

RRB NTPC UG Memory Based Mock (13 Aug Exam)

Q1. Among the following Central Government posts, even if they are considered equivalent, which post is the highest in terms of prestige, salary, and other facilities?

- (a) Indian Audit Officer
- (b) Tax Collection Officer
- (c) Indian Foreign Service Officer
- (d) Indian Defence Service Officer

Q2. Which of the following places is not related to Lakshadweep?

- (a) Kavaratti
- (b) Minicoy
- (c) Agatti
- (d) Kannur

Q3. The northern part of the Bay of Bengal is called the Northern Circars. What is the southern part called?

- (a) South Crescent
- (b) Coromandel Coast
- (c) South Cursor
- (d) South Gulf

Q4. Which important document did Lord Macaulay present upon arriving in India in 1834?

- (a) The Macaulay Minute
- (b) The Charter Act of 1833
- (c) The Indian Penal Code
- (d) The Racial Equality Bill

Q5. What is the balanced chemical equation for the reaction of magnesium (Mg) with oxygen (O₂)?

- (a) $\text{Mg} + \text{O}_2 \rightarrow \text{MgO}$
- (b) $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$
- (c) $2\text{Mg} + 2\text{O}_2 \rightarrow 2\text{MgO}$
- (d) $\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$

Q6. In which Part of the Indian Constitution are the special provisions for states given?

- (a) Part XVI
- (b) Part XVIII
- (c) Part XXI
- (d) Part XIII

Q7. The "Civil Defence Mock Drill" conducted in 244 districts across India on May 7, 2025, was officially named what?

- (a) Operation Bharat Rakshak
- (b) Operation Suraksha
- (c) Operation Abhyaas
- (d) Operation National Guard

Q8. Which new rice variety (or varieties) have been recently developed or announced in India?

- (a) Basmati-India 2000
- (b) IR64
- (c) DBR 100 (Kamal) and Musta
- (d) Shakti Rice

Q9. Meluri district was recognized as the 17th district of which state in India?

- (a) Nagaland
- (b) Assam
- (c) Arunachal Pradesh
- (d) Meghalaya

Q10. Which Part of the Constitution of India describes the financial relations between Centre and States?

- (a) Part IV
- (b) Part XII
- (c) Part XXI
- (d) Part IX

Q11. The Kumaoni language belongs to which state?

- (a) Himachal Pradesh
- (b) Uttarakhand
- (c) Uttar Pradesh
- (d) Haryana

Q12. Which Mughal ruler introduced the Dahsala system?

- (a) Akbar
- (b) Babur
- (c) Shah Jahan
- (d) Aurangzeb

Q13. Which type of coal is known as 'brown coal'?

- (a) Lignite
- (b) Bituminous
- (c) Anthracite
- (d) Peat

Q14. Amelia Kerr (female cricketer) is associated with which country?

- (a) Australia
- (b) New Zealand
- (c) England
- (d) South Africa

Q15. In which year was Bharat Sanchar Nigam Limited (BSNL) established?

- (a) 1995
- (b) 2000
- (c) 2005
- (d) 1990

Q16. According to the IMF (International Monetary Fund), what is India's projected GDP growth rate for the year 2025?

- (a) 6.0%
- (b) 6.2%
- (c) 6.4%
- (d) 7.0%

Q17. Which species of elephant is considered Critically Endangered by the IUCN?

- (a) African Savanna Elephant
- (b) Asian Elephant
- (c) African Forest Elephant
- (d) Indian Elephant

Q18. Which Article of the Indian Constitution relates to the reservation of seats in the Lok Sabha for Scheduled Castes (SC) and Scheduled Tribes (ST)?

- (a) Article 15
- (b) Article 17
- (c) Article 330
- (d) Article 368

Q19. What was the theme of NITI Aayog's 10th Governing Council meeting held on 24 May 2025?

- (a) Sustainable Development for India 2047
- (b) Viksit Rajya for Viksit Bharat@2047
- (c) Transforming India's Future: 2047 Vision
- (d) Empowering States for Growth and Development

Q20. Article 79 of the Indian Constitution is associated with which of the following?

- (a) The appointment of judges to the Supreme Court
- (b) The structure and composition of the Parliament of India
- (c) The powers of the President of India
- (d) The fundamental rights of Indian citizens

Q21. On which river is the Tehri Dam located?

- (a) Yamuna
- (b) Ganga
- (c) Bhagirathi
- (d) Narmada

Q22. In MS Word, Ctrl + R is used to align the text to the ____ of the screen.

- (a) left
- (b) right
- (c) top
- (d) bottom

Q23. What does the Rig Vedic word "Gavishthi" refer to?

- (a) Peace treaty
- (b) Marriage alliance
- (c) Search for cows or war
- (d) Religious offering

Q24. What is the main theme of Bharat NCX 2025?

- (a) Secure Digital Governance
- (b) Cybersecurity for Critical Infrastructure
- (c) Enhancing the Operational Preparedness of Indian Cyberspace
- (d) AI and Blockchain in Cyber Defense

Q25. Who among the following launched the IndiaAI initiatives in 2025?

- (a) Minister of Science and Technology
- (b) Union IT Minister
- (c) Prime Minister of India
- (d) Director of IndiaAI Mission

Q26. Which physicist was famous for the gold foil experiment?

- (a) John Dalton
- (b) Niels Bohr
- (c) JJ Thomson
- (d) Ernest Rutherford

Q27. Which scheme completed 9 years in June 2025?

- (a) Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)
- (b) Pradhan Mantri Jan Dhan Yojana
- (c) Ayushman Bharat
- (d) Beti Bachao Beti Padhao

Q28. What is the name of the civil defence mock drill conducted in Bengaluru to enhance emergency preparedness and public awareness?

- (a) Operation Shield
- (b) Operation Abhyas
- (c) Operation Safeguard
- (d) Operation Vigilant

Q29. According to the IMF World Economic Outlook April 2025, what is India's revised GDP growth forecast for FY26?

- (a) 6.5%
- (b) 6.3%
- (c) 6.0%
- (d) 6.2%

Q30. The Government of India has approved a 9.5% hike in material cost under which scheme, resulting in an additional central expenditure of ₹954 crore for the financial year 2025-26, effective from May 1, 2025?

- (a) PM-KISAN
- (b) PM-POSHAN
- (c) PM-GKRA
- (d) PM-SVANidhi

Q31. The Central Vigilance Commission (CVC) was established in ____.

- (a) 1966
- (b) 1964
- (c) 1967
- (d) 1965

Q32. What is the primary objective of the Amrit Bharat Station Scheme (ABSS)?

- (a) To construct new railway stations in urban areas
- (b) To redevelop and modernize existing railway stations across India
- (c) To privatize railway station operations
- (d) To reduce the number of railway stations to streamline operations

Q33. On which date will Veer Savarkar's Death Anniversary be observed in 2025?

- (a) January 23, 2025
- (b) February 26, 2025
- (c) March 15, 2025
- (d) April 14, 2025

Q34. In February 2025, where was the RuTAGe Smart Village Center (RSVC) inaugurated?

- (a) Jaipur, Rajasthan
- (b) Sonapat, Haryana
- (c) Pune, Maharashtra
- (d) Chennai, Tamil Nadu

Q35. Where was the first-ever BIMSTEC Youth Summit held in February 2025?

- (a) New Delhi
- (b) Gandhinagar, Gujarat
- (c) Dhaka, Bangladesh
- (d) Colombo, Sri Lanka

Q36. Who won the 'Sportsman of the Year' award in 2025?

- (a) Neeraj Chopra
- (b) Swapnil Kusale
- (c) Bajrang Punia
- (d) P.R. Sreejesh

Q37. What is the theme for World Pulses Day 2025?

- (a) Pulses for Sustainable Agriculture
- (b) Pulses: Bringing Diversity to Agrifood Systems
- (c) Pulses and Climate Change
- (d) Pulses: A Pathway to Food Security

Q38. The normal tenure of the Comptroller and Auditor General (CAG) of India is _____ years.

- (a) six
- (b) three
- (c) four
- (d) five

Q39. Exercise VAJRA PRAHAR, recently in news, is conducted between India and:

- (a) Bhutan
- (b) Sri Lanka
- (c) Nepal
- (d) United States of America (USA)

Q40. The Tehri Dam is the highest dam in India and tenth tallest dam in the world located at?

- (a) Uttarakhand
- (b) Kerala
- (c) Karnataka
- (d) Telangana

Q41. The total surface area of a solid cylinder is 297 sq. cm. If its radius is 3.5 cm, what is its volume?

- (a) 451 cm^3
- (b) 363 cm^3
- (c) 418 cm^3
- (d) 385 cm^3

Q42. In an examination, P scored 20% more marks than Q, Q scored 20% less marks than R and R scored 25% more marks than S. If P scored 480 marks out of 600, then find the marks of S.

- (a) 400
- (b) 425
- (c) 520
- (d) 450

Q43. Due to 10% reduction in the price of sugar a person can buy 5 kg more sugar for ₹ 300. Find the reduction in the price of sugar per kg.

- (a) Rs. 6.00
- (b) Rs. 5.75
- (c) Rs. 6.50
- (d) Rs. 5.25

Q44. ₹370 is divided into 3 parts. The second part is $\frac{1}{4}$ of the third part and the ratio of the first and the third parts is 3 : 5. Find the ratio of the third part to the total amount of money.

- (a) 10 : 41
- (b) 15 : 43
- (c) 12 : 23
- (d) 20 : 37

Q45. Speed of a boat in still water is 10 km/hr. If speed of stream is 2 km/hr, then how much distance can the boat travel downstream in 2.5 hours?

- (a) 30 km
- (b) 24 km
- (c) 32 km
- (d) 28 km

Q46. The ratio of money with Kishore to Pradeep is 5 : 11 and that with Pradeep to Sandeep is 6 : 14. If Kishore has Rs. 570, then Sandeep has (in Rs.):

- (a) 2,926
- (b) 3,456
- (c) 2,456
- (d) 3,026

Q47. If three solid spheres of radii 3 cm, 4 cm and 5 cm are melted and made into one solid sphere, then by how much percent will the surface area be reduced?

- (a) 12 percent
- (b) 28 percent
- (c) 14 percent
- (d) 16 percent

Q48. Two trains are running in opposite directions. They cross a man standing on a platform in 28 seconds and 10 seconds, respectively. They cross each other in 24 seconds. What is the ratio of their speeds?

- (a) 1 : 9
- (b) 7 : 2
- (c) 9 : 2
- (d) 4 : 5

Q49. The marked price of an item is Rs. 1,900. The shopkeeper was offering it for a discount of 12% but on further bargaining agreed to offer a successive discount and finally he sold the item for Rs. 1,538.24. What was the second discount offered by him?

- (a) 12%
- (b) 8%
- (c) 15%
- (d) 10%

Q50. Evaluate the following:

$0.000000814 - 0.000002564 + 62540.00000081 - 40.00000256 + 625$

- (a) 21.51
- (b) 24.99
- (c) 22.56
- (d) 25.63

Q51. The value of $22k+1-2k \times 2k+22k \times 2k+3-22 \times 22k$ is: The value of $2k \times 2k+3-22 \times 22k$ is:

- (a) $12k^2k^1$
- (b) $2k^2k$
- (c) $-12-21$
- (d) 1

Q52. An aeroplane travels distances 1320 km, 1760 km and 2095 km at the rate of 528 km/h, 352 km/h and 419 km/h, respectively. Find the average speed (in km/h) of the aeroplane.

- (a) 398
- (b) 497
- (c) 452
- (d) 414

Q53. The LCM of $2^3 \times 9^2 \times 13$, $2^2 \times 13^2 \times 19$ and $9^3 \times 13^2 \times 19^2$ is:

- (a) $2^3 \times 9^3 \times 13^2 \times 19^2$
- (b) $2^2 \times 9^3 \times 13 \times 19^2$
- (c) $2^3 \times 9^2 \times 13^2 \times 19^3$
- (d) $2^3 \times 9^2 \times 13^2 \times 19$

Q54. Vikram, Anjali and Raj started a business in partnership, investing in the ratio of 7 : 3 : 20, respectively. At the end of the year, they earned a profit of ₹28,800, which is 25% of their total investment. How much did Anjali invest (in ₹)?

- (a) ₹11,472
- (b) ₹11,564
- (c) ₹11,520
- (d) ₹11,682

Q55. The difference between an interior angle and an exterior angle of a regular polygon is 140° . Find the number of sides of the polygon.

- (a) 15
- (b) 16
- (c) 18
- (d) 20

Q56. Mahesh gets a 2% increase in his sale amount in the first year and a 20% increase in the second year, and with that his present sale is ₹1,90,400. What was his sale (in ₹) two years ago? (Rounded off to two decimal places.)

- (a) 1,86,666.67
- (b) 1,58,666.67
- (c) 1,55,555.56
- (d) 1,35,555.56

Q57. Which of the following numbers is divisible by 41?

- (a) 7995
- (b) 7431
- (c) 8537
- (d) 7889

Q58. A and B can do a piece of work in 6 days and 8 days, respectively. With the help of C, they completed the work in 3 days and earned ₹ 3,848. What was the share of C?

- (a) ₹ 481
- (b) ₹ 1,693
- (c) ₹ 1,443
- (d) ₹ 861

Q59. A person invested ₹50,000, partly at 10% and the rest at 12% per annum at simple interest. At the end of two years, the total interest received was ₹11,640. How much is the first and the second part of the investment?

- (a) ₹9,000; ₹41,000
- (b) ₹31,000; ₹19,000
- (c) ₹20,000; ₹30,000
- (d) ₹10,000; ₹40,000

Q60. Pipe A can fill 50% of a tank in 4 hours and pipe B can completely fill the same tank in 12 hours. If both the pipes are opened at the same time, then in how much time will the empty tank be completely filled?

- (a) 4 hours 52 minutes
- (b) 4 hours 48 minutes
- (c) 4 hours 40 minutes
- (d) 4 hours 55 minutes

Q61. If $\sin 4\theta + \cos 4\theta = 2\sin 2\theta \cos 2\theta$, $\sin 4\theta + \cos 4\theta = 2\sin 2\theta \cos 2\theta$, $0^\circ < \theta < 90^\circ$, then find the value of $\cot \theta$.

- (a) $1/\sqrt{2}$
- (b) $1/3$
- (c) 1
- (d) $1/2$

Q62. What is the mode of the following data? 66, 69, 83, 69, 84, 74, 71, 83, 69, 84, 73, 83, 69, 71, 84, 74, 83, 66, 74, 71, 83, 66, 90, 90

- (a) 74
- (b) 90
- (c) 84
- (d) 83

Q63. In a triangle PQR, incentre is A and $\angle QAR = 116^\circ$. Find the measure of $\angle QPR$.

- (a) 5400
- (b) 2700
- (c) 2600
- (d) 5200

Q64. The number of prime numbers between 301 and 320 is:

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

Q65. The cost price of 20 articles is the same as the selling price of 15 articles. The profit percentage in the transaction is:

- (a) 3313%3331%
- (b) 25%
- (c) 50%
- (d) 30%

Q66. The number of prime numbers lying between 400 and 430 is:

- (a) 5
- (b) 3
- (c) 6
- (d) 4

Q67. The ages of A and B are in the ratio 4 : 7, respectively. After 8 years, the ratio of their ages will be 2 : 3. What is the sum of the ages of A and B (in years)?

- (a) 38
- (b) 36
- (c) 42
- (d) 44

Q68. By selling an article for Rs.138, a shopkeeper losses 8%. At what price should the article be sold to get a gain of 4%?

- (a) Rs.156
- (b) Rs.144
- (c) Rs.210
- (d) Rs.90

Q69. Find the simple interest on 3,000 at 6 $\frac{1}{4}$ % p.a. for the period from 5 Feb 2005 to 18 April 2005, both dates included.

- (a) Rs.40
- (b) ₹37.50
- (c) Rs.35.50
- (d) Rs.42.80

Q70. Simplify the given expression.


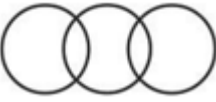


$$y + 2x - [(y - (y - x + y) - (x + y) + y) - 2y]$$

- (a) -y
- (b) -2x
- (c) y
- (d) 2x

Q71. Rogerio, in search of an internet café, walked 30 m due North. He turned right and walked 18 m. He again turned right and walked 30 m. Finally, he turned left and walked 22 m to reach the internet café. How far and in which direction is the internet café from his starting point?

- (a) 40 m due East
- (b) 100 m due East
- (c) 60 m due East
- (d) 40 m due west

Q72. Which of the following Venn diagrams best represents the relationship between stars, planets and universe?

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

Q73. J, K, L, M, N and O live on six different floors of the same building. The lowermost floor in the building is numbered 1, the floor above it is numbered 2, and so on till the topmost floor is numbered 6. M lives on floor number 2. K and M are immediate neighbours. O lives on the floor immediately above K. N lives on the topmost floor. J lives on an odd numbered floor, exactly above O. On which floor does L live?

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

Q74. Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the one that is different.

(Note: the letter-clusters are NOT to be treated as meaningful words)

- (a) PTSV
- (b) YCBF
- (c) FJIL
- (d) MQPS

Q75. In the following question, select the odd letter/letters from the given alternatives.

- (a) DG-GJ
- (b) HK-KN
- (c) PS-SV
- (d) BE-DH

Q76. In a row of certain students, Karishma is 16th from the left and 18th from the right. What is the total number of students in the row?

- (a) 33
- (b) 36
- (c) 34
- (d) 32

Q77. Sheela walks 1 km to east and turns right and walks another 1 km and then turns left and walks 2 km and again turning left her left travels 5 km. How far is Sheela from her starting point?

- (a) 6 km
- (b) 5 km
- (c) 7 km
- (d) 2 km

Q78. Find the missing term in the following number series.

2, 6, 12, 20, ____, 42

- (a) 36
- (b) 32
- (c) 34
- (d) 30

Q79. Eight people are living on eight different floors of the building in such a way that the ground floor is numbered 1, the floor above that is numbered 2, and so on till the top floor is numbered 8. Only two people live between C and E. Only two people live between E and D. F lives on the topmost floor. G lives immediately above B. A lives on one of the floors below E but above D and H. D lives on the ground floor. How many floors are there between the floors on which C and H live?

- (a) One
- (b) Three
- (c) Two
- (d) Four

Q80. Select the pair which follows the same pattern as that followed by the two set of pairs given below. Both pairs follow the same pattern.

JOL : FRO

MKH : INK

- (a) LOA : HSD
- (b) NRF : JUH
- (c) RME : NPG
- (d) HPD : DSG

Q81. A man 'A' starts from a certain point and walks 2 km towards north, turns towards his right and walks 2 km, turns right again and walks. What is the direction he is facing now?

- (a) South
- (b) South - East
- (c) North
- (d) East

Q82. Select the option that indicates meaningful and logical arrangement of the following words.

1. doctor
2. treatment
3. accident
4. injury
5. medicine

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

Q83. MJGT is related to QNKX in a certain way based on the English alphabetical order. In the same way, CZWJ is related to GDAN. To which of the following options is OLIV related, following the same logic?

- (a) SMPZ
(b) SPMZ
(c) SPZM
(d) SMZP

Q84. SUZD is related to ZBGK in a certain way based on the English alphabetical order. In the same way, UWBF is related to BDIM. To which of the following options is PRWA related, following the same logic?

- (a) WDHY
(b) WYHD
(c) WDUH
(d) WYDH

Q85. U, V, W, X, and Y live on a five-floor building, each floor having only one flat. The bottommost floor is numbered as 1, and the floor immediately above it is numbered as 2, and so on. X lives just below Y. W, U, and V live on consecutive floors in the same order. No one lives below V. Who lives just below X?

- (a) V
(b) Y
(c) W
(d) U

Q86. Seven people, D, E, F, G, L, M and N, are sitting in a row, facing north. Only M sits to the left of N. Only four people sit between M and L. Only F sits between G and D, and G is not an immediate neighbour of L. Who sits at the extreme right of the line?

- (a) N
(b) D
(c) E
(d) G

Q87. What should come in place of the question mark (?) in the given series?

8, 13, 20, 29, 40, ?

- (a) 65
(b) 61
(c) 53
(d) 57

Q88. What will come in the place of the question mark (?) in the following equation, if '+' and '-' are interchanged and '×' and '÷' are interchanged?

$122 \div 4 + 65 \times 5 - 41 = ?$

- (a) 516
(b) 518
(c) 512
(d) 522

Q89. Refer to the following number and symbol series and answer the question that follows. Counting to be done from left to right only.

(NOTE: All numbers are single digit numbers only.)

(Left) @ \$ 6 # % 1 4 £ * 1 £ © 7 # 4 8 3 % % 2 \$ £
(Right)

How many such symbols are there each of which is immediately preceded by a number and also immediately followed by a number?

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

Q90. What should come in place of the question mark (?) in the given series?

517, 494, 461, ?, 365, 302

- (a) 438
(b) 418
(c) 428
(d) 408

Q91. If '+' means 'subtraction', '-' means 'multiplication', '×' means 'division' and '÷' means 'addition', then what will come in place of the question mark (?) in the following equation?

$171 \div 95 \times 5 - 4 + 33 = ?$

- (a) 204
(b) 209
(c) 226
(d) 214

Q92. Refer to the following number and symbol series and answer the question that follows. Counting to be done from left to right only.

(NOTE: All numbers are single digit numbers only.)

(Left) 6 3 £ \$ % 3 \$ 9 8 1 8 * % 2 6 € \$ £ # 8 & \$
(Right)

How many such symbols are there each of which is immediately preceded by a number and also immediately followed by a symbol?

- (a) 6
- (b) 4
- (c) 5
- (d) 3

Q93. Refer to the following number and symbol series and answer the question that follows. Counting to be done from left to right only.

(NOTE: All numbers are single digit numbers only.)

(Left) © 9 6 £ 9 & € 8 4 4 2 @ © £ # 4 * 7 © 7 9 6
(Right)

How many such numbers are there each of which is immediately preceded by a symbol and also immediately followed by a symbol?

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

Q94. What will come in the place of the question mark (?) in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?

$$131 \div 6 + 1818 \times 18 - 23 = ?$$

- (a) 711
- (b) 705
- (c) 708
- (d) 701

Q95. In a certain code language, 'BEST' is coded as '4568' and 'STAB' is coded as '8965'. What is the code for 'A' in the given code language?

- (a) 6
- (b) 5
- (c) 9
- (d) 8

Q96. Select the option that is related to the sixth number cluster in the same way as the first number cluster is related to the second number cluster and third number cluster is related to fourth number cluster. (NOTE: Operations should

be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 - Operations on 13 such as adding /subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

$$88 : 93 :: 69 : 74 :: ? : 39$$

- (a) 34
- (b) 33
- (c) 32
- (d) 31

Q97. In a certain code language, 'FIRE' is coded as '5371' and 'ACID' is coded as '8247'. What is the code for 'I' in the given code language?

- (a) 3
- (b) 2
- (c) 4
- (d) 7

Q98. MBKF is related to OGMK in a certain way based on the English alphabetical order. In the same way, QLOP is related to SQQU. To which of the given options is UVSZ related, following the same logic?

- (a) VBUD
- (b) WAUE
- (c) XZVF
- (d) WBTD

Q99. In a certain code language,
A + B means 'A is the mother of B'
A - B means 'A is the brother of B'
A × B means 'A is the wife of B' and
A ÷ B means 'A is the father of B'.

How is M related to Q if 'M + N × O ÷ P - Q'?

- (a) Father's sister
- (b) Mother's mother
- (c) Father's mother
- (d) Mother's sister

Q100. Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?

KM37, IK48, GI59, EG70, ?

- (a) CF81
- (b) CE82
- (c) CE81
- (d) CF82

Solutions

1. (c): Correct Answer: (c) Indian Foreign Service Officer

Explanation:

The **Indian Foreign Service (IFS)** officers are considered the highest in terms of **prestige, salary, and other facilities** among the given options. IFS officers represent India in diplomatic missions around the world and hold significant influence in shaping the country's foreign policy.

Information Booster:

IFS officers enjoy high social status, excellent pay, perks, and extensive international exposure.

The **Tax Collection Officer** and **Indian Audit Officer** have important roles but are generally seen as less prestigious compared to the **Indian Foreign Service Officer**, who holds diplomatic positions.

2. (d): Correct Answer: (d) Kannur

Explanation:

Kannur is a city located in **Kerala** on the mainland of India, and is **not** part of **Lakshadweep**.

The other places listed— **Kavaratti, Minicoy, and Agatti**—are islands that are part of the **Lakshadweep** archipelago, a Union Territory of India in the Arabian Sea.

Information Booster:

Lakshadweep is an archipelago of 36 islands, with **Kavaratti** being the **capital**, **Minicoy** and **Agatti** among the most notable islands. These islands are known for their natural beauty and serve as important tourist and marine biodiversity hubs.

3. (b): Correct Answer: (b) Coromandel Coast

Explanation:

The **northern part** of the **Bay of Bengal** is called the **Northern Circars**, while the **southern part** is known as the **Coromandel Coast**.

The **Coromandel Coast** is located along the southeastern coast of **India**, stretching from **Chennai** in the north to the **Kanyakumari** in the south.

Information Booster:

The **Coromandel Coast** is known for its **historic trading ports, beautiful beaches**, and the influence of **Indian Ocean trade** throughout history. It also includes important cities like **Chennai** and **Puducherry**.

4. (a): Correct Answer: (a) The Macaulay Minute

Explanation:

In **1834**, **Lord Macaulay** presented the **Macaulay Minute** to the **British government** in India. It was a significant document that laid the foundation for **English education** in India and promoted the establishment of **English as the medium of instruction** in schools and colleges.

Information Booster:

The **Macaulay Minute** is considered a key turning point in the history of education in India, marking the beginning of **Western-style education** and **English education** in India, replacing many traditional educational systems.

5. (b): Correct Answer: (b) $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$

Information Booster

- When magnesium metal is heated strongly in oxygen, it burns with an intense white flame, producing a white ash of magnesium oxide (MgO). This is an example of a **combination (synthesis) reaction**.
- The equation must follow the **law of conservation of mass** — the number of each type of atom must be equal on both sides:
- **Left side:** $\text{Mg} = 2, \text{O} = 2$ (from O_2 molecule)
- **Right side:** $\text{Mg} = 2, \text{O} = 2$ (from 2MgO molecules)

Additional Information

Explanation of Other Options

- **(a): $\text{Mg} + \text{O}_2 \rightarrow \text{MgO}$**
 - Not balanced. O_2 has 2 oxygen atoms on the left, but only 1 oxygen atom in MgO on the right.
- **(c): $2\text{Mg} + 2\text{O}_2 \rightarrow 2\text{MgO}$**
 - Left side has 4 oxygen atoms, right side has only 2 — oxygen is not balanced.
- **(d): $\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$**
 - Left side has 1 Mg atom, right side has 2 Mg atoms — magnesium is not balanced.

6. (c): Correct Answer: (c) Part XXI

Explanation:

The **special provisions for states** are outlined in **Part XXI (Article 371A to 371J)** of the **Indian Constitution**. This part includes provisions that grant **special status** and **autonomy** to certain states like **Nagaland** (Article 371A) and **Assam** (Article 371B), among others.

Information Booster:

Article 371A to 371J provide special provisions, particularly for states in the **Northeast** and **hill regions**, addressing issues like governance, language, and cultural protection.

For example, **Article 371A** provides special provisions for **Nagaland**, and **Article 371B** provides provisions for **Assam**.

7. (c): Correct Answer: (c) Operation Abhyaas

Explanation:

The "**Civil Defence Mock Drill**" conducted in **244 districts** across **India** on **May 7, 2025**, was officially named **Operation Abhyaas**. This large-scale exercise was organized by the **Ministry of Home Affairs (MHA)** and coordinated by the **National Disaster Management Authority (NDMA)**.

The purpose of **Operation Abhyaas** was to assess the **emergency response readiness** across the country, particularly in the face of **national security concerns** and heightened tensions with **Pakistan**.

The drill was designed to test the country's preparedness for **emergency situations**, including natural disasters, security threats, and other large-scale crises.

Information Booster:

Operation Abhyaas focused on ensuring that India's **civil defense mechanisms** were ready to deal with **emergencies**, enhance coordination among various agencies, and effectively protect the public during times of crisis.

8. (c): Correct Answer: (c) DBR 100 (Kamal) and Musta

Explanation:

The **ICAR** (Indian Council of Agricultural Research) recently announced the development of two new **genome-annotated rice varieties** in India: **DBR 100 (Kamal)** and **Musta**.

These varieties are part of India's efforts to improve rice production through advanced breeding and genome mapping techniques.

Information Booster:

The introduction of these new rice varieties aims to improve **yield** and **resilience** to adverse weather conditions.

9. (a): Correct Answer: (a) Nagaland

Explanation:

Meluri was recognized as the **17th district** of **Nagaland** on **2nd November 2024**. The official inauguration took place on **21-22 February 2025** by the **Chief Minister** of Nagaland.

Information Booster:

Meluri is now a newly recognized district in the **Kohima region** of Nagaland. It is known for its natural beauty and scenic landscapes, and it is home to a variety of **tribes** including the **Pochury Naga** community.

10. (b): Correct Answer: (b) Part XII

Explanation:

Part XII of the **Indian Constitution** deals with the **financial relations** between the **Centre** and the **States**. It covers the distribution of revenues, the powers and duties of the **Union and State governments** in regard to financial matters, and matters related to taxes and financial transfers.

Information Booster:

This part outlines the roles of the **Finance Commission** and the **Union Government** in revenue-sharing and provides for the **distribution of taxes** between the Centre and the States. It also includes provisions on **borrowings** by the **Union** and the **States**.

11. (b): Correct Answer: (b) Uttarakhand

Explanation:

The **Kumaoni language** is predominantly spoken in the **Kumaon region** of **Uttarakhand**, India. It is a part of the **Hindi** language family and has distinct dialects in different parts of the Kumaon region.

Information Booster:

Kumaoni is one of the most widely spoken languages in **Uttarakhand**, alongside **Garhwali**, and is an important part of the state's cultural and linguistic heritage.

12. (a): Correct Answer: (a) Akbar

Explanation:

The **Dahsala system** was introduced by **Mughal Emperor Akbar** in **1580**. It was a land revenue system based on the average produce and prices over a period of **10 years**. The system aimed to collect taxes based on average crop yields and market prices, ensuring fairness and consistency in revenue collection.

Information Booster:

The **Dahsala system** was implemented by Akbar's finance minister **Raja Todar Mal** and was one of the earliest attempts at land revenue reform in India. It helped stabilize the revenue system and ensured more accurate tax collection.

13. (a): The correct answer is Lignite.

Lignite is often referred to as 'brown coal' due to its color and lower carbon content.

14. (b): Correct Answer: (b) New Zealand

Explanation:

Amelia Kerr is a renowned female cricketer from **New Zealand**. She has gained recognition for her outstanding performances in women's cricket and is known for being an all-rounder in the team.

Information Booster:

Amelia Kerr made headlines in 2018 when she scored a double century against Ireland in a Women's One Day International, setting a new record for the highest score by a woman in ODI cricket.

15. (b): Correct Answer: (b) 2000

Explanation:

Bharat Sanchar Nigam Limited (BSNL), a **government-owned telecommunications company**, was established on **1st October 2000**. It operates under the jurisdiction of the **Ministry of Communications** and provides a wide range of services, including landline, mobile, and internet services across India.

Information Booster:

BSNL was formed by merging the Department of Telecom Services (DTS) and Department of Telecom Operations (DTO) under the Ministry of Communications to provide reliable telecommunication services across India.

16. (c): Correct Answer: (c) 6.4%

Explanation:

According to the **International Monetary Fund (IMF)**, India's **projected GDP growth rate for 2025** is **6.4%**. This projection reflects the IMF's expectations of India's economic recovery and growth in the coming years, driven by factors like domestic demand, investment, and export performance.

Information Booster:

The IMF provides economic forecasts for various countries, and India's **GDP growth rate** is considered a key indicator for the global economy, especially in terms of its **emerging market** status.

17. (c): Correct Answer: (c) African Forest Elephant

Explanation:

The **African Forest Elephant (Loxodonta cyclotis)** is listed as **Critically Endangered** on the **IUCN Red List**. This species is heavily threatened by habitat destruction, poaching for ivory, and the illegal wildlife trade.

Information Booster:

The **African Forest Elephant** is smaller than its counterpart, the **African Savanna Elephant**, and is primarily found in the dense forests of central and West Africa. Its population has declined dramatically due to **poaching** and **habitat loss**, making conservation efforts critical for its survival.

18. (c): Correct Answer: (c) Article 330

Explanation:

Article 330 of the **Indian Constitution** provides for **reservation of seats** in the **Lok Sabha** (House of the People) and **State Legislative Assemblies** for **Scheduled Castes (SC)** and **Scheduled Tribes (ST)**. It ensures that a certain number of seats are reserved for these communities to promote their representation in the legislative process.

Information Booster:

The reservation for **SCs** and **STs** is valid for a specific period, which is **extended periodically** by amendments to the Constitution.

The **purpose** of this provision is to ensure political representation for communities that have historically been marginalized and to give them a voice in the decision-making process.

19. (b): Correct Answer: (b) Viksit Rajya for Viksit Bharat@2047

Explanation:

The theme of the **10th Governing Council meeting** of NITI Aayog, held on **24th May 2025**, was "**Viksit Rajya for Viksit Bharat@2047**".

This theme focuses on the vision of a **developed India by 2047**, with the role of **states** in driving economic and social progress.

Information Booster:

The **Governing Council of NITI Aayog** includes the **Prime Minister of India**, all **Chief Ministers**, and Union Territories, along with other stakeholders. The council meets regularly to discuss issues of national importance and to guide the nation towards achieving its development goals, particularly for **India's centenary of independence in 2047**.

20. (b): Correct Answer: (b) The structure and composition of the Parliament of India

Explanation:

Article 79 of the Indian Constitution deals with the **structure of the Parliament of India**, which includes three components:

1. **The President of India**
2. **The Council of States (Rajya Sabha)**
3. **The House of the People (Lok Sabha)**

This article establishes the framework for the legislative body and outlines its bicameral nature, ensuring that both the **people** (through **Lok Sabha**) and **states** (through **Rajya Sabha**) are represented in the Parliament.

Information Booster:

The **President** plays an essential role in summoning and dissolving Parliament sessions, and the **Rajya Sabha** and **Lok Sabha** serve distinct functions in India's legislative process.

21. (c): Correct Answer: (c) Bhagirathi

Explanation:

The **Tehri Dam** is located on the **Bhagirathi River** in the **state of Uttarakhand**, India. It is one of the highest dams in the world and serves as a significant source of hydroelectric power generation, irrigation, and water supply.

Information Booster:

The Tehri Dam is situated at the confluence of the **Bhagirathi** and **Alaknanda** rivers, which are key tributaries of the **Ganga River**.

22. (b): **Ctrl + R** is used to align the text to the **right** of the screen in MS Word. When this shortcut is pressed, it aligns the selected text or the cursor to the right margin of the page, creating a right-aligned paragraph or section.

Important Key Points:

Ctrl + R: This shortcut is used to align text to the **right** side of the screen in MS Word.

Right Alignment: The text moves to the right edge of the page, and the line starts from that point.

Efficiency: This is a quick way to format text without having to use the mouse or menu options.

Knowledge Booster:

Ctrl + L: This shortcut aligns text to the **left** of the screen.

Ctrl + E: This shortcut is used for centering text.

Ctrl + J: This shortcut justifies the text, aligning it to both the left and right margins.

23. (c): Answer: (c) Search for cows or war

Explanation:

In Rig Vedic vocabulary, the term "**gavishthi**" means "**search for cows**," but it was also used to mean **war**.

This shows the central role of **cattle in economy and conflict**, where protecting and raiding herds were crucial aspects of life.

24. (c): The correct answer is: (c) Enhancing the Operational Preparedness of Indian Cyberspace

Explanation:

- The 2025 exercise is centered on strengthening India's ability to respond to real-world cyber incidents.

Information Booster:

- Simulates deepfake, malware, API breach scenarios.
- Integrates AI for autonomous cyber defense.
- Promotes cross-sector coordination.
- Real-time, live-fire cyber exercises included.
- Aims to reduce cyber vulnerability and boost resilience.

25. (b): The correct answer is (B) Union IT Minister

Explanation:

- The **IndiaAI initiatives** were launched in 2025 by **Ashwini Vaishnaw**, the **Union Minister for Electronics and Information Technology (MeitY)**. This mission is part of India's strategic push to become a global leader in artificial intelligence (AI) and to foster innovation across sectors such as healthcare, agriculture, and education.
- The launch of the **IndiaAI Mission** focuses on improving **AI capabilities**, enhancing **research and development**, and ensuring India's role in the future of AI technologies.

Information Booster:

- **Ashwini Vaishnaw**, as the **Union IT Minister**, is responsible for various initiatives under the **IndiaAI Mission**, which includes the **AIKosha Datasets Platform**, **AI Compute Portal**, and **AI Competency Framework** for officials and entrepreneurs.
- The mission is designed to boost **AI adoption**, improve **AI skills** at various levels, and help **industries** use AI to address national challenges.

26. (d): The correct answer is: (d) Ernest Rutherford

Explanation:

The **Gold Foil Experiment** was conducted by **Ernest Rutherford** in **1909** with the help of **Hans Geiger and Ernest Marsden**.

It led to the **discovery of the nucleus** and proposed the **Rutherford atomic model**, where electrons orbit a dense, positively charged nucleus.

Information Booster:

The experiment used **alpha particles and a thin gold foil**.

Most alpha particles passed through, some deflected → indicating a **dense nucleus**.

Replaced **JJ Thomson's plum pudding model**.

This was the foundation for **modern atomic models**.

Rutherford is known as the **Father of Nuclear Physics**.

Later discoveries led to **Bohr's model**, improving upon Rutherford's.

Additional Information:

John Dalton – Proposed the **Atomic Theory** (1803).

Niels Bohr – Developed the **Bohr Model** with electron orbits.

JJ Thomson – Discovered the **electron**, proposed plum pudding model.

27. (a): The correct answer is (a) Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)

- The Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) completed 9 years in June 2025.
- Launched in June 2016, PMSMA aims to provide free, quality antenatal care (ANC) services to pregnant women, particularly those in their second and third trimesters.
- The scheme's focus is on reducing maternal and neonatal mortality by ensuring early identification and management of high-risk pregnancies.
- It operates on the 9th of every month across the country, engaging both public and private healthcare professionals.

Information Booster:

- Over 6.19 crore pregnant women have benefited from PMSMA services.
- The scheme has contributed to a significant decline in the Maternal Mortality Ratio (MMR).
- It integrates with other maternal health initiatives like JSY, JSSK, and SUMAN.
- E-PMSMA was introduced in 2022 to enhance follow-up for high-risk pregnancies.
- It is aligned with the RMNCAH+N goals under the National Health Mission (NHM).

Additional Information:

- **(b) Pradhan Mantri Jan Dhan Yojana:** While a significant scheme, it was launched in 2014
- **(c) Ayushman Bharat:** Launched in 2018, this scheme is focused on providing health insurance.
- **(d) Beti Bachao Beti Padhao:** Launched in 2015, this scheme aims at gender equality.

28. (b): The Correct Answer is (b) Operation Abhyas.

- The civil defence mock drill conducted in Bengaluru is named 'Operation Abhyas,' which aimed to improve public awareness and emergency preparedness.
- It simulated real-life scenarios, such as fire rescues, debris entrapment, and high-rise evacuations, to ensure that citizens and emergency services are ready for potential crises.
- The drill was part of a nationwide initiative under the Ministry of Home Affairs to enhance civil defence readiness amid heightened security concerns.

Information Booster:

- 'Operation Abhyas' took place on May 7, 2025, in the Halasuru area of Bengaluru, from 3:48 PM to 7:00 PM.
- The drill was conducted by the Karnataka State Fire and Emergency Services Department.
- The exercise was prompted by rising national security concerns following a terrorist attack in Pahalgam, Jammu & Kashmir.
- It tested the coordination and response of various departments, including police, civil defence, and fire services.

29. (d): The correct answer is (d) 6.2%

The **International Monetary Fund (IMF)** has revised **India's GDP growth forecast for FY26 (2025–26) to 6.2%**, down from the previous estimate of 6.5%. This downward revision has been made in light of increasing global trade tensions, especially the **26% tariff imposed by the United States on imports from India**. Despite this reduction, India remains one of the fastest-growing major economies, with growth prospects better than other advanced and emerging markets.

Information Booster:

- India's FY26 growth forecast revised from 6.5% to **6.2%** by the IMF.
- FY27 projection also lowered from 6.5% to **6.3%**.
- The US imposed a **26% tariff** on Indian imports, affecting trade flow and economic projections.
- IMF revised **global GDP growth** for 2025 from 3.3% to **2.8%**.
- Despite the dip, India is **better positioned** than other major economies due to strong **domestic rural consumption**.
- **China's** GDP forecast dropped to **4%**, and the **US** to **1.8%**.

30. (b): Ans. (b)

The PM-POSHAN scheme, previously known as the Mid-Day Meal Scheme, aims to enhance the nutritional levels of school-going children by providing hot cooked meals in government and government-aided schools. The recent 9.5% hike in material cost, approved by the Union Cabinet, reflects the government's commitment to address inflation and ensure that the nutritional standards of meals served under the scheme are not compromised. The hike will result in an additional central expenditure of ₹954 crore in the financial year 2025–26 and is effective from May 1, 2025. This move is crucial, especially in the backdrop of rising food prices, and it underscores the government's efforts to improve child health and learning outcomes. The increased allocation will help schools maintain meal quality and quantity, thereby supporting child development, reducing dropout rates, and encouraging enrollment, particularly in rural and underserved areas.

Information Booster

PM-POSHAN covers students from Class 1 to 8.

Formerly known as the Mid-Day Meal Scheme.

Implemented by the Ministry of Education.

Launched on 28 November 2001; renamed in 2021.

Focuses on nutrition, education, and gender equity.

Central and state governments share the funding.

Additional Knowledge

(a) PM-KISAN: This scheme provides income support to all landholding farmer families in the country to supplement their financial needs. Under PM-KISAN (Pradhan Mantri Kisan Samman Nidhi), farmers receive ₹6,000 annually in three equal installments. Launched in December 2018, it has been instrumental in ensuring financial security for small and marginal farmers. It is fully funded by the central government and benefits more than 11 crore farmers.

(b) PM-POSHAN: This scheme, launched in 2021 as the rebranded version of the Mid-Day Meal Scheme, aims to provide one nutritious hot-cooked meal per day to school children from Class 1 to 8 in government and government-aided schools. The scheme plays a critical role in enhancing school attendance and improving nutritional levels. In addition to meals, the scheme integrates nutrition education and kitchen garden initiatives to inculcate healthy habits. The 9.5% hike in material cost in 2025 reflects the government's proactive approach to maintaining meal quality amidst inflation.

(c) PM-GKRA: The Pradhan Mantri Garib Kalyan Rojgar Abhiyaan was launched in June 2020 to address the employment needs of migrant workers who returned to their home states due to the COVID-19 pandemic. The scheme provided livelihood opportunities in 116 districts across six states through 25 public works. It was a time-bound campaign lasting 125 days, focusing on rural infrastructure and skill development.

(d) PM-SVANidhi: The Pradhan Mantri Street Vendor's AtmaNirbhar Nidhi scheme was launched in June 2020 to provide working capital loans to street vendors affected by the COVID-19 lockdown. It offers an initial loan of ₹10,000, with incentives for digital transactions and timely repayments. The scheme encourages self-reliance and formalization of the street vending sector, which forms a critical part of the urban informal economy.

31. (b): The Correct Answer is: (B) 1964

Explanation:

The **Central Vigilance Commission (CVC)** was established in **1964** by the **Government of India** on the recommendation of the **Santhanam Committee on Prevention of Corruption**. Initially set up through an executive resolution, it became a **statutory body** in **2003** after the enactment of the **Central Vigilance Commission Act, 2003**.

Information Booster:

- **Established on:** 11th February 1964.
- **First Chief Vigilance Commissioner:** Nittoor Srinivasa Rau.
- **Statutory Status:** Granted through the CVC Act, 2003.
- The CVC is an **independent body** not under any ministry.
- It supervises vigilance activities in **central government offices, PSUs, and banks**.
- It has the power to advise the Central Government and recommend action in cases of corruption.

Additional Knowledge:

- Shri Nittoor Sreenivasa Rau, a freedom fighter and Chief Justice of the High court of Mysore State became the first Central Vigilance Commissioner on 19th February 1964.
- Present Central Vigilance Commissioner: **Shri Praveen Kumar Srivastava**

32. (b): The correct answer is (b) to redevelop and modernize existing railway stations across India.

Explanation:

The Amrit Bharat Station Scheme (ABSS) was launched in February 2023 by the Ministry of Railways.

Information Booster:

Launch: February 2023

Objective: Redevelopment of railway stations across India with a long-term vision.

Key Highlights

- Aims for **continuous and phased development** of railway stations.
- Focuses on **modernization, enhanced passenger amenities, and improved infrastructure**.
- Customizes upgrades based on the **specific needs of each station**.
- Seeks to transform stations into **vibrant city hubs** over time.

Key Features

- Modern Passenger Amenities
- Improved Traffic Circulation
- Inter-modal Integration
- Upgraded Signage
- Sustainability & Eco-Friendliness

33. (b): Ans. (b)

Explanation

Veer Savarkar's death anniversary is observed on February 26 every year. In 2025, it will be observed on February 26, 2025, to honor his contributions to India's freedom struggle, literature, and social reforms. Vinayak Damodar Savarkar, also known as Veer Savarkar, was a revolutionary nationalist, writer, and the key proponent of Hindutva ideology. He passed away on February 26, 1966 in Mumbai.

Information Booster

Birth: May 28, 1883, in Bhagur, Maharashtra.

Death: February 26, 1966, in Mumbai.

Major Contribution: Advocate of Hindutva ideology, revolutionary writer, and freedom fighter.

Imprisonment: Sentenced to two life terms (50 years) in the Cellular Jail, Andaman and Nicobar Islands.

Famous Book: "The First War of Indian Independence - 1857".

34. (b): Correct Answer is (b) Sonipat, Haryana

The RuTAGE Smart Village Center (RSVC) was inaugurated in **Mandaura village, Sonipat, Haryana**, in February 2025. It serves as a hub for rural technological advancements and sustainable development.

Information Booster:

The RSVC was inaugurated by Professor Ajay Sood, the Principal Scientific Adviser (PSA) to the Government of India (GoI), along with other key stakeholders.

SELCO (Solar Electric Light Company) Foundation, based in Bengaluru, Karnataka, provides technical assistance for solar hybrid and wind technology solutions in RSVC.

35. (b): Correct Answer is (b) Gandhinagar, Gujarat The first-ever BIMSTEC Youth Summit was held in Gandhinagar, Gujarat, from February 7 to 11, 2025.

Information Booster:

Organized by the Ministry of Youth Affairs & Sports (MoYA&S) and Ministry of External Affairs (MEA).

Confederation of Indian Industry (CII) Young Indians (YI) was the knowledge partner.

Union Minister Mansukh Mandaviya, Ministry of Youth Affairs & Sports (MoYA&S), inaugurated the first-ever BIMSTEC Youth Summit.

Seven BIMSTEC countries participated in the summit: **Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, Thailand**

36. (b): Ans. (b) Swapnil Kusale

Explanation

Indian shooter Swapnil Kusale won the 'Sportsman of the Year' award in 2025 after his remarkable performance at the Paris Olympics, where he clinched a bronze medal. Competing in rifle shooting events, Kusale showcased exceptional accuracy and composure, solidifying his position among India's elite marksmen.

Over the years, Kusale has consistently performed at the ISSF World Cup, Asian Championships, and National Shooting Championships. His dedication to precision shooting and mental strength have earned him multiple accolades.

Information Booster

Swapnil Kusale is a specialist in 50m rifle shooting events.

He won a bronze medal at the 2024 Paris Olympics, marking a major achievement for Indian shooting.

The Sportsman of the Year Award is given to India's top-performing male athlete annually.

He has also excelled in ISSF World Cups and other international shooting events.

Shooting has been India's stronghold at the Olympics, with Kusale continuing the legacy.

His consistent performances have made him a key figure in Indian rifle shooting.

Additional Information

(a) Neeraj Chopra

India's star javelin thrower and Olympic gold medalist.

Did not win this award in 2024 but remains a top athlete.

(b) Swapnil Kusale (Correct Answer)

Won 'Sportsman of the Year' in 2025.

Won bronze at the Paris Olympics in rifle shooting.

(c) Bajrang Punia

Indian wrestler and Olympic medalist.

A decorated athlete but did not win this award in 2025.

(d) P.R. Sreejesh

Legendary hockey goalkeeper, winner of 'Sportstar of the Year (Male)' award.

Not the recipient of this specific award.

37. (b): Ans. (b) Pulses: Bringing Diversity to Agrifood Systems

Explanation

The United Nations has announced the theme for World Pulses Day 2025 as "Pulses: Bringing Diversity to Agrifood Systems." This theme emphasizes the crucial role that pulses play in enhancing both above-ground and below-ground biodiversity. By integrating pulses into agricultural practices, farmers can promote healthier diets and sustainable farming methods, thereby ensuring food security for vulnerable communities. Pulses contribute to soil health by fixing atmospheric nitrogen, reducing the need for synthetic fertilizers, and supporting diverse cropping systems. Their inclusion in diets offers a rich source of plant-based protein, essential vitamins, and minerals, contributing to improved nutrition globally.

Information Booster

1. World Pulses Day 2025 Theme: "Pulses: Bringing Diversity to Agrifood Systems."

2. Significance: Highlights pulses' role in promoting biodiversity and sustainable agriculture.

3. Nutritional Benefits: Pulses are rich in protein, fiber, and essential nutrients.

4. Environmental Impact: They improve soil fertility by fixing nitrogen, reducing the need for chemical fertilizers.

5. Food Security: Pulses contribute to resilient food systems, especially in vulnerable communities.

6. Global Observance: Celebrated annually on February 10 to raise awareness about the benefits of pulses.

Additional Knowledge

- (a) Pulses for Sustainable Agriculture: While pulses do promote sustainable agriculture, this was not the specific theme for 2025.
- (b) Pulses: Bringing Diversity to Agrifood Systems: *(Correct Answer)* The official theme for World Pulses Day 2025, focusing on the role of pulses in enhancing agricultural biodiversity.
- (c) Pulses and Climate Change: Pulses contribute to climate change mitigation through sustainable farming practices, but this was not the 2025 theme.
- (d) Pulses: A Pathway to Food Security: Pulses are indeed vital for food security; however, this was not the designated theme for 2025.

38. (a): The correct answer is (a) Six.

Explanation:

- The **Comptroller and Auditor General (CAG)** of India holds office for a term of **6 years or until attaining the age of 65 years**, whichever is earlier.
- The CAG is responsible for auditing the accounts of the Central and State governments and ensuring accountability for the expenditure of public funds.

Information Booster:

Comptroller and Auditor General (CAG) provided under Part V (Article 148-151) of the Indian Constitution.

- Appointment:** The CAG is appointed by the President of India. **(Article 148(1))**
- Removal:** The CAG can be removed like the process for removing a Supreme Court judge (by impeachment on grounds of proven misbehavior or incapacity). **(Article 148(1))**
- Responsibility:** Auditing government accounts, including expenditure from the Consolidated Fund of India, State funds, and Union Territories. **(Article 149)**
- Preparing and submitting audit reports to the President or Governor, who then presents them to the legislature. **(Article 151)**

39. (d): NEWS:

Recently, the Indo-US Joint Special Forces exercise "VAJRA PRAHAR 2023" commenced at the Joint Training Node, Umroi, Meghalaya.

It is a joint exercise conducted between Indian Army and US Army Special Forces.

It aims at sharing best practices and experiences in areas such as joint mission planning and operational tactics.

It is the 14th Edition of the Indo-US Joint Special Forces exercise "VAJRA PRAHAR 2023" commenced at the Joint Training Node, Umroi

The US contingent is represented by personnel from the 1st Special Forces Group (SFG) of US Special Forces. The Indian Army contingent is led by Special Forces personnel from the Eastern Command.

The first edition was conducted in the year 2010 in India and the 13th edition of the Indo-US Joint Special Forces exercise was conducted at the Special Forces Training School (SFTS), Bakloh (HP).

The current edition is being conducted in Umroi Cantonment, Meghalaya from 21st November to 11th December 2023.

Exercise VAJRA PRAHAR has evolved as a mechanism to exchange ideas and share best practices between the Special Forces of both the nations.

It is also a platform to enhance inter-operability and strengthen defence cooperation between the armies of India and the United States of America.

40. (a): The Tehri Dam is the Highest dam in India and one of the highest in the world. It is a multi-purpose rock and earth-fill embankment dam on the Bhagirathi River near Tehri in Uttarakhand, India.

41. (d): Given:

The total surface area of a solid cylinder is 297 sq. cm.

Radius is 3.5 cm

Formula Used:

Volume of the cylinder = $\pi \times r^2 \times h$

Total Surface Area of Cylinder = $2 \times \pi \times r \times h + 2 \times \pi \times r^2$

Solution:

Total surface area of the cylinder = $2 \times \pi \times r \times h + 2 \times \pi \times r^2$

$\Rightarrow 297 = 2 \times (22/7) \times 3.5 \times h + 2 \times (22/7) \times (3.5)^2 \Rightarrow 297 = 22h + 77 \Rightarrow h = 10 \text{ cm} \Rightarrow 297 = 2 \times (22/7) \times 3.5 \times h + 2 \times (22/7) \times (3.5)^2 \Rightarrow 297 = 22h + 77 \Rightarrow h = 10 \text{ cm}$

Volume of the cylinder = $(22/7) \times (3.5)^2 \times 10 = 385 \text{ cm}^3$

42. (a): Given:

P scored 20% more marks than Q
Q scored 20% less marks than R
R scored 25% more marks than S
P scored 480 marks out of 600

Formula Used:

If A is x% more than B, then

$$A = B \times (1 + \frac{x}{100})$$

If A is x% less than B, then

$$A = B \times (1 - \frac{x}{100})$$

Solution:

$$\Rightarrow P's \text{ marks} = 480 \Rightarrow Q's \text{ marks} = (480 \times \frac{100}{120}) = 400 \Rightarrow R's \text{ marks} = (400 \times \frac{100}{80}) = 500$$

$$\Rightarrow S's \text{ marks} = (500 \times \frac{100}{125}) = 400 \Rightarrow P's \text{ marks} = 480 \Rightarrow Q's \text{ marks} = (480 \times \frac{100}{120}) = 400$$

$$\Rightarrow R's \text{ marks} = (400 \times \frac{100}{80}) = 500 \Rightarrow S's \text{ marks} = (500 \times \frac{100}{125}) = 400$$

43. (a): Given:

Reduction in price = 10%
Increased quantity = 5 kg
Total money spent = ₹300

Solution:

Let the original price of sugar be ₹x per kg.

Then, the quantity of sugar bought at the original price: $\frac{300}{x}$

After a 10% reduction, the new price per kg: $0.9x$

The new quantity of sugar bought = $\frac{300}{0.9x}$

$$\frac{300}{x} - \frac{300}{0.9x} = 5$$

$$\frac{3000 - 3000 \times 0.9}{0.9x} = 5 \Rightarrow \frac{3000 - 2700}{0.9x} = 5 \Rightarrow \frac{300}{0.9x} = 5 \Rightarrow 300 = 4.5x \Rightarrow x = \frac{300}{4.5} = 66.67$$

$$= 5300 = 5 \times 9 \times 300 = 45x \Rightarrow 45x = 5300 \Rightarrow x = \frac{5300}{45} = 117.78$$

$$\text{Reduced Price} = 0.9x = 0.9 \times 117.78 = 106.00$$

Alternate Solution:

$$\text{Price} \propto \frac{1}{\text{Consumption}} \Rightarrow \frac{\text{Price}_1}{\text{Price}_2} = \frac{\text{Consumption}_2}{\text{Consumption}_1}$$

$$\frac{10\%}{100\%} = \frac{10}{100}$$

$$\text{Price } 10 : 9$$

$$\text{Consumption } 9 : 10$$

$$1 \text{ unit} = 5 \text{ kg}$$

$$\text{So, Final Purchase Quantity} = \frac{300}{5} = 60 \text{ kg}$$

$$\text{Final price} = \frac{300}{60} = 5$$

44. (d): Given:

Total amount = Rs. 370
Second part = $\frac{1}{4}$ of the third part
The ratio of the first and third parts = 3 : 5

Solution:

Let's denote the three parts as A, B, and C.

$$\text{We know that } A + B + C = 370$$

$$B = \frac{1}{4}C \text{ and } A : C = 3 : 5$$

Substituting B in terms of C and A in terms of C in the main equation:

$$= (3553) \times C + (1441) \times C + C = 370$$

$$= 37 \times C \Rightarrow C = \frac{370}{37} = 10$$

$$= C = \frac{(370 \times 20)}{37 \times 20} = 200$$

Ratio of the third part

$$= \frac{200}{370} = \frac{20}{37}$$

45. (a): Given:

Speed of a boat in still water = 10 km/hr

Speed of stream = 2 km/hr

Formula Used:

Downstream speed = Speed of a boat in still water + Speed of stream

Solution:

Downstream speed = $10 + 2 = 12$ km/hr

In 1-hour boat travels = 12 km

Then, in 2.5 hours boat will travel = $2.5 \times 12 = 30$ km

46. (a): Given:

Ratio of Kishore to Pradeep = 5 : 11

Ratio of Pradeep to Sandeep = 6 : 14

Kishore has Rs. 570

Solution:

Kishore : Pradeep = $5 \times 6 : 11 \times 6 = 30 : 66$

Pradeep : Sandeep = $6 \times 11 : 14 \times 11 = 66 : 154$

So, Kishore : Pradeep : Sandeep = 30 : 66 : 154

Now, if 30 parts = Rs. 570

1 part = $570 \div 30 =$ Rs. 19

Sandeep's share = $154 \times 19 =$ Rs. 2926

Alternate Method:

Kishore	Pradeep	Sandeep
5	11	11
6	6	14
30	66	154

Kishore : Pradeep : Sandeep = 30 : 66 : 154

Now, if 30 parts = Rs. 570

1 part = $570 \div 30 =$ Rs. 19

Sandeep's share = $154 \times 19 =$ Rs. 2926

47. (b): Given:

Three spheres of radius 3 cm, 4 cm, and 5 cm

Formula Used:

Volume of the sphere = $\frac{4}{3} \pi \times R^3$,

Where R is the radius of the sphere

Solution:

Let radius of the newly formed sphere = R

$$43 \times \pi \times R^3 = 43 \times \pi \times (3^3 + 4^3 + 5^3) \quad 34 \times \pi \times R^3 = 34 \times \pi \times (3^3 + 4^3 + 5^3)$$

R = 6 cm

Total surface of sphere = $4 \times \pi \times R^2$

Total surface area of all three-sphere = $4\pi(3^2 + 4^2 + 5^2) = 200\pi$ $4\pi(3^2 + 4^2 + 5^2) = 200\pi$

Total surface area of recast sphere = $4\pi R^2 = 4\pi \times 6^2 = 144\pi = 4\pi R^2 = 4\pi \times 6^2 = 144\pi$

Percentage decrease in surface area = $\frac{200\pi - 144\pi}{200\pi} \times 100 = 28\% = \frac{200\pi - 144\pi}{200\pi} \times 100 = 28\%$

48. (b): Given:

Train A crosses a man in 28 seconds

Train B crosses a man in 10 seconds

They cross each other in 24 seconds

Formula Used:

Length of train = Speed \times Time

Solution:

Speeds of Train A and Train B be S1 and S2 m/s

Length of A = $28S1$

Length of B = $10S2$

They cross each other in 24 s

$$28S1 + 10S2 = 24(S1 + S2) \quad 28S1 + 10S2 = 24S1 + 24S2$$

$$28S1 + 10S2 = 24S1 + 24S2 \quad 28S1 + 10S2 = 24S1 + 24S2$$

$$4S1 = 14S2 \quad 4S1 = 14S2$$

$$S1S2 = 144 = 7:2 \quad S1S2 = 144 = 7:2$$

49. (b): Given:

Marked Price (MP) = Rs. 1900

First discount = 12%

Final Selling Price (SP) = Rs. 1538.24

Concept Used:

Discounted price = $MP \times (1 - d/100) \times MP \times (1 - 100d)$

Solution:

Price after 12% discount

$$= 1900 \times (1 - 12/100) = 1900 \times (88/100) = 19 \times 88 = 1900 \times (1 - 100/12) = 1900 \times (100/88) = 19 \times 88 = 1672$$

Now, second discount percentage

$$1672 \times (1 - x/100) = 1538.24 \Rightarrow 1672 - x \times 1672/100 = 1538.24 \Rightarrow 0.920 \times 100 = 0.081672 \times (1 - 100x) = 1538.24 \Rightarrow 1 - 100x = 1672/1538.24 \Rightarrow 1 - 100x = 0.920 \Rightarrow 100x = 0.08$$

$$x = 8\%$$

50. (b): Given:

$$0.000000814 - 0.000002564 + 62540.00000081 - 40.00000256 + 625$$

Solution:

Solving each terms:

$$0.000000814 = 81 \times 10^{-8} = 34 \times 10^{-8} = 3 \times 10^{-2} = 0.030.000002564 = 256 \times 10^{-8} = 44 \times 10^{-8} = 4 \times 10^{-2} = 0.04625 = 2540.00000081 = 481 \times 10^{-8} = 434 \times 10^{-8} = 3 \times 10^{-2} = 0.0340.00000256 = 4256 \times 10^{-8} = 444 \times 10^{-8} = 4 \times 10^{-2} = 0.04625 = 25$$

Now,

$$0.03 - 0.04 + 25$$

$$= -0.01 + 25$$

$$= 24.99$$

51. (c): Given:

$$22k+1-2k \times 2k+22k \times 2k+3-22 \times 22k \times 2k+3-22 \times 22k \times 2k+1-2k \times 2k+2$$

Formula Used:

$$am \times an = am + n \quad am - n \quad am \times an = am + n \quad an \times am = am - n$$

Solution:

$$22k+1-2k \times 2k+22k \times 2k+3-22 \times 22k = 22k+1-22k+22k+3-22k+2 = 22k+1(1-2)22k+1(22-21) = -122k \times 2k + 3 - 22 \times 22k \times 2k+1-2k \times 2k+2 = 22k+3-22k+22k+1-22k+2 = 22k+1(22-21)22k+1(1-2) = 2-1$$

52. (d): Given:

Distances = 1320 km, 1760 km, 2095 km

Speeds = 528 km/h, 352 km/h, 419 km/h

Formula Used:

$$\text{Average Speed} = \frac{\text{Total Distance}}{\text{Total Time}} \quad \text{Total Time} = \frac{\text{Total Distance}}{\text{Average Speed}}$$

Solution:

$$\text{Total Distance} = 1320 + 1760 + 2095 = 5175 \text{ km}$$

$$\text{Total Time} = \frac{1320}{528} + \frac{1760}{352} + \frac{2095}{419} = 2.5 + 5 + 5 = 12.5 \text{ hours}$$

$$\text{Average Speed} = \frac{5175}{12.5} = 414 \text{ km/h}$$

53. (a): Given:

$$1) 2^3 \times 9^2 \times 13$$

$$2) 2^2 \times 13^2 \times 19$$

$$3) 9^3 \times 13^2 \times 19^2$$

Formula Used:

LCM is obtained by taking the highest power of all prime factors occurring in any of the numbers.

Solution:

$$2^3 \times 9^2 \times 13$$

$$2^2 \times 13^2 \times 19$$

$$9^3 \times 13^2 \times 19^2$$

Take the highest power of each prime factor

$$\text{LCM} = 2^3 \times 9^3 \times 13^2 \times 19^2 \quad \text{LCM} = 2^3 \times 9^3 \times 13^2 \times 19^2$$

54. (c): Given:

Ratio of investments: Vikram : Anjali : Raj = 7 : 3 : 20
Total profit earned at the end of the year = ₹28,800
The profit earned is 25% of their total investment

Solution:

Let the total investment be T.

Profit = 25% of total investment

$$₹28,800 = 0.25 \times T$$

$$T = \frac{28,800 \times 100}{25} = ₹1,15,200$$

Profit share for Anjali = $\frac{3}{30} \times \text{Total Profit}$

Anjali's Investment = $\frac{3}{30} \times T$

$$\text{Anjali's Investment} = \frac{3}{30} \times ₹1,15,200 = ₹11,520$$

55. (c): Given:

The difference between an interior angle and an exterior angle of a regular polygon is 140°

Formula Used:

$$\text{Interior angle} + \text{Exterior angle} = 180^\circ$$

$$\text{Exterior angle of a regular polygon} = \frac{360}{n}$$

Solution:

Let exterior angle = x, then interior angle = $180 - x$

So,

$$(180 - x) - x = 140$$

$$180 - 2x = 140$$

$$2x = 40$$

$$x = 20$$

Now,

$$\frac{360}{n} = 20$$

$$n = \frac{360}{20} = 18 \text{ sides}$$

56. (c): Given:

1st year: 2% increase

2nd year: 20% increase

Present sale = ₹1,90,400

Solution:

Value two year ago:

$$= \frac{1,90,400 \times 100}{102} \times \frac{100}{120} = ₹1,55,555.56$$

$$= ₹1,55,555.56$$

57. (a): Formula Used:

To find out which number is divisible by 41, we need to divide each number by 41 and check if the remainder is zero.

Solution:

$$\text{Option A: } 7995 \div 41 = 195 \text{ (remainder = 0)}$$

$$\text{Option B: } 7431 \div 41 = 181 \text{ (remainder } \neq 0)$$

$$\text{Option C: } 8537 \div 41 = 208 \text{ (remainder } \neq 0)$$

$$\text{Option D: } 7889 \div 41 = 192 \text{ (remainder } \neq 0)$$

Since 7995 is exactly divisible by 41

58. (a): Given:

A can do the work in 6 days.

B can do the work in 8 days.

Together with C, they complete the work in 3 days.

Total earning for 3 days = ₹3848

Formula Used:

$$\text{Work done per day} = \frac{1}{\text{Time taken}_1} + \frac{1}{\text{Time taken}_2} + \dots$$

$$\text{Share} = (\text{Work done by individual per day} \times \text{total days}) \times \text{Total earning}$$

Solution:

Work done by A in 1 day = 1661

Work done by B in 1 day = 1881

Let C's 1-day work = x

Total work done in 1 day by A, B, and C = 16+18+x61+81+x

They completed the work in 3 days, so their 1 day work = 1331

$\Rightarrow 16+18+x=13 \Rightarrow (4+324)+x=13 \Rightarrow 724+x=13 \Rightarrow x=13-724 \Rightarrow x=8-724 \Rightarrow x=124 \Rightarrow 61+81+x=31 \Rightarrow (244+3)+x=31$

$\Rightarrow 247+x=31 \Rightarrow x=31-247 \Rightarrow x=248-7 \Rightarrow x=241$

So, C's 1-day work = 124241

C's total work in 3 days = $3 \times 124 = 183 \times 241 = 81$

C's share of money = $18 \times 384881 \times 3848 = ₹481$

Alternative Method:

Let total work = 24 unit (LCM of 8, 6, 3)

Efficiency of A = $248 = 3824 = 3$ unit/day

Efficiency of B = $246 = 4624 = 4$ unit/day

Efficiency of A + B + C = $243 = 8324 = 8$

Then efficiency of C = $8 - (3 + 4) = 1$ unit/day

Efficiency ratio = wages ratio (concept)

Wages ratio = 3 : 4 : 1 = 8 unit

8 unit = 3848

1 unit (wages of C) = ₹ 481

59. (a): Given:

Total investment = ₹50,000

Part invested at 10%, rest at 12%

Time = 2 years

Total interest received = ₹11,640

Formula Used:

Simple Interest:

$SI = P \times R \times T / 100$

Solution:

Let first part (at 10%) = ₹x

Then second part (at 12%) = ₹(50,000 - x)

Interest from first part:

$SI_1 = x \times 10 \times 2 / 100 = 20x / 100$

Interest from second part:

$SI_2 = (50000 - x) \times 12 \times 2 / 100 = 24(50000 - x) / 100$

Total interest:

$20x / 100 + 24(50000 - x) / 100 = 11640$

$20x + 24(50000 - x) = 1164000$

$20x + 1200000 - 24x = 1164000$

$-4x = 1164000 - 1200000$

$-4x = -36000$

$x = 9000$

\Rightarrow First part = ₹9,000

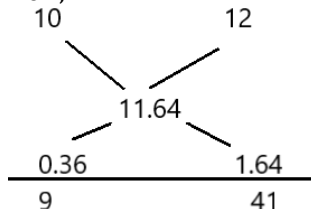
\Rightarrow Second part = ₹50,000 - ₹9,000 = ₹41,000

Alternate Solution:

In 1 year interest received = 11640/2 = 5820

Net rate of interest = $5820 / 50000 \times 100 = 11.64\%$

Now,



$9 + 41 \text{ unit} = 50000$
 $50 \text{ unit} = 50000$
 $1 \text{ unit} = 1000$
 So, 9 unit = ₹9,000 and 41 unit = ₹41,000

60. (b): Given:

Pipe A fills 50% of the tank in 4 hours
 Pipe B fills full tank in 12 hours

Concept Used:

Time = $\frac{1}{\text{Rate}}$

Solution:

Pipe A fill 50% of the tank in 4 hours, So
 time take to fill full tank = 8 hours

A's rate = $\frac{1}{8}$ tank per hour

B's rate = $\frac{1}{12}$ tank per hour

Combined rate = $\frac{1}{8} + \frac{1}{12} = \frac{3}{24} + \frac{2}{24} = \frac{5}{24}$

Time to fill 1 tank = $\frac{24}{5} = 4.8$ hours or 4 hours 48 min

Alternate Solution:

total capacity of tank = LCM of 8 and 12 = 24 units

A fills in 8 hours → A's rate = $\frac{24}{8} = 3$ units/hour

B fills in 12 hours → B's rate = $\frac{24}{12} = 2$ units/hour

Combined rate = $3 + 2 = 5$ units/hour

Time to fill 24 units = $\frac{24}{5} = 4.8$ hours = 4 hours 48 minutes

61. (c): Given:

$\sin 4\theta + \cos 4\theta = 2\sin 2\theta \cos 2\theta$

Formula Used:

$\cot \theta = \frac{\cos \theta}{\sin \theta}$

Solution:

$\sin 4\theta + \cos 4\theta = 2\sin 2\theta \cos 2\theta$

Dividing both sides of the equation by $\sin 4\theta$,

Split the middle term, we get

$$[\cot \theta]^4 - [\cot \theta]^2 - [\cot \theta]^2 + 1 = 0$$

$$[\cot \theta]^2 (\cot^2 \theta - 1) - (\cot^2 \theta - 1) = 0$$

$$([\cot \theta]^2 - 1)^2 = 0$$

$$[\cot \theta]^2 - 1 = 0$$

$$[\cot \theta]^2 = 1$$

$$\cot \theta = \pm 1$$

As the value of θ , it lies between 0 to 90 degrees,

$$\cot \theta = 1$$

62. (d): Given:

66, 69, 83, 69, 84, 74, 71, 83, 69, 84, 73, 83, 69, 71, 84, 74, 83, 66, 74, 71, 83, 66, 90, 90

Concept used:

Mode is the value that appears most often in a set of data values.

Solution

The mode here will be 83..(5 times)

The answer is 83

63. (d): Given:

In triangle PQR, the incenter is

$$\angle QAR = \frac{1}{2} \angle Q, \angle QAR = \frac{1}{2} \angle Q,$$

Concept Used:

If PQR is a triangle and A is the incenter, then:

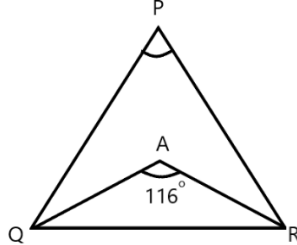
$$\angle QAR = 90^\circ - \frac{1}{2} \angle P, \angle QAR = 90^\circ - \frac{1}{2} \angle P$$

Solution:

$$\angle QAR = 90^\circ + \angle P \quad \angle QAR = 90^\circ + 2\angle P$$

Given that $\angle QAR = 116^\circ$, $\angle QAR = 116^\circ$, we substitute into the equation:

$$116^\circ = 90^\circ + \angle P \quad 116^\circ = 90^\circ + 2\angle P$$



$$26^\circ = \angle P \quad 26^\circ = 2\angle P$$

$$\angle P = 52^\circ \quad \angle P = 52^\circ$$

64. (d): Given:

Prime between 301 and 320

Concept Used:

Prime numbers are those number which are either divisible by itself or by 1.

Solution:

Prime numbers between 301 and 320 are 307, 311, 313, 317

So there are **4 prime** numbers between 301 and 320

65. (a): Given:

Cost price (CP) of 20 articles = Selling price (SP) of 15 articles

Profit percentage = ?

Concept Used:

$$\text{Profit \%} = \frac{\text{SP} - \text{CP}}{\text{CP}} \times 100 \quad \frac{\text{CPSP} - \text{CP}}{\text{CP}} \times 100$$

Solution:

Assume CP per article

Then, the total CP of 20 articles = ₹20.

Selling price of 15 articles is also ₹20, the SP per article is

$$\text{SP} = \frac{20}{15} = \frac{4}{3} = 1.33 \text{ per article}$$

$$\text{Profit} = \text{SP} - \text{CP} = \frac{4}{3} - 1 = \frac{1}{3} = 0.33$$

$$\text{Profit \%} = \frac{0.33}{1} \times 100 = 33\%$$

$$= 100 \times \frac{1}{3} = 33.33\%$$

$$= 33.33\%$$

Alternate Method:

$$20\text{CP} = 15\text{SP}$$

$$\text{CPSP} = 1520 \quad \text{SPCP} = 2015$$

$$\text{CP} = 3$$

$$\text{SP} = 4$$

$$\text{Profit} = 4 - 3 = 1$$

$$\text{Profit \% on CP} = \frac{1}{3} \times 100 = 33.33\%$$

66. (d): Given:

Find the number of prime numbers between 400 and 430.

Concept Used:

A prime number is a natural number greater than 1 that has only two factors 1 and itself

Solution:

Prime numbers between 400 and 430

401 → Prime

409 → Prime

419 → Prime

421 → Prime

The number of prime numbers is 4

67. (d): Given:

Ratio of the ages of A and B = 4 : 7

Ratio of the ages of A and B after 8 years = 2 : 3

Solution:

Let the ratio be 4x, 7x

After 8 years ratio of ages will be 2 : 3

Then

$$(4x+8)(7x+8)=233(4x+8)=2(7x+8)12x+24=14x+1624-16=14x-12x2x=8x=4(7x+8)(4x+8)=32 \quad 3(4x+8)=2(7x+8)$$

$$12x+24=14x+16 \quad 24-16=14x-12x \quad 2x=8 \quad x=4$$

Ages of A and B are 4x = 16 years and 7x = 28 years

Sum of ages of A and B = 16 + 28 = 44 years

Alternate Solution:

	A	:	B
Present Age -	4	:	7
after 8 year -	2×3	:	3×3
	6	:	9

-2 -2

Difference = 2

2 unit = 8 year

1 unit = 4 year

Sum of age of A and B = 4 + 7 = 11 × 4 = 44 × 4 = 44 years

68. (a): Given:

Selling Price = Rs.138

Loss percent = 8%

Formula used:

$$\text{Loss percent} = (\text{CP} - \text{SP}) \div \text{CP} \times 100$$

$$\text{Selling Price} = \text{Cost Price} \times (100 + \text{profit})\%$$

Solution:

$$\text{Loss \%} = (\text{CP} - 138) \div \text{CP} \times 100$$

$$8 = (\text{CP} - 138) \div \text{CP} \times 100$$

$$2 \times \text{CP} = 25 \times \text{CP} - 138 \times 25$$

$$23\text{CP} = 138 \times 25$$

$$\text{CP} = 138 \times 25 \div 23 = 150$$

At profit = 4%

$$\text{Selling Price} = 150 \times 104/100$$

The required selling price

= Rs.156

69. (b): Given:

Simple interest = 3000

Rate = 614641%

Time period = 5 Feb 2005 to 18 April 2005

Formula Used:

$$\text{SI} = \text{P} \times \text{R} \times \text{T} / 100 \quad \text{SI} = 100\text{P} \times \text{R} \times \text{T}$$

Solution:

$$\text{Time} = 24 + 31 + 18 = 73 \text{ days}$$

$$= 73/365 \text{ years} = 365/73 \text{ years}$$

$$\text{SI} = 3000 \times 73 \times 6.25/365 \times 100/365 \times 100/3000 \times 73 \times 6.25$$

$$\text{SI} = \text{Rs. } 37.5$$

70. (d): Concept Used:

BODMAS rule:

Operation preference wise Symbol Brackets [], () Orders, of²(power), $\sqrt{\text{root}}$, of Division \div Multiplication \times Addition + Subtraction – Operation preference wise Brackets Orders, of Division Multiplication Addition Subtraction Symbol [], ²(power), $\sqrt{\text{root}}$, of $\div \times + -$

Solution:

$$\begin{aligned} y + 2x - [y - 2y + x - x - y + y] - 2y \\ = y + 2x + y - 2y \\ = 2x \end{aligned}$$

71. (a): Given:

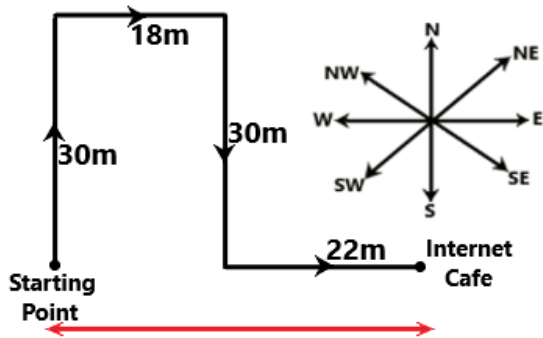
Rogério, in search of an internet café, walked 30 m due North.

He turned right and walked 18 m.

He again turned right and walked 30 m.

Finally, he turned left and walked 22 m to reach the internet café.

From the given information path diagram will be.

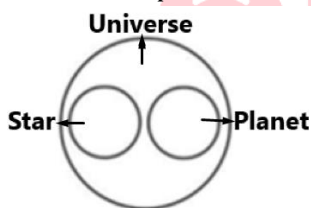


$$18 + 22 = 40\text{m}$$

He **40m** far and in East direction is the internet café from his starting point.

Thus, correct option is (a).

72. (a): Given: stars, planets and universe



Star and **Planet** are part of **Universe**.

Thus, correct option is (a).

73. (b): Given:

J, K, L, M, N and O live on six different floors of the same building.

The lowermost floor in the building is numbered 1, the floor above it is numbered 2, and so on till the topmost floor is numbered 6.

M lives on floor number 2.

K and M are immediate neighbours.

O lives on the floor immediately above K.

N lives on the topmost floor.

J lives on an odd numbered floor, exactly above O.

From the given information arrangement will be.

FloorsPersons

6 N
5 J
4 O
3 K
2 M
1 L

On 1 floor does L live.

Thus, correct option is (b).

74. (b):

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Here's the explanation of the options

a) PTSV

$P + 4 = T$, $T - 1 = S$, $S + 3 = V$

b) YCBF

$Y + 4 \neq C \rightarrow$ wrong pattern

c) FJIL

$F + 4 = J$, $J - 1 = I$, $I + 3 = L$

d) MQPS

$M + 4 = Q$, $Q - 1 = P$, $P + 3 = S$

Option B is different (does not follow +4, -1, +3)

Thus, correct option is (b).

75. (d):

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: 1st letter + 3 = 3rd letter and 2nd letter + 3 = 4th letter

Now, we check each options.

Option (a): DG-GJ (Follow)

$D + 3 = G$, $G + 3 = J$

Option (b): HK-KN (Follow)

$H + 3 = K$, $K + 3 = N$

Option (c): PS-SV (Follow)

$P + 3 = S$, $S + 3 = V$

Option (d): BE-DH (Not Follow)

$B + 3 \neq D$, $E + 3 = H$

Thus, correct option is (d).

76. (a): Given:

Karishma is 16th from the left

She is also 18th from the right

So the total number of students =

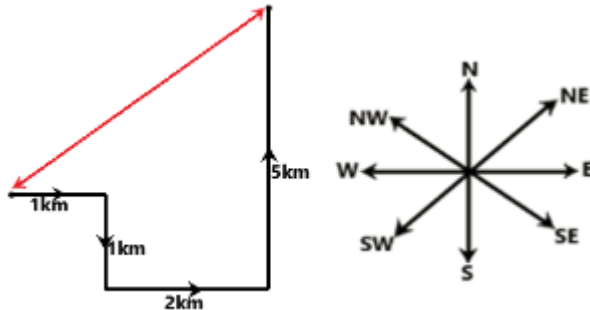
15 (left of her) + 1 (Karishma) + 17 (right of her) = 33

Thus, correct option is (a).

77. (b): Given:

Sheela walks 1 km to east and turns right and walks another 1 km and then turns left and walks 2 km and again turning left her left travels 5 km.

From the given information path diagram will be.



$$\text{Distance} = 1 + 1 + 2 + 5$$

$$= 1 + 1 + 2 + 5$$

$$= 9$$

$$= 9 \text{ km}$$

Sheela far **9km** from her starting point.

Thus, correct option is (b).

78. (d): Given:

2, 6, 12, 20, _____, 42

Logic: The differences between consecutive numbers are increasing by 2:

$$2 + 4 = 6$$

$$6 + 6 = 12$$

$$12 + 8 = 20$$

$$20 + 10 = 30$$

$$30 + 12 = 42$$

Therefore, the missing number is 30.

Thus, correct option is (d).

79. (d): Given:

Eight people (A, B, C, D, E, F, G, H) live on different floors of a building numbered from 1 to 8.

Only two people live between C and E.

Only two people live between E and D.

F lives on the topmost floor (floor 8).

G lives immediately above B.

A lives on one of the floors below E but above D and H.

D lives on the ground floor (floor 1).

Floor Person

8 F

7 C

6 G

5 B

4 E

3 A

2 H

1 D

So 4 floors are there between the floors on which C and H live.

Thus, correct option is (d).

80. (d): Given:

JOL : FRO

MKH : INK

Logic: 1st letter - 4 = 4th letter, 2nd letter + 3 = 5th letter and 3rd letter + 3 = 6th letter

For, JOL : FRO

J - 4 = F, O + 3 = R, L + 3 = O

For, MKH : INK

M - 4 = I, K + 3 = N, H + 3 = K

Now, we check each options.

Option (a): LOA : HSD (**Not Follow**)

L - 4 = H, O + 3 = R, A + 3 = D

Option (b): NRF : JUH (**Not Follow**)

N - 4 = J, R + 3 = U, F + 3 = I

Option (c): RME : NPG (**Not Follow**)

R - 4 = N, M + 3 = P, E + 3 = H

Option (d): HPD : DSG (**Follow**)

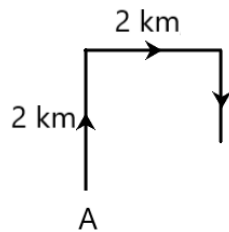
H - 4 = D, P + 3 = S, D + 3 = G

Thus, correct option is (d).

81. (a): Given:

A man 'A' starts from a certain point and walks 2 km towards north, turns towards his right and walks 2 km, turns right again and walks.

From the above following path diagram will be-



From the above he facing south direction now.

Correct answer is (a) **South**.

82. (c): Solution

The logic followed here is:

3. Accident - This is the starting point, where an incident occurs.

4. Injury - As a result of the accident, an injury happens.

1. Doctor - After the injury, a doctor is consulted.

5. Medicine - The doctor prescribes medicine.

2. Treatment - The medicine is part of the overall treatment plan.

So, the order would be: 3, 4, 1, 5, 2.

Hence, the correct answer is "**Option C**".

83. (b): Given: MJGT is related to QNKX and CZWJ is related to GDAN with same logic.

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: Letters are increasing + 4 place.

For, MJGT - QNKX

M + 4 = Q, J + 4 = N, G + 4 = K, T + 4 = X

For, CZWJ - GDAN

$C + 4 = G, Z + 4 = D, W + 4 = A, J + 4 = N$

Similarly,

OLIV - ?

$O + 4 = S, L + 4 = P, I + 4 = M, V + 4 = Z$

So, **OLIV** is related to **SPMZ**.

Thus, correct option is (b).

84. (d): Given: SUZD is related to ZBGK and UWBF is related to BDIM with same logic.

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: Letters are increasing + 7 place.

For, SUZD - ZBGK

$S + 7 = Z, U + 7 = B, Z + 7 = G, D + 7 = K$

For, UWBF - BDIM

$U + 7 = B, W + 7 = D, B + 7 = I, F + 6 = M$

Similarly,

PRWA - ?

$P + 7 = W, R + 7 = Y, W + 7 = D, A + 7 = H$

So, **PRWA** is related to **WYDH**.

Thus, correct option is (d).

85. (c): Given:

U, V, W, X, and Y live on a five-floor building, each floor having only one flat.

The bottommost floor is numbered as 1 and the floor immediately above it is numbered as 2 and so on.

X lives just below Y.

W, U and V live on consecutive floors in the same order.

No one lives below V.

From the given information arrangement will be.

FloorsPersons

5 Y

4 X

3 W

2 U

1 V

W lives just below X.

Thus, correct option is (c).

86. (c): Given:

Seven people, D, E, F, G, L, M and N, are sitting in a row, facing north.

Only M sits to the left of N.

Only four people sit between M and L.

Only F sits between G and D, and G is not an immediate neighbour of L.

From the given information seating arrangement will be.



E sits at the extreme right of the line.

Thus, correct option is (c).

87. (c): Given Series:

8, 13, 20, 29, 40, ?

Logic:

The series follows the pattern of +5, +7, +9, +11, +13...

$$8 + 5 = 13$$

$$13 + 7 = 20$$

$$20 + 9 = 29$$

$$29 + 11 = 40$$

Similarly,

$$40 + 13 = 53$$

So, missing number is 53.

Thus, correct option is (c).

88. (a): Given: $122 \div 4 + 65 \times 5 - 41 = ?$

Given Sign $+ \times -$

Interchanged Sign $- \div +$

Given equation is solve by **BODMAS** rule.

Operation preference wise Symbol Brackets $[], ()$ Orders,

of (power), $\sqrt{\text{root}}$, of Division \div Multiplication \times Addition $+$ Subtraction $-$ Operation preference wise Brackets Orders, of Division Multiplication Addition Subtraction Symbol $[], ()$ (power), $\sqrt{\text{root}}$, of $\div \times + -$

New equation: $122 \times 4 - 65 \div 5 + 41 = ?$

$$122 \times 4 - 13 + 41 = ?$$

$$488 - 13 + 41 = ?$$

$$529 - 13 = ?$$

$$? = 516$$

Thus, correct option is (a).

89. (b): Given: (Left) @ \$ 6 # % 1 4 £ * 1 £ © 7 # 4 8 3 % % 2 \$ £ (Right)

Logic: Number | Symbol | Number

(Left) @ \$ 6 # % 1 4 £ * 1 £ © 7 # 4 8 3 % % 2 \$ £ (Right)

1 symbols are there each of which is immediately preceded by a number and also immediately followed by a number.

Thus, correct option is (b).

90. (b): Given: 517, 494, 461, ?, 365, 302

Logic: the differences decrease by 10 each time: -23, -33, -43, -53, -63.

$$517 - 23 = 494$$

$$494 - 33 = 461$$

$$461 - 43 = 418$$

$$418 - 53 = 365$$

$$365 - 63 = 302$$

So, the missing term is **418**.

Thus, correct option is (b).

91. (d): Given: $171 \div 95 \times 5 - 4 + 33 = ?$

Given Sign $\div - \times \div +$

New Sign $- \times \div + +$

Given equation is solve by **BODMAS** rule.

Operation preference wise Symbol Brackets $[], ()$ Orders,

of (power), $\sqrt{\text{root}}$, of Division \div Multiplication \times Addition $+$ Subtraction $-$ Operation preference wise Brackets Orders, of Division Multiplication Addition Subtraction Symbol $[], ()$ (power), $\sqrt{\text{root}}$, of $\div \times + -$

New equation: $171 + 95 \div 5 \times 4 - 33 = ?$

$$171 + 19 \times 4 - 33 = ?$$

$$171 + 76 - 33 = ?$$

$$247 - 33 = ?$$

$$? = 214$$

Thus, correct option is (d).

92. (b): Given: (Left) 6 3 £ \$ % 3 \$ 9 8 1 8 * % 2 6 € \$ £ # 8 & \$ (Right)

Logic: Number | Symbol | Symbol

(Left) 6 3 £ \$ % 3 \$ 9 8 1 8 * % 2 6 € \$ £ # 8 & \$ (Right)

4 symbols are there each of which is immediately preceded by a number and also immediately followed by a symbol.

Thus, correct option is (b).

93. (d): Given: (Left) © 9 6 £ 9 & € 8 4 4 2 @ © £ # 4 * 7 © 7 9 6 (Right)

Logic: Symbol | Number | Symbol

(Left) © 9 6 £ 9 & € 8 4 4 2 @ © £ # 4 * 7 © 7 9 6 (Right)

(Left) © 9 6 £ 9 & € 8 4 4 2 @ © £ # 4 * 7 © 7 9 6 (Right)

3 numbers are there each of which is immediately preceded by a symbol and also immediately followed by a symbol.

Thus, correct option is (d).

94. (c): Given: $131 \div 6 + 1818 \times 18 - 23 = ?$

Given Sign $+ \times \times$

Interchanged Sign- $\div \div$

Given equation is solve by **BODMAS** rule.

Operation preference wise Symbol Brackets [], () Orders,

of (power), $\sqrt{\text{root}}$, of Division \div Multiplication \times Addition + Subtraction - Operation preference wise Brackets Orders,

of Division Multiplication Addition Subtraction Symbol [], () (power), $\sqrt{\text{root}}$, of $\div \times + -$

New equation: $131 \times 6 - 1818 \div 18 + 23 = ?$

$131 \times 6 - 101 + 23 = ?$

$786 - 101 + 23 = ?$

$809 - 101 = ?$

$? = 708$

Thus, correct option is (c).

95. (c): Given:

In a certain code language, 'BEST' is coded as '4568' and 'STAB' is coded as '8965'.

B E S T = 4 5 6 8

S T A B = 8 9 6 5

B, S, T and 5, 6, 8 are common in both.

So, the code of A is 9.

Thus, correct option is (c).

96. (a): Given:

$88 : 93 :: 69 : 74 :: ? : 39$

Logic: $1\text{st} + 5 = 2\text{nd}$

$88 + 5 \rightarrow 93$

$69 + 5 \rightarrow 74$

Similarly,

$? + 5 \rightarrow 39$

$? \rightarrow 39 - 5$

$? \rightarrow 34$

Thus, correct option is (a).

97. (d): Given:

FIRE' is coded as '5371'

'ACID' is coded as '8247'

F **I** R E = 5 3 **7** 1

A C **I** D = 8 2 4 **7**

From the above I is common and in the code 7 is common thus, the code of I will be 7.

Correct answer is (d) 7.

98. (b): Given:

MBKF → OGMK

QLOP → SQQU

UVSZ → ?

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: → Pattern: +2, +5, +2, +5

MBKF → OGMK

M → O (+2)

B → G (+5)

K → M (+2)

F → K (+5)

QLOP → SQQU

Q → S (+2)

L → Q (+5)

O → Q (+2)

P → U (+5)

Apply same to UVSZ:

U → W (+2)

V → A (+5)

S → U (+2)

Z → E (+5)

→ So, UVSZ → WAUE

Final Answer: WAUE

Final Correct Option: (B)

99. (b): Given - A + B means 'A is the mother of B'

A - B means 'A is the brother of B'

A × B means 'A is the wife of B' and

A ÷ B means 'A is the father of B'.

How is M related to Q if 'M + N × O ÷ P - Q'?

Symbol in Diagram	Meaning
- / O	Female
+ / □	Male
=	Married Couple
—	Siblings
	Difference Of Generation

M-

|

N- = O+

|

P+ — Q

M is Q's Mother's mother.
Option B is correct.

100. (c): Given: KM37, IK48, GI59, EG70, ?

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C	D	E	F	G	H	I	J	K	L	M
Z	Y	X	W	V	U	T	S	R	Q	P	O	N
26	25	24	23	22	21	20	19	18	17	16	15	14

Logic: Each letter - 2, Numbers + 11 = Next number.

First letter: K - 2 = I, I - 2 = G, G - 2 = E, E - 2 = C

Second letter: M - 2 = K, K - 2 = I, I - 2 = G, G - 2 = E

For the numbers:

37 + 11 = 48

48 + 11 = 59

59 + 11 = 70

70 + 11 = **81**

Thus, the correct letter-number cluster is **CE81**.