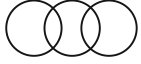

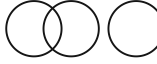



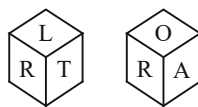
Part A: General Intelligence and Reasoning

- In a certain code language, 'BSGN' is coded as '5-22-10-17' and 'TAUE' is coded as '23-4-24-8'. How is 'PJ DQ' coded in the given language?

(a) 15-11-5-19 (b) 19-13-7-20
(c) 16-12-8-18 (d) 17-13-6-20
- Select the Venn diagram that best illustrates the relationship among the following classes.
Female, Cardiologist, Engineer

(a)  (b) 
(c)  (d) 
- Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which letter-cluster DOES NOT belong to that group?
(Note: The odd man out is not based on the number of consonants/vowels or their position in the letter-cluster.)

(a) HJL (b) SUV (c) FHJ (d) NPR
- A dice has its faces marked by letters E, R, A, L, O and T. Two positions of the same dice are shown in the given figures. Which face is opposite to face E?



(a) L (b) A (c) O (d) R
- In a certain code language, 'JAMB' is coded as '5139' and 'BALM' is coded as '9521'. What is the code for 'L' in the given code language?

(a) 5 (b) 9 (c) 2 (d) 1
- Based on some logic, 'CLONE' is written as 'BLUKU' and 'BOUND' is written as 'AOAKT'. Following the same logic, 'NICHE' can be written as:

(a) NIIET (b) MIIET
(c) MIIEU (d) NIIEU
- What should come in place of the question mark (?) in the given series?
208 190 163 127 82 ?

(a) 28 (b) 54 (c) 45 (d) 12
- Seven people L, M, N, O, P, Q and R are sitting in a straight line facing the north (but not necessarily in the same order). M is

sitting to the immediate left of P. O is sitting to the immediate left of Q. R is sitting to the immediate right of P and the immediate left of L. N is sitting to the immediate right of L and the immediate left of O. Who is sitting second to the left of N?

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

- SBCF is related to RADG in a certain way. In the same way, NVMO is related to MUNP. To which of the following is GUAX related, following the same logic?

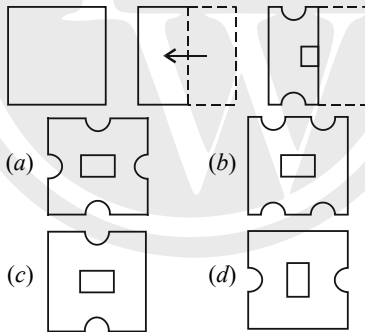
- (a) FTBZ (b) FTBY
(c) FTCY (d) FRCY

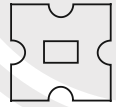
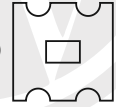
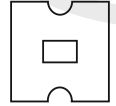
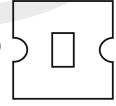
- What should come in place of the question mark (?) in the given series based on the English alphabetical order?

EHO HJP KLQ ? QPS

- (a) MMR (b) MNR
(c) NMR (d) NNR

- The sequence of folding a piece of paper and the manner in which the folded paper is cut is shown in the following figures. How would this paper look when unfolded?



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

- The position(s) of how many letters will remain unchanged if each letter in the word GRACEFUL is arranged in the English alphabetical order?

- (a) Two (b) None
(c) One (d) Three

- Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

All gabions are walls.
All concretes are walls.
All bridges are walls.

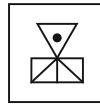
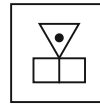
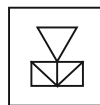
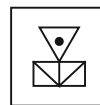
Conclusions:

- I. Some bridges are gabions.
II. Some concretes are bridges.

- (a) Neither conclusion (I) nor (II) follows.
(b) Only conclusion (I) follows.
(c) Both conclusions (I) and (II) follow.
(d) Only conclusion (II) follows.

- Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



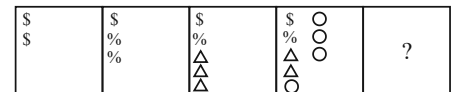
- (a)  (b) 
(c)  (d) 

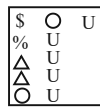
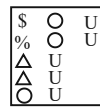
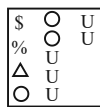
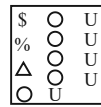
- What will come in the place of the question mark '?' in the following equation, if '÷' and '×' are interchanged and '+' and '-' are interchanged?

$$50 - 9 \div 1 + 63 \times 7 = ?$$

- (a) 53 (b) 52 (c) 51 (d) 50

- Identify the figure given in the options which when put in place of the question mark (?) will logically complete the series.



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

- Select the combination of letters that when sequentially placed in the blanks of the given series will make the series logically complete.

_ HKM O _ NPRN _ S UQT _ XTW _

- (a) JKR VX (b) LMQUY
(c) LKQVY (d) JMRUX

- What should come in place of the question mark (?) in the given series?

4 6 10 18 34 ?

- (a) 67 (b) 65 (c) 68 (d) 66

- Eight people are sitting in two parallel rows containing 4 people each in such a way that there is equal distance between adjacent

persons. In row 1, D, E, O and S are seated and all of them are facing south. In row 2, F, A, R and M are seated and all of them are facing north. Thus, each person faces another person from the other row. Only D sits to the left of E. Only R sits to the left of A. Only one person sits between A and F. Only one person sits between D and O. Which of the following represents both people facing each other?

- (a) E and A (b) E and R
(c) E and M (d) E and F

20. In a certain code language.

'X @ C' means 'X is the daughter of C',
'X \$ C' means 'X is the husband of C',
'X = C' means 'X is the mother of C' and
'X * C' means 'X is the father of C'.

Based on the above, how is J related to N if 'N @ E \$ J @ S'?

- (a) Daughter's son (b) Sister's daughter
(c) Sister (d) Mother

Part B: General Knowledge and General Awareness

21. Pradhan Mantri Rojgar Protsahan Yojana is being implemented since _____.

- (a) 2015 (b) 2014
(c) 2017 (d) 2016

22. Where were the first Asian Games held in India?

- (a) New Delhi (b) Gwalior
(c) Chennai (d) Patiala

23. In August 2024, who bid farewell to the Supreme Court, became the first woman Chief Justice of the High Court for the State of Telangana and was the ninth woman to be elevated to the Supreme Court of India?

- (a) Aditi Kapoor
(b) Hima Kohli
(c) Kutti Rameshwaram
(d) Usha Iyer

24. Which of the following sports was included as a discipline in the 11th Asian Games Beijing 1990?

- (a) Wrestling (b) Kabaddi
(c) Volleyball (d) Squash

25. Which are the two wettest places on Earth that receive more than 1,080 cm of rainfall in a year?

- (a) Pasighat and Agumbe
(b) Gangtok and Amboli
(c) Cherrapunji and Mawsynram
(d) Mahabaleshwar and Neriamangalam

26. As per National Multidimensional Poverty Index of India: A Progress Review 2023, which of the following union territories has the highest percentage of multidimensionally poor?

- (a) Chandigarh
(b) Delhi
(c) Dadra and Nagar Haveli & Daman and Diu
(d) Puducherry

27. What is the penalty amount specified under the Public Examinations (Prevention of Unfair Means) Bill, 2024, for individuals involved in unfair practices or offenses during exams?

- (a) Up to one lakh rupees
(b) Up to twenty lakh rupees
(c) Up to eleven lakh rupees
(d) Up to ten lakh rupees

28. Which Articles of the Constitution of India deals with the Union Public Service Commission?

- (a) Articles 300 to 320
(b) Articles 330 to 338
(c) Articles 210 to 219
(d) Articles 315 to 323

29. Which sector of the economy does the Green Revolution belong to?

- (a) Service sector
(b) Industrial sector
(c) Financial sector
(d) Agricultural sector

30. The annual Mamallapuram Dance Festival, which includes performances of Indian Classical Dances Bharatanatyam, Kuchipudi, Kathak, Mohiniattam, Odissi and Kathakali, is organised in _____.

- (a) Tamil Nadu (b) Andhra Pradesh
(c) Maharashtra (d) Karnataka

31. Which of the following sentences is/are true?

- (i) The projected growth rate of the Indian agriculture sector for FY 2022-23 was 5.5%.
(ii) During the Financial Year 2021-22, agricultural exports of India reached to about US \$ 50.2 billion.
(iii) During Kharif Marketing Season 2021-22, 581.7 lakh metric tons of rice was procured in India.
(a) Only (i) and (ii)
(b) Only (ii) and (iii)
(c) Only (i)
(d) Only (ii)

32. Lakshmi Vishwanathan, who won the prestigious Natya Kalanidhi Award from the Music Academy was famous for which dance form?

- (a) Kuchipudi (b) Odissi
(c) Kathak (d) Bharatanatyam

33. What was the major economic challenge addressed in the Third Five-Year Plan (1961-1966)?

- (a) Liberalisation of the economy
(b) Introduction of the service sector
(c) Focus on digital technology advancement
(d) War-time expenditure and resource allocation

34. 2nd October 2022 marked the _____ birth anniversary of Mahatma Gandhi, celebrated as Gandhi Jayanti.

- (a) 153rd (b) 150th
(c) 152nd (d) 155th

35. The NBPW, which can be considered as the most widespread Iron Age pottery, stands for _____.

- (a) Northern Blue Polished Ware
(b) Northern Brown Polished Ware
(c) Northern Black Polished Ware
(d) Northern Bronze Polished Ware

36. Part III of the Constitution of India stated about which of the following?

- (a) Directive Principles of States Policy
(b) Fundamental Duties
(c) Citizenship
(d) Fundamental Rights

37. Which of the following plants can be made to climb walls using special support?

- (a) Sunflower plant
(b) Lemon plant
(c) Rose plant
(d) Pumpkin plant

38. Who were the key figures behind the recommendations that formed the basis of the Government of India Act, 1919?

- (a) Lord Linlithgow and Edwin Montagu
(b) Lord Irwin and Edwin Montagu
(c) Lord Chelmsford and Edwin Montagu
(d) Lord Curzon and Edwin Montagu

39. When did Michael Faraday discover electromagnetic induction, the principle behind the electric transformer and generator?

- (a) 1853 (b) 1820
(c) 1875 (d) 1831

40. She was a Carnatic legendary singer who sang in Europe, North America and at the United Nations General Assembly. Who was she?

- (a) Beghum Akhtar
(b) Lata Mangeshkar
(c) Asha Bhosle
(d) Madurai Shanmukhavadiyu Subbulakshmi

Part C: Elementary Mathematics

41. The LCM of 28, 60, 120 and 135 is:

- (a) 7626 (b) 7560
(c) 7608 (d) 7569

42. In an examination, there were three papers of Mathematics, two papers of English and one paper of Science. All papers were of 100 marks. S got 60% in Mathematics, 70% in English and 50% in Science. What was his percentage of marks in all papers?

- (a) 61.33% (b) 60.67%
(c) 61.67% (d) 60%

43. A number is first decreased by 15% and then increased by 20%. The number so obtained is 78 more than the original number. The original number is:

- (a) 3900 (b) 2600
(c) 4500 (d) 5200

44. If at same rate of interest, in 2 years, the simple interest is ₹ 42 and compound interest is ₹ 51, then what is the principal (in ₹)?

- (a) 44 (b) 49 (c) 42 (d) 53

45. Mandar has two grandsons Ketan and Tushar. 11 year old Ketan gets some money from Mandar's wealth and 12 year old Tushar gets rest of the money. But Ketan and Tushar will get money only when they turn 22 years old. Till then the money is in a bank getting interest at rate 8% compounded annually. When both turn 22, they receive the same amount. How much had Mandar given Tushar (in ₹) initially, if total money with Mandar was ₹ 24700?

- (a) 11625 (b) 13175
(c) 12825 (d) 11875

46. What is the cost price of an article which is sold for ₹ 1,566 with 8% profit?

- (a) ₹ 1,420 (b) ₹ 1,390
(c) ₹ 1,450 (d) ₹ 1,400

47. Two numbers are in the ratio of 4 : 9. If the mean proportional between them is 24, find the positive difference between the two numbers.

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

48. Two trains having lengths of 210 m and 140 m are running at speeds of 80 km/h and 150 km/h, respectively, in the same direction. The time taken (in minutes) by the faster train, coming from behind, to completely cross the other train is:

- (a) 2 (b) 0.3 (c) 0.5 (d) 1

49. The price (per litre) of petrol increases by 85%. By what percent should its consumption be reduced such that the expenditure on it increases by 48% only?

- (a) 18% (b) 82% (c) 20% (d) 80%

50. A can do a piece of work in 32 days and B in 48 days. They work together for 8 days and then A goes away. In how much time (in days) will B finish the 60% of the remaining work?

- (a) $18\frac{2}{5}$ (b) $19\frac{3}{4}$
(c) $16\frac{4}{5}$ (d) $17\frac{3}{7}$

51. Find the value of

$$\left[(48 \div 8) \times \left\{ \frac{49}{7} + \frac{40}{4} \times (7-3) \right\} \right]$$

- (a) 282 (b) 286
(c) 284 (d) 273

52. Determine the largest four-digit number that is exactly divisible by 15, 25, 40 and 75.

- (a) 9600 (b) 9975
(c) 9999 (d) 9960

53. Two cones have their heights in the ratio 4 : 3 and the radii of their bases in the ratio 1 : 2. Find the ratio of their volumes.

- (a) 4 : 9 (b) 1 : 3
(c) 2 : 9 (d) 2 : 5

54. A dishonest shopkeeper promises to sell his goods at cost price. However, he uses a weight that actually weighs 46% less than what is written on it. Find his profit percentage.

(a) $87\frac{10}{27}\%$ (b) $85\frac{5}{27}\%$

(c) $84\frac{5}{27}\%$ (d) $86\frac{6}{27}\%$

55. The average weight of Gopal, Akshay and Atul is 46 kg. If the average weight of Gopal and Akshay be 40 kg and that of Akshay and Atul be 45 kg, then the weight of Akshay (in kg) is:

- (a) 47 (b) 42 (c) 32 (d) 52

56. A student was getting the following four offers on the purchase of a book:

- I. Two successive discounts of 20% and 20%.
II. Two successive discounts of 25% and 15%.
III. Two successive discounts of 30% and 10%.
IV. Two successive discounts of 5% and 35%.

Which scheme offers the most discount to the student?

- (a) III (b) II (c) IV (d) I

57. A man goes to Ahmedabad from Kolkata at a speed of 9 km/hr and returns to Kolkata at speed of 18 km/hr, through same route. What is his average speed (in km/hr) of the entire journey?

- (a) 8 (b) 12 (c) 17 (d) 15

58. Vipul invests a sum of ₹ 5400 and Vijay invests a sum of ₹ 9400 at the same rate of simple interest per annum. If, at the end of 5 years, Vijay gets ₹ 840 more interest than Vipul, then find the rate of interest per annum (in percentage).

- (a) 6.2 (b) 3.2 (c) 2.2 (d) 4.2

59. The HCF of two numbers is 11 and their sum is 132. If both the numbers are greater than 42, then the difference between the two numbers is:

- (a) 18 (b) 22 (c) 26 (d) 11

60. What is the third proportional to 16 and 48?

- (a) 144 (b) 121 (c) 169 (d) 135

Part D: English

61. The following sentence has been split into four segments. Identify the segment that contains a grammatical error.

- (A) He spoke passionately about his favourite book, / (B) articulating his thoughts clear / (C) and engaging everyone in a lively discussion / (D) about its themes.

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

62. Select the most appropriate option to fill in the blank.

Grey _____ is no sure sign of attaining wisdom.

- (a) heir (b) air
(c) hare (d) hair

63. Select the most appropriate option to fill in the blank.

The dog ran _____ the garden chasing the cat.

- (a) at (b) on
(c) between (d) across

64. Select the most appropriate option to fill in the blank.

It is a sin against God and humanity to _____ places of religious worship.

- (a) modest (b) desecrate
(c) disapprove (d) upright

65. Select the correct collocation to fill in the blank.

The teacher gave the students _____ instructions before the exam.

- (a) careful (b) great
(c) strong (d) clear

66. Select the most appropriate ANTONYM of the given word.

Arrogant

- (a) Creepy (b) Clumsy
(c) Average (d) Humble

67. Select the most appropriate synonym of the given word.

Broad

- (a) Particular (b) Small
(c) Wide (d) Exact

68. Select the most appropriate meaning of the given idiom.

Man of straw

- (a) A combination of two people that is perfect in every way
(b) A child of a celebrity or a famous person
(c) A person who is disregarded as lacking character or morality
(d) A situation like a close contest

69. Select the most appropriate option to fill in the blank.

We will complete the project _____ without external help.

- (a) oneself (b) ourselves
(c) itself (d) themselves

70. Select the most appropriate ANTONYM of the given word.

Flaunt

- (a) Parade (b) Hide
(c) Wide (d) Open

71. Identify the sentence with the INCORRECTLY spelt word.

- (a) The film was praised for its stunning cinematography.
(b) The scientist presented his findings at the conference.
(c) The students wrote an interesting essey on the topic.
(d) The bakery makes delicious pastries every day.

72. Select the most appropriate idiom that can substitute the underlined segment in the given sentence.

When it comes to cooking, she can really think creatively and unconventionally to create unique dishes that surprise everyone.

- (a) outside the wire
(b) outside the canvas
(c) outside the box
(d) outside the law

73. Select the most appropriate ANTONYM of the word in brackets to fill in the blank.
The widespread _____ (destruction) of the natural world threatens the food we eat, the water we drink and the air we breathe.
(a) contribution (b) creation
(c) choice (d) condition
74. The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer.
Alka had been writing / to her boss until she realises / that he was not interested in resolving her issues.
(a) that he was not interested in resolving her issues
(b) No error
(c) to her boss until she realises
(d) Alka had been writing

75. Select the option that rectifies the underlined spelling error.
The students had to write an essay for their assignment.
(a) assignmant (b) assignment
(c) essignment (d) assignmant

Directions (76-80): In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

There is a ___(1)___ sense of freedom about being alone in a carriage that is jolting noisily through the night. It is liberty unrestrained in a very ___(2)___ form. You can do anything you like. You can talk to ___(3)___ as loud as you please and no one will hear you. You can have that argument out with Jones and roll him triumphantly in the dust ___(4)___ fear of a counterstroke. You can stand on your head and no one will see you. You can sing or dance a two-step or practise a golf stroke, ___(5)___ play marbles on the floor without let or hindrance.

76. Select the most appropriate option to fill in blank no 1.
(a) pleasant (b) contemptuous
(c) tedious (d) baleful
77. Select the most appropriate option to fill in blank no 2.
(a) miserable (b) agreeable
(c) humour (d) detestable
78. Select the most appropriate option to fill in blank no 3.
(a) yourself (b) ourselves
(c) herself (d) himself
79. Select the most appropriate option to fill in blank no 4.
(a) in (b) with
(c) for (d) without
80. Select the most appropriate option to fill in blank no 5.
(a) yet (b) but
(c) or (d) because

ANSWER KEY AND SOLUTIONS

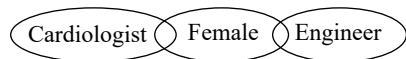
1. (b) **Logic:** Each letter is coded by adding 3 to its alphabetical position.

As,
B S G N
2 19 7 14
↓+3 ↓+3 ↓+3 ↓+3
5 22 10 17

And,
T A U E
20 1 21 5
↓+3 ↓+3 ↓+3 ↓+3
23 4 24 8

Similarly,
P J D Q
16 10 4 17
↓+3 ↓+3 ↓+3 ↓+3
19 13 7 20

2. (a) As, Cardiologist and Engineer are professional categories which can include females or males.



3. (b) **Logic:** Each letter is 2 positions apart in the alphabet.

As, HJL ⇒ H + 2 = J, J + 2 = L

FHJ ⇒ F + 2 = H, H + 2 = J

NPR ⇒ N + 2 = P, P + 2 = R

But, SUV ⇒ S + 2 = U, U + 1 = V (Odd)



Face R, is common in both position of the dice.

Letter	R	L	T
Opposite	E	O	A

Hence, face R is opposite to face E.

5. (c) JAMB → 5139

BALM → 9521

The common letters are B, A, M, and the common digits are 9, 5, 1.

Hence, L must be coded as 2.

6. (c) As,

C L O N E
↓-1 ↓+0 ↓+6 ↓-3 ↓+16
B L U K U

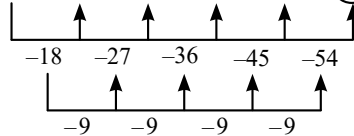
And,

B O U N D
↓-1 ↓+0 ↓+6 ↓-3 ↓+16
A O A K T

Similarly,

N I C H E
↓-1 ↓+0 ↓+6 ↓-3 ↓+16
M I I E U

7. (a) 208, 190, 163, 127, 82, (28)



8. (c)
-
- A letter sequence diagram showing the terms M, P, R, L, N, O, Q. Arrows point from each term to the next, with differences of +2, +3, -1, -2, +1, +2.

So, the second to the left of N is R.

9. (b) As,

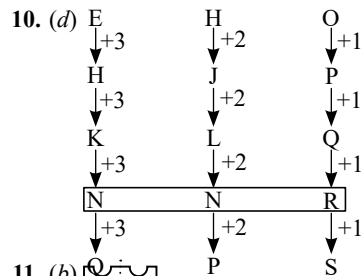
S B C F
↓-1 ↓-1 ↓+1 ↓+1
R A D G

And,

N V M O
↓-1 ↓-1 ↓+1 ↓+1
M U N P

Similarly,

G U A X
↓-1 ↓-1 ↓+1 ↓+1
F T B Y



11. (b)

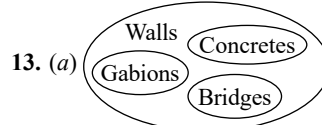


12. (b) Original word: GRACEFUL

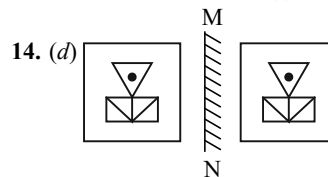
Sorted in alphabetical order:

A C E F G L R U

Comparing positions show that no letter remain in the same place.



So, neither conclusion (I) nor (II) follows.



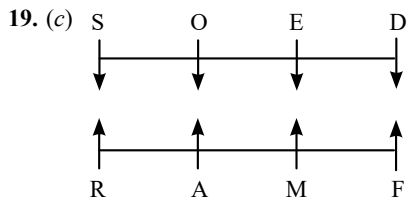
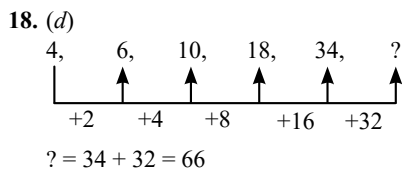
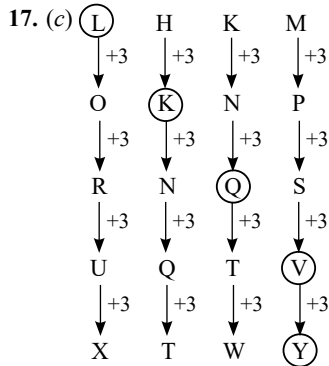
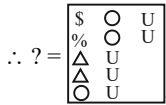
15. (d) $50 - 9 \div 1 + 63 \times 7 = ?$

After interchanging the signs, '÷' & '×' and '+', & '-',

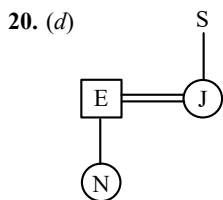
$50 + 9 \times 1 - 63 \div 7$

$= 50 + 9 - 9 = 50.$

16. (b) **Logic:** In the next figure new symbols added in sequence 1, 2, 3, 4, ... etc., and the only one previous symbol removed in the next figure.



Hence, E and M are facing each other.



So, J is the mother of N.

21. (d) Pradhan Mantri Rojgar Protsahan Yojana is being implemented since 2016. The scheme aimed to **promote employment generation** by incentivizing employers for hiring new workers. Under the scheme, the government pays the full **employer's contribution for Employees' Provident Fund and Employees' Pension Scheme** for new employees for **3 years**. The beneficiaries are workers earning a salary of **up to ₹ 15,000 per month**.
22. (a) The **first Asian Games** were held in New Delhi in 1951. It was organized by the **Asian Games Federation** after India's independence. The Asian Games, also called the **Asiad**, is a **continental multi-sport event** held every **four years** among athletes from all over **Asia**. The next Asian Games will be held in **2026** in **Aichi-Nagoya, Japan**.

23. (b) In August 2024, Hima Kohli, who bid farewell to the Supreme Court, became the **first woman Chief Justice** of the High Court for the State of **Telangana**. On August 31, 2021, she was elevated to the Supreme Court of India, becoming the ninth woman to hold such a position. She retired from the Supreme Court in **August 2024**. Justice Kohli chaired the Delhi State Legal Services Authority starting May 20, 2020.

24. (b) **Kabaddi** was included as a discipline in the **11th Asian Games** Beijing 1990.

India has been **dominant** in Kabaddi, winning **multiple gold medals** since its introduction. The 1990 Beijing Asian Games featured **27 sports**.

25. (c) **Cherrapunji and Mawsynram** are the two **wettest places on Earth** that receive more than 1,080 cm of rainfall in a year. **Cherrapunji** receives **average annual rainfall of more than 1,080 cm**. **Mawsynram** holds the record for the **highest annual rainfall in the world**. **Cherrapunji** is known for **heavy monsoon rains** and **massive waterfalls**.

26. (c) As per **National Multidimensional Poverty Index of India: A Progress Review 2023**, **Dadra and Nagar Haveli & Daman and Diu** has the highest percentage of multidimensionally poor people. The Multidimensional Poverty Index (MPI) assesses poverty by considering various deprivations experienced by individuals across health, education, and standard of living indicators.

The percentage of multidimensionally poor people in Dadra and Nagar Haveli & Daman and Diu is **9.21%** of the population.

27. (d) The penalty amount specified under the **Public Examinations (Prevention of Unfair Means) Bill, 2024**, for individuals involved in **unfair practices or offenses during exams** is up to 10 lakh rupees. Service providers found guilty can be **fined up to one crore rupees** and barred from conducting public examinations for four years.

For organized crimes related to public examinations, the Bill prescribes **imprisonment between five and ten years** and a minimum fine of one crore rupees.

28. (d) **Articles 315 to 323** of the Constitution of India deal with the Union Public Service Commission. These articles are part of **Part XIV** of the Constitution, titled "**Services under the Union and the States**."

Article 315 provides for the **establishment of UPSC and State PSCs**, while **Article 316** deals with the appointment and tenure of **Chairman and Members**. **Article 317** focuses on the removal and suspension of members.

29. (d) The Green Revolution belongs to the agricultural sector.

The **Green Revolution** refers to a period of **agricultural transformation** that significantly increased food production using **high-yield variety seeds, chemical fertilizers** and **pesticides**.

M. S. Swaminathan is the Father of the Green Revolution in India.

Green Revolution was introduced in late **1960s**.

30. (a) The annual **Mamallapuram Dance Festival**, which includes performances of **Indian Classical Dances** Bharata-natyam, Kuchipudi, Kathak, Mohiniattam, Odissi and Kathakali, is organised in **Tamil Nadu**. The festival was organized by Tamil Nadu Tourism Department.

This festival showcases **Indian Classical Dances**, including **Bharata-natyam, Kuchipudi, Kathak, Mohiniattam, Odissi** and **Kathakali**.

31. (b) Statements ii and iii are correct.

The **agriculture sector** in India has shown robust growth, **averaging 5%** annually from FY17 to FY23.

However, specific data for **FY 2022-23** indicates a **growth rate of 4.7%**.

A quantity of 518 LMT rice has been estimated for procurement during the forthcoming KMS 2022-23 (Kharif Crop) as against 509.82 LMT actually procured during last KMS 2021-22 (Kharif Crop).

32. (d) **Lakshmi Vishwanathan**, who won the prestigious **Natya Kalanidhi Award** from the Music Academy was famous for **Bharatanatyam**.

Lakshmi, born into a family associated with classical arts and the **Thanjavur tradition**, started her dance training under Guru Kausalya of the Vazhuvur Ramaiya Pillai school and **Guru Kanchipuram Ellappa**. She wrote several acclaimed books on Bharatanatyam and related subjects.

She served as **Vice President of the Music Academy, Chennai**, and was a member since 1984.

33. (d) War-time expenditure and resource allocation were the major economic challenge addressed in the Third Five-Year Plan (1961-1966).

The **Third Five-Year Plan** aimed to make India **self-reliant** and **self-sufficient** in food production.

It was overshadowed by the **Sino-Indian War (1962)** and later the **Indo-Pak War (1965)**.

34. (a) 2nd October 2022 marked the 153rd **birth anniversary of Mahatma Gandhi**, celebrated as **Gandhi Jayanti**. Mahatma Gandhi's birth date is **2nd October 1869**.

Gandhi Jayanti is also observed as the **International Day of Non-Violence** by the United Nations.

35. (c) The NBPW, which can be considered as the most widespread Iron Age pottery, stands for Northern Black Polished Ware. NBPW is found across **northern India**, particularly in the **Gangetic plains**. It is considered **one of the most widespread Iron Age pottery types** in India. It is associated with **early urbanization** and the rise of **Mahajanapadas**.
36. (d) Part III of the Constitution of India stated the **Fundamental Rights**. Part III of the Constitution covers **Article 12 to Article 35**. These rights are **justiciable**, which means they can be enforced by the **courts**.
37. (d) **Pumpkin** plant can be made to climb walls using special support. Pumpkin is a **climber** that grows by spreading along the ground or **climbing with support**. It has specialized structures called **tendrils**, which help the plant grip onto walls, fences, or trellises. With proper support, pumpkin vines can grow vertically, saving space and **improving air circulation**.
38. (c) **Lord Chelmsford and Edwin Montagu** were behind the recommendations that formed the basis of the **Government of India Act, 1919**. The act introduced **Diarchy** in provinces and separated central and provincial subjects. The act gave **limited self-governance** to Indians in certain areas. Lord Chelmsford was the Viceroy of India from 1916 to 1921, while **Edwin Montagu** was the **Secretary of State for India** from 1917 to 1922.
39. (d) Michael Faraday discovered **electromagnetic induction** in 1831. His experiment showed that a **changing magnetic field can induce an electric current in a conductor**, forming the basis of modern **electric transformers, generators, and inductor**. He demonstrated this by moving a **magnet through a coil of wire**, which produced an electric current. This discovery led to **Faraday's Law of Induction**.
40. (d) **Madurai Shanmukhavadiyu Subbulakshmi** was a **Carnatic legendary singer** who sang in Europe, North America and at the **United Nations General Assembly**. She was the **first Indian musician to perform at the United Nations General Assembly (UNGA) in 1966**. She was honored with the **Bharat Ratna in 1998**.
41. (b) $28 = 2 \times 2 \times 7$
 $60 = 2 \times 2 \times 3 \times 5$
 $120 = 2 \times 2 \times 2 \times 3 \times 5$
 $135 = 3 \times 3 \times 3 \times 5$
Hence, LCM of 28, 60, 120 and 135
 $= 2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 5 \times 7 = 7560$

42. (c) Total marks got in Mathematics in all three papers = $300 \times \frac{60}{100} = 180$
Total marks got in English in all two papers = $200 \times \frac{70}{100} = 140$
Total marks got in Science in one paper = $100 \times \frac{50}{100} = 50$
Hence, his percentage of marks in all papers = $\frac{(180 + 140 + 50)}{(300 + 200 + 100)} \times 100 = \frac{370}{6} = 61.67$

TOPPER'S GUIDANCE

Percentage of marks in all papers

$$= \frac{3 \times 60 + 2 \times 70 + 50}{6 \times 100} \times 100$$

$$= \frac{370}{6} = 61.67\%$$

43. (a) Let the original number be a .

According to question,

$$a \times \frac{85}{100} \times \frac{120}{100} = a + 78$$

$$\Rightarrow \frac{102a}{100} - a = 78 \Rightarrow \frac{2a}{100} = 78$$

$$\Rightarrow a = \frac{7800}{2} = 3900$$

44. (b) Difference between C.I. and S.I.

$$= 51 - 42 = ₹ 9$$

$$\text{S.I. for 1 year} = \frac{42}{2} = ₹ 21$$

$$\text{So, rate of interest} = \frac{9}{21} \times 100 = \frac{300}{7}\%$$

$$\text{Now, simple interest} = \frac{P \times R \times T}{100}$$

$$\Rightarrow 42 = \frac{P \times \frac{300}{7} \times 2}{100}$$

$$\Rightarrow P = \frac{42 \times 7}{6} = ₹ 49$$

TOPPER'S GUIDANCE

For 2 years:

$$\text{Principal} = \frac{SI^2}{(CI - SI) \times T^2}$$

$$= \frac{42 \times 42}{(51 - 42) \times 2 \times 2} = \frac{42 \times 42}{9 \times 4}$$

$$= 7 \times 7 = ₹ 49$$

45. (c) Let Tushar gets money ₹ a .

$$\therefore \text{Ketan gets money} = ₹ (24700 - a)$$

According to question, both receive the same amount.

$$\therefore (24700 - a) \times \left(1 + \frac{8}{100}\right)^{11} = a \times \left(1 + \frac{8}{100}\right)^{10}$$

$$\Rightarrow (24700 - a) \times \left(1 + \frac{8}{100}\right) = a$$

$$\Rightarrow (24700 - a) \times \frac{27}{25} = a$$

$$\Rightarrow 24700 \times 27 - 27a = 25a$$

$$\Rightarrow a = \frac{24700 \times 27}{52} = ₹ 12,825$$

46. (c) Cost price = $SP \times \frac{100}{100 + P\%}$
 $= 1566 \times \frac{100}{108} = ₹ 1,450$

47. (d) Let the numbers be $4a$ and $9a$.
Mean proportion of $4a$ and $9a = 24$

$$\Rightarrow \sqrt{4a \times 9a} = 24$$

$$\Rightarrow 6a = 24 \Rightarrow a = 4$$

Hence, difference between two numbers = $9a - 4a = 5a = 5 \times 4 = 20$

48. (b) Relative speed = $150 - 80 = 70$ km/hr

$$= 70 \times \frac{5}{18} = \frac{350}{18} \text{ m/sec}$$

$$\text{Total distance} = 210 + 140 = 350 \text{ m}$$

$$\text{Hence, required time} = \frac{\text{Total distance}}{\text{Relative speed}}$$

$$= \frac{350}{\frac{350}{18}} = 18 \text{ sec} = \frac{18}{60} = 0.3 \text{ minute}$$

49. (c) Let initial price of petrol be ₹ 100.

Let initial consumption be 100 litres.

$$\therefore \text{Initial expenditure} = 100 \times 100 = ₹ 10000$$

$$\text{New price of petrol} = 100 \times \frac{185}{100} = ₹ 185$$

$$\text{New expenditure} = 10000 \times \frac{148}{100} = ₹ 14800$$

According to question,

$$185 \times \text{New consumption} = 14800$$

$$\Rightarrow \text{New consumption} = \frac{14800}{185} = 80 \text{ litres}$$

Hence, the percentage reduction in

$$\text{consumption} = \frac{(100 - 80)}{100} \times 100 = 20\%$$

TOPPER'S GUIDANCE

Percentage reduction in consumption

$$= \frac{(85 - 48)}{(100 + 85)} \times 100 = \frac{3700}{185} = 20\%$$

50. (c) Let the total work = LCM of 32 and 48 = 96 units

$$\text{Efficiency of A} = \frac{96}{32} = 3 \text{ units/day}$$

$$\text{Efficiency of B} = \frac{96}{48} = 2 \text{ units/day}$$

$$\text{Work completed in 8 days} = 8 \times (3 + 2) = 40 \text{ units}$$

$$\text{Remaining work} = 96 - 40 = 56 \text{ units}$$

$$\text{So, 60\% of remaining work} = 56 \times \frac{60}{100}$$

$$= \frac{168}{5} \text{ units}$$

$$\text{Hence, required time} = \frac{168}{\frac{5}{2}} = \frac{84}{5}$$

$$= 16\frac{4}{5} \text{ days}$$

51. (a) $\left[(48 \div 8) \times \left\{ \frac{49}{7} + \frac{40}{4} \times (7-3) \right\} \right]$
 $= [6 \times \{7 + 10 \times 4\}] = 6 \times (7 + 40)$
 $= 6 \times 47 = 282$
52. (a) The largest four-digit number is 9999.
 LCM of 15, 25, 40 and 75 = 600
 Remainder of $\frac{9999}{600} = 399$
 Hence, required largest four-digit number
 $= 9999 - 399 = 9600$
53. (b) The ratio of two cones' volumes

$$= \frac{\frac{1}{3}\pi r_1^2 h_1}{\frac{1}{3}\pi r_2^2 h_2} = \left(\frac{r_1}{r_2}\right)^2 \times \left(\frac{h_1}{h_2}\right) = \left(\frac{1}{2}\right)^2 \times \frac{4}{3}$$

 $= \frac{1}{4} \times \frac{4}{3} = \frac{1}{3}$
 Hence, required ratio = 1 : 3
54. (b) Let cost price of 1 gm goods be ₹ 1.
 \therefore Cost price of 1000 gm = ₹ 1000
 Actual weight he uses = $1000 \times \frac{(100-46)}{100}$
 $= 540$ gm
 \therefore Cost price for shopkeeper = ₹ 540
 And, selling price for shopkeeper = ₹ 1000
 Hence, his profit % = $\frac{(1000-540)}{540} \times 100$
 $= \frac{4600}{54} = 85\frac{5}{27}\%$

TOPPER'S GUIDANCE

Profit percentage

$$= \frac{\text{Weight reduction \%}}{(100 - \text{Weight reduction \%})} \times 100$$

$$= \frac{46}{(100 - 46)} \times 100 = \frac{4600}{54} = 85\frac{5}{27}\%$$

55. (c) Sum of weights of Gopal, Akshay and Atul = $46 \times 3 = 138$ kg
 Sum of weights of Gopal and Akshay = $40 \times 2 = 80$ kg
 Sum of weights of Akshay and Atul = $45 \times 2 = 90$ kg
 Hence, the weight of Akshay = $(80 + 90) - 138 = 170 - 138 = 32$ kg
56. (c) Ist offer: Single discount
 $= 20 + 20 - \frac{20 \times 20}{100} = 40 - 4 = 36\%$
 IInd offer: Single discount
 $= 25 + 15 - \frac{25 \times 15}{100} = 40 - 3.75 = 36.25\%$
 IIIrd offer: Single discount
 $= 30 + 10 - \frac{30 \times 10}{100} = 40 - 3 = 37\%$
 IVth offer: Single discount
 $= 5 + 35 - \frac{5 \times 35}{100}$
 $= 40 - 1.75 = 38.25\%$ (Most discount)
57. (b) Average speed of entire journey
 $= \frac{2 \times X \times Y}{X + Y} = \frac{2 \times 9 \times 18}{9 + 18}$
 $= \frac{18 \times 18}{27} = 2 \times 6 = 12$ km/hr
58. (d) Let the rate of interest be R%.
 According to question,
 $\frac{9400 \times R \times 5}{100} - \frac{5400 \times R \times 5}{100} = 840$
 $\Rightarrow 5(94R - 54R) = 840$
 $\Rightarrow 200R = 840 \Rightarrow R = \frac{84}{20} = 4.2$
59. (b) Let the numbers are 11a and 11b.
 So, $11a + 11b = 132$
 $\Rightarrow a + b = 12$
 As, both numbers are greater than 42.
 So, possible value of (a, b) = (5, 7) or (7, 5)
 Hence, the difference = $11 \times 7 - 11 \times 5$
 $= 77 - 55 = 22$
60. (a) Third proportional of a and b = $\frac{b^2}{a}$
 Hence, third proportional of 16 and 48
 $= \frac{48 \times 48}{16} = 3 \times 48 = 144$
61. (b) The word "clear" is an adjective, we need an adverb "clearly" to modify the verb "articulating".
62. (d) The phrase "Grey hair" is a common expression referring to aging.
63. (d) "Ran across" means moving from one side to another, which fits the sentence structure.
64. (b) "Desecrate" means to show disrespect to something sacred like a place of worship. The sentence talks about sinning against God and humanity, making "desecrate" the most appropriate word.
65. (d) The phrase "clear instructions" is a common collocation in English. It means instructions that are easy to understand.
66. (d) "Arrogant" means **overly proud and self-important** (अहंकार से भरा हुआ). Its opposite, "**Humble**", means **modest and respectful** (विनम्र और आदरशील).
Creepy (डरावना) – Incorrect
Clumsy (अकुशल, अनाड़ी) – Incorrect
Average (सामान्य) – Incorrect
67. (c) "Broad" means **large in extent or range** (बहुत फैला हुआ या विस्तृत). "**Wide**" is a synonym because it also means **large or extensive** (चौड़ा, बड़ा).
Particular (विशिष्ट, विशेष) – Incorrect
Small (छोटा) – Incorrect
Exact (सटीक, सही-सही) – Incorrect
68. (c) The idiom "Man of straw" refers to someone who is weak, lacks character, or is insignificant.
69. (b) The correct reflexive pronoun in this sentence is "ourselves" because the subject "We" is plural.
 "Oneself", "itself" and "themselves" do not fit the plural subject "We".

70. (b) "**Flaunt**" means **to show off or display something proudly** (खुले आम दिखाना या शान बघारना).
 The opposite of "flaunt" is "**hide**", which means **to keep something out of sight** (किसी चीज को छिपाना).
 Parade (झांकी निकालना, प्रदर्शन करना) – Incorrect (It means to show off, which is similar to "flaunt").
Wide (चौड़ा, विस्तृत) – Incorrect (Not related to "flaunt").
Open (खुला, स्पष्ट) – Incorrect (It doesn't convey the opposite meaning of "flaunt").
71. (c) The word "essey" is incorrectly spelled; the correct spelling is "essay".
72. (c) The phrase "creatively and unconventionally" is best replaced with the idiom "outside the box", which means thinking in an innovative and unique way.
73. (b) The word in brackets "destruction" means damage or ruin. The opposite of destruction is "creation," which means bringing something into existence.
74. (c) The verb "realises" is in the present tense, but the sentence starts with "Alka had been writing" past perfect continuous. To maintain proper tense consistency, "realises" should be "realised".
75. (b) The word "assignmant" is incorrectly spelled. The correct spelling is "assignment."
76. (a) The passage describes a sense of freedom and enjoyment. The word "pleasant" meaning enjoyable and satisfying fits best in the given context. Other options, like "contemptuous" showing disdain, "tedious" boring, and "baleful" threatening, do not match the tone of the passage.
77. (b) The sentence describes a sense of freedom that is enjoyable rather than something negative. "Agreeable" means pleasant or enjoyable, which fits the context best. Other options "miserable," "humour," and "detestable" do not match the meaning of the passage.
78. (a) The sentence suggests a person talking to themselves loudly. "Yourself" is the correct reflexive pronoun to refer back to the subject. Other options "ourselves", "herself" and "himself" do not fit grammatically.
79. (d) The sentence discusses freedom without fear of counterstroke retaliation. "Without" is the correct preposition, meaning in the absence of something. Other options "in", "with" and "for" do not fit the meaning of the sentence.
80. (c) The conjunction "**or**" is used **to present alternatives or choices** (विकल्प दिखाने के लिए "or" का प्रयोग किया जाता है)।