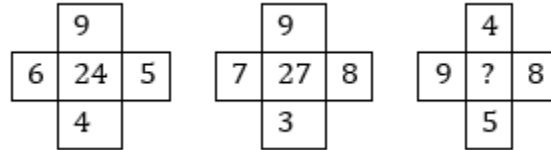
**Q30.** Find the missing number from the given series?  
10, 12, 22, 34, ?, 90

- (a) 56
- (b) 46
- (c) 60
- (d) 76

**Q31.** Find the missing number from the given series?  
3, 7, 19, 55, 163, ?

- (a) 487
- (b) 310
- (c) 467
- (d) 285

**Q32.** Which will replace the question mark?



- (a) 20
- (b) 16
- (c) 26
- (d) 24

**Q33.** In a certain code language, "MAYOR" is written as "NBZPS". How is "PLAYER" written in that code language?

- (a) QBFTRZ
- (b) ZRBMQF
- (c) QMBZFS
- (d) RBMQFS

**Q34.** In a certain code language, 'x' represents '+', '÷' represents 'x', '-' represents '÷' and '+' represents '-'. Find out the answer to the following question.

$$5 + 10 \times 21 \div 5 - 15 = ?$$

- (a) 49
- (b) 2
- (c) 30
- (d) 24

**Q35.** The following equation is incorrect. Which two signs should be interchanged to correct the equation?

$$10 \times 4 + 5 - 30 \div 6 = 31$$

- (a) x and -
- (b) ÷ and -
- (c) + and ÷
- (d) - and +

**Q36.** A bookseller bought 500 text books for 20,000. He wanted to sell them at a profit so that he gets 50 books free. At what profit percent should he sell them?

- (a) 10 %
- (b) 20 %
- (c) 15 %
- (d) 10.5 %

**Q37.** 20% of a man's salary is paid as rent, 60% are his living expenses and 10% are his savings. If he spends remaining Rs. 30 on the education of his children, find his salary?

- (a) 300
- (b) 900
- (c) 3000
- (d) 9000

**Q38.** The radius of a sphere and hemisphere are same. The ratio of their total surface area is:

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

**Q39.** There are 1400 students in a school, 25% of those wear spectacles and  $\frac{2}{7}$  of those wearing spectacles are boys. How many girls in the school wear spectacles?

- (a) 250
- (b) 100
- (c) 200
- (d) 300

**Q40.** A can do  $\frac{1}{3}$ rd of a work in 5 days and B can do  $\frac{2}{5}$ th of this work in 10 days. Both A and B, together can do the work in

- (a)  $7\frac{3}{8}$  days
- (b)  $8\frac{4}{5}$  days
- (c)  $9\frac{3}{8}$  days
- (d) 10 days

**Q41.** Kamal is 5 times older than her sister Geeta, who is 2 yrs younger than her brother Ram. If Ram is 8 years old, what will be the age of Kamal?

- (a) 30 years
- (b) 24 years
- (c) 40 years
- (d) 28 years

**Q42.** There are 50 students in a class. One boy among them, whose weight is 51 kg leaves the class and a new boy admits in the class. Due to this the average weight of the class increases by  $\frac{1}{2}$  kg. The weight of newly admitted student is

- (a) 73 kg
- (b) 76 kg
- (c) 74 kg
- (d) 75 kg

**Q43.** The sum of two numbers is 216 and their HCF is 27. How many such pairs of these numbers are there?

- (a) 1
- (b) 2
- (c) 3
- (d) 0

**Q44.** Six persons went to a hotel to take launch. Five among them spend Rs 32 each on their food while the 6<sup>th</sup> person spends Rs 80 more than that of the average expense of 6 persons. How much they spent all together?

- (a) Rs 192
- (b) Rs 240
- (c) Rs 288
- (d) Rs 336

**Q45.** In a fort there was sufficient food for 24 weeks for 200 soldiers. 80 more soldiers join the group at the end of one week and quantity of food served to each soldier was reduced from 900 gm to 750 gm. How many more days the rest food would last?

- (a) 69
- (b) 138
- (c) 91
- (d) 276

**Q46.** A car left 3 minutes early than the scheduled time and in order to reach the destination 126 km away in time, it has to slow its speed by 6 km/h from the usual. What is the usual speed (in km/hr) of the car?

- (a) 56
- (b) 63
- (c) 94.5
- (d) 126

**Q47.** The price of motor cycle depreciates every year by 10%. If the value of the motor cycle after 3 years will be Rs 36450, Then what is the present value (in Rs) of the motor cycle?

- (a) 45000
- (b) 50000
- (c) 48000
- (d) 51000

**Q48.** The average age of 6 members of a family is 25 years. If the youngest member of the family is 15 years old, then what was the average age (in years) of the family at the time of the birth of the youngest member?

- (a) 9
- (b) 12
- (c) 18
- (d) 24

**Q49.** Three bottles of equal capacity contain mixture of milk and water in ratio 2 : 3, 3 : 5 and 4 : 5 respectively. These three bottles are emptied into a large bottle. What is the ratio of milk and water respectively in the large bottle?

- (a) 439 : 1080
- (b) 439 : 641
- (c) 439 : 360
- (d) 439 : 79

**Q50.** A boat travels 24 km upstream in 6 hours and 20 km down-stream in 4 hours. Then the speed of boat in still water and the speed of water current are respectively.

- (a) 4 kmph and 3 kmph
- (b) 4.5 kmph and 0.5 kmph
- (c) 4 kmph and 2 kmph
- (d) 5 kmph and 2 kmph

**Q51.** Rice at Rs. 126 per kg and rice at Rs 135 per kg are mixed with a third type of rice in the ratio of 1:1: 2. If the value of this mixture is Rs 153 per kg then what is the price per kg of the third type of rice?

- (a) Rs169.50
- (b) Rs175.50
- (c) Rs175
- (d) Rs185

**Q52.** A and B enter into a partnership with capitals in the ratio 5 : 6. At the end of 8 months A withdraws his capital, if they receive profits in the ratio 5 : 9; B invested the capital for

- (a) 6 months
- (b) 8 months
- (c) 10 months
- (d) 12 months

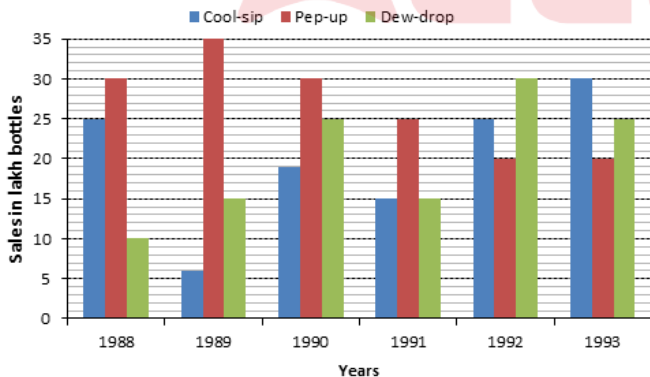
**Q53.** Rs. 2000 amounts to Rs 2600 in five years at a certain rate of simple interest. If the rate of interest is 3% more than the previous rate, then in the same time period, the same sum will amount to

- (a) Rs 2700
- (b) Rs 2800
- (c) Rs 2900
- (d) Rs 3000

**Q54.** If the difference between SI and CI for 2 years on a sum of money lent at 5% is Rs 6, then the sum is

- (a) Rs 2200
- (b) Rs 2400
- (c) Rs 2600
- (d) Rs 2000

**Directions (55-56):** Study the graph and answer the questions.



**Q55.** In which year the sale of cool-sip is minimum ?

- (a) 1990
- (b) 1992
- (c) 1993
- (d) None of the above

**Q56.** In case of which soft drink was the average annual sale maximum during the period 1988-1993 ?

- (a) Pep-up only
- (b) Pep-up and Dew-drop
- (c) Cool-sip only
- (d) Cool-sip and Pep-up

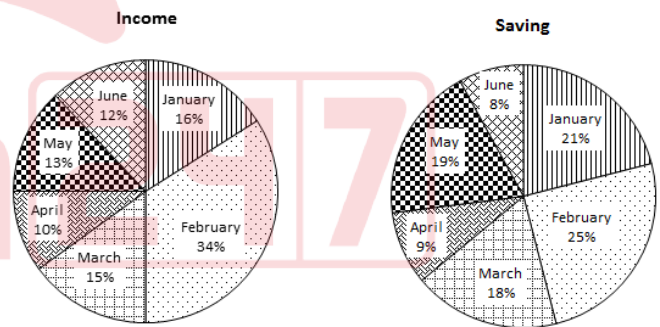
**Q57.** The ratio of the age of Sweta and Santoshi is 9 : 4. If after 10 years, Santoshi's age would be the same as the present age of Sweta, find the present age of Sweta (in years).

- (a) 9
- (b) 36
- (c) 27
- (d) 18

**Q58.** A, B and C started a business with their investments in the ratio of 1 : 2 : 3. After 6 months, A invested the same amount as before and B and C withdrew half of their investments. The ratio of their profits at the end of the year is:

- (a) 2 : 2 : 3
- (b) 1 : 2 : 2
- (c) 2 : 2 : 1
- (d) 2 : 3 : 2

**Directions (59-60):** Two pie charts are given below, first one is showing distribution of income of a person during 6 months of a year and the other pie chart shows distribution of saving in 6 different months of the same year. Read the data carefully and answer the question given below.



**Total Income = Rs. 60,000 Rs.**

**Total Saving = Rs. 20,000 Rs.**

**Q59.** Find expenditure of month January and February together.

- (a) Rs. 20800
- (b) Rs. 21800
- (c) Rs. 19800
- (d) Rs. 17800

**Q60.** Expenditure of person is maximum in which month.

- (a) January
- (b) March
- (c) April
- (d) February

**Q61.** The value of  $\frac{(0.32)^3 + (0.45)^3 - (0.77)^3}{81(0.32)(0.45)(0.77)}$  will be

- (a) 1
- (b) 0
- (c)  $-\frac{1}{27}$
- (d)  $\frac{1}{27}$

**Q62.** Calculate the value of  $0.77777 + 0.7777 + 0.777 + 0.77 + 0.7 + 0.07$

- (a) 3.86274
- (b) 3.80247
- (c) 3.85274
- (d) 3.87247

**Q63.** Length and breadth of a rectangle are increased by 40% and 70% respectively. What will be the percentage increase in the area of rectangle?

- (a) 118
- (b) 110
- (c) 138
- (d) 128

**Q64.** U and V started a business by investing amounts Rs 184000 and Rs 224000 respectively. If U's share in the profit received at the end of year is Rs 20700, then what will be the total profit (in Rs) earned by them together?

- (a) 43200
- (b) 45900
- (c) 52300
- (d) 56400

**Q65.**

Calculate the value of  $\frac{(61681 \times 61681 - 31681 \times 31681)}{30000}$

- (a) 93352
- (b) 94362
- (c) 93362
- (d) 95362

**Q66.** The marked price of a chair is 40% more than its cost price. If the chair is sold for Rs 520 after a discount of Rs 40, then what will be the profit percentage?

- (a) 33
- (b) 40
- (c) 25
- (d) 30

**Q67.** Which of the following statement(s) is/are TRUE?

- I.  $2\sqrt{3} > 3\sqrt{2}$
- II.  $4\sqrt{2} > 2\sqrt{8}$

- (a) Only I
- (b) Only II
- (c) Neither I nor II
- (d) Both I and II

**Q68.** Ten years ago, the average age of a family of 4 members was 25 years, 2 children having been born (with age difference 2 years), the present average age of the family is the same. The present age of the youngest child is -

- (a) 1 year
- (b) 2 year
- (c) 3 year
- (d) 4 years.

**Q69.** Amit can row a boat d km upstream and the same distance downstream in 5 hours 15 minutes. Also, he can row the boat 2d km upstream in 7 hours. How long will it take to row the same distance 2d km downstream for Amit?

- (a) 4 hrs 15 min
- (b) 3 hrs 15 min
- (c) 3 hrs 30 min
- (d) 4 hrs 30 min

**Q70.** Two mixtures have milk and water in the ratio 1 : 4 and 3 : 2 respectively. In what ratio two types of mixtures have to be mixed to get a new mixture having ratio of milk and water as 1 : 1?

- (a) 4 : 3
- (b) 5 : 3
- (c) 3 : 2
- (d) 1 : 3

**Q71.** Which airports were awarded the Best Airport of the Year at Wings India Awards?

- (a) Mumbai and Chennai Airports
- (b) Hyderabad and Kolkata Airports
- (c) Bengaluru and Delhi Airports
- (d) Pune and Goa Airports

**Q72.** Which entity retained the IPL Title Sponsorship for the next five years?

- (a) Reliance Group
- (b) Tata Group
- (c) Adani Group
- (d) Mahindra Group

**Q73.** What initiative was launched by the Assam Government for women entrepreneurs?

- (a) "Lakhpati Beti"
- (b) "Lakhpati Didi"
- (c) "Lakhpati Baideo"
- (d) "Lakhpati Mahila"

**Q74.** Where were the Khelo India Youth Games 2023 inaugurated by the Prime Minister?

- (a) Kolkata, West Bengal
- (b) Mumbai, Maharashtra
- (c) Chennai, Tamil Nadu
- (d) New Delhi, Delhi

**Q75.** Which state government initiated the 'My School-My Pride' program?

- (a) Kerala
- (b) Himachal Pradesh
- (c) Uttarakhand
- (d) Gujarat

**Q76.** Which is NOT the correct statement about the Governor?

- (a) He appoints the Chief Minister and other Ministers.
- (b) He has the power to grant pardons, reprieves and forgive the death penalty of a person
- (c) He may issue Ordinances under certain circumstances
- (d) The state executive power is vested with the Governor.

**Q77.** The 42nd Constitutional Amendment was made according to the recommendation of \_\_\_\_\_, set up in 1976.

- (a) Abhijeet Sen Committee
- (b) Ajit Kumar Committee
- (c) Abid Hussain Committee
- (d) Swaran Singh Committee

**Q78.** Identify the writ by the virtue of which the Court directs a detained person to be brought before it to examine the legality of his detention.

- (a) Mandamus
- (b) Certiorari
- (c) Habeas Corpus
- (d) Quo-Warranto

**Q79.** Which of the following Articles of the Indian Constitution provides for an independent office of the Comptroller and Auditor General of India?

- (a) Article 148
- (b) Article 134
- (c) Article 158
- (d) Article 160

**Q80.** Under which of the following articles is the abolition of titles recognised?

- (a) Article 19
- (b) Article 20
- (c) Article 18
- (d) Article 17

**Q81.** Which among the following Vedas is the oldest?

- (a) Sama
- (b) Rig
- (c) Atharva
- (d) Yajur

**Q82.** Who among the following was the founder of the Vakataka Dynasty?

- (a) Pravarasena I
- (b) Vindhyashakti
- (c) Pravarasena II
- (d) Prabhavati Gupta

**Q83.** Which region witnessed a significant rebellion led by Begum Hazrat Mahal during the Revolt of 1857?

- (a) Awadh
- (b) Punjab
- (c) Bengal
- (d) Madras

**Q84.** What is called the line that combines the places of same amount of rainfall?

- (a) Isobath
- (b) Isohyet
- (c) Isoryme
- (d) Isoneph

**Q85.** Which of the following rivers does not have a delta in the eastern coastal plain of India?

- (a) Mahanadi
- (b) Krishna
- (c) Godavari
- (d) Narmada

**Q86.** Which of the following is NOT a potential impact of a cyclone?

- (a) Heavy rainfall and flooding
- (b) High winds and storm surge
- (c) Drought conditions
- (d) Landslides and mudslides

**Q87.** Which category had the highest percentage of workers in the 2011 Census of India?

- (a) Agriculture
- (b) Industry
- (c) Services
- (d) Construction

**Q88.** Which of the following schemes aims to provide free LPG connections to women from Below Poverty Line (BPL) households?

- (a) Ujjwala Yojana
- (b) Swachh Bharat Abhiyan
- (c) Pradhan Mantri Fasal Bima Yojana
- (d) Pradhan Mantri Jan Dhan Yojana

**Q89.** What is the consequence of iodine deficiency in our diet?

- (a) Hyperthyroidism
- (b) Goitre
- (c) Diabetes
- (d) Cushing's syndrome

**Q90.** In Paramecium, the food is moved to a specific spot by the movement of \_\_\_\_\_.

- (a) cilia
- (b) villi
- (c) pseudopodia
- (d) vacuole



**Q91.** Which of the following is not an allotrope of carbon?

- (a) Diamond
- (b) Graphite
- (c) Fullerene
- (d) Carbon monoxide

**Q92.** Which non-metal is essential for combustion and respiration?

- (a) Hydrogen
- (b) Oxygen
- (c) Nitrogen
- (d) Chlorine

**Q93.** A force of 200 N displaces a body by 4 m, calculate the work done (in J).

- (a) 40
- (b) 500
- (c) 80
- (d) 800

**Q94.** Which of the following is NOT a freshwater lake in India?

- (a) Bhimtal
- (b) Loktak
- (c) Barapani
- (d) Sambhar

**Q95.** The famous Pushkar Fair of Rajasthan is held \_\_\_\_\_ in a year.

- (a) two times
- (b) four times
- (c) three times
- (d) one time

**Q96.** What is the theme for the World Day of Social Justice 2024?

- (a) Equality for All
- (b) Bridging Gaps, Building Alliances
- (c) Justice and Legal Equity
- (d) Promoting Social Harmony

**Q97.** Which city hosted the 11th International Puppet Festival?

- (a) Jaipur
- (b) Mumbai
- (c) New Delhi
- (d) Chandigarh

**Q98.** What major project did the Indian Air Force conduct in Rajasthan?

- (a) Operation Gagan Shakti
- (b) Exercise Vayu Shakti-24
- (c) Aero India Show
- (d) Exercise Garuda

**Q99.** What is the purpose of the 'Sagar Aankalan' guidelines launched by the government?

- (a) To promote oceanic exploration
- (b) To increase maritime security
- (c) To boost efficiency and competitiveness in maritime activities
- (d) To regulate fishing activities

**Q100.** Where was India's first Skill India Centre inaugurated?

- (a) Gujarat
- (b) Maharashtra
- (c) Odisha
- (d) Kerala

**Q101.** Only Indian citizen above the age of \_\_\_\_\_ years are eligible for the appointment of the Governor of a State.

- (a) 28
- (b) 40
- (c) 25
- (d) 35

**Q102.** Which article of the Constitution of India abolishes the concept of 'untouchability' and prohibits its practice in any shape or form?

- (a) 16
- (b) 15
- (c) 17
- (d) 14

**Q103.** A \_\_\_\_\_ is a group of people who come together to contest elections and hold power in the government.

- (a) political party
- (b) proletariat
- (c) municipality
- (d) judiciary

**Q104.** In which year was the term 'secular' added to the Preamble of the Indian Constitution?

- (a) 1976
- (b) 1970
- (c) 1972
- (d) 1974

**Q105.** Which Veda depicts the information about the most ancient Vedic age culture?

- (a) Rigveda
- (b) Yajurveda
- (c) Atharvaveda
- (d) Samaveda

**Q106.** Ashoka's conquest of Kalinga has been described in the minor rock edict numbered

- (a) I
- (b) IV
- (c) VIII
- (d) XIII

**Q107.** The Dutch established their first factory in India at:

- (a) Surat
- (b) Calicut
- (c) Chennai (Madras)
- (d) Masulipatnam

**Q108.** The First Anglo Maratha war was fought at the time of?

- (a) Lord Dalhousie
- (b) Robert Clive
- (c) Lord Wellesley
- (d) Warren Hastings

**Q109.** All vital atmospheric processes leading to various climatic and weather conditions take place in the:

- (a) Stratosphere
- (b) Troposphere
- (c) Ionosphere
- (d) Exosphere

**Q110.** Which is the largest island in the Indian Ocean?

- (a) Borneo
- (b) Madagascar
- (c) Andaman Islands
- (d) Ashmore and Cartier Islands

**Q111.** Which of the following rivers flows from south to north?

- (a) Godavari
- (b) Cauvery
- (c) Krishna
- (d) Betwa

**Q112.** Startup India was launched under the \_\_\_\_\_.

- (a) Ministry of Skill Development and Entrepreneurship
- (b) Ministry of Social Justice and Empowerment
- (c) Ministry of Labour and Employment
- (d) Ministry of Commerce and Industry

**Q113.** What makes the imported goods more expensive?

- (a) Superior Quality
- (b) Custom Made goods
- (c) Tariffs
- (d) Rarity in nature

**Q114.** As per the Census 2011, what was the literacy rate in India?

- (a) 74.04%

(b) 88.23%

(c) 65.27%

(d) 69.90%

**Q115.** What is the white precipitate formed in the reaction of sodium sulphate and barium Chloride?

- (a) Barium hydroxide
- (b) Sodium chloride
- (c) Sodium oxide
- (d) Barium sulphate

**Q116.** Which among the following elements has the least atomic radius?

- (a) Li
- (b) Be
- (c) O
- (d) B

**Q117.** Which vitamin is essential for maintaining healthy eyesight?

- (a) Vitamin A
- (b) Vitamin C
- (c) Vitamin D
- (d) Vitamin K

**Q118.** Which of the following is an example of a non-metallic mineral?

- (a) Iron ore
- (b) Copper ore
- (c) Graphite
- (d) Bauxite

**Q119.** What is the heat released by a heating filament rated 24 W when it is kept on for 6 seconds?

- (a) 4
- (b) 144
- (c) 72
- (d) 8

**Q120.** Which national park is known for its population of the endangered Great Indian Bustard?

- (a) Ranthambore National Park
- (b) Keoladeo National Park
- (c) Desert National Park
- (d) Jim Corbett National Park

## Solutions

**S1. Ans.(d)**

**S2. Ans.(c)**

**S3. Ans.(a)**

**Sol.** Truth is the antonym of lie.

Similarly,

Big is the antonym of small.

**S4. Ans.(d)**

**Sol.**  $5 - 5^2 = 25$

$6 - 6^2 = 36$

**S5. Ans.(c)**

**Sol.** -1 series

S6. Ans.(b)

Sol. 4. Solution

5. Solve

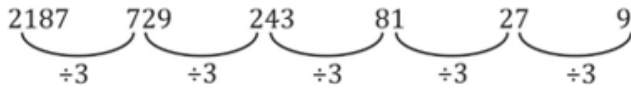
3. Somber

2. Sometimes

1. Sonorous

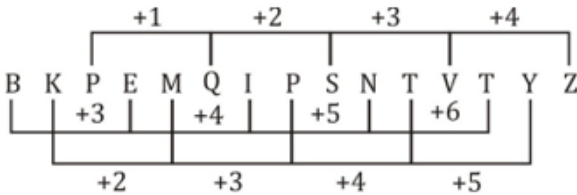
S7. Ans.(b)

Sol.



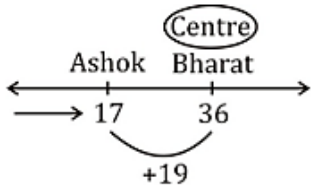
S8. Ans.(a)

Sol.



S9. Ans.(b)

Sol.



∴ No. of trucks to the right of Ashok truck

$$= 19 + 35$$

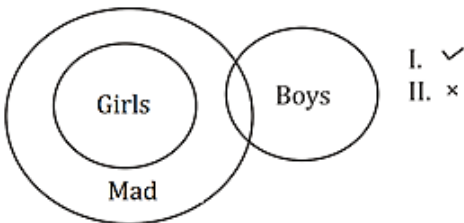
$$= 54$$

S10. Ans.(b)

Sol. Actually

S11. Ans.(a)

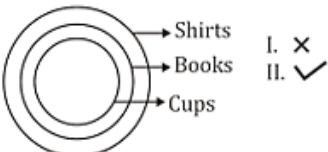
Sol.



Only conclusion I follows

S12. Ans.(b)

Sol.



Only Conclusion II follows.

S13. Ans.(c)

Sol. DH

S14. Ans.(c)

Sol.

5<sup>th</sup> June = Monday

$$\text{Number of days till 11 Dec} = 25 + 31 + 31 + 30 + 31 + 30 + 11 = 189$$

$$\therefore \text{No. of odd days} = \frac{189}{7} = 0 \text{ odd days}$$

$$\therefore \text{Day on 11 December} = \text{Monday} + 0 = \text{Monday}$$

S15. Ans.(d)

Sol.

$$(10 \times 2) - (4 \times 2) = 12$$

$$(8 \times 1) - (5 \times 1) = 3$$

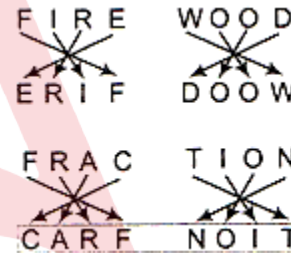
$$(7 \times 3) - (2 \times 3) = 15$$

S16. Ans.(c)

Sol. Here, 'WXUW' series is going on. So, option (c) will complete the gap.

S17. Ans.(c)

Sol. As



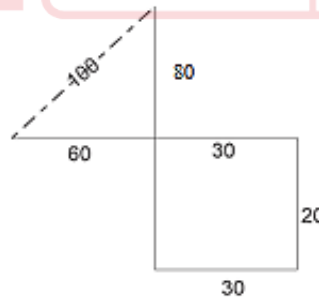
S18. Ans.(a)

Sol. On interchanging ÷ and ×, we get

$$5 + 6 \times 3 - 12 \div 2 = 5 + 6 \times 3 - 6 = 5 + 18 - 6 = 17$$

S19. Ans.(c)

Sol.



S20. Ans.(a)

Sol. Only daughter of my mother-myself. So, the woman is man's mother.

S21. Ans.(b)

Sol. 18 Q 12 P 4 R5S6

$$= 18 \times 12 \div 4 + 5 - 6 = 18 \times 12 \times 1 \div 4 + 5 - 6$$

$$= 54 + 5 - 6 = 53$$

S22. Ans.(a)

Sol. 15 triangles

S23. Ans.(b)

Sol. Her husband's only daughter's daughter means her own daughter's daughter (Grand-daughter) and that lady's son is brother of her daughter. So that lady's son is uncle of the Grand-daughter or Grandson.

S24. Ans.(a)

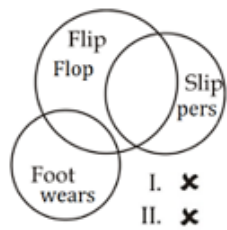
S25. Ans.(a)

Sol. As per numeric position in English alphabet series.

M / O / R / N / S → 13 / 15 / 18 / 14 / 19

S26. Ans.(d)

Sol.



Neither conclusion I nor conclusions II follow.

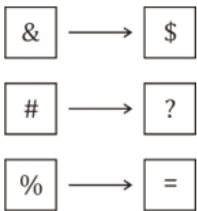
S27. Ans.(b);

Sol. Clearly option(b) will complete the figure.

S28. Ans.(c)

S29. Ans.(d)

Sol. Opposite faces are:-



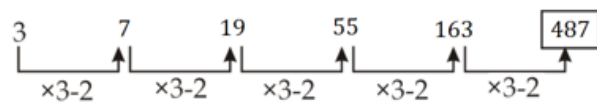
S30. Ans.(a)

Sol. Each term in the series is the sum of the preceding two terms.

Missing number = 22 + 34 = 56

S31. Ans.(a)

Sol.



S32. Ans.(c)

Sol. 9 + 5 + 4 + 6 = 24

9 + 8 + 3 + 7 = 27

4 + 8 + 5 + 9 = 26

S33. Ans.(c)

Sol. QMBZFS (+ 1 series)

S34. Ans.(b)

Sol.

$$\begin{aligned} & 5 + 10 \times 21 \div 5 - 15 \\ \Rightarrow & 5 - 10 + 21 \times 5 \div 15 \\ \Rightarrow & 5 - 10 + 21 \times \frac{5}{15} \\ \Rightarrow & 5 - 10 + 7 \\ \Rightarrow & 12 - 10 = 2 \end{aligned}$$

S35. Ans.(a)

Sol.  $10 \times 4 + 5 - 30 \div 6 = 31$

$$\Rightarrow 10 - 4 + 5 \times 30 \div 6 = 31$$

$$\Rightarrow 10 - 4 + 25 = 31$$

$$\Rightarrow 35 - 4 = 31$$

$$\Rightarrow 31 = 31$$

S36. Ans.(a)

Sol.

$$\text{Price of 1 text book} = \frac{20000}{500} = \text{Rs. 40}$$

$$\text{Price of free 50 text books} = 50 \times 40 = \text{Rs. 2000}$$

$$\text{So, profit} = \frac{2000}{20000} \times 100 = 10\%$$

S37. Ans.(a)

Sol. Total expenditure = 20 + 60 + 10 = 90%

so, remaining salary = [100 - 90]% = 10%

$$\Rightarrow 10\% = 30$$

$$\therefore 100\% = 300$$

S38. Ans.(d)

Sol.

$$\text{ratio of surface area} = \frac{\text{sphere}}{\text{hemisphere}}$$

$$= \frac{4\pi r^2}{3\pi r^2} = \frac{4}{3}$$

S39. Ans.(a)

Sol.

Total students = 1400

Number of students who wear specs = 350

$$\Rightarrow \text{Girls wear specs} = 350 - 350 \times \frac{2}{7} = 250$$

S40. Ans.(c)

Sol.

Since A can complete  $\frac{1}{3}$ rd work in 5 days

$\therefore$  A can complete whole work in  $5 \times 3 = 15$  days

Similarly, B can complete the whole work in  $10 \times \frac{5}{2} = 25$  days

$$\therefore \text{Total number of days taken by them working together} = \frac{1}{\frac{1}{15} + \frac{1}{25}} = \frac{25 \times 15}{(25+15)} = 9\frac{3}{8} \text{ days.}$$

S41. Ans.(a)

Sol. Ram's age = 8 years

Geeta's age = 8 - 2 = 6 years

$\therefore$  kamal's age = 6 × 5 = 30 years

**S42. Ans.(b)****Sol.**

The weight of newly admitted student  
 $= 51 + \frac{50}{2} = 51 + 25 = 76\text{kg}$

**S43. Ans.(b)****Sol.** Let a & b be prime numbers

$$\therefore 27a + 27b = 216$$

$$27(a + b) = 216$$

$$\therefore a + b = 8$$

Then possible pairs = (1, 7), (7, 1), (3, 5), (5, 3)

There are 2 common pairs among them

 $\therefore$  required answer = 2**S44. Ans.(c)****Sol.**Let 6<sup>th</sup> person spends Rs x

Then,

$$x = \frac{5 \times 32 + x}{6} + 80$$

$$\Rightarrow x = 128$$

$$\text{Total expense} = 5 \times 32 + 128$$

$$= \text{Rs } 288$$

**S45. Ans.(b)****Sol.**

We have

$$900 \times 23 \times 200 = 280 \times 750 \times W$$

$$\Rightarrow W = \frac{138}{7}$$

$$\text{No. of days} = \frac{138}{7} \times 7 = 138$$

**S46. Ans.(d)****Sol.**

Let the usual time be 't' hrs and usual speed be 'x' km/h

ATQ,

$$126 = xt \quad \dots(i)$$

$$\text{And } 126 = (x-6) \times \left(t + \frac{3}{60}\right)$$

$$126 = (x-6) \times \left(\frac{126}{x} + \frac{1}{20}\right) \quad \dots(ii)$$

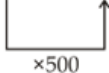
Solving eqn (i) and eqn (ii), we get

$$x = 126 \text{ km/h}$$

**S47. Ans.(b)****Sol.**

$$100 \xrightarrow{-10\%} 90 \xrightarrow{-10\%} 81 \xrightarrow{-10\%} 72.9\%$$

$$\text{If } 72.9\% = 36450$$



$$\text{Then } 100\% \Rightarrow 100 \times 500 = \text{Rs } 50000$$

**S48. Ans.(b)****Sol.**Sum of the age of the family =  $6 \times 25 = 150$  yearsThe sum of age of the family at the time of the birth of the youngest member =  $150 - 90$ 

$$= 60$$

$$\text{Average (age)} = \frac{60}{5} = 12 \text{ years}$$

**S49. Ans.(b)****Sol.**

$$2 : 3 = 5 \times 72$$

$$144 : 216$$

$$3 : 5 = 8 \times 45$$

$$135 : 225 =$$

$$4 : 5 = 9 \times 40$$

$$160 : 200$$

$$439 : 641$$

**S50. Ans.(b);****Sol.**

$$\text{Upstream speed, } U = \frac{24}{6} = \frac{12}{3} = 4 \text{ km/h}$$

$$\text{Downstream speed, } D = \frac{20}{4} = 5 \text{ km/h}$$

$$\therefore \text{ speed of boat in still water, } x = \frac{D+U}{2} = \frac{9}{2} = 4.5 \text{ km/h}$$

$$\text{Speed of water current, } y = \frac{D-U}{2} = \frac{1}{2} = 0.5 \text{ km/h.}$$

**S51. Ans.(b)****Sol.** We have,

$$126 \times 1 + 135 \times 1 + x \times 2 = 153 \times 4$$

$$\Rightarrow 2x = 351$$

$$\Rightarrow x = 175.50 \text{Rs.}$$

**S52. Ans.(d)****Sol.**As, profit = Investment  $\times$  time

Now,

$$\frac{5 \times 8}{6 \times x} = \frac{5}{9}$$

$$x = 12 \text{ months}$$

**S53. Ans.(c)****Sol.**

Simple interest for 5 years = Rs 600

 $\therefore$  simple interest for 1 year = 120

$$\text{Rate of interest} = \frac{120}{2000} \times 100 = 6\%$$

Now rate of interest =  $6 + 3 = 9\%$ 

$$\text{New interest} = \frac{2000 \times 9 \times 5}{100} = 900$$

$$\text{Amount} = 2000 + 900 = \text{Rs } 2900$$

**S54. Ans.(b)****Sol.**

$$\text{We have, } 5\% = \frac{1}{20}$$

$$\text{Let principal} = 400 \rightarrow 20$$

$$20 \quad 1$$

Difference between SI &amp; CI = 1 unit

We have, 1 unit = Rs 6

$$\therefore \text{principal} = 400 \text{ unit} = 40 \times 6 = \text{Rs } 2400$$

**S55. Ans.(d)****Sol.** It is obvious from the graph.

Minimum sales in 1989 = 6 lakh bottles

**S56. Ans.(a)****Sol.**

Average annual sales during 1988-1993:

$$\text{Cool sip} = \frac{25+6+19+15+25+30}{6}$$

$$= \frac{120}{6} = 20 \text{ lakh bottles}$$

6

$$\text{Pep-up} = \frac{30+35+30+25+20+20}{6}$$

$$= \frac{160}{6} = 26\frac{2}{3} \text{ lakh bottles.}$$

**S57. Ans.(d)****Sol.** Let the ages of Swetha and Santoshi be  $9x$  and  $4x$ 

$$\Rightarrow 4x + 10 = 9x \Rightarrow x = 2$$

$$\therefore \text{Swetha's age} = 9 \times 2 = 18 \text{ years}$$

**S58. Ans.(a)****Sol.** Let the initial investments of A, B and C be  $x$ ,  $2x$ ,  $3x$  respectively.A's investment for 6 months =  $6x$  and remaining 6 months =  $2x \times 6 = 12x$ B's investment for 6 months =  $2x \times 6 = 12x$  and remaining 6 months =  $x \times 6$ C's investment for 6 months =  $3x \times 6 = 18x$  and remaining 6 months =  $4.5x \times 9x$ 

Required ratio of profits = ratio of investments

$$= (6x + 12x) : (12x + 6x) : (18x + 9x)$$

$$= 2 : 2 : 3$$

**S59. Ans.(a)****Sol.**

$$\text{Expenditure of January} = 60000 \times \frac{16}{100} - 20000 \times \frac{21}{100} = 54000$$

$$\text{Expenditure of February} = 60000 \times \frac{34}{100} - 20000 \times \frac{25}{100} = \text{Rs. } 15400$$

$$\text{Total Expenditure} = 15400 + 5400 = \text{Rs. } 20800$$

**S60. Ans.(d)****Sol.** It is clearly visible that Expenditure in February will be maximum.**S61. Ans.(c)****Sol.**

When,

$$a + b + c = 0 \text{ then, } a^3 + b^3 + c^3 = 3abc$$

here,

$$a = 0.32, b = 0.45 \text{ \& } c = -0.77$$

So,

$$\frac{1}{27} \times \frac{(0.32)^3 + (0.45)^3 + (-0.77)^3}{3(0.32)(0.45)(-0.77)} = -\frac{1}{27} \times 1$$

$$= -\frac{1}{27}$$

**S62. Ans.(d)**

$$\text{Sol. } 0.77777 + 0.7777 + 0.777 + 0.77 + 0.7 + 0.07 = 3.87247$$

**S63. Ans.(c)****Sol.**

Let length = 10 cm &amp; breadth = 10 cm

$$\text{Area} = 100 \text{ cm}^2$$

$$\text{New length} = \frac{10 \times 140}{100} = 14 \text{ cm}$$

$$\text{New breadth} = \frac{10 \times 170}{100} = 17 \text{ cm}$$

$$\text{New area} = 238 \text{ cm}^2$$

$$\text{Required percentage increase} = \frac{238-100}{100} \times 100 = 138\%$$

**S64. Ans.(b)****Sol.** Profit share Ratio is equal to investment ratio if time of investment is equal or not given profit share ratio

$$184000 : 224000$$

$$23 : 28$$

$$\text{Required total profit} = \frac{20700 \times (23+28)}{23} = 45900$$

**S65. Ans.(c)****Sol.**

ATQ,

$$\frac{61681^2 - 31681^2}{30000} = \frac{(61681 + 31681)(61681 - 31681)}{30000}$$

$$= 93362$$

**S66. Ans.(d)****Sol.**

$$\text{Total market price} = 520 + 40 = 560$$

Let, cost price =  $x$ 

$$\text{Market price} = \frac{x \times 140}{100} = 1.4x$$

$$1.4x = 560$$

$$x = 400$$

$$\text{Selling price} = 520$$

$$\text{Profit} = 520 - 400 = 120$$

$$\text{Required profit percentage} = \frac{120}{400} \times 100 = 30\%$$

**S67. Ans.(c)****Sol.**In 1<sup>st</sup> statement

$$2\sqrt{3} > 3\sqrt{2}$$

If we make square we get  $12 > 18$ So, 1<sup>st</sup> statement is wrong.In 2<sup>nd</sup> statement

$$4\sqrt{2} > 2 \times 2\sqrt{2} = 4\sqrt{2} = 4\sqrt{2}$$

So, 2<sup>nd</sup> statement is also wrong..

Both statements are wrong.

**S68. Ans.(d)****Sol.**10 years ago, sum of age of the family =  $25 \times 4 = 100$  years $\therefore$  present sum of age of the family of 4 members =  $100 + 40 = 140$ & present sum of age of the family of 6 members =  $25 \times 6 = 150$  years $\therefore$  sum of age of two children =  $150 - 140$ 

= 10 years

$$x + y = 10 \text{ (Say)}$$

$$x - y = 2 \text{ (Given)}$$

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

$$x = 6 \text{ \& } y = 4$$

 $\therefore$  The present age of the youngest child = 4 year

**S69. Ans.(c)****Sol.**

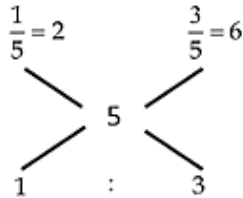
We have

$$\frac{d}{x+y} + \frac{d}{x-y} = \frac{21}{4} \quad \dots (i)$$

$$\& \frac{2d}{x-y} = 7 \Rightarrow \frac{d}{x-y} = \frac{7}{2}$$

$$\text{From (i)} \rightarrow \frac{d}{x+y} + \frac{7}{2} = \frac{21}{4} \Rightarrow \frac{d}{x+y} = \frac{7}{4}$$

$$\text{Required time} = \frac{2d}{x+y} = \frac{7}{2} = 3 \text{ hrs } 30 \text{ min}$$

**S70. Ans.(d)****Sol.**

Required ratio 1 : 2 : 3 : 6

**S71. Ans.(c)****Sol.** Correct answer is (c)

- At the prestigious Wings India Awards 2024, both the Kempegowda International Airport in Bengaluru and the Indira Gandhi International Airport in Delhi were jointly awarded the 'Best Airport of the Year'
- The award ceremony, held in Hyderabad, saw a gathering of notable personalities from the aviation sector. The awards covered various categories, recognizing excellence in traffic handling, innovation, sustainability, and more. Bengaluru's Kempegowda International Airport was specifically recognized with the '25 MPPA Traffic Award' in the Airports category for handling more than 25 million passengers annually.
- The airport has been proactive in its environmental commitments, achieving Level 4+ Transition status under the globally recognized Airport Carbon Accreditation (ACA) program. Efforts to minimize environmental impact include achieving net energy-neutral status, prohibiting single-use plastics, and regenerating more water than consumed. The airport holds the distinction of being the world's largest terminal with a Platinum LEED rating and IGBC Green New Building Platinum certification.
- Kempegowda International Airport incorporates advanced technology to improve passenger convenience, featuring Digi Yatra facial recognition, the BLR Pulse app, and self-baggage drop systems. It also employs an Automated Tray Retrieval System for streamlined baggage screening.

**S72. Ans.(b)****Sol.** The correct answer is (b) Tata Group

Tata Sons Private Limited exercised its Right to Match card, ensuring the retention of title sponsorship for the Indian Premier League (IPL) over the next five years spanning 2024 to 2028.

**S73. Ans.(c)****Sol.** The correct answer is (c) Lakhpati Baideo

Under the leadership of Chief Minister Himanta Biswa Sarma, has launched an ambitious scheme aimed at transforming around 39 lakh women Self-Help Group (SHG) members into Rural Micro Entrepreneurs, affectionately known as "Lakhpati Baideos" or sisters. The primary objective is to ensure an annual income of Rs 1 lakh for each member.

The government is allocating a substantial budget of Rs 3900 Crore, emphasising the promotion of entrepreneurship among women. Chief Minister Sarma outlined the eligibility criteria, stating that beneficiaries from General and OBC categories should not have more than three children, while SC/ST/Moran/Matak/Tea-tribes' beneficiaries should not exceed four children.

**S74. Ans.(c)****Sol.** The correct answer is (c) Chennai, Tamil Nadu

The Prime Minister was the Chief Guest for the opening ceremony of the 6th Khelo India Youth Games 2023 held at the Jawaharlal Nehru Stadium in Chennai. This is the first time that Khelo India Youth Games are being held in South India. The Games will be played across four cities of Tamil Nadu, namely Chennai, Madurai, Trichy and Coimbatore from 19th to 31st January 2024.

The mascot for the games is Veera Mangai. Rani Velu Nachiyar, fondly called Veera Mangai, was an Indian queen who waged a war against British colonial rule. The mascot symbolizes the valour and spirit of Indian women, embodying the strength of women power. The logo for the games incorporates the figure of poet Thiruvalluvar.

Over 5600 athletes will be participating in this edition of Khelo India Youth Games, spread across 13 days in 15 venues with 26 sporting disciplines, over 275 competitive events and 1 demo sport

**S75. Ans.(b)****Sol.** The correct answer is (b)

- Himachal Pradesh introduces 'My School-My Pride' campaign, part of 'Apna Vidyalay' program, aiming to transform education in government schools, fostering holistic student growth.
- This initiative is set to revolutionize the quality of education in government schools, providing a holistic approach to student growth and development.
- The 'My School-My Pride' campaign aims to encourage active participation from individuals and organizations to adopt schools and contribute to various aspects of students' growth.
- Stakeholders are urged to play a pivotal role in providing career counseling, offering remedial teaching, coaching students for examinations, and engaging in community support services.

- Under the 'Apna Vidyalay' programme, stakeholders are not only encouraged to contribute their time and expertise but also make monetary contributions for infrastructure development, sponsor events, provide scholarships, and support the Mid-Day Meal (MDM) programme. This multi-faceted approach ensures a comprehensive enhancement of the overall educational environment.

**S76. Ans.(b)**

**Sol.** The statement provided in option (b), "He has the power to grant pardons, reprieves and forgive the death penalty of a person," is NOT correct in the context of the Indian Constitution.

The power to pardon death sentences lies with the President of India, not the Governor. However, the Governor does have the power to grant pardons, reprieves, respites, and remissions of punishment other than in cases of death penalty.

**Explanations for each option:**

- The Governor appoints the Chief Minister and on the advice of the Chief Minister, appoints other Ministers, This statement is correct
- The Governor may promulgate Ordinances when the state legislature is not in session, under certain circumstances, as provided under Article 213 of the Indian Constitution, This statement is correct
- The executive power of the state is vested with the Governor and is exercised by him either directly or through officers subordinate to him in accordance with the Constitution, as per Article 154(1) of the Indian Constitution, This statement is correct
- So, the correct answer is (b), as the Governor does not have the power to pardon death sentences.

**S77. Ans.(d)**

**Sol.** The correct option is (d) Swaran Singh Committee. The Swaran Singh Committee, also known as the Committee on Constitutional Changes, was set up in 1976 under the chairmanship of then-Home Minister Swaran Singh. The committee was tasked with examining the working of the Constitution and recommending changes to strengthen the system.

The committee's recommendations formed the basis for the 42nd Constitutional Amendment, which was enacted in 1976. The amendment introduced several changes to the Constitution, including:

- Rewriting the preamble to include the words "socialist" and "secular"
- Making the directive principles more comprehensive and giving them precedence over fundamental rights
- Introducing new fundamental rights, such as the right to work and the right to education
- Reducing the power of the Supreme Court and the High Courts

The 42nd Constitutional Amendment was highly controversial and was later repealed by the 44th Constitutional Amendment in 1978. However, the amendment still had a significant impact on Indian politics and law.

**S78. Ans.(c)**

**Sol.** The correct answer is (c) Habeas Corpus.

- The writ of habeas corpus is a legal instrument that is used to challenge the legality of a person's detention. It is a fundamental right that is enshrined in the constitutions of many countries, including India.
- The writ of habeas corpus is issued by a court to a person who has detained another person. The court will then examine the cause and legality of the detention. If the court finds that the detention is illegal, it will order the person to be released.
- The writ of habeas corpus is a crucial safeguard against arbitrary detention and is a powerful tool for protecting individual liberty. It has been used in many cases to release people who have been wrongly imprisoned.

**S79. Ans.(a)**

**Sol.** The correct answer is (a) Article 148.

Article 148 of the Indian Constitution provides for the establishment of an independent office of the Comptroller and Auditor General of India (CAG). The CAG is responsible for auditing the accounts of the Union and the States, and for ensuring that public funds are used efficiently and effectively. The CAG is appointed by the President of India, and can only be removed from office in the same manner as a Judge of the Supreme Court. This ensures that the CAG is independent of the Government, and can carry out its duties without fear or favour.

**S80. Ans.(c)**

**Sol.** The correct answer is (c) Article 18.

Article 18 of the Constitution of India deals with the abolition of titles. It states that no title, not being a military or academic distinction, shall be conferred by the State. This means that no one in India can be given a title by the government, such as "Raja" or "Maharaja." Additionally, no citizen of India can accept any title from a foreign state.

**The other options are incorrect:**

- Article 19 deals with the protection of certain rights regarding freedom of speech, freedom of assembly, freedom of association, right to move freely, right to reside and settle, right to acquire, hold and dispose of property, and right to practise any profession or occupation.
- Article 20 deals with the protection in respect of convictions for offences.
- Article 17 deals with the abolition of untouchability.

**S81. Ans.(b)**

**Sol.** The correct answer is (b) Rig.

The Rigveda is the oldest of the Vedas, the sacred scriptures of Hinduism. It is a collection of 1,028 hymns composed in Vedic Sanskrit, an early form of Sanskrit. The Rigveda is believed to have been composed between 1500 and 1200 BCE in the Punjab region of northwestern India. It is the oldest Indo-European text and one of the oldest extant texts in any language.



**The other Vedas are:**

- The Yajurveda, which contains the sacrificial formulas used in Vedic rituals.
- The Samaveda, which contains the melodies used in Vedic rituals.
- The Atharvaveda, which contains a collection of spells and charms.

**S82. Ans.(b)**

**Sol.** The founder of the Vakataka Dynasty was (b) Vindhyashakti.

**Detailed explanation:**

- **Vindhyashakti** reigned from 250 to 270 AD and is considered the founder of the dynasty. He laid the foundation for the Vakataka empire and established its capital at Nandivardhana (modern-day Nandurbar in Maharashtra).
- **Pravarasena I** was the son of Vindhyashakti and is credited with expanding the Vakataka kingdom significantly. He performed prestigious Vedic sacrifices like Ashwamedha and Vajapeya, solidifying the dynasty's power and prestige.
- **Pravarasena II** ruled from 410 to 415 AD and was the last powerful ruler of the dynasty. After his death, the Vakataka empire gradually weakened and fragmented.
- **Prabhavatigupta** was the daughter of the Gupta emperor Chandragupta I and married to the Vakataka king Rudrasena I. While she played a crucial role in strengthening the Vakataka-Gupta alliance.

**S83. Ans.(a)**

**Sol.** The correct answer is (a) Awadh.

The significant rebellion led by Begum Hazrat Mahal took place in the region of Awadh (also known as Oudh). Awadh was a princely state in northern India, with its capital in Lucknow. During the Revolt of 1857, which is also known as the Indian Rebellion of 1857 or the First War of Independence, several regions in India witnessed uprisings against British colonial rule. However, Begum Hazrat Mahal played a prominent role in leading the rebellion in Awadh. She was the wife of Nawab Wajid Ali Shah, the last Nawab of Awadh, and she took charge of the revolt after his exile. Begum Hazrat Mahal organized and fought against the British forces in defense of Awadh's independence.

**S84. Ans.(b)**

**Sol.** The line on a map or chart that connects places with equal rainfall is called an Isohyet.

- Isobath is the line that connects points of equal depth below the surface of a body of water.
- Isoryme is a term used in oceanography to describe a line of constant salinity in a body of water.

**S85. Ans.(d)**

**Sol.** Narmada River does not form a delta in the eastern coastal plain.

- The Narmada River is a major west-flowing river in central India. It passes through the states of Madhya Pradesh, Maharashtra, and Gujarat.
- The deltas of the rivers Mahanadi, Krishna, and Godavari are present in the eastern coastal plain. These deltas are known for their fertility and agricultural productivity.
- The Mahanadi River is located in the eastern part of India and flows through the states of Chhattisgarh and Odisha. It forms a delta in the eastern coastal plain of India, where it meets the Bay of Bengal.
- The Krishna River is another important river in India, flowing through the states of Maharashtra, Karnataka, and Andhra Pradesh. It also forms a delta in the eastern coastal plain of India, where it empties into the Bay of Bengal.
- The Godavari River is the second-longest river in India, flowing through the states of Maharashtra, Telangana, Andhra Pradesh, and Odisha. It forms the largest river delta in the eastern coastal plain of India, known as the Godavari Delta or the Konaseema Delta, before entering the Bay of Bengal.

**S86. Ans.(c)**

**Sol.** Drought conditions, on the other hand, are not typically associated with cyclones.

- Cyclones are intense low-pressure weather systems that can cause a wide range of impacts, particularly when they make landfall.
- Heavy rainfall and flooding are common impacts of cyclones, as the storms can dump large amounts of rain in a short period of time. High winds and storm surges can also be dangerous, as they can cause extensive damage to buildings and infrastructure and lead to coastal flooding.

**S87. Ans.(a)**

**Sol.** According to the 2011 Census of India, the category with the highest percentage of workers was agriculture.

According to the 2011 Census of India, 54.6% of the workforce was employed in agriculture. This was followed by industry at 22.8% and services at 22.6%.

As per Census 2011, conducted by the Registrar General of India, the total number of agricultural workers in the country has increased from 234.1 million (127.3 million cultivators and 106.8 million agricultural labourers) in 2001 to 263.1 million (118.8 million cultivators and 144.3 million agricultural labourers) in 2011. However, the share of the workforce engaged in the agriculture sector (comprising of cultivators and agricultural labourers) has come down from 58.2 per cent in 2001 to 54.6 per cent in 2011.

**S88. Ans.(a)**

**Sol.** Ujjwala Yojana is a scheme launched by the Government of India aimed at providing free LPG connections to women from Below Poverty Line (BPL) households. The scheme aims to provide clean cooking fuel to households and reduce the health hazards associated with traditional cooking fuels.

- Pradhan Mantri Ujjwala Yojana was launched by Prime Minister of India Narendra Modi on 1 May 2016 to distribute 50 million LPG connections to women of Below Poverty Line families.
- The scheme was replaced by the Ujjwala Yojana 2.0 in 2021.

**S89. Ans.(b)**

**Sol.** The consequence of iodine deficiency in our diet is Goitre.

- Goitre is a visible swelling of the thyroid gland in the neck, which can cause discomfort, difficulty swallowing, and difficulty breathing. It is more common in areas where the soil and water are low in iodine, and the population's diet is deficient in iodine. In severe cases, iodine deficiency can lead to mental retardation and developmental delays, particularly in infants and children.
- Hyperthyroidism is a condition characterized by the overproduction of thyroid hormones.
- Diabetes is a condition characterized by high blood sugar levels.
- Cushing's syndrome is a condition caused by the excessive production of cortisol, a hormone produced by the adrenal gland.

**S90. Ans.(a)**

**Sol.** The paramecium uses its **cilia** to sweep the food along with some water into the cell mouth after it falls into the oral groove.

- Paramecium feed on microorganisms like bacteria, algae, and yeasts.
- The food goes through the cell mouth into the gullet and is transported to the food vacuole for digestion.

**S91. Ans.(d)**

**Sol.** The correct answer is (d). Carbon monoxide is a compound of carbon and oxygen, not an allotrope of carbon.

An allotrope is a substance that is made up of only one element, but has different physical properties due to the different ways that the atoms are bonded together. Diamond, graphite, and fullerene are all allotropes of carbon. Diamond is the hardest natural substance, while graphite is soft and slippery. Fullerene is a molecule that is made up of 60 carbon atoms arranged in a sphere.

**S92. Ans.(b)**

**Sol.** Oxygen is a non-metal that is essential for both combustion and respiration. Combustion is a chemical reaction that occurs when a fuel reacts with oxygen to produce heat and light. Respiration is a biological process that occurs when cells use oxygen to produce energy.

Hydrogen, nitrogen, and chlorine are all non-metals, but they are not essential for combustion or respiration. Hydrogen is a flammable gas that can be used as a fuel, but it is not essential for combustion. Nitrogen is a gas that makes up about 78% of the Earth's atmosphere, but it is not essential for respiration. Chlorine is a poisonous gas that is used to disinfect water, but it is not essential for respiration.

**S93. Ans.(d)**

**Sol.** work done = force x distance.

$$= 200 * 4$$

$$= 800 \text{ joule}$$

**S94. Ans.(d)**

**Sol.** The answer is (d) Sambhar.

- Sambhar is NOT a freshwater lake in India. Sambhar Lake, located in the state of Rajasthan, is actually a saltwater lake. It is the largest saltwater lake in India and one of the largest in the world. Sambhar Lake is known for its salt production and is not suitable for freshwater purposes due to its high salinity.
- Bhimtal: Located in the Kumaon Hills of Uttarakhand, Bhimtal is a freshwater lake famous for its scenic beauty.
- Loktak: Situated in Manipur, Loktak is the largest freshwater lake in Northeast India and known for its unique floating phumdis (islands made of decomposed vegetation).
- Barapani: Situated in Meghalaya, Barapani is a man-made reservoir and a popular tourist destination. While not naturally occurring, it still falls under the category of a freshwater lake.

**S95. Ans.(d)**

**Sol.** The Pushkar Fair is held (d) one time in a year.

The famous Pushkar Fair of Rajasthan is held once in a year. It is an annual event that usually takes place in the month of Kartik (October/November) according to the Hindu calendar. This fair is a significant cultural and religious event for the people of Rajasthan and attracts visitors from all over the world. During the Pushkar Fair, a large number of traders, pilgrims, and tourists gather in the town of Pushkar to participate in various activities, including cattle trading, religious rituals, and cultural performances.

**S96. Ans.(b)**

**Sol.** The Correct answer is (b)

The theme for the World Day of Social Justice in 2024 is "Bridging Gaps, Building Alliances". This theme emphasizes the importance of creating connections and partnerships to address social inequalities and injustices, aiming to foster a more equitable and inclusive society by bridging gaps between different communities and sectors.

**S97. Ans.(d)****Sol.** The Correct answer is (d)

The 11th International Puppet Festival, celebrated for its captivating showcase of puppetry, was held in Chandigarh. This event marked a significant cultural gathering, bringing together puppeteers and enthusiasts from around the globe. It provided a platform for artists to display a wide array of puppetry forms, ranging from traditional to contemporary styles, thereby enriching the cultural fabric of Chandigarh and offering a unique experience to its attendees. Through performances, workshops, and interactive sessions, the festival aimed to promote the art of puppetry, encourage cultural exchange, and stimulate creativity among participants. Hosting such an event not only boosts local tourism but also highlights the host city's commitment to fostering cultural activities and arts.

**S98. Ans.(b)****Sol.** The Correct answer is (b)

The Indian Air Force conducted a major exercise named Vayu Shakti-24 in Rajasthan. This exercise was a large-scale event, showcasing the capabilities of the Indian Air Force in both offensive and defensive operations. Vayu Shakti-24, held on February 17, was designed to demonstrate the IAF's operational, aerial firepower, and combat readiness, involving various aircraft and assets from the three services of the Indian Armed Forces. The exercise aimed to enhance operational synergy and joint operational planning among the Indian Army, Navy, and Air Force, thereby strengthening the defense posture of India.

**S99. Ans.(c)****Sol.** The Correct answer is (c)

The 'Sagar Aankalan' guidelines were launched by the government to boost efficiency and competitiveness, focusing on enhancing the operational and strategic aspects of maritime activities.

**S100. Ans.(c)****Sol.** The Correct answer is (c)

Union Minister of Education and Skill Development & Entrepreneurship, Shri Dharmendra Pradhan, inaugurated the first Skill India Centre (SIC) of the country in Sambalpur, Odisha.

The centre boasts best-in-class infrastructure, cutting-edge technologies, and modern facilities to facilitate effective learning. It will provide a unique combination of classroom and work-based learning to empower youth with industry-specific skills. Collaborative efforts will harness the potential of demographic dividends to catalyse rural development and spur socio-economic growth.

**Key Details:**

- The Skill India Centre aims to equip young people with industry-relevant skills and foster socio-economic growth.
- Focuses on providing affordable courses, making skill development accessible to a larger segment of the youth.

- Targets to train over 1200 students through this centre.
- Designed to upgrade the skillset of the "Amrit Peedhi" (generation born after 2010) in demand-driven industries.
- Expected to create an industry-ready workforce, encourage entrepreneurship, and strengthen the overall skilling ecosystem

**S101. Ans.(d)****Sol.** The correct answer is (d) 35.

According to Article 157 of the Indian Constitution, a person to be eligible for appointment as Governor should be a citizen of India and has completed the age of 35 years.

Therefore, only Indian citizens above the age of 35 years are eligible for the appointment of the Governor of a State.

**S102. Ans.(c)****Sol.** The answer is (c) 17

Article 17 of the Constitution of India abolishes the concept of 'untouchability' and prohibits its practice in any shape or form.

Article 17 states: "Untouchability is abolished and its practice in any form is forbidden. The enforcement of any disability arising out of untouchability shall be an offence punishable in accordance with law."

**Other Option Details:**

- Article 16 guarantees equality of opportunity in matters of public employment.
- Article 15 prohibits discrimination on the grounds of religion, race, caste, sex, place of birth, or any of them.
- Article 14 guarantees equality before the law and equal protection of laws.

**S103. Ans.(a)****Sol.** The answer is (a) political party

- A political party is a group of people who come together with the common goal of contesting elections and holding power in the government. Political parties play a crucial role in the democratic process of many countries, as they provide a platform for individuals with similar political ideologies and objectives to work together to represent the interests of their constituents.
- Political parties typically have a defined ideology or set of principles that guide their policies and decisions. They nominate candidates to run for various government offices, such as presidents, governors, senators, and members of parliament. These candidates campaign on behalf of the party, seeking the support of the electorate.
- Once a political party wins an election, its members who have been elected to office will form the government, and those who were not successful may serve as the opposition. In this way, political parties are integral to the functioning of democratic systems, as they help shape government policies and represent the diverse interests of the population.

**S104. Ans.(a)**

**Sol.** The answer is (a) 1976

The term "secular" was added to the Preamble of the Indian Constitution in the year 1976. This significant amendment was made during the Emergency period under Prime Minister Indira Gandhi's government.

This change came as a part of the 42nd Amendment to the Constitution of India. The 42nd Amendment, often regarded as the most comprehensive amendment to the Constitution, was enacted at a time when the normal democratic processes were suspended.

The inclusion of the word "secular" was aimed at emphasizing the equal status and protection of all religions in India. The Indian Constitution, since its inception, had always implied a secular state, but this amendment made it explicit. This amendment stated that India would not favor or discriminate against any religion, reflecting the country's diverse religious landscape and the importance of maintaining harmony among its various religious communities.

**S105. Ans.(a)**

**Sol.** The Correct answer is (a)

- The Rig-Veda is the oldest of the four collections of hymns and other sacred texts known as the Vedas.
- It contains most of the information about the religious and social life of the early Vedic period.
- These works are considered the "sacred knowledge" of the Aryans.
- The Rig-Veda also contains ideas that served as the basis for India's system of castes (Varna).
- According to Brahminic ideology, Varna means hierarchizing society into classes.

**S106. Ans.(d)**

**Sol.** Ashoka's conquest of Kalinga has been described in the famous Rock Edict XIII, which is also known as the Kalinga Edict. This edict is one of the major rock edicts of Ashoka, and it describes in detail the suffering and devastation caused by the Kalinga War, and how it led Ashoka to embrace Buddhism and adopt a policy of non-violence. Option (d) is correct.

**S107. Ans.(d)**

**Sol.** The Dutch established their first factory in India at (d) Masulipatnam.

Masulipatnam, also known as Machilipatnam or Bandar, was a major port town located on the Coromandel Coast of Andhra Pradesh, India. The Dutch East India Company, also known as the Vereenigde Oostindische Compagnie (VOC), established their first factory in India at Masulipatnam in 1605. It served as an important center for trade and commerce between the Dutch and the local Indian kingdoms. The Dutch presence in Masulipatnam continued until they were eventually driven out by the British East India Company in the late 18th century.

**S108. Ans.(d)**

**Sol.** The First Anglo-Maratha War was fought between the Maratha Army and the British East India Company. Warren Hastings was the Governor-General of British India at that time. The British Forces were ultimately defeated in the series of battles that took place during the period between 1775 and 1882.

**S109. Ans.(b)**

**Sol.** The troposphere is the lowest portion of Earth's atmosphere and is also where nearly all-weather proceeds take place.

Layer	Altitude Range	Key Characteristics
Stratosphere	10-50 km	Contains the ozone layer; absorbs harmful UV radiation
Troposphere	0-7/20 km	All weather occurs and contains most atmospheric gases
Ionosphere	60 km - 1000 km	Interacts with the magnetic field, ionizes atmospheric gases
Exosphere	500 km - 10,000 km	Gradual fade into space, very thin air; gases escape into space

**S110. Ans.(b)**

**Sol.** Madagascar is the largest island in the Indian Ocean and the fourth-largest island in the world.

- It is located off the southeastern coast of Africa.
- Borneo is the third-largest island in the world and is located in Southeast Asia.
- Andaman Islands are a group of islands in the Bay of Bengal.
- Ashmore and Cartier Islands are located off the northwest coast of Australia.

**S111. Ans.(d)**

**Sol.** The Betwa is a river in Northern India and a tributary of the Yamuna.

- Also known as the Vetravati, the Betwa rises in the Vindhya Range just north of Hoshangabad in Madhya Pradesh and flows northeast through Madhya Pradesh and Orchha to Uttar Pradesh.
- Betwa River flows from South to North.
- The Godavari River flows from west to east, through the states of Maharashtra, Telangana, Andhra Pradesh, Chhattisgarh, and Odisha, before emptying into the Bay of Bengal.
- The Cauvery River flows from west to east, originating in the Western Ghats of Karnataka and flowing through Tamil Nadu before emptying into the Bay of Bengal.
- The Krishna River flows from west to east, originating in the Western Ghats of Maharashtra and flowing through the states of Karnataka, Telangana, and Andhra Pradesh before emptying into the Bay of Bengal.

**S112. Ans.(d)****Sol.** The answer is (d).

Startup India was launched under the Ministry of Commerce and Industry on January 16, 2016. The initiative is designed to create a supportive ecosystem for startups in India and to promote entrepreneurship. The Ministry of Commerce and Industry is responsible for formulating and implementing policies and programs related to trade, industry, and investment. It also plays a key role in promoting India's exports and attracting foreign investment.

**The other options are:**

- The Ministry of Skill Development and Entrepreneurship is responsible for developing and implementing skill development programs in India.
- The Ministry of Social Justice and Empowerment is responsible for formulating and implementing policies and programs for the welfare of marginalized and disadvantaged groups.
- The Ministry of Labour and Employment is responsible for formulating and implementing policies and programs related to labor and employment.

**S113. Ans.(c)****Sol.** The answer is: (c) Tariffs

Tariffs are taxes that are imposed on imported goods. They are one of the main reasons why imported goods are more expensive than domestically produced goods. Tariffs are typically imposed by governments to protect domestic industries from foreign competition. They can also be used to raise revenue for the government.

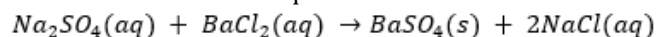
**S114. Ans.(a)****Sol.** The answer is (a).

- The literacy rate in India as per the Census 2011 was 74.04%. This was an increase of 9.21% from the 2001 Census.
- The male literacy rate was 82.14% and the female literacy rate was 65.46%.
- The state with the highest literacy rate was Kerala (93.91%) and the state with the lowest literacy rate was Bihar (63.82%).

**S115. Ans.(d)****Sol.** The answer is (d) Barium sulphate

The white precipitate formed in the reaction of sodium sulphate and barium chloride is barium sulphate.

The balanced chemical equation for the reaction is:



This is a double displacement reaction, where the sodium and barium ions exchange places to form new compounds. Barium sulphate is an insoluble salt, so it precipitates out of solution

as a white solid. Sodium chloride is a soluble salt, so it remains in solution.

Therefore, the answer is (d).

**S116. Ans.(c)****Sol.** Correct answer (c) O

The atomic radius of an element tends to decrease across a period from left to right in the periodic table due to the increase in the nuclear charge which pulls the electrons closer to the nucleus. Between the elements listed (Li, Be, B, and O), Oxygen (O) is furthest to the right in a period and therefore has the least atomic radius among the options provided. So, the correct answer is (c)

**S117. Ans.(a)**

**Sol.** Vitamin A is essential for maintaining healthy eyesight. It plays a vital role in the functioning of the retina and helps prevent night blindness and other vision-related issues.

- Vitamin A can be found in foods such as liver, fish oil, egg yolks, dairy products (milk, cheese, butter), carrots, sweet potatoes, pumpkin, mangoes, apricots, spinach, kale, and fortified foods like cereals and margarine.

**S118. Ans.(c)**

**Sol.** Graphite is an example of a non-metallic mineral. It is a form of carbon with a layered structure. Graphite is known for its softness, black color, and excellent electrical conductivity. It is commonly used as a lubricant, in batteries, as a material for electrodes, and in various other industrial applications.

Iron ore and copper ore are examples of metallic minerals as they contain significant amounts of metals like iron and copper, respectively. Bauxite is an ore from which aluminum is extracted and is also considered a metallic mineral.

**S119. Ans.(b)****Sol.** Power =W/T

$$W=24 \times 6$$

$$=144 \text{ J}$$

**S120. Ans.(c)**

**Sol.** The Desert National Park is situated near the city of Jaisalmer in western Rajasthan. It covers an extensive area of about 3,162 square kilometers.

- The Desert National Park is home to a variety of desert-adapted wildlife species. Some of the notable wildlife found in the park include the Great Indian Bustard (a critically endangered bird species), blackbuck (a type of antelope), chinkara (Indian gazelle), desert fox, desert cat, and various reptiles.