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Director

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IB ACIO 2024
17/01/2024 (1st Shift)

Current Affairs

Q.1. Consider the following statement about Hockey India Sub Junior Women South Zone Championship 2023:
1. It was the 2nd edition of such kind of tournament.
2. In this event Hockey Andhra Pradesh secured the top position with 12 points
3. Hockey Unit of Tamil Nadu have secured the 2nd position.

Which of the statements given above is/are correct ?
(a) Statement 2 and 3
(b) All are correct
(c) Only statement 3
(d) Only statement 2

Q.2. Frontal offset test in Bharat New Car Assessment Programme (NCAP) is performed at a speed of _____ .
(a) 70 kmph   (b) 75 kmph
(c) 82 kmph   (d) 64 kmph

Q.3. Consider the following statement about the peace agreement done by Government of India in December 2023:
1. It was signed between United National Liberation Front (UNLF), Government of Manipur and Government of India
2. NRFM (earlier United Revolutionary Front) was formed on September 11, 2021
3. Around 25 leaders/cadres of National Revolutionary Front Manipur (NRFM-a Meitei UG outfit) led by Major Boicha (Vice Chief of Army Staff of NRFM) along with 50 weapons have joined UNLF on 22nd December, 2023.

Which of the statement given above is/are correct ?
(a) Statement 1 and 2
(b) Only statement 2
(c) Only statement 1
(d) All are correct

Q.4. Consider the following statements about Mitrashakti 2023:
1. It is a naval exercise
2. It is the joint exercise of India and Sri Lanka
3. The exercise has been conducted from 16th to 29th November 2023.
4. It is aimed at fostering a deeper understanding of each other's operational strategies and tactics.

Which of the statement given above is/are correct?

(a) Statement 1, 2 and 3
(b) All are correct
(c) Statement 1, 3, 4
(d) Statement 2 and 3

Q.5. Orunodoi 2.0 is launched by which of the following states ?
(a) Rajasthan   (b) Manipur
(c) Assam   (d) Jharkhand

Q.6. Who is appointed as the new DGCA Chief in Jan 2023 ?
(a) Bir Singh Rai   (b) Ravi Krishna
(c) D.C Sharma   (d) Vikram Dev Dutt

Q.7. Which of the following cities is recognized as a city of music by UNESCO's Creative Cities Network ?
(a) Srinagar   (b) Jaipur
(c) New Delhi   (d) Gwalior

Q.8. Consider the following statement about India's first Regional Rapid Transit System (RRTS):
1. It was inaugurated by Prime Minister Narendra Modi.
2. It was inaugurated on 20 October 2023.
3. It comes under the Ministry of Housing & Urban Affairs.
4. Delhi-Ghaziabad-Meerut RRTS corridor is the first RRTS corridor in India.

Which of the statements given above is/are incorrect ?
(a) None of given statement
(b) Statement 2 and 3
(c) Statement 4
(d) Statement 1

Q.9. What is India's rank in the Climate Change Performance Index in 2023 ?
(a) 8th   (b) 5th   (c) 7th   (d) 6th

Q.10. What is the rank of India in Global Innovation Index 2023 ?
(a) 8th   (b) 23rd   (c) 40th   (d) 34th

Q.11. Consider the following statement about "Miyawaki" Plantation Method:
1. In December 2023, in a bid to boost forest cover in the coal belt region of Chhattisgarh, Coal India Ltd subsidiary, South Eastern Coalfields Ltd (SECL) will undertake plantation using the Miyawaki method for the first time in its operational areas.
2. The Miyawaki method of plantation was pioneered in the 90s by Spanish botanist and expert in plant ecology Mr. Akira Miyawaki.
3. This technique of plantation involves planting native trees, shrubs and groundcover plants within every square metre.

Which of the statement given above

is/are correct?
(a) Statement 2 and 3
(b) Only statement 2
(c) All are correct
(d) Statement 1 and 3

Q.12. Who among the following are the first-ever brother-sister duo to become Grandmasters in chess ?
(a) Padmini Rout and Parimarjan Rout
(b) Priya Gupta and Abhijeet Gupta
(c) Vantika Agrawal and Suri Agrawal
(d) Vaishali Rameshbabu and Praggnanandhaa

Q.13. Consider the following statement about "Project UDBHAV":
1. Rajnath Singh inaugurated 'Project Udbhav'.
2. This project has been launched in October 2023.
3. It is an initiative by the Indian Army to blend ancient wisdom with modern military methods for tackling current security challenges

Which of the statements given above is/are correct?
(a) Only statement 3
(b) All are correct
(c) Only statement 2
(d) Statement 2 and 3

Q.14. Bharatiya Nyaya Sanhita was introduced in Lok Sabha to replace _____.
(a) Indian Criminal Code
(b) Indian Civil Code
(c) Indian Penal Code
(d) Indian Code of Conduct

Q.15. Match the list 1 and list 2 and select the correct answer using the code given below.

List 1 (Chatbot)	List 2 (Company)
A. Q	1. Open AI
B. Bard	2. IndiGo
C. Eskai	3. Google
D. ChatGPT	4. Amazon

(a) A-4 B-3 C-2 D-1   (b) A-2 B-3 C-1 D-4
(c) A-2 B-3 C-4 D-1   (d) A-4 B-2 C-1 D-3

Q.16. Consider the following statement about NISAR:
1. It is a microwave remote sensing satellite for Earth observation
2. It is a joint mission of India and USA
3. It's full form is NASA-ISRO Synthetic Aperture Radar
4. It is targeted for launch onboard India's GSLV

Which of the statements given above is/are correct?
(a) Only statement 2 and 4

(b) Statement 2 and 3
(c) Only statement 1, 3, 4
(d) All are correct

Q.17. As per Financial Assistance for Promotion of Guru-Shishya Parampara scheme of Ministry of Culture,
(a) support is provided to 1 Guru and maximum 18 Shishyas in the field of theatre
(b) support is provided to 1 Guru and maximum 15 Shishyas in the field of theatre
(c) support is provided to 1 Guru and maximum 10 Shishyas in the field of theatre
(d) support is provided to 1 Guru and maximum 12 Shishyas in the field of theatre

Q.18. Consider the following statement about "Women Reservation Act 2023":
1. Provides 33 percent reservation to women in state assemblies and Lok Sabha
2. It is related to the 106th constitutional amendment act of the Indian constitution
3. Through this act reservation will be provided for the next 10 years which can be extended in future.
4. Article 330A is inserted through this amendment
Which of the statements given above is/are correct ?
(a) Statement 1, 2 and 4
(b) Statement 2, 3 and 4
(c) All are correct
(d) Statement 1, 2 and 3

Q.19. Sacred Ensembles of the Hoysalas which was declared as a UNESCO world heritage site in 2023 is located in _____ .
(a) Karnataka   (b) Chhattisgarh
(c) Odisha   (d) Andhra Pradesh

Q.20. As of December 2023, which among the following schemes are related with the Ministry of Minority Affairs:
1. Pradhan Mantri Jan Vikas Karyakram
2. Saksham Scholarship Scheme
3. Pragati Scholarship
4. Beti Bachao Beti Padhao
(a) Only 1   (b) Only 4
(c) 2 and 3   (d) 1 and 2

General Studies

Q.21. Which of the following were the aspects of the green revolution?
A. Using High Yielding Varieties seeds
B. Mechanization of Agriculture
C. Use of Chemical Fertilizers and Pesticides
D. Irrigation
(a) B, C, D only   (b) A, B, C only
(c) A, B, C, D   (d) A, C, D only

Q.22. The term 'secular' was added to the Preamble of the Indian Constitution by _____ .
(a) the 45nd Constitutional Amendment Act of 1985.
(b) the 42nd Constitutional Amendment Act of 1976.
(c) the 42nd Constitutional Amendment Act of 1970.
(d) the 40th Constitutional Amendment Act of 1968

Q.23. Consider the following statements:
A. Judicial decisions are bound by precedent in common law, whereas quasi-judicial decisions are generally not.
B. Judicial decisions may create new laws, but quasi-judicial decisions are based on existing law.
(a) Neither A nor B is true
(b) Only A is true
(c) Both A and B is true
(d) Only B is true

Q.24. Consider the following statements:
1. The Bhagavad Gita is part of the Mahabharata and is a dialogue between Krishna and Arjuna.
2. Shankaracharya is associated with the Advaita Vedanta school of Hindu philosophy.
3. The Rigveda is the oldest of the Vedas and contains hymns dedicated to various deities.
4. The Natya Shastra, attributed to sage Bharata, is an ancient Indian treatise on the performing arts and is closely related to the expression of Hindu spirituality.
Which of the statements above is/are correct?
(a) 1, 2, 3, and 4   (b) 2, 3, and 4 only
(c) 1, 3, and 4 only   (d) 1, 2, and 4 only

Q.25. Mamluk Dynasty was ended by which of the following rulers?
(a) Jalal-ud-din Firuz Khilji
(b) Timur
(c) Qutb-ud-din Aibak
(d) Ghiyas-ud-din Tughluq

Q.26. Consider the following statements:
1. The Tehri Dam, located on the Bhagirathi River in Uttarakhand, is the highest dam in India.
2. The Kakrapar Atomic Power Plant is situated in Tapi, Gujarat.
3. The Narora Atomic Power Station, situated in Uttar Pradesh, is a major contributor to India's nuclear energy production.
Which of the statements above is/are correct ?
(a) 1 and 3 only   (b) 1, 2 and 3
(c) 1 and 2 only   (d) 2 and 3 only

Q.27. The literacy rate of males in India as per 2011 census is around _____ .
(a) 79%   (b) 74%   (c) 82%   (d) 76%

Q.28. Ullambana is the festival of which of the following religions ?
(a) Hinduism   (b) Buddhism
(c) Sikhism   (d) Jainism

Q.29. Consider the following statements:
1. The Constitution (74th Amendment) Act, 1992 provides for the constitution of Wards Committees.
2. The Twelfth Schedule of the Constitution lists the powers, authority, and responsibilities of Municipalities.
3. Urban Local Governments in India include Municipal Corporations, Municipal Councils, and Nagar Panchayats depending on the size of the population.
Which of the above statements are correct ?
(a) 1 and 3 only   (b) 2 and 3 only
(c) 1 and 2 only   (d) 1, 2 and 3

Q.30. Who among the following was the minister who helped King Ashoka acquire the throne ?
(a) Susima   (b) Bhadrayudha
(c) Samudra   (d) Radhagupta

Q.31. Consider the following statements:
1. The Prime Minister of India must be a member of the Lok Sabha or the Rajya Sabha.
2. The President of India has the power to grant pardons, reprieves, respites, or remissions of punishment under Article 73 of the Indian Constitution.
3. The Vice-President of India is ex officio Chairman of the Lok Sabha.
4. The Governor of a state in India is appointed by the President and holds office during the pleasure of the President.
Which of the statements above is/are correct ?
(a) 2 only   (b) 1 and 4 only
(c) 1 only   (d) 3 and 4 only

Q.32. Consider the following statements:
1. The Brahmaputra river is known as Tsangpo in its upper reaches in Tibet.
2. The Godavari river is often referred to as the Ganges of the South.
3. The Krishna river has the second-largest river basin in India,

after the Ganges.
4. The Indus river originates from the Tibetan plateau, near Lake Mansarovar.
Which of the statements above is/are correct ?
(a) 1, 2, and 3 only   (b) 2, 3, and 4 only
(c) 1, 3, and 4 only   (d) 1, 2, and 4 only

Q.33. Consider the following statements:
1. The HDI assesses a country's average accomplishment in three aspects: a long and healthy life, knowledge, and a decent standard of living.
2. Kerala has consistently topped among Indian states in HDI rankings.
3. According to the Human Development Report of 2021-22, India ranks 135 out of 191 countries, behind Bangladesh (129) and Sri Lanka (73).
Which of the statements above is/are correct ?
(a) 2 and 3 only   (b) 1, 2 and 3
(c) 1 and 2 only   (d) 1 and 3 only

Q.34. The height of the Dancing Girl figurine of Indus Valley Civilization is about _____ .
(a) 83 cm   (b) 169 cm
(c) 11 cm   (d) 111 cm

Q.35. Consider the following statements:
1. The Eighth Schedule of the Indian Constitution lists 22 languages recognized as scheduled languages of India.
2. Sanskrit is the liturgical language of Hinduism, Buddhism, and Jainism, and is one of the 22 languages listed in the Eighth Schedule.
3. Konkani, spoken in the Western coastal regions of India, was added to the Eighth Schedule in the 71st amendment of the Constitution.
Which of the statements above is/are correct ?
(a) 1 and 2 only   (b) 1 only
(c) 2 and 3 only   (d) 1, 2, and 3

Q.36. Consider the following statements:
1. HDI is a composite index that accounts for life expectancy at birth, mean years of schooling, expected years of schooling, and Gross National Income per capita.
2. As per the UNDP report, India's HDI value saw a decline during the COVID-19 pandemic.
3. The HDI for India's female population has been historically lower than that for the male population.
4. The Inequality-adjusted Human Development Index (IHDI) considers

inequality in the distribution of each dimension across the population.
Which of the statements above is/are correct ?
(a) 1, 2, and 4 only   (b) 1, 2, 3 and 4
(c) 1, 3, and 4 only   (d) 2, 3, and 4 only

Q.37. Which of the following rivers are east flowing rivers ?
A. Godavari
B. Tapi
C. Krishna
D. Narmada
(a) A, B, C only   (b) A, C only
(c) B, C, D only   (d) A,B only

Q.38. Net Indirect Taxes are included in _____ .
(a) Personal Taxes
(b) Personal Disposable Income
(c) Net Current Transfers
(d) National Disposable Income

Q.39. Consider the following statements:
1. The Vijayanagara Empire was established by Harihara-I and Bukka Raya-I.
2. Krishnadevaraya, the greatest ruler of the Vijayanagara Empire, belonged to the Tuluva dynasty.
3. The Battle of Talikota led to the decline of the Chola Empire.
Which of the statements above is/are correct ?
(a) 1 and 2 only   (b) 1, 2, and 3
(c) 2 and 3 only   (d) 1 and 3 only

Q.40. Consider the following statements:
1. The Indian National Congress was formed in 1885 with A.O. Hume as its first president.
2. The Muslim League was founded in 1906 and proposed the idea of separate electorates for Muslims with the Lucknow Pact.
3. The All India Kisan Sabha was established in Lucknow in 1936 to address the issues of the peasantry.
4. The Ghadar Party was an international political movement founded by Punjabi Indians in the United States and Canada with the aim of liberating India from British rule.
Which of the above statements are correct ?
(a) 1, 3, and 4   (b) 2, 3, and 4
(c) 1, 2, and 4   (d) 1, 2, and 3

Numerical Aptitude

Q.41. Janaki leaves her home every day at 7:55 am and reaches office at 9:25 a.m. However, one day she left her home at 7:55 a.m. but reached office at

09:20:30 a.m.
Which of the statements below support the information provided above ?

Statement 1: Janaki travelled $\frac{3}{10}$ of the distance at $\frac{6}{7}$ of her usual speed and the rest of the distance at $\frac{7}{6}$ of her usual speed .

Statement 2: Janaki travelled $\frac{5}{8}$ of the distance at $\frac{5}{4}$ of her usual speed and the rest of the distance at $\frac{5}{6}$ of her usual speed .

Statement 3: Janaki travelled $\frac{7}{9}$ of the distance at $\frac{5}{6}$ of her usual speed and the rest of the distance at $\frac{20}{3}$ of her usual speed .
(a) Each of Statements 1 and 3 supports the information provided, but Statement 2 doesn't.
(b) Each of Statements 2 and 3 supports the information provided, but Statement 1 doesn't.
(c) Each of Statements 1 and 2 supports the information provided, but Statement 3 doesn't.
(d) None of the three statements supports the information provided.

Q.42. In the last financial year the ratio of the monthly incomes of Viraj and Rohan was m : n and the ratio of their monthly expenditures was p : n. In the current financial year Viraj's income has increased by q% and his expenditure has gone up by 2q%. The corresponding increases for Rohan have been r% and s% respectively. The current monthly savings of Viraj and Rohan are respectively Rs u and Rs v, while the monthly savings of Rohan last year was Rs t.
Which one of the following is correct in respect of the Question and the Statements given below ?
Statement 1: The values of m, n, p, q, r, s, t, u, and v are given respectively as 8, 5, 4, 12.5, 40, 20, 10000, 58000, and 24000.
Statement 2: The values of m, n, p, q, r, s, t, u, and v are given respectively as 10, 7, 6, 15, 40, 20, 7700, 21530, and 14140.
(a) Only statement 2 has values of the variables that are consistent with one another.
(b) Only statement 1 has values of the variables that are consistent with one another.
(c) Neither of the two statements has values of the variables that are

consistent with one another.
(d) Both statements have values of the variables that are consistent with one another.

Q.43. A train travels at a speed of 72.6 km/hr. How many kilometres will it travel in 15 minutes ?
(a) 13.12 km   (b) 16.22 km
(c) 20.5 km   (d) 18.15 km

Q.44. From a cask filled with wine, 108.75 litres are first drawn and replaced with water. From this mixture 87 litres are drawn and replaced with water. The ratio of wine to water in the cask is now 3 : 2. How many litres of wine did the cask initially hold ?
(a) 522   (b) 348   (c) 470   (d) 435

Q.45. What would be the annual interest accrued on a deposit of ₹24,550 in a bank that pays a 22% per annum rate of simple interest ?
(a) ₹6320 (b) ₹5401 (c) ₹5560 (d) ₹4760

Q.46. The cost price of 28 articles is the same as the selling price of x articles. If the profit is 40%, then find the value of x.
(a) 14   (b) 20   (c) 15   (d) 16

Q.47. How many pairs of natural numbers (x, y) exist such that x > y and the product of x, y and HCF (x, y) = 2520?
(a) 3   (b) 4   (c) 5   (d) 6

Q.48. The average age of a group of 10 friends is 27 years. If one friend leaves the group, the average becomes 25 years. Find the age of the friend who left the group.
(a) 45 years   (b) 50 years
(c) 55 years   (d) 65 years

Q.49. If the numerator of a fraction is increased by 25% and the denominator is decreased by 10%, the value of the new fraction becomes $\frac{25}{24}$ Find the original fraction.
(a) 2 : 3   (b) 4 : 3   (c) 3 : 2   (d) 3 : 4

Q.50. Find the HCF of 36, 108, and 156.
(a) 12   (b) 36   (c) 16   (d) 9

Q.51. Which one of the following is correct in respect of the Statements given below ?
Statement 1: 2^{10} is the smallest natural number having exactly 11 factors.
Statement 2: 2^{11} is the smallest natural number having exactly 12 factors.
Statement 3: 2^{12} is the smallest natural number having exactly 13 factors.
(a) All the three statements given above are true.

(b) Statements 1 and 2 are true, but Statement 3 is false.
(c) None of the three statements (1, 2, 3) given is true.
(d) Statements 1 and 3 are true, but Statement 2 is false.

Q.52. If the interest is compounded half-yearly, calculate the amount when the principal is ₹4000, the rate of interest is 22% per annum and the duration is one year.
(a) ₹4928.4   (b) ₹4288.8
(c) ₹4825.5   (d) ₹5204.9

Q.53. Rohan purchased an item for which there was a 13.5% discount offered on the part of the payment made in cash and a 6.25% surcharge on the part of the payment made through a credit card. If Rohan would have paid the entire amount in cash he would have paid Rs y for the item. But he actually had to pay Rs 40964 in all for the item, out of which Rs 29064 was paid in cash. What is the value of y ?
(a) 32988   (b) 35700
(c) 38554   (d) 38752

Q.54. On a particular day each of Danny, Edwin and Fahim sold three types of pens from their respective shops. As a coincidence, each of them sold an identical number of pens of Type A, an identical number of pens of Type B and an identical number of pens of Type C. However, the numbers of pens of each type that were sold were all different from one another. Also, the three sellers sold each of the types of pens at different prices per unit.
Assertion (A): It is possible that Danny sold each pen of Type A at a profit of Rs 2, each pen of Type B at a loss of Re 1, and each pen of Type C at a loss of Rs 12 and made an overall profit of Rs 8; Edwin sold each pen of Type A at a profit of Rs 2, each pen of Type B at a loss of Rs 6, and each pen of Type C at a loss of Rs 6 and made an overall profit of Rs 14; and Fahim sold each pen of Type A at a profit of Rs 1, each pen of Type B at a profit of Rs 1, and each pen of Type C at a loss of Rs 3 and made an overall profit of Rs 27.
Reason (R): Framing and solving the three possible linear equations we will find that we get a unique solution.
(a) Assertion (A) is true and Reason (R) is false.
(b) Both Assertion (A) and Reason (R) are true but Reason (R) is not a correct explanation of Assertion (A).
(c) Both Assertion (A) and Reason (R) are true and Reason (R) is a correct explanation of Assertion (A).

(d) Assertion (A) is false and Reason (R) is true.

Q.55. A shop sells only steamed momos and fried momos. On a particular day the ratio of the numbers of steamed momos and fried momos sold from that shop was 5 : 4. How many steamed momos were sold from the shop on that day ?
Which one of the following is correct in respect of the Question and the Statements given below ?
Statement 1: If the number of steamed momos were to double, the ratio of the numbers of steamed momos and fried momos sold from that shop would become 5 : 2.
Statement 2: If the number of fried momos sold was at least 13 more while the number of steamed momos sold stayed the same, then the number of fried momos sold would have been more than the number of steamed momos sold.
(a) The data in Statement 2 alone are sufficient answer to the question.
(b) The data in Statement 1 and Statement 2 both taken together are not sufficient to answer the question.
(c) The data either in Statement 1 alone or in Statement 2 alone are sufficient to answer the question.
(d) The data in Statement 1 alone are sufficient to answer the question.

Q.56. X's income is 44% more than that of Y. What percent is Y's income less than X's ?
(a) 32.5%   (b) 33%   (c) 30.5%   (d) 20.4%

Q.57. If $a^3 - b^3 = 602 \ and \ a - b = 2$, then find the value of $(a^2 + b^2)$.
(a) 202   (b) 156   (c) 260   (d) 240

Q.58. The team of A, B, and C was supposed to complete a piece of work. Working alone, A could have completed the same work in 190 hours, B could have completed the same work in 285 hours, while C could have completed it in 342 hours. The trio decided that only one of the three would work at any point of time. In the first cycle of three days A worked for two hours on Day 1, B worked for two hours on Day 2, and C worked for two hours on Day 3. In the second cycle of three days A worked for four hours on Day 1, B worked for four hours on Day 2, and C worked for four hours on Day 3. In the third cycle of three days A worked for six hours on Day 1, B worked for six hours on Day 2, and C worked for six hours on Day 3. This continued till the piece of work was completed, with each working for 2 hours in Cycle, the sole

exception being made, if necessary, in the last cycle, as the work may get completed mid-cycle. What was the total number of days needed for the work to be completed ?
(a) 26   (b) 25.5   (c) 26.4   (d) 25.8

Q.59. Three natural numbers are such that one-third of the first number is equal to two-fifths of the second, and two-thirds of the second number is equal to one-seventh of the third. The sum of five times the third number and half of the square of the first number is 1348. What is the value of the second number ?
(a) 24   (b) 30   (c) 15   (d) 21

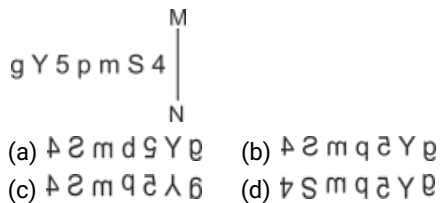**Q.60.** If 22% of x is equal to 66% of y, then find the value of x: y.
(a) 1 : 3   (b) 11 : 6   (c) 3 : 1   (d) 2 : 5

Reasoning & Logical Aptitude

Q.61. In a class Pratik ranks 22nd from top and 27th from bottom, how many students are there in that class ?
(a) 48   (b) 30   (c) 37   (d) 44

Q.62. Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.

M

g Y 5 p m S 4

N

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

Q.63. Four words have been given, out of which three are alike in some manner and one is different. Select the odd word.
(a) Yen   (b) Euros   (c) Beijing   (d) Yuan

Q.64. Select the wrong term in the following number series:
458, 230, 116, 60, 30.5
(a) 60   (b) 30.5   (c) 230   (d) 116

Q.65. Six girls named A, B, C, D, E and F are sitting in a straight line, all facing north. Each one of them has different profession from amongst lawyer, doctor, chef, clerk, teacher and engineer. B is second to the left of D. C is third to the right of D. Only doctor is sitting between clerk and chef. Engineer is second to the left of lawyer. Clerk is sitting at one of the extreme ends. F is a teacher. C is a lawyer. E is not the immediate neighbour of F.
Which of the following is/are true based on the given arrangement ?
 I. E is an engineer.
 II. The doctor is sitting at third place to the left of teacher.

III. Engineer is sitting to the immediate right of chef.
(a) Only I and II are true
(b) Only II and III are true
(c) All I, II and III are true
(d) Only I and III is true

Q.66. In a university, 88 students had taken Mathematics courses, 90 students had taken Hindi courses, 64 students had taken Biology courses, 22 students had taken Mathematics and Biology, 28 students had taken Mathematics and Hindi, 24 students had taken Hindi and Biology courses, and 10 students had taken all three courses. Find how many students had taken mathematics courses only.
(a) 44   (b) 48   (c) 50   (d) 52

Q.67. Three Statements are given followed by two conclusions numbered I and II. Assuming the statements to be true, decide which of the conclusions logically follow(s) from the statements.
Statement I: Some Good are Bad.
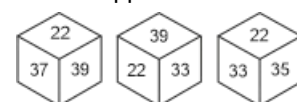**Statement II:** Some Good are Nice.
Statement III: Some Bad are Cute.
Conclusion I: Some Bad are not Cute.
Conclusion II: Some Nice are good.
(a) Only conclusion I follows
(b) Neither conclusion I nor II follows
(c) Both conclusions I and II follow
(d) Only conclusion II follows

Q.68. Three different positions of the same dice are given below. Find the number opposite of 37.

(a) 35   (b) 33   (c) 39   (d) 22

Q.69. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(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)
(24, 12, 169)
(66, 14, 263)
(a) (25, 11, 127)   (b) (47, 15, 273)
(c) (61, 13, 211)   (d) (21, 17, 210)

Q.70. Read the following information carefully and answer the question that follows. You must assume everything in the statement to be true and decide

which of the conclusion/s logically follow/s.
Infant jaundice is yellow discoloration of newborn baby's skin and eyes which occurs because the baby's blood contains an excess of a yellow pigment called bilirubin. Infant jaundice usually occurs because a baby's liver isn't mature enough to get rid of bilirubin in the bloodstream.
Which of the following can be concluded from the given information ?
A. In some newborn babies suffering from jaundice, the liver is not fully developed which causes excess bilirubin in the blood.
B. The function of liver is also to remove excess bilirubin from the blood.
C. Excess bilirubin is undesirable for infants only. For adults, bilirubin is necessary for survival.
D. The colour of an infant's skin and eyes is usually yellowish in colour.
(a) Only A and D   (b) Only B, C and D
(c) Only B   (d) Only A, B and C

Q.71. Select the figure that will replace the question mark (?) in the following figure series.
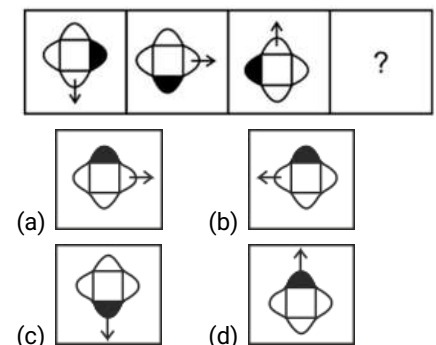
Q.72. If A denotes 'addition', B denotes 'multiplication', C denotes 'subtraction', and D denotes 'division', then what will be the value of the following equation ?
15 A 10 B 24 D 12 C 5 = ?
(a) 5   (b) 6   (c) 10   (d) 30

Q.73. Select the incorrect term in the alpha-numeric series:
X, Z, B, D, F, G
(a) X   (b) D   (c) Z   (d) G

Q.74. 'A + B' means 'A is the sister of B'
'A = B' means 'A is the daughter of B'
'A # B' means 'A is the son of B'
'A & B' means 'A is the father of B'
Based on the above information, find out which of the given statements can be the reason/s behind the assertion made below if it is given that 'H & N + Y = K = C'.
Assertion: H is U's sister's husband ?
Reason A: D & U
Reason B: U # C

(a) Only A is the reason behind the assertion

(b) Only B is the reason behind the assertion

(c) Both A and B are reasons behind the assertion

(d) Neither A nor B is the reason behind the assertion

Q.75. In a certain code language, 'PLOT' is written as '63', and 'SOUP' is written as '71'. Which of the following are correct matches as per the given code language?

Word	CODE
(i) LIKE	(W) 56
(ii) DOSE	(X) 37
(iii) MINT	(Y) 53

(a) i-Y, ii-W only   (b) i-X, iii-W only
(c) i-X, ii-Y, iii-W only   (d) i-X, ii-W only

Q.76. Arrange the words in a meaningful logical order and select the appropriate sequence :
1. Dhanbad   2. India   3. World
4. Jharkhand   5. Universe
(a) 42153 (b) 14253 (c) 53421 (d) 14235

Q.77. In a class, six students named P, Q, R, S, T and U obtain different marks out of total 100 marks. The ratio between marks of T and S is 2 : 3 respectively. P obtains 50% marks. R obtains 5 marks less than P. U obtains 1.5 times of the marks obtained by P. T obtains less marks U but more marks than R. Q obtains 20 marks more than T. The ratio between marks of T and U is 4 : 5 respectively.

Which of the following is true based on the given information ?
I. S obtains 90% marks which are the highest among all.
II. The ratio between marks of P and Q is 5 : 8 respectively.
(a) Only II   (b) Only I
(c) Neither I nor II   (d) Both I and II

Q.78. Three of the following four figure pairs are alike in a certain way and thus form a group. Which is the one that does not belong to that group ?
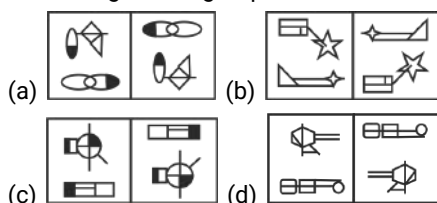
Q.79. NAPTUNE is related to RCPGGPW in a certain way based on certain logic. In the same way, CURTAIN is related to TWEGPKC. Which of the following are correct matches following the same logic ?

i. LOGICAL	(W) WQOMFGV
ii. MOUNTED	(X) KRPMPDG
iii. FIXTURE	(Y) TGDTCMP
iv. CERTAIN	(Z) ZKHGGTW

(a) ii-W, iii-Z, iv-X only   (b) ii-W, iii-Z only
(c) ii-Z, iv-Y only   (d) iii-Z only

Q.80. A question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient /necessary to answer the question. Read both the statements and decide the appropriate answer.

Question: If Kartik is the brother of Preeti, how is Kartik related to Amrita ?
I. Amrita is the daughter of Raghav, who is the son of Preeti's mother Seema.
II. Seema is the wife of Prashant who is the paternal grandfather of Amrita.

(a) Data in Statement II alone is sufficient to answer the question while data in statement I is not
(b) Data in Statement I alone is sufficient to answer the question while data in statement II is not
(c) Data in statements I and II together are necessary to answer the question.
(d) Data in statements I and II together are NOT sufficient to answer the question

English

Q.81. The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.
I don't know the reason why he/has said all this yet it/ puts him in a bad light.
(a) has said all this yet it
(b) No error
(c) puts him in a bad light.
(d) I don't know the reason why he

Q.82. Arrange the given sentences (1-6) in the correct order to form a coherent paragraph.
1. They had escaped the dark world and were enveloped in a dazzling white light which almost blinded them.
2. The fountain of immortality sprung before them from which they collected the elixir in a large conch shell.
3. The next moment, the boys found themselves floating over misty clouds.
4. They gave him some elixir from the shell and he immediately acquired an

ethereal form.
5. It was then that they saw the Formless One before them.
6. There was bliss and tranquillity around them.
(a) 614523   (b) 316254
(c) 352146   (d) 512346

Q.83. Which of the following statements correctly use the idiom' pour oil on troubled waters' by substituting the underlined words ?
A. If you unnecessarily interfere in others' affairs, you will suffer yourselves.
B. Fed up with frequent strikes, the management decided to, deal with the situation decisively.
C. The government ordered a judicial enquiry into the communal riots in a bid to pacify. the situation.
D. From his behaviour it is obvious that someone has prejudiced him against me.
(a) Only statement B correctly uses the idiom.
(b) Only statement C correctly uses the idiom.
(c) Both statements A and C correctly use the idiom.
(d) Both statements B and D correctly use the idiom.

Q.84. Match the following groups of words with the correct one-word substitutions.

phrase	one-word substitution
A. an annual calendar that contains important dates and time	1. connoisseur
B. one who is a critical judge of any art	2. almanac
C. one who does not appreciate art, literature or music	3. utopia
D. an ideally perfect state	4. philistine

(a) A-2,B-1, C-4,D-3   (b) A-3,B-4,C-1,D-2
(c) A-2,B-4, C-1,D-3   (d) A-4,B-2,C-3,D-1

Q.85. Select the most appropriate meaning of the given proverb from the options.
Better late than never
(a) It's good to be clean. God is clean, and you should be too
(b) It's better to finish something late than to never do it at all
(c) People who are similar spend time together
(d) Don't make someone angry or hurt someone who is helping you or paying for you

Q.86. Four sentences are given below. Find the odd sentence out.

A. A new analysis has determined that the threat of global warming can still be greatly diminished if nations cut emissions of heat-trapping greenhouse gases by 70% this century.

B. With research showing that additional warming of about 1 degree C may be the threshold for dangerous climate change, the European Union has called for dramatic cuts in emissions of carbon dioxide and other greenhouse gases.

C. The most dangerous potential aspects of climate change include massive losses of Arctic sea ice and permafrost.

D. "This research indicates that we can no longer avoid significant warming during this century," said NCAR scientist Warren Washington, the study paper's lead author.

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

Q.87. Select the word that is opposite in meaning (ANTONYM) to the word given below.
Corpulent
(a) Aerial   (b) Slim
(c) Anecdotist   (d) Narrator

Q.88. The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.
He has been read through/ the archives to research/ his article on the town's history.
(a) No error
(b) his article on the town's history.
(c) the archives to research
(d) He has been read through

Q.89. Match the following groups of words with the correct one-word substitutions.

One-word substitution	Phrase
1. hallucination	A. the act of looking into one's mind
2. reverie	B. pleasure mixed with sadness at recalling happy moments in the past
3. introspection	C. a false perception of things that do not really exist
4. nostalgia	D. a state of Absent-minded daydreaming

(a) A-4,B-2,C-3,D-1   (b) A-2,B-1,C-4, D-3

(c) A-3,B-4, C-1,D-2   (d) A-3,B-2,C-4,D-1

Q.90. Select the correct conclusion based on the meaning of the underlined word:
Statement: The trade embargo has impacted export revenue.
Conclusion:
i) The new trade laws have exempted goods from duty.
ii) Trading in certain goods has been temporarily stopped.
iii) The government order has put restrictions on trade with some countries.
iv) Exports have increased after signing of new trade treaties.
(a) options i and ii are correct
(b) options i, ii and iv are correct
(c) options ii and iii are correct
(d) option i and iv are correct

Q.91. The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.
As noon approached, sunlight filtered/ through an branches, casting dappled/ patterns on the cobblestone path.
(a) patterns on the cobblestone path.
(b) As noon approached, sunlight filtered
(c) No error
(d) through an branches, casting dappled

Q.92. Select the correct conclusion based on the meaning of the underlined word:
Statement: After his father's death, he became a prodigal of his fortune.
Conclusion:
I. He gained wisdom and spent money cautiously.
II. Being the only heir, he inherited all his father's wealth.
III. He squandered his wealth recklessly and lost all he had.
IV. He assumed the responsibility of increasing his father's fortune.
(a) Both options ii and iii are correct
(b) only option iv is correct
(c) only option iii is correct
(d) Both options ii and iv are correct

Q.93. Select the word that is closest in meaning (SYNONYM) to the word given below
Equivocal
(a) Unanimous   (b) Occlude
(c) Obstruct   (d) Ambiguous

Q.94. Some parts of a sentence have been jumbled up, and labelled P, Q, R and S. Select the option that gives the correct sequence in which these parts can be

rearranged to form a meaningful and grammatically correct paragraph. Opening and Closing sentence indicate the start of the paragraph and end of the sentence paragraph.

Opening Sentence: Born on October 5, 1983, in Los Angeles, California, Emma Stone's journey in the entertainment industry began at a young age.

P . While attending local theatre classes, Stone discovered her passion for acting and soon started auditioning for various roles.

Q . Despite facing initial rejections, Stone's determination and talent eventually landed her a breakthrough role in the comedy "Superbad."

R . Stone's career skyrocketed as she garnered critical acclaim for her performances in movies like "The Help" and "La La Land," earning her an Academy Award for Best Actress.

S . Inspired by the likes of Meryl Streep, Stone continued honing her craft and exploring diverse roles, solidifying her status as one of Hollywood's leading actresses. Closing Sentence: Today, Emma Stone stands as a respected figure in the film industry, celebrated for her versatility and contributions to the world of cinema.

(a) SRQP (b) SPQR (c) PQSR (d) RQPS

Q.95. The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.
We will have to spend a few/ hours journeying down in a bus,/ which is bound to take its toll.
(a) hours journeying down in a bus,
(b) which is bound to take its toll.
(c) We will have to spend a few
(d) No error

Q.96. In the following passage there are blanks, each of which has been numbered. Select the correct option to fill in the blanks.

What draws India closer to an obscure and indifferent picture are the (1) _____ tribes. They own their personal identity, far from the (2) _____ trend and economic development, as Adivasis having their own language, religion, festivals, cuisine, dance and music. With such an (3) _____ culture and hospitality they also significantly hold a contrasting patriarchal and matriarchal society. The lively (4) _____ of the tribal community in India stretches from the remote villages tucked in the Indian Himalayan region to southern-most tip of

India and from the farthest corner of North East India to the dunes of Rajasthan.

(a) 1 - indigenous, 2 - contemporary, 3 - enigmatic, 4 - tableau
(b) 1 - original, 2 - unique, 3 - oppressive, 4 - representation
(c) 1 - obsolete, 2 - modern, 3 - enchanting, 4 - presence
(d) 1 - immigrant, 2 - current, 3 - alarming, 4 - culture

Q.97. Select the word that is closest in meaning (SYNONYM) to the word given below

Aegis

(a) Aggravate   (b) Spread
(c) Intensify   (d) Protection

Q.98. Select the correct conclusion based on the meaning of the underlined idiom:

Statement: Splitting hairs is futile and will not resolve our problem.

Conclusion:

I. A superficial investigation will suffice for the problem at hand.
II. Making peevish criticisms on trivial matters will not lead us anywhere.
III. A difference of opinion is not tolerated in a dictatorship.

(a) Only conclusion (i) is correct
(b) Both conclusion (ii) and (iii) are correct
(c) Only conclusion (ii) is correct
(d) Both conclusion (i) and (iii) are correct

Q.99. Select the most appropriate meaning of the given idiom

Go down like a lead balloon

(a) To be received badly by an audience
(b) To surrender
(c) To gamble everything you have
(d) Put yourself in a tough position in order to support someone/something

Q.100. There is a sentence that is missing in the paragraph below. Look at the paragraph and decide in which blank (1, 2, 3, or 4) the following sentence would best fit.

Sentence: On the other hand, we find persons engaged in worst types of corrupt practices living in peace and prosperity.

We often come across situations and incidents, which appear quite contradictory to the known laws of Nature, creating doubts about the impartiality of divine justice. (1)_____
For instance, honest, duty-conscious, morally elevated person is often seen caught in adversities in one form or the other, or is suddenly struck with a great misfortune in life as though he/she were being punished by God for a great sin. (2) _____. An idler wins a jackpot or inherits a fortune from unexpected quarters, whereas a hard working intelligent person is found suffering endlessly for want of basic necessities. (3) _____. One person achieves great success with little effort, whereas another does not succeed in spite of his best efforts. (4) _____ Such phenomena are popularly ascribed to the role of fate.

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

Answer Key :-

1.(a)	2.(d)	3.(c)	4.(d)
5.(c)	6.(d)	7.(d)	8.(a)
9.(a)	10.(c)	11.(d)	12.(d)
13.(b)	14.(c)	15.(a)	16.(d)
17.(a)	18.(a)	19.(a)	20.(a)
21.(c)	22.(b)	23.(c)	24.(a)
25.(a)	26.(b)	27.(c)	28.(b)
29.(d)	30.(c)	31.(b)	32.(d)
33.(c)	34.(c)	35.(a)	36.(b)
37.(b)	38.(d)	39.(a)	40.(b)
41.(c)	42.(b)	43.(d)	44.(d)
45.(b)	46.(b)	47.(b)	48.(a)
49.(d)	50.(a)	51.(d)	52.(a)
53.(d)	54.(d)	55.(b)	56.(c)
57.(a)	58.(a)	59.(b)	60.(c)
61.(a)	62.(b)	63.(c)	64.(a)
65.(b)	66.(b)	67.(d)	68.(b)
69.(b)	70.(c)	71.(b)	72.(d)
73.(d)	74.(b)	75.(b)	76.(d)
77.(d)	78.(d)	79.(b)	80.(b)
81.(a)	82.(b)	83.(b)	84.(a)
85.(b)	86.(c)	87.(b)	88.(d)
89.(c)	90.(c)	91.(d)	92.(c)
93.(d)	94.(c)	95.(d)	96.(a)
97.(d)	98.(c)	99.(a)	100.(c)

Solutions :-

Sol.1.(a) Statement 2 and 3. The 1st edition of the Hockey India Sub Junior Women South Zone Championship was held in Chennai, Tamil Nadu in 2023. The 2nd edition took place in 2024 at Kollam, Kerala. Hockey Andhra Pradesh clinched the title with a commanding 3-0 victory over the Hockey Unit of Tamil Nadu in the final match. Andhra Pradesh led the points table with 13 points, followed closely by Tamil Nadu with 12 points. Kerala Hockey secured third place by defeating Karnataka in the playoff for the bronze.

Sol.2.(d) 64 kmph. Bharat NCAP is a government-led car safety assessment program for vehicles up to 3.5 tonnes. It allows voluntary testing under AIS 197, with crash tests including frontal (64 km/h), side (50 km/h), and pole-side impact (29 km/h). Cars receive star ratings for Adult and Child Occupant Protection, requiring 27 and 41 points respectively for 5 stars. Aligned with Global NCAP norms, it also covers CNG and EVs and offers a unified safety rating. Bharat NCAP launched on October 1, 2023.

Sol.3.(c) Only statement 1. In December 2023, a historic peace agreement was signed between the United National Liberation Front (UNLF), the Government of India, and the Government of Manipur, marking the first time a valley-based Meitei insurgent group entered into a peace pact. The National Revolutionary Front Manipur (NRFM), formerly known as the United Revolutionary Front, was formed on September 11, 2011. Contrary to the claim, there is no official confirmation that 25 cadres of NRFM led by Major Boicha joined the UNLF on December 22, 2023.

Sol.4.(d) Statement 2 and 3. The 10th edition of the India–Sri Lanka Joint Military Exercise MITRA SHAKTI took place from 12th to 25th August 2024 at the Army Training School, Maduru Oya, Sri Lanka. This annual bilateral exercise focuses on counter-insurgency and counter-terrorism operations in semi-urban terrain. It is the largest joint military exercise conducted by the Sri Lankan Army and plays a key role in strengthening the India–Sri Lanka defence partnership. The exercise also integrates elements of UN peacekeeping operations through tactical drills and discussions.

Sol.5.(c) Assam. Orunodoi 2.0 is a flagship poverty alleviation scheme by the Assam government, officially launched on December 14, 2022. It provides ₹1,250/month via DBT to over 27 lakh economically disadvantaged beneficiaries, including women, persons with disabilities, and transgender individuals. Launched initially on October 2, 2020, it also integrates earlier pension schemes for streamlined welfare delivery

and supports families in purchasing essential items like medicines and food.

Sol.6.(d) Vikram Dev Dutt was appointed DGCA chief in January 2023 and took charge in February 2023. He stepped down in October 2024, and Faiz Ahmed Kidwai was appointed as the new DGCA chief in January 2025. The DGCA is India's apex civil aviation regulatory body under the Ministry of Civil Aviation, responsible for aviation safety and enforcing civil air regulations. Its headquarters are in New Delhi, and it collaborates internationally with the International Civil Aviation Organisation (ICAO) to harmonize regulatory standards.

Sol.7.(d) Gwalior. In November 2023, UNESCO designated Gwalior as the 'City of Music' and Kozhikode as the 'City of Literature' under its Creative Cities Network (UCCN). This network, established in 2004, promotes creativity and culture as key drivers of sustainable urban development. Nearly 300 cities worldwide are part of this initiative.

Sol.8.(a) None of the given statements. Regional Rapid Transit System (RRTS) implemented by the National Capital Region Transport Corporation (NCRTC) under the Ministry of Housing and Urban Affairs, the RRTS is a semi high-speed, integrated mass transit system for the NCR. It aims to boost regional connectivity, sustainable urban development, and economic productivity with trains running at 160 km/h (design speed 180 km/h). Inspired by international systems (like Paris RER), it offers state-of-the-art infrastructure, promotes public transport, and supports new commercial hubs. Eight corridors are planned under NCR-2032.

Sol.9.(a) 8th. India ranked 10th in the Climate Change Performance Index (CCPI) 2025, maintaining its position among the top-performing G20 nations. The index, published by Germanwatch, New Climate Institute, and Climate Action Network, assesses 63 countries + EU based on greenhouse gas emissions, renewable energy, energy use, and climate policy. Top ranks (1-3) remain unfilled; Denmark, Netherlands, and UK ranked 4th, 5th, and 6th respectively for their strong climate actions.

Sol.10.(c) 40th. In the Global Innovation Index (GII) 2023, India ranked 40th out of 132 economies, showing consistent innovation performance. In GII 2024,

India improved to 39th globally and 1st in Central & Southern Asia. It ranked 4th in WIPO S&T Clusters and 7th globally in intangible asset intensity. The GII is published by WIPO, a UN agency based in Geneva, to promote innovation by protecting intellectual property. Switzerland topped the index for the 14th consecutive year.

Sol.11.(d) Statement 1 and 3. The Miyawaki method, developed by Japanese botanist Akira Miyawaki in the 1970s, involves planting 2–4 types of indigenous trees per square metre to rapidly create dense, self-sustaining forests. These forests mature in about 3 years and require minimal maintenance. The method improves biodiversity, air quality, soil fertility, and regulates temperature, making it ideal for urban green cover. Common native species used include Anjan, Amala, Bel, Arjun, and Gunj.

Sol.12.(d) Vaishali Rameshbabu and Praggnanandhaa. Praggnanandhaa became a Grandmaster in 2018 at age 12, and Vaishali earned the title in 2023. The Grandmaster (GM) title is the highest title awarded by FIDE for exceptional chess skill. Both are celebrated prodigies from India.

Sol.13.(b) All are correct. Project Udbhav, launched by the Indian Army in October 2023 and inaugurated by Defence Minister Rajnath Singh, aims to integrate ancient Indian knowledge of statecraft, warcraft, and diplomacy into modern military thinking. It focuses on texts like those of Kautilya and explores indigenous military systems and regional strategies. The goal is to develop an India-centric strategic framework that combines historical wisdom with present-day defence practices.

Sol.14.(c) Indian Penal Code. The Bharatiya Nyaya Sanhita (BNS), 2023 was introduced as part of reforming colonial-era criminal laws. Along with it, Bharatiya Nagarik Suraksha Sanhita (BNSS), 2023 replaces the CrPC, 1973, and Bharatiya Sakshya Bill (BSB), 2023 replaces the Indian Evidence Act, 1872. These new laws came into effect from July 1, 2024, marking a major overhaul of India's criminal justice system.

Sol.15.(a) A-4 B-3 C-2 D-1. Q is an AI-powered chatbot developed by Amazon Web Services (AWS) to assist enterprise users with internal data and operations. Bard, now rebranded as

Gemini, is a chatbot created by Google to compete with platforms like ChatGPT. 6Eskai is a customer support chatbot launched by IndiGo Airlines to handle services like bookings and flight inquiries. ChatGPT, one of the most recognized AI chatbots globally, is developed by OpenAI.

Sol.16.(d) All are correct. The NISAR (NASA-ISRO Synthetic Aperture Radar) mission is a joint Earth observation initiative between NASA (USA) and ISRO (India). It aims to monitor natural disasters, land use changes, glacier movements, and climate change impacts using dual-frequency synthetic aperture radar (SAR) operating in L-band and S-band. NASA is contributing the L-band SAR, GPS, and communication systems, while ISRO is providing the S-band SAR, satellite platform, and launch services via GSLV Mk II from Satish Dhawan Space Centre. NISAR will provide all-weather, high-resolution imaging of the Earth's surface.

Sol.17.(a) The Guru-Shishya Parampara (Repertory Grant) Scheme, under the Ministry of Culture, provides financial assistance to promote the ancient tradition of Guru-Shishya in Indian performing arts. It is a central sector scheme under the Kala Sanskriti Vikas Yojana (KSVY) and supports cultural organizations in music, dance, drama/ theatre, etc. Introduced in 2003– 04, the scheme allows 1 Guru to train up to 10 shishyas in music/dance and 18 shishyas in theatre. The minimum age for shishyas is 3 years, and the scheme helps preserve traditional art forms through regular training.

Sol.18.(a) Statement 1, 2 and 4. The Women's Reservation Act 2023, linked to the 106th Constitutional Amendment Act, provides for 33% reservation for women in the Lok Sabha, State Legislative Assemblies, and the Legislative Assembly of the NCT of Delhi, including within SC/ST categories. This will be implemented after the next census and delimitation, and will be valid for 15 years (extendable). A new provision, Article 330A, has been added to enable this. India, as a CEDAW signatory, has long supported gender equality. Earlier versions of the Women's Reservation Bill were proposed in 1996, 1998, 1999, and 2008, but lapsed due to Lok Sabha dissolutions.

Sol.19.(a) Karnataka. The Sacred Ensembles of the Hoysalas, are located

in Karnataka and include three iconic temples: Chennakeshava Temple (Belur), Hoysaleswara Temple (Halebidu), and Keshava Temple (Somanathapura). Built in the 12th–13th centuries, these temples showcase intricate carvings, star-shaped platforms, and a blend of Dravidian, Vesara, and Nagara architectural styles. Made of soft soapstone, they feature detailed sculptures based on mythology and daily life. The temples mark a shift toward Hinduism and are uniquely signed by sculptors, reflecting both artistic excellence and religious significance.

Sol.20.(a) Only 1. The Pradhan Mantri Jan Vikas Karyakram (PMJVK), launched in 2018, is a Central Sector Scheme administered by the Ministry of Minority Affairs. It aims to improve socio-economic infrastructure for minority communities by focusing on education, health, and skill development, and bridging the gap between national averages and minority community development. Additionally, the Saksham and Pragati Scholarship Schemes, implemented by AICTE, support differently - abled and girl students in technical education. The Beti Bachao Beti Padhao campaign, launched in 2015, is a joint initiative promoting girl child education and empowerment.

Sol.21.(c) A, B, C, D. The Green Revolution in India began in 1966–67 under the leadership of M.S. Swaminathan and aimed to boost agricultural productivity using High-Yielding Variety (HYV) seeds, mechanization, chemical inputs, and irrigation. Initially focused on wheat in Punjab, Haryana, and Western Uttar Pradesh, it made India self-sufficient in food, especially in wheat and rice. However, it also caused negative effects like soil degradation, overuse of water and chemicals, and regional disparities in agricultural growth.

Sol.22.(b) The 42nd Constitutional Amendment Act, 1976, often called the "Mini Constitution", brought major changes to the Indian Constitution. It added the words "socialist," "secular," and "integrity" to the Preamble, introduced Fundamental Duties, limited judicial review, and made the President bound by Cabinet advice. It also extended the tenure of legislatures from 5 to 6 years and added provisions for tribunals. The 45th Amendment Act, 1980 focused on legislative reservations, extending the reservation of seats for SCs and STs in the Lok Sabha and State Assemblies until 1990, and made changes to the 10th Schedule, dealing with disqualification due to defection.

Sol.23.(c) Both A and B are true. In common law systems like India, the UK, and the USA, judicial decisions are based on precedent and can create new laws through interpretation. In contrast, quasi-judicial bodies (like tribunals) are not bound by precedent and apply existing laws without creating new ones. Judicial bodies are part of the judiciary, while quasi-judicial bodies operate within the administrative structure. Examples include NGT (National Green Tribunal) and Income Tax Appellate Tribunal (ITAT).

Sol.24.(a) 1, 2, 3, and 4. The Bhagavad Gita, part of the Mahabharata, is a dialogue between Lord Krishna and Arjuna on the battlefield of Kurukshetra, containing 700 verses on dharma, karma, and bhakti, offering spiritual wisdom. Adi Shankaracharya (8th century CE), born in Kalady, opposed ritualism, unified six sects under Shanmata, and established four mathas across India, founding the Dashanami Sampradaya. The Rigveda, the oldest Veda, has 1,028 hymns dedicated to nature gods like Agni, Indra, and Varuna, and forms the base of Hindu rituals. The Natya Shastra, by Bharata, is an ancient text on Indian performing arts, linking art with spiritual expression.

Sol.25.(a) Jalal-ud-din Firuz Khilji. The Mamluk Dynasty, founded by Qutb-ud-din Aibak in 1206 AD, was the first to rule the Delhi Sultanate until it was overthrown in 1290 by Jalal-ud-din Khilji, who started the Khilji Dynasty. The powerful ruler Alauddin Khilji expanded the empire, introduced soldier ID and horse branding systems, and carried out key reforms like abolishing hereditary land grants, increasing taxes, and regulating markets. The Khilji Dynasty ended in 1320, giving way to the Tughluq Dynasty founded by Ghiyas-ud-din Tughluq .

Sol.26.(b) 1, 2 and 3. The Tehri Dam, the highest dam in India at 260.5 meters, is built on the Bhagirathi River in Uttarakhand and serves irrigation, hydropower, and drinking water needs. The Kakrapar Atomic Power Plant (KAPS), located in Gujarat's Tapi district, is operated by NPCIL and houses Pressurized Heavy Water Reactors (PHWRs). The Narora Atomic Power Station in Uttar Pradesh's Bulandshahr district has two PHWRs of 220 MW each and is important for the Northern Grid. Other notable dams include Bhakra Dam on the Sutlej River and Sardar Sarovar Dam on the Narmada River. Among nuclear plants, Tarapur was the first in India, Kudankulam is the largest by capacity, and Rajasthan Atomic Power Station (RAPS) is one of the oldest.

Sol.27.(c) 82%. According to the Census 2011, the overall literacy rate in India was 74.04%, with male literacy at 82.14% and female literacy at 65.46%. The top three states/UTs in literacy were Kerala (94.00%), Lakshadweep (91.85%), and Mizoram (91.33%), while the lowest literacy rates were found in Bihar (61.80%), Arunachal Pradesh (65.38%), and Rajasthan (66.11%).

Sol.28.(b) Buddhism. Ullambana is a significant Buddhist festival in East and Southeast Asia, also called the Ghost Festival or Ancestor Day. Based on the Ullambana Sutra, it tells the story of Maudgalyayana, a disciple of Buddha who seeks to free his mother from suffering among hungry ghosts. The festival involves ancestor worship, charity, and ritual offerings during the monks' Vassa retreat to help departed souls attain peace. It is celebrated on the 15th day of the 7th lunar month (usually August) in countries like China, Japan, Vietnam, and Taiwan. Similar ancestral festivals exist in Hinduism (Pitru Paksha) and Jainism (Paryushana and Samvatsari).

Sol.29.(d) 1, 2 and 3. The 74th Constitutional Amendment Act, 1992 gave constitutional status to Urban Local Bodies (ULBs) and introduced Wards Committees for cities with over three lakh people to ensure grassroots participation. It added the 12th Schedule listing 18 key municipal functions like urban planning and waste management. Urban local bodies are classified into Municipal Corporations, Municipal Councils, and Nagar Panchayats based on population. The Act promotes decentralized governance and complements the 73rd Amendment for rural local bodies, both strengthening India's democratic decentralization.

Sol.30.(d) Radhagupta. Ashoka became the third Mauryan emperor around 273 BCE, after a succession struggle supported by his minister Radhagupta. Under Ashoka, the Mauryan Empire expanded from Afghanistan to Bangladesh. His most notable military campaign was the Kalinga War (261

BCE), which caused massive devastation and led to Ashoka's conversion to Buddhism and a focus on peaceful governance. Ashoka's edicts, inscribed on pillars and rocks, promote peace, tolerance, and welfare. The Lion Capital of Ashoka at Sarnath is India's national emblem, featuring the Ashoka Chakra, which is at the center of the national flag symbolizing Dharma and progress.

Sol.31.(b) 1 and 4 only. As per Article 75, the Prime Minister must be a member of either House of Parliament or get elected within six months of appointment. The Vice-President is the ex-officio Chairman of the Rajya Sabha, while the Speaker chairs the Lok Sabha. The Governor, appointed by the President under Articles 155 & 156, has no fixed tenure and largely performs ceremonial duties, with real powers resting with the Chief Minister. The President's pardoning powers, under Article 72, apply to Union law, death sentences, and court-martials. The five types of pardoning powers are pardon, commutation, remission, respite, and reprieve, aimed at balancing justice with mercy and correcting judicial errors.

Sol.32.(d) 1, 2, and 4 only. The Brahmaputra River, known as Tsangpo in Tibet, originates there and flows into India through Arunachal Pradesh and Assam. The Godavari River, originating from Trimbakeshwar (Maharashtra), is the second-longest river in India and is called the "Dakshina Ganga." The Indus River rises near Lake Mansarovar on the Tibetan Plateau and flows through Ladakh into Pakistan, with major tributaries like Jhelum, Chenab, Ravi, Beas, and Sutlej. The Krishna River, from Mahabaleshwar, is the fourth-largest in basin size and flows through Karnataka, Telangana, and Andhra Pradesh.

Sol.33.(c) 1 and 2 only. The Human Development Index (HDI), developed by the UNDP, measures development using life expectancy, education levels, and GNI per capita. Kerala ranks highest among Indian states due to its high literacy, life expectancy, and strong public services. India ranks 130th out of 193 countries in the 2025 UNDP Human Development Report. Iceland tops the list, while South Sudan is last. The report stresses the importance of inclusive, human-centric AI policies to promote development and avoid widening inequalities or job loss.

Sol.34.(c) 11 cm. The Dancing Girl is a small bronze statue from the Indus Valley Civilization, discovered at Mohenjo - daro by Ernest Mackay in 1926. Standing 10.5 to 11 cm tall, it was made using the lost-wax (cire perdue) method. The figure shows a confident young girl with bangles on her arm, suggesting artistic expression like dance and music in Harappan culture. It is currently housed in the National Museum, New Delhi. Another notable Indus Valley artifact is the Priest-King, made of steatite.

Sol.35.(d) 1, 2 and 3. The Eighth Schedule of the Indian Constitution currently includes 22 scheduled languages. It originally had 14 languages, with Konkani, Manipuri, and Nepali added in 1992 through the 71st Amendment, and four more (Bodo, Dogri, Maithili, Santhali) added in 2003 via the 92nd Amendment. Sanskrit, a classical language used in Hinduism, Buddhism, and Jainism, is also included. Articles 344 and 351 govern its provisions, supporting the promotion and official development of these languages.

Sol.36.(b) 1, 2, 3 and 4. The Human Development Index (HDI), developed by the UNDP, measures development in three areas: health (life expectancy), education (years of schooling), and standard of living (GNI per capita). In the 2025 Human Development Report titled "A Matter of Choice: People and Possibilities in the Age of AI", India is ranked 130th out of 193 countries, as per the UNDP. Iceland secured the top spot with an HDI of 0.972, while South Sudan ranked last with an HDI of 0.388. Historically, women in India have lower HDI than men due to inequalities. The Inequality-adjusted HDI (IHDI) reflects these disparities more accurately.

Sol.37.(b) A, C only. Godavari and Krishna are east-flowing rivers that drain into the Bay of Bengal and form deltas. Tapi and Narmada are west-flowing rivers that drain into the Arabian Sea and form estuaries. Godavari, the longest river in peninsular India (~1,465 km), originates from Trimbak Plateau, Maharashtra. Krishna also originates from Mahabaleshwar, Maharashtra, with tributaries like Bhima and Tungabhadra. Tapi originates in Madhya Pradesh, and Narmada from the Amarkantak Plateau, flowing between the Vindhya and Satpura ranges.

Sol.38.(d) National Disposable Income. Net Indirect Taxes (NIT = Indirect Taxes – Subsidies) are added to the Net National Product (NNP) at factor cost to get National Income at market price. To calculate National Disposable Income (NDI), we add Net Indirect Taxes and Net Current Transfers (like remittances, grants) to NNP at factor cost. NDI is the total income available to the nation for spending or saving. Net Indirect Taxes are macroeconomic and not part of personal or disposable income. Personal Disposable Income = Personal Income – Personal Taxes (like income or property tax).

Sol.39.(a) 1 and 2 only. The Vijayanagara Empire was founded in 1336 CE by Harihara I and Bukka Raya I in South India, with its capital at Hampi. It was ruled by 16 kings from 4 dynasties. The most famous ruler, Krishnadevaraya of the Tuluva Dynasty (1509–1529), led the empire to its peak. He promoted Telugu, Sanskrit, and Kannada literature and authored Amuktamalyada. The Battle of Talikota (1565) against the Deccan Sultanates led to the destruction of Hampi and the decline of the empire. The Aravidu Dynasty continued rule from Penukonda and Chandragiri until the empire ended around 1646 AD.

Sol.40.(b) 2, 3, and 4. The Indian National Congress (INC) was founded in 1885 by A.O. Hume, with W.C. Bonnerjee as its first President. The All India Muslim League was formed in 1906 in Dhaka, supporting separate electorates, which were accepted by the INC in the Lucknow Pact (1916). The All India Kisan Sabha (AIKS) was established in 1936 in Lucknow under Swami Sahajanand Saraswati, focusing on peasant rights and agrarian reforms. The Ghadar Party was founded in 1913 in San Francisco by Punjabi Indians like Lala Har Dayal and Sohan Singh Bhakna, aiming for an armed revolution to overthrow British rule.

Sol.41.(c) Usual time taken by Janaki to reach office = 1 hr 30 min = $\frac{3}{2}$

New time taken by Janaki to reach office = 1 hr 25 min 30 sec = $1 + \frac{25}{60} + \frac{30}{3600}$

= $\frac{57}{40}$

Let the distance and usual speed of Janaki be D and S respectively

Then, t = $\frac{D}{S} = \frac{3}{2}$

For statement 1 ,

$\Rightarrow \frac{\frac{3}{10}D}{\frac{6}{7}S} + \frac{\frac{7}{10}D}{\frac{7}{6}S} = \frac{57}{40}$

Putting $\frac{D}{S} = \frac{3}{2}$, we have ;

$\Rightarrow \frac{3}{2}(\frac{7}{20} + \frac{3}{5}) = \frac{57}{40} \Rightarrow \frac{3}{2} \times \frac{19}{20} = \frac{57}{40}$

$\Rightarrow \frac{57}{40} = \frac{57}{40}$

LHS = RHS

For statement 2 ,

$\Rightarrow \frac{\frac{5}{8}D}{\frac{5}{4}S} + \frac{\frac{3}{8}D}{\frac{5}{6}S} = \frac{57}{40}$

Putting $\frac{D}{S} = \frac{3}{2}$, we have ;

$\Rightarrow \frac{3}{2}(\frac{1}{2} + \frac{9}{20}) = \frac{57}{40}$

$\Rightarrow \frac{3}{2} \times \frac{19}{20} = \frac{57}{40} \Rightarrow \frac{57}{40} = \frac{57}{40}$

LHS = RHS

For statement 3 ,

$\Rightarrow \frac{\frac{7}{9}D}{\frac{5}{6}S} + \frac{\frac{2}{9}D}{\frac{20}{3}S} = \frac{57}{40}$

Putting $\frac{D}{S} = \frac{3}{2}$, we have ;

$\Rightarrow \frac{3}{2}(\frac{14}{15} + \frac{1}{30}) = \frac{57}{40}$

$\Rightarrow \frac{3}{2} \times \frac{29}{30} = \frac{57}{40} \Rightarrow \frac{29}{20} \neq \frac{57}{40}$

Clearly, we can see that statements 1 and 2 support the information provided, but statement 3 doesn't.

Sol.42.(b) For last financial year,

	Viraj	Rohan
Income(I)	m	n
Expenditure(E)	p	n
Saving		t

For current financial year,

	Viraj	Rohan
% change in I	+q%	+r%
% change in E	+2q%	+s%
Saving	u	v

From statement 1, we get ;
m = 8, n = 5, p = 4, q = 12.5, r = 40, s = 20, t = 10,000,u = 58,000, v = 24,000

	Viraj	Rohan
Income(I)	8	: 5
New income	$8 \times \frac{9}{8}$: $5 \times \frac{7}{5}$ = 9 : 7	
Expenditure(E)	4	: 5
New expenditure	$4 \times \frac{5}{4}$: $5 \times \frac{6}{5}$ = 5 : 6	

Let income and expenditure be x and y
9x - 5y = 58,000 --------(1)
7x - 6y = 24,000 --------(2)
5x - 5y = 10,000 --------(3)
Solving eqn(1) and (3), we get x = 12000 and y = 10,000
Putting the value of x and y in eqn(2) we have ;
7 × 12,000 - 6 × 10,000 = 24,000
24,000 = 24,000
LHS = RHS (satisfied)
From statement 2, we get ;

m = 10, n = 7, p = 6, q = 15, r = 40, s = 20, t = 7700 ,u = 21530, v = 14140

	Viraj	Rohan
Income(I) →	10	: 7
New income →	$10 \times \frac{23}{20}$: $7 \times \frac{7}{5}$	
	= 115	: 98
Expenditure(E) →	6	: 7
New expenditure →	$6 \times \frac{13}{10}$: $7 \times \frac{6}{5}$	
	= 13	: 14

Let income and expenditure be x and y
115x - 13y = 21530 -----(1)
98x - 14y = 14140 ------(2)
7x - 7y = 7700 ------(3)
Solving eqn(1) and (2), we get
x = 350 and y = 1440
Putting the value of x and y in eqn(3) we have ;
7(350 - 1440) = 7700
- 7,630 ≠ 7700
LHS = RHS (not satisfied)

Sol.43.(d) Distance = speed × time

Hence, required distance = $72.6 \times \frac{15}{60}$

= 18.15km

Sol.44.(d) Let the capacity of cask be x
ATQ,

$\frac{x - 108.75}{x} \times \frac{x - 87}{x} = \frac{3}{5}$

5(x - 108.75)(x - 87) = $3x^2$
Putting all the values given in the option one by one,option(d) gets satisfied.
So, x = 435 litres

Sol.45.(b) Total interest occurred

= $24550 \times \frac{22}{100}$ = ₹5401

Sol.46.(b) 40% = $\frac{2}{5}$

CP = 5 unit , SP = 7 unit
According to the question,
⇒ 28 × CP = x × SP

⇒ 28 × 5 = x × 7 ⇒ $x = \frac{28 \times 5}{7}$ = 20

Sol.47.(b) Let the two no's x and y be Ha and Hb respectively where a and b are coprimes
ATQ, (Ha × Hb) × H = 2520
H^3ab = 2520 = $(2^3 \times 3^2 \times 5 \times 7)$
The possible value of H = 2
For H = 2, ab = 315; possible pairs of (a, b) = (315, 1), (45, 7), (63, 5), (35, 9)
So, the total no of possible pairs of (x, y) = 4
Note : If we consider H = 1 then,
ab = 2520 $(2^3 \times 3^2 \times 5 \times 7)$
Possible pairs of (a, b) = $(2^3 \times 3^2 \times 5 \times 7,$ 1), $(2^3 \times 3^2 \times 5 , 7),(2^3 \times 3^2 \times 7, 5), (2^3 \times 5 \times 7, 9), (3^2 \times 5 \times 7, 8), (2^3 \times 3^2, 35), (2^3 \times 5,$

63), $(2^3 \times 7, 45)$
No of pairs of (x, y) = 8
Total no of pairs of (x, y) = 8 + 4 = 12

Sol.48.(a) Age of friend who left the group = 25 + (27 - 25) × 10 = 45 years

Sol.49.(d) Let original fraction = $\frac{x}{y}$

According to the question,
$\frac{125x}{90y} = \frac{25}{24} \Rightarrow \frac{x}{y} = \frac{3}{4}$ = 3 : 4

Sol.50.(a) 36 = $2^2 \times 3^2$
108 = $2^2 \times 3^3$
156 = $2^2 \times 3 \times 13$
HCF(36 , 108 , 156) = 12

Sol.51.(d) Concept used ;
Let Number be $a^p \times b^q \times c^r$. then
Total no of factors = (p + 1)(q + 1)(r + 1)
For statement 1;
As 11 is prime no then 2^{10} is the smallest natural number having exactly 11 factors
For statement 2,
2^{11}(2048) is not the smallest natural number having exactly 12 factors.
For eg, $2^2 \times 3^3$(108) has exactly 12 factors which is less than 2^{11}.
$2^5 \times 3^1$ (96) has also exactly 12 factors which is less than 2^{11}.
For statement 3,
As 13 is prime no then 2^{12} is the smallest natural number having exactly 13 factors.
So, we can conclude that statements 1 and 3 are true, but statement 2 is false.

Sol.52.(a) Rate compounded half yearly , then, rate = 11% , time = 2 cycle

so, Amount = $4000 \times \frac{111}{100} \times \frac{111}{100}$

= ₹4928.4

Sol.53.(d) 13.5% = $\frac{27}{200}$, 6.25% = $\frac{1}{16}$

Amount paid by Rohan through credit card = 40964 - 29064 = ₹11900
Actual amount through credit card

= $11900 \times \frac{16}{17}$ = ₹11200

If the part of the payment made through credit card would have been paid through cash. then

Required amount = $11,200 \times \frac{173}{200}$

= ₹9688
So, y = 29064 + 9688 = ₹38752
Sol.54.(d)

	Danny	Edwin	Fahim
Type A	a	a	a
Type B	b	b	b
Type C	c	c	c

Now, we have following equations ;

$2a - b - 12c = 8$ ----------- (1)
$2a - 6b - 6c = 14$ ---------- (2)
$a + b - 3c = 27$ ----------- (3)
Solving eqn(2) and (3), we get ;
$b = 5$
Solving eqn(1) and (2), we get ;
$6c - 5b = 6 \Rightarrow 6c - 25 = 6$
$\Rightarrow c = \dfrac{31}{6}$ which is not possible. as a, b, c
$\in n$(natural no)
Clearly, we can conclude that Assertion (A) is false and Reason (R) is true.

Sol.55.(b) Let the steamed momos and fried momos be 5x and 4x respectively
From statement 1 , we have ;
No of steamed momos = 5x × 2 = 10x
No of fried momos = 4x
From statement 2 , we have ;
4x + 13 > 5x (varied with different value of x)
Even the data in Statement 1 and Statement 2 both taken together are not sufficient to answer the question. So the correct answer is (b).

Sol.56.(c) $44\% = \dfrac{11}{25}$
According to the question,
Age of Y = 25 unit and X = (25 + 11) = 36 unit
Hence, required % = $\dfrac{11}{36} \times 100 = 30.5\%$

Sol.57.(a)
Given, $a^3 - b^3 = 602$ and $a - b = 2$
$(a - b)^3 = a^3 - b^3 - 3ab(a - b)$
$(2)^3 = 602 - 3ab(2)$
$6ab = 594 \Rightarrow ab = 99$
Now, $a^3 - b^3 = (a - b)[a^2 + b^2 + ab]$
$602 = 2[a^2 + b^2 + 99]$
$a^2 + b^2 = 301 - 99 = 202$

Sol.58.(a)

Total work (1710)
Efficiency
A 9 (190 days)
B 6 (285 days)
C 5 (342 days)
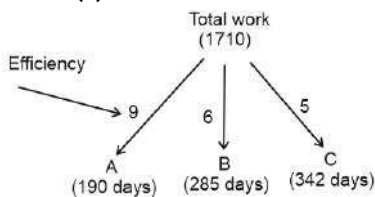
Efficiency of A + B + C = 20 unit
For first cycle
A , B and C work for 2 hours
So, total work done in first cycle(3 days)
= 2 × 20 = 40 unit
For second cycle
A , B and C work for 4 hours
So, total work done in second cycle
(3 days) = 4 × 20 = 80 unit
For third cycle
A , B and C work for 6 hours
So, total work done in third cycle(3 days)
= 6 × 20 = 120 unit

For fourth cycle
A , B and C work for 8 hours
So, total work done in fourth cycle(3 days) = 8 × 20 = 160 unit
And so on….
so, work done in 24 days
= 40 + 80 + 120 + 160 + 200 + 240 + 280 + 320 = 1440 unit
Remaining work = 1710 - 1440 = 270 unit
On 25th day (9th cycle) Work done by A in 18 hours
= 18 × 9 = 162 unit
Remaining work = 270 - 162 = 108 unit
On 26th day (9th cycle) Work done by B in 18 hours
= 18 × 6 = 108 unit
Remaining work = 108 - 108 = 0 unit
Hence, time taken to complete the whole work = 26 days

Sol.59.(b) Let 1st , 2nd and 3rd natural numbers are x, y and z respectively,
According to the question,
$\dfrac{1}{3}x = \dfrac{2}{5}y$----------(1)
And, $\dfrac{2}{3}y = \dfrac{1}{7}z$----------(2)
From equation (1) and (2) we get;
So, x : y : z = 18 : 15 : 70
Let, x = 18a , y = 15a and z = 70a
Now, according to the question,
$5z + \dfrac{1}{2}x^2 = 1348$
$\Rightarrow 5 \times 70a + \dfrac{1}{2} \times 324a^2 = 1348$
$\Rightarrow 162a^2 + 350a - 1348 = 0$
$\Rightarrow 81a^2 + 175a - 674 = 0$
$\Rightarrow 81a^2 + 337a - 162a - 674 = 0$
$\Rightarrow a(81a + 337) - 2(81a + 337) = 0$
$\Rightarrow (a - 2)(81a + 337) = 0 \Rightarrow a = 2$
Hence, second number (15a) = 30

Sol.60.(c) 22% of x = 66% of y
x = 3y ⇒ x : y = 3 : 1

Sol.61.(a) Rank of Pratik from Top = 22
Rank of Pratik from bottom = 27
Total = Rank from top + rank from bottom - 1
Total = 22 + 27 - 1 = 48

Sol.62.(b)
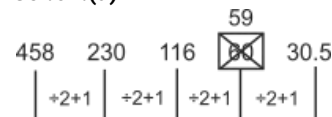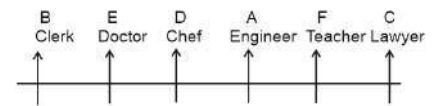Ⱥ ᠌2 m q ᠌5 Y ᠌q

Sol.63.(c) Yen, Euros and yuan all are the currencies of respective countries but Beijing is a city and the capital of China. So Beijing is odd one.
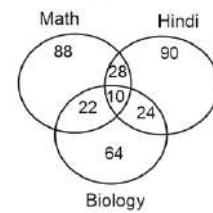
Sol.64.(a)

```
             59
458   230   116  ⌧  30.5
  ÷2+1  ÷2+1  ÷2+1  ÷2+1
```

Sol.65.(b)

B   E   D   A   F   C
Clerk   Doctor Chef Engineer Teacher Lawyer

The doctor is sitting at third place to the left of teacher and Engineer is sitting to the immediate right of chef.
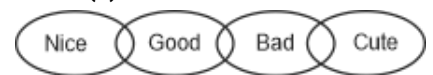Only II and III are true.

Sol.66.(b)

Math   Hindi
88   90
     28
  10
22   24
     64
     Biology

The number of students who had taken mathematics courses only
= 88 - (22 + 28 - 10) ⇒ 88 - (40) = 48

Sol.67.(d)

Nice Good Bad Cute

Only conclusion II follows.

Sol.68.(b) From dice 1 and dice 2 numbers 22 and 39 are common so the number opposite to '37' is '33'.

Sol.69.(b) Logic :
$(2\text{nd num})^2 + 1\text{st num} + 1 = 3\text{rd num}$
$(24, 12, 169) :- (12)^2 + 24 + 1$
$= 144 + 24 + 1 = 169$
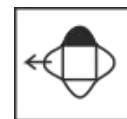$(66, 14, 263) :- (14)^2 + 66 + 1$
$= 196 + 66 + 1 = 263$
Similarly,
$(47, 15, 273) :- (15)^2 + 47 + 1$
$= 225 + 47 + 1 = 273$

Sol.70.(c) From the above information we can conclude that the function of liver is also to remove excess bilirubin from the blood.

Sol.71.(b)

Sol.72.(d) Given : 15 A 10 B 24 D 12 C 5
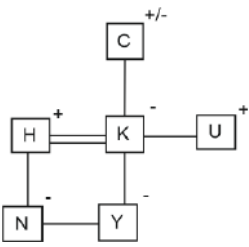After applying the changes given in the question we get,
15 + 10 × 24 ÷ 12 - 5
15 + 20 - 5 = 30

Sol.73.(d)

```
                           H
X    Z    B    D    F     ⌧
  +2   +2   +2   +2   +2
```

Sol.74.(b) From the assertion H is U's sister's husband it is only possible from Reason B.

Sol.75.(b) Logic : Sum of the place value of alphabets = Number
PLOT :- 16 + 12 + 15 + 20 = 63
SOUP:- 19 + 15 + 21 + 16 = 71
LIKE :- 12 + 9 + 11 + 5 = 37
MINT:- 13 + 9 + 14 + 20 = 56
But,
DOSE:- 4 + 15 + 19 + 5 = 43(Not 53)

Sol.76.(d) The correct order will be:
Dhanbad (1) → Jharkhand (4) → India (2) → World (3) → Universe (5)

Sol.77.(d) The marks of the students are given below. Total marks = 100
P = 50 , R = 50 - 5 = 45 , U = 1.5 × 50 = 75
T : U = 4 : 5
5 unit → 75 ,1 unit → 15 so 4 unit → 60
T = 60 , Q = 60 + 20 = 80
T : S = 2 : 3
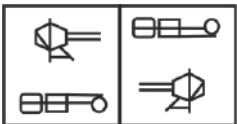2unit → 60 ,1 unit → 30 so 3 unit → 90
S = 90
S gets 90 % marks so statement I is true.
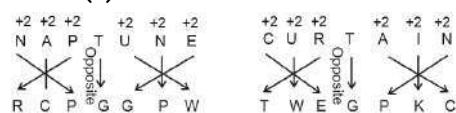Ratio between P and Q = 50 : 80 = 5 : 8
Statement II is also true.

Sol.78.(d) Logic :- In all other options the figures are water images of each other except option d .
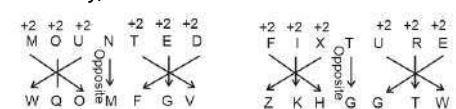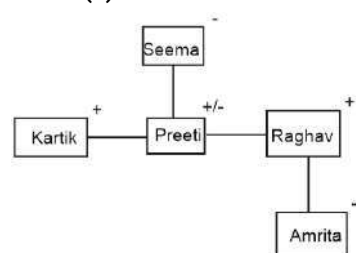

Option d is odd one.

Sol.79.(b)

Similarly,

Sol.80.(b) From statement 1

From this we can see that Kartik is the Uncle of Amrita.

From statement 2 - From this statement

there is no relation between Kartik, Seema and Prashant.
Data in Statement I alone is sufficient to answer the question while data in statement II is not.

Sol.81.(a) has said all this yet
'Has' will be removed and only the past form 'said' will be used to indicate an action that happened in the past. Hence, 'said all this yet' is the most appropriate answer.

Sol.82.(b) 316254
Sentence 3 will be the starting line as it introduces the characters ("the boys") and the new setting ("misty clouds"). Sentence 1 tells us more about the setting, describing the "dazzling white light" they are now in. So, sentence 1 will follow sentence 3. Sentence 6 adds to the scene by describing its tranquil atmosphere. So, sentence 6 will follow sentence 1. Sentence 2 introduces the main action within this setting: the boys find a "fountain" and collect an "elixir." So, sentence 2 will follow sentence 6. Sentence 5 marks the arrival of a new character, the "Formless One," immediately after the boys' action. So, sentence 5 will follow sentence 2. Sentence 4 concludes the story by showing the boys giving the elixir to the "Formless One" ("him"), causing a transformation. So, sentence 4 will follow sentence 5. Going through the options, option (b) has the correct sequence.

Sol.83.(b) Only statement C correctly uses the idiom.
The idiom "to pour oil on troubled waters" means to try to calm a difficult or angry situation. Statement C, "The government ordered a judicial enquiry into the communal riots in a bid to pacify the situation," accurately gives this meaning. Hence, option (b) is the most appropriate answer.

Sol.84.(a) A-2, B-1, C-4, D-3
Connoisseur- one who is a critical judge of any art.
Almanac- an annual calendar that contains important dates and time.
Utopia- an ideally perfect state.
Philistine- one who does not appreciate art, literature or music.

Sol.85.(b) Better late than never- It's better to finish something late than to never do it at all.
E.g.- He finally submitted the assignment a day after the deadline. Better late than never.

Sol.86.(c) Sentence C
Sentences A, B, and D all focus on the theme of cutting greenhouse gas emissions to mitigate the effects of global warming and the scientific research supporting this. Sentence C, however, simply lists some of the dangerous potential aspects of climate change (loss of Arctic sea ice and permafrost) without directly relating to the theme of emission cuts as a solution.

Sol.87.(b)
Slim- slender or gracefully thin.
Corpulent- fat or having a large, bulky body.
Aerial- existing, happening, or operating in the air.
Anecdotist- a person who is skilled at telling stories or anecdotes.
Narrator- a person who recounts the events of a story.

Sol.88.(d) He has been read through
'Has been' is a helping verb of present perfect continuous tense and 'has been + V_{ing}' is the correct grammatical structure. Hence, 'He has been reading through' is the most appropriate answer.

Sol.89.(c) A-3, B-4, C-1, D-2
Hallucination- a false perception of things that do not really exist.
Reverie- a state of absent-minded daydreaming.
Introspection- the act of looking into one's mind.
Nostalgia- pleasure mixed with sadness at recalling happy moments in the past.

Sol.90.(c) Options ii and iii are correct An "embargo" is an official ban on trade or other commercial activity with a particular country. Therefore, if a trade embargo has impacted export revenue, it means that trading in certain goods has been temporarily stopped (ii) and the government has put restrictions on trade with some countries (iii).

Sol.91.(d) through an branches, casting dappled The error lies in the use of the article "an" before "branches." Since "branches" is a plural noun, the correct article to use is "the". Hence, 'through the branches, casting dappled' is the most appropriate answer.

Sol.92.(c) Only option iii is correct.
The word "prodigal" means someone who spends money or resources recklessly and wastefully. Therefore, the statement means he squandered his wealth recklessly and lost all he had.

Sol.93.(d) Ambiguous- open to more

than one interpretation or not having one obvious meaning.

Equivocal- uncertain, questionable, or open to several different interpretations.

Unanimous- that everyone is in full agreement.

Occlude- to stop, close up, or obstruct a passage.

Obstruct- to block or get in the way of something.

Sol.94.(c) PQSR

Sentence P will come after the opening line as it describes the origin of her acting journey: discovering her passion and starting to audition. This is the earliest event in the narrative. Sentence Q tells us about her first big success in "Superbad," which came after the initial period of auditioning and facing rejections mentioned in P. It marks her entry into the mainstream. So, sentence Q will follow sentence P. Sentence S describes the phase of her career after her breakthrough, where she focused on improving her skills ("honing her craft") and taking on different roles to become a "leading actress." This hard work is what bridges the gap between a first hit and major awards. So, sentence S will follow sentence Q . Sentence R describes the result of all that hard work: her career "skyrocketing" and winning an Academy Award. This is the pinnacle of her achievements and the climax of the narrative before the concluding summary. So, sentence R will follow sentence S. Hence, option (c) has the correct sequence.

Sol.95.(d) No error

The given sentence is grammatically correct.

Sol.96.(a) 1-indigenous,2 - contemporary, 3 - enigmatic, 4 - tableau

Blank 1: indigenous is correct because it means native to a place, which accurately describes the Adivasi tribes as India's original inhabitants.

Blank 2: contemporary is correct because it means "modern" or "current." The sentence contrasts the tribes' traditional ways with the trends of the modern world.

Blank 3: enigmatic is correct because it means mysterious and intriguing. This word fits the description of a unique culture with its own distinct language, religion, and customs.

Blank 4: tableau is correct because it means a "picturesque scene." It creatively describes the vibrant and widespread presence of tribal communities across India as a beautiful, living picture.

Sol.97.(d) Protection- the state of being kept safe from harm or injury.

Aegis- to the protection, backing, or support provided by a person or organization.

Aggravate- to make a problem or injury worse.

Spread- to extend over a larger area.

Intensify- to become or make more intense.

Sol.98.(c) Only conclusion (ii) is correct The idiom "splitting hairs" means to argue about or pay too much attention to small, unimportant details. Conclusion (ii), "Making peevish criticisms on trivial matters will not lead us anywhere," conveys this meaning.

Sol.99.(a) Go down like a lead balloon- to be received badly by an audience.

E.g.- His attempt at making a joke during the meeting went down like a lead balloon.

Sol.100.(c) blank 2

The paragraph sets up a contrast between how life "should" work according to divine justice and how it often appears. Blank 1 introduces the first side of this contradiction (the good person suffering). The provided sentence, "On the other hand, we find persons engaged in worst types of corrupt practices living in peace and prosperity," offers the perfect contrast to the preceding sentence. The examples that follow in the paragraph then illustrate both sides of this contradiction.

IB ACIO 2024
17/01/2024 (2nd Shift)

Current Affairs

Q.1. Consider the statement about United in Science report 2023 (Sustainable Development Edition) :-
1. To get on track to meet the Paris Agreement goals of limiting warming to well below 2 °C and preferably 1.5 °C
2. Fossil fuel CO_2 emissions increased 1% globally in 2022 compared to 2021
3. Preliminary estimates from January-June 2023 show a further 0.8% rise of fossil fuel CO_2 emissions.
Which of the statement given above is/are correct?
(a) Statement 1 and 2
(b) Statement 1 and 3
(c) Statement 2 and 4
(d) Statement 3 and 4

Q.2. Who are the eligible beneficiaries of Abua Awas Yojna ?
A) Homeless or unattended individuals.
B) Particularly Vulnerable Tribal Group (PVTG) members will receive priority.
C) Current or retired government or semi - government employess.
(a) A, B   (b) A, C   (c) A, B, C   (d) B, C

Q.3. Consider the following statement about Indian Army:
1. Indian Army has inaugurated a Vertical Wind Tunnel (VWT) in October 2023
2. This tunnel is Indian Army's first Vertical Wind Tunnel (VWT)
3. This tunnel was inaugurated at the Special Forces Training School (SFTS) in Maharashtra
Which of the statement given above is/are correct?
(a) Statement 2
(b) Statement 1 and 2
(c) Statement 3 and 4
(d) All are correct

Q.4. Kodava Hockey Festival is held in _____.
(a) Karnataka   (b) Tamil Nadu
(c) Andhra Pradesh   (d) Telangana

Q.5. As of November 2023, the number of Ayushman Bharat Health and Wellness Centers in India is_____ approximately.
(a) 1 lakh   (b) 2 lakh
(c) 1.6 lakh   (d) 1.2 lakh

Q.6. _____ is a Kalamkari artist from Gujarat won the Padma Shree in 2023.
(a) Shri Kapil Dev Prasad
(b) Shri Ramesh Parmar
(c) Shri Bhanubhai Chitara
(d) Shri Dilshad Hussain

Q.7. Consider the following statement about Jan Jatiya Gaurav Divas 2023:
1. Pan-India celebrations marked the Jan Jatiya Gaurav Divas on 11th November 2023
2. This event is to pay tributes to Bhagwan Birsa Munda on his birth anniversary
3. Prime Minister launched PM JANMAN (PM - Janjati Adivasi Nyaya Maha Abhiyan) during this program.
4. PM also flagged off 'Viksit Bharat Sankalp Yatra' during this program
Which of the statement given above is/are correct?
(a) All are correct
(b) Statement 2, 3 and 4
(c) Statement 1, 2 and 3
(d) Statement 1, 3, 4

Q.8. Consider the following statement about Center of Excellence (CoE) named ATMAN:
1. Full form of the ATMAN is Advanced Technologies for Monitoring Air-quality iNdicators
2. The Indian Institute of Technology, Delhi has established this in November 2023
3. It focuses on building indigenous low-cost sensor manufacturing and AI/ML capabilities to enhance air quality
4. It aims to translate sustainable technologies and business models into practical products and services with cutting edge technology.
Which of the statement given above is/are correct?
(a) Statement 2, 3 and 4
(b) Statement 1, 2 and 3
(c) Statement 1, 3, 4
(d) All are correct

Q.9. Which of the following won the 'NATIONAL TECHNOLOGY AWARD -TRANSLATIONAL RESEARCH' in National Technology Week 2023 ?
(a) Ritu Trivedi
(b) Jaysingh Krushnarao Chavhan
(c) Govindaraju Thimmaiah
(d) Nimisha Brahmbhatt

Q.10. Consider the following statement about ICC Men's Cricket World Cup 2023:
1. Virat Kohli has been named as the player of the tournament.
2. Mohammed Shami was the Highest Wicket Taker in the tournament
3. South Africa hosted this tournament
Which of the statement given above is/are correct?
(a) Statement 1 and 2
(b) Only statement 2
(c) Only statement 3
(d) All are correct

Q.11. Consider the following statement about Global Hunger Index report 2023:
1. India ranks 111th out of the 125 countries
2. According to the report India has the highest child wasting rate in the world
3. The score of India in the Global Hunger Index-2023 is 34.6%
4. Rate of undernourishment in India is 24.7%
Which of the statement given above is/are correct?
(a) Statement 2, 3 and 4
(b) Statement 1 and 2
(c) All are correct
(d) Statement 1, 2 and 4

Q.12. Consider the following statement about "National Family Health Survey 2023-24":
1. It is sixth survey of NFHS series
2. It was provided by the ICMR and the National AIDS Research Institute (NARI), Pune
3. Assistance for some of the Clinical, Anthropometric, and Biochemical (CAB) tests was provided by the ICMR and the National AIDS Research Institute (NARI), Pune
Which of the statement given above is/are correct?
(a) Statement 2 and 3
(b) Statement 1 and 2
(c) statement 2
(d) All are correct

Q.13. Consider the following statement about Climate Change Performance Index (CCPI, 2023): -
1. India improves 2 ranks in CCPI 2023
2. This report was published by German Watch, New Climate Institute and Climate Action Network International based in Germany.
3. The first, second, third and fourth ranks were not awarded to any country
4. India was best among the G20 countries.
Which of the statement given above is/are correct?
(a) Statement 1, 3, 4
(b) Statement 2, 3 and 4
(c) Statement 1, 2 and 4
(d) All are correct

Q.14. Consider the following statement about "Surat" warship:
1. On 6th October, Prime Minister Narendra Modi unveiled the crest of the Indian Navy's warship 'Surat.'
2. It was the part of the project 15B
3. 'Surat' holds the distinction of being the second warship named after a city in Gujarat.
4. India purchased this warship from Japan

Which of the statement given above is/are correct ?
(a) Statement 2
(b) All are correct
(c) Only Statement 3 and 4
(d) Statement 1 and 2

Q.15. Who among the following is appointed as 25th Director General of Indian Coast Guard ?
(a) Virender Singh Pathania
(b) Krishnaswamy Natarajan
(c) Rajendra Singh
(d) Rakesh Pal

Q.16. The Securities and Exchange Board of India (SEBI) announced a crucial reduction in the time period for listing shares in public issues from _____ (where T is the issue closing date)
(a) "T + 8" to "T + 4"   (b) "T + 6" to "T + 3"
(c) "T + 4" to "T + 2"   (d) "T + 2" to "T"

Q.17. Match the list 1 and list 2 and select the correct answer using the code given below.

List 1 (Launcher)	List 2 (Satellite)
A. PSLV-C57	1. EOS-06
B. PSLV-C56	2. TeLEOS-2
C. PSLV-C55	3. DS-SAR
D. PSLV-C54	4. Aditya-L1

(a) A-2 B-3 C-4 D-1   (b) A-4 B-2 C-1 D-3
(c) A-4 B-3 C-2 D-1   (d) A-2 B-3 C-1 D-4

Q.18. As per November 2023,_____ is the third largest country in the world in ethanol production.
(a) Brazil (b) Thailand (c) India (d) USA

Q.19. Who became the first Indian man to win a gold medal in 3000m steeplechase at the Asian Games?
(a) Naveen Kumar   (b) Madan Singh
(c) Avinash Sable   (d) Gopal Saini

Q.20. Which of the following is the cleanest city in India in 2023 ?
(a) Indore   (b) Surat
(c) Ahmedabad   (d) Mysuru

General Studies

Q.21. Consider the following statements:

1. Akbar abolished Jizya, the tax on non-Muslims, in 1564.
2. The Mansabdari system, a grading of civil and military officials, was introduced by Shah Jahan.
3. Aurangzeb was the last of the prominent Mughal emperors and his reign marked the beginning of the decline of the Mughal Empire.

Which of the statements above is/are correct?
(a) 1 and 2 only   (b) 1, 2, and 3
(c) 1 and 3 only   (d) 2 and 3 only

Q.22. Consider the following statements:
1. The 73rd Constitutional Amendment Act provided a constitutional status to urban local bodies.
2. The Panchayats (Extension to Scheduled Areas) Act extends the provisions of Panchayats to the tribal areas of twelve states.
3. The National Panchayati Raj Day is celebrated on April 24th every year in India.

Which of the statements above is/are correct?
(a) 3 only   (b) 3 and 4 only
(c) 2 only   (d) 1 only

Q.23. Which of the following are Desert Rivers which flow for some distance and are lost in the desert ?
(a) Rukni   (b) Katakhal
(c) Rupen   (d) Dhaleswari

Q.24. Consider the following statements:
1. The Pradhan Mantri Awas Yojana Gramin (PMAY-G) had been devised in line with Government's commitment to provide 'Housing for All' by 2021 in the rural areas.
2. The Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) seeks to alleviate rural poverty through the promotion of diversified and gainful self- employment.
3. The Sansad Adarsh Gram Yojana (SAGY) encourages Members of Parliament to develop model villages.
4. The e-Panchayat project is an initiative for the digitization of all the Panchayats in the country, enhancing transparency and accountability.

Which of the statements above is/are correct?
(a) 1, 3, and 4 only   (b) 1, 2, and 3 only
(c) 2, 3, and 4 only   (d) 1, 2, 3 and 4

Q.25. Which of the following dynasty is also known as the slave dynasty?
(a) Khilji Dynasty   (b) Lodi Dynasty
(c) Mamluk Dynasty (d) Tughluq Dynasty

Q.26. Consider the following statements:
1. The Council of Ministers is collectively responsible to the Lok Sabha.
2. The total number of Ministers, including the Prime Minister, in the Council of Ministers shall not exceed twenty percentage of the total number of members of the House of the People.
3. The President can proclaim a national emergency only after receiving a written recommendation from the Cabinet.
4. The Council of Ministers must have members from both houses of Parliament.

Which of the statements above is/are correct?
(a) 1, 2, 3 and 4   (b) 2 and 4 only
(c) 1, 2 and 3 only   (d) 1 and 3 only

Q.27. The Harappan site of Indus Valley Civilization was excavated by _____ .
(a) Rai Bahadur Daya Ram Sahni
(b) N.G Majumdar
(c) Sir John Marshal
(d) R. D. Banerjee

Q.28. Which of the following state has the lowest sex ratio as per 2011 census?
(a) Kerala   (b) Mizoram
(c) Chhattisgarh   (d) Odisha

Q.29. Which of the following statements is correct?
A) Statutory bodies are established by an act of a parliament.
B) Constitutional bodies derive their powers from the constitution.
(a) Only A is true
(b) Both A and B is true
(c) Only B is true
(d) Neither A nor B is true

Q.30. Who assassinated King Brihadratha of the Mauryan Empire?
(a) Vasishka
(b) Kujula Kadphises
(c) Pushyamitra Sunga
(d) Kanishka

Q.31. In the Indian Constitution, from which country Appointment of state governors by the Centre is borrowed from?
(a) France   (b) Japan
(c) Canada   (d) United Kingdom

Q.32. Transportation and Storage falls under which sector of economic activity?
(a) Secondary sector   (b) Primary sector
(c) Service sector   (d) Tertiary Sector

Q.33. Match the following ports with their respective states and select the

correct answer using the codes/options given below the lists.

List-I (Port)	List-II (PORT)
A. Kandla	(i) Odisha
B. Haldia	(ii) West Bengal
C. Cochin	(iii) Kerala
D. Paradip	(iv) Gujarat

(a) A-ii B-iii C-i D-iv   (b) A-iii B-i C-iv D-ii
(c) A-i B-iv C-ii D-iii   (d) A-iv B-ii C-iii D- i

Q.34. Consider the following statements:
1) Bal Gangadhar Tilak was considered the Father of Indian Unrest by the British colonial authorities.
2) Dadabhai Naoroji is known as the Grand Old Man of India and was the first to calculate the national income of India.
3) Subhas Chandra Bose went on to lead the Indian National Army (INA) after resigning from the presidency of the Indian National Congress.
4) Bhagat Singh was one of the youngest freedom fighters of India and a member of the Hindustan Socialist Republican Association.
Which of the above statements are correct?
(a) 2, 3, and 4   (b) 1, 2, 3, and 4
(c) 1, 3, and 4   (d) 1, 2, and 3

Q.35. Consider the following statements:
1. The Hadith literature is a record of the sayings and deeds of the Prophet Muhammad.
2. Sufism is a mystical Islamic belief system that seeks direct personal experience with God.
3. The Five Pillars of Islam constitute the basic acts considered mandatory for Muslims.
4. The Chishti Order is one of the four major Sufi orders (tariqas) of Islam that originated in Chishti, a small town near Rawalpindi, Pakistan.
Which of the statements above is/are correct?
(a) 1, 3, and 4 only   (b) 2, 3, and 4 only
(c) 1, 2, and 3 only   (d) 1, 2, 3, and 4

Q.36. Which of the following were the negative effects of the green revolution:
A) Increased economic disparity among regions.
B) Deficiency of micronutrients.
C) Depletion of groundwater level.
D) Physical and chemical degradation of soil.
(a) A, C, D only   (b) B, C, D only
(c) A, B, C only   (d) A, B, C, D

Q.37. Consider the following statements:
1. The Constitution of India designates Hindi in Devanagari script as the official language of the Government of India.
2. English was also an associate official language for a period of 10 years only from the date of commencement of the Constitution.
3. Marathi and Tamil are among the languages that are also used for official purposes in the Union.
Which of the statements above is/are correct?
(a) 2 and 3 only   (b) 1 and 2 only
(c) 1 only   (d) 1 and 3 only

Q.38. Consider the following statements:
1. The South Asian Free Trade Area (SAFTA) agreement was signed to promote trade and economic cooperation among SAARC countries.
2. The bilateral trade between India and Pakistan has increased to USD 1.35 billion during April-December 2022 as against USD 516.36 million in the whole 2021-22.
3. Bangladesh is India's largest trade partner in South Asia.
Which of the statements above is/are correct?
(a) 1 and 3 only   (b) 2 and 3 only
(c) 1 and 2 only   (d) 1, 2 and 3

Q.39. Which state has the maximum percentage of Jain population as per 2011 census?
(a) Delhi   (b) Rajasthan
(c) Maharashtra   (d) Gujarat

Q.40. Consider the following statements:
1. The Eastern Ghats and Western Ghats meet at the Nilgiri Hills.
2. The Thar Desert is the most densely populated desert in the world.
3. The Patkai or Purvanchal ranges are part of the Eastern Himalayas.
4. The Satpura range is formed by a series of scarped plateaus on the south, generally at an elevation varying between 300-400 m above the mean sea level.
Which of the statements above is/are correct?
(a) 2, 3 and 4 only   (b) 1, 2 and 4 only
(c) 1, 2 and 3 only   (d) 1, 3 and 4 only

Numerical Aptitude

Q.41. A mixture contains alcohol and water in the ratio 4 : 7. If it contains 9 litres more water than alcohol, then find the quantity of water in the mixture.
(a) 24 litres   (b) 21 litres
(c) 20 litres   (d) 18 litres

Q.42. p% of Bobby's income is equal to q% of Ron's income. If Bobby's income was Rs y less than what it is and Ron's income was Rs z more than what it is, the ratio of the incomes of Bobby and Ron would have been m : n. The actual combined income of the duo is Rs x.
Which one of the following is correct in respect of the Question and the Statements given below?
Statement 1: The values of p, q, y, z, m, n and x are respectively 40, 56, 3200, 2000, 6, 5 and 67200.
Statement 2: The values of p, q, y, z, m, n and x are respectively 20, 32, 1200, 5500, 4, 3 and 83200.
(a) Neither of the two statements is feasible.
(b) Only Statement 2 is feasible.
(c) Only Statement 1 is feasible.
(d) Both Statements are feasible

Q.43. A shopkeeper buys three varieties of pulses at Rs 132, Rs 160 and Rs 192 per kg respectively and mixes them in the ratio 9 : 2 : 1. The marked price per kg of the blended pulses is fixed at Rs 238, the shopkeeper gives a discount equal to $\frac{1}{n}$ of the marked price and still earns a profit of 40%. What is the value of n ?
(a) 5   (b) 6   (c) 4   (d) 7

Q.44. Find the least number that should be added to 567201, so that the sum is exactly divisible by 9.
(a) 4   (b) 5   (c) 6   (d) 8

Q.45. In how many years will a sum of money be 12 times itself at 44% per annum simple interest ?
(a) 35 years   (b) 25 years
(c) 30 years   (d) 20 years

Q.46. By selling an article for ₹ 5600, and gains ₹ 1600. What is the gain percent ?
(a) 45%   (b) 40%   (c) 35%   (d) 30%

Q.47. Ravi and Rajiv decided to run a 960 m long race on a track as long as the length of the race. Which of the statement(s) below is (are) sufficient to conclude that Rajiv caught up with Ravi with $\frac{3}{8}$ of the track length still to be covered?
Statement 1: Ravi is allowed to start 5 seconds before Rajiv started running.
Statement 2: Ravi ran at 8 m per second.
Statement 3: Rajiv ran at a speed of 10 m/s?
(a) Statements 2 and 3 taken together are sufficient.
(b) All the three statements taken together is sufficient.
(c) Statements 1 and 3 taken together are sufficient.

(d) Even all the three statements taken together is not sufficient.

Q.48. On a particular day each of Danny, Edwin and Fahim sold three types of pens from their respective shops. Danny and Edwin sold an identical number of pens of Type A while Fahim sold twice as many pens of Type A as each of Danny and Edwin sold. The ratio of the numbers of pens of Type B sold by Danny, Edwin and Fahim was 3:5:2 respectively, while each of the trio sold an identical number of pens of Type C. The three sellers sold each of the types of pens at different prices per unit.

Assertion (A): It is possible that Danny sold each pen of Type A at a profit of Rs 2, each pen of Type B at a loss of Re 1, and each pen of Type C at a loss of Rs 12 and made an overall profit of Rs 125; Edwin sold each pen of Type A at a profit of Rs 2, each pen of Type B at a loss of Rs 6, and each pen of Type C at a profit of Rs 6 and made an overall profit of Rs 110; and Fahim sold each pen of Type A at a profit of Re 1, each pen of Type B at a profit of Re 1, and each pen of Type C at a loss of Rs 3 and made an overall profit of Rs 210.

Reason (R): Framing and solving the three possible linear equations we will find that we get a unique solution.

(a) Assertion (A) is true and Reason (R) is false.
(b) Both Assertion (A) and Reason (R) are true but Reason (R) is not a correct explanation of Assertion (A).
(c) Assertion (A) is false and Reason (R) is true.
(d) Both Assertion (A) and Reason (R) are true and Reason (R) is a correct explanation of Assertion (A).

Q.49. The difference between the value of the number increased by 32% and the value of the number decreased by 28% is 180. Find the number.
(a) 300   (b) 320   (c) 260   (d) 280

Q.50. The expense of a boarding house is partly fixed and partly varies with the number of boarders. What is the profit per head per month when there are 80 boarders?
Which one of the following is correct in respect of the Question and the Statements given below?
Statement 1: Each boarder pays $ 780 a month.
Statement 2: The profit is $108 per head per month when there are 50 boarders.
Statement 3: The profit is $128 per head per month when there are 60 boarders.

(a) Statement 2 and Statement 3 together are sufficient.
(b) Statement 1 and any one of the other two statements taken together are sufficient.
(c) All the three statements together are sufficient,
(d) Even all the three statements taken together is still not sufficient.

Q.51. The square of the natural numbers are grouped as 1^2, $(2^2, 3^2)$, $(4^2, 5^2, 6^2)$.....
(.... 210^2)
Which one of the following is correct in respect of the Question and the Statements?
Statement 1: The sum of the terms in the last group is 804660.
Statement 2: There are 20 groups in all.
Statement 3: The sum of all the terms till the last but one group is 2304415.
(a) Statements 1 and 2 are both correct, but Statement 3 is incorrect.
(b) All three statements are correct.
(c) Only Statement 2 is correct.
(d) Statements 2 and 3 are both correct, but Statement 1 is incorrect.

Q.52. The ratio of the number of students in the morning shift and the afternoon shift of a school was 13: 9. After 'n' students moved from the morning shift to the afternoon shift, the said ratio became 19 : 14. Now 153 new students sought admission in the school, and these students joined the morning and the afternoon shifts in the ratio 6 : 11 respectively. If the ratio of the number of students in the morning shift and the afternoon shift of the school after the new admissions became 24 : 19, find the value of 'n'.
(a) 36   (b) 30   (c) 24   (d) 27

Q.53. Harsh was four times as old as dev six years ago. How old is dev today if harsh will be 40 years old 10 years later ?
(a) 13 years   (b) 12 years
(c) 14 years   (d) 11 years

Q.54. In an election, Candidate M received 67% of the votes, and candidate N received 33% of the votes, if the total votes were 10,000. Find the difference in the number of votes received by each candidate.
(a) 3500   (b) 3000   (c) 4200   (d) 3400

Q.55. A train, 364 meters long, passes a pole in 26 seconds, Find the speed of the train in the meters per second.
(a) 14 m/sec   (b) 11 m/sec
(c) 13 m/sec   (d) 15 m/sec

Q.56. If the interest is compounded yearly, find the compound interest on the sum ₹ 30,000 at the rate of 4% per annum for 3 years.
(a) ₹3525.88   (b) ₹4525.55
(c) ₹3745.92   (d) ₹ 3856.25

Q.57. A salt and water mixture, of which 7.5% is salt, costs ₹22.50 per litre. Another salt and water mixture, of which 17.5% is salt, costs ₹ z per litre. If the cost of twelve litres of a salt and water mixture, of which 22.5% is salt, is ₹450, find the value of z.
(a) 32.50 (b) 31.50 (c) 30.60 (d) 34.50

Q.58. If x = $7 + 7^{\frac{2}{3}} + 7^{\frac{1}{3}}$, then which of the options below is correct?
(a) $x^3 + 21x^2 - 126x - 252 = 0$
(b) $x^3 + 21x^2 - 126x + 252 = 0$
(c) $x^3 - 21x^2 + 126x - 252 = 0$
(d) $x^3 - 21x^2 - 126x + 252 = 0$

Q.59. The average of five numbers is 87.8. The average of the first two numbers is 81.5 and the average of the last two numbers is 93.5. What is the third number ?
(a) 88   (b) 90   (c) 89   (d) 93

Q.60. A cistern can be filled by one of two pipes in 52 minutes and by the other pipe in 60 minutes. Both pipes are opened together for a certain time but being particularly clogged only $\frac{13}{20}$ of the full quantity of water flows through the first pipe and only $\frac{3}{4}$ of the full quantity of water flows through the second pipe. The obstructions, however, were suddenly removed in both the pipes after some time and the cistern got filled in $15\frac{3}{5}$ minutes from that moment. For how many minutes did the pipes remain clogged?
(a) $17\frac{4}{5}$ (b) $17\frac{1}{5}$ (c) $17\frac{3}{5}$ (d) $17\frac{2}{5}$

Reasoning & Logical Aptitude

Q.61. In a class of 140 students, 80 students like math, 88 like science, 30 like both the subjects.Find the number of students who like either Math or Science.
(a) 135   (b) 138   (c) 120   (d) 130

Q.62. 'A @ B' means 'A is the wife of B'
'A = B' means 'A is the brother of B'
'A # B' means 'A is the son of B'
'A & B' means 'A is the father of B'
'A + B' means 'A is the mother of B'
Based on the above information, find out which of the given statements can be the

reason/s behind the assertion made below if it is given that 'P = F & G @ M # L'.

Assertion: T is paternal grandfather of R?

Reason A: L @ T

Reason B: G + R

(a) Both A and B are reasons behind the assertion

(b) Neither A nor B is the reason behind the assertion

(c) Only A is the reason behind the assertion

(d) Only B is the reason behind the assertion

Q.63. A question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statement/s is/are sufficient/necessary to answer the question. Read both the statements and decide the appropriate answer.

Question: Six students A, B, C, D, E, F, and G are sitting in a straight line facing north direction. D is sitting third to the right of B. E is sitting third to the left of C. Who is sitting to the immediate left of B?

(I) D and E are sitting at the extreme ends.

(II) A is sitting third to the left of F.

(a) Data in Statement I alone is sufficient to answer the question while data in statement II is not

(b) Data in statements I and II together are necessary to answer the question.

(c) Data in Statement II alone is sufficient to answer the question while data in statement I is not

(d) Data in statements I and II together are NOT sufficient to answer the question

Q.64. Seven students named P, Q, R, S, T, U and V are sitting around a circle facing the centre. Each one of them has secured one of different Ranks from 1 to 7 in the class. U is fourth to the left of the Rank-2 student. T is second to the right of Rank-7 student. Q is sitting to the immediate right of V who secured Rank-2. S is sitting third to the left of R. P is third to the left of V. Q secured Rank-6. S secures Rank-3. Only one student is sitting between R and U. Only one student is sitting between Rank-1 and Rank-2 students. U does not secure Rank-5.

Which of the following is/are true based on the given arrangement ?

I. The student securing Rank-7 is sitting second to the left of the student who secure Rank-5.

II. T is sitting immediately right of the person who secures Rank-2.

III. U secures Rank-4 and is sitting to the immediate left of P.

(a) All I, II and III are true

(b) Only I and II is true

(c) Only II and III are true

(d) Only I and III are true

Q.65. Six players named K, L, M, N, O and P have different heights. They play one of six different games i.e. Chess, Polo, Tennis, Hockey, Cricket and Football. Polo player has more height than Hockey player. M plays cricket. K does not play Football. N has more height than O. Hockey player has more height than Tennis player. Football player has less height than Cricket player. K's height is more than only three other players. Polo player has lesser height than exactly three other players. P's height is more than K. O's height is more than L who plays Tennis.

Which of the following is true based on the given information?

I. P's height is more than M. M's height is less than N.

II. Chess player's height is more than Football player but less than Polo player.

(a) Both I and II   (b) Neither I nor II

(c) Only II   (d) Only I

Q.66. Select the correct mirror image of the given figure when the mirror MN is placed to the right side of the figure.
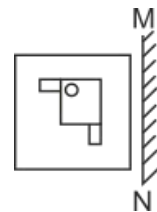
Q.67. Select the wrong term in the following number series:

9, 10, 19, 44, 93, 175

(a) 10   (b) 175   (c) 93   (d) 44

Q.68. Select the wrong term in the given alpha-numeric series.

L11, O22, R44, U44, X55

(a) U44   (b) O22   (c) R44   (d) X55

Q.69. Four letter-cluster pairs have been given, out of which three are alike in some manner and one is different. Select the odd letter-cluster pair.

(a) CG : DH   (b) UE : VF

(c) OS : PQ   (d) LT : MU

Q.70. Read the following information carefully and answer the question that follows.

Banking reforms in India encompass a range of measures such as liberalization, deregulation and technological advancements. The adoption of technology-driven initiatives like core banking solutions, electronic fund transfers and digital payment systems promoted financial inclusion and improved operational efficiency. Which of the following will WEAKEN the argument that that Banking system in India has become an efficient system?

(a) The Prevention of Money Laundering Act (PMLA) aims to prevent money laundering by imposing obligations on the banks and financial institutions to maintain records, report transactions and verify customer identities.

(b) Steps have been taken to the issue of non performing assets to expedite the resolution of stressed assets and improve recovery mechanisms.

(c) Efforts have been taken to provide access of the banking services to some identified areas by not including unbanked sections of the society.

(d) Financial technology and digital innovation have been adopted for the development of payment systems and other banking services.

Q.71. In the following question, a group of letters is given which are numbered 1, 2, 3, 4, and 5. Select that combination of numbers so that letters arranged accordingly form a meaningful word.

E U J G D

1 2 3 4 5

(a) 3, 5, 2, 1, 4   (b) 4, 2, 3, 1, 5

(c) 3, 2, 5, 1, 4   (d) 3, 2, 5, 4, 1

Q.72. Select the figure that will replace the question mark (?) in the following question.

Q.73. Which two signs should be

interchanged to make the given equation correct?

24 ÷ 2 = 20 - 4 × 6 + 8

(a) × and +   (b) = and +
(c) - and +   (d) ÷ and ×

Q.74. FORTUNE is related to GILUVMF in a certain way based on certain logic. In the same way, PLINTHS is related to MROKHSG. Which of the following are correct matches following the same logic?

i. MUSICAL	(W) GIVKMRZ
ii.FURIOUS	(X) HFLRIGV
iii. PERTAIN	(Y) ILGHWVN
iv. STORMED	(Z) RHFNOZX

(a) i-Z, iii-Y only   (b) i-Z, iii-W, iv-Y only
(c) ii-W, iv-Y only   (d) i-Z, ii-X, iv-Y only

Q.75. In a certain code language, "SALT" is written as '25', and 'GAIT' is written as '73'. Which of the following are correct matches as per the given code language?

WORD	CODE
(i) TOMB	(W) 28
(ii) BEAT	(X) 96
(iii) ZOOM	(Z) 05

(a) iii-X only   (b) i-Y, ii-W, iii-X only
(c) i-Y, iii-X only   (d) i-Y, iii-W only

Q.76. In a row of boys, if Akhil who is 13th from the left, and Firoz who is 6th from the right end interchange their positions, Akhil becomes 23rd from the left. How many boys are there in the row?

(a) 28   (b) 18   (c) 21   (d) 27

Q.77. Three Statements are given followed by two conclusions numbered I and II. Assuming the statements to be true, decide which of the conclusions logically follow(s) from the statements.
Statement I: All queens are kings.
Statement II: All kings are princesses.
Statement III: All princesses are beautiful.
Conclusion I: Some kings are beautiful.
Conclusion II: All queens are princesses.
(a) Both conclusions I and II follow
(b) Neither conclusion I nor II follows
(c) Only conclusion I follows
(d) Only conclusion II follows

Q.78. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(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

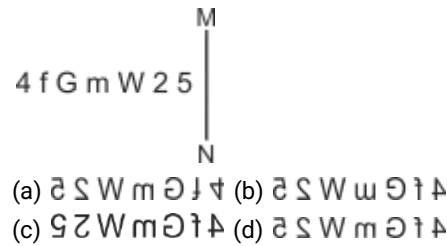mathematical operations on 1 and 3 is not allowed)
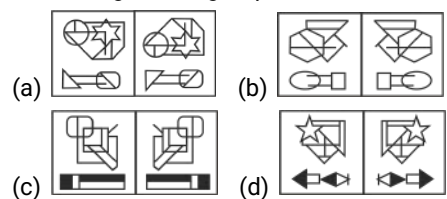(17, 9, 132)
(24, 8, 136)
(a) (16, 7, 118)   (b) (28, 12, 144)
(c) (26, 6, 114)   (d) (18, 10, 160)

Q.79. Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.

M
|
4 f G m W 2 5
|
N

(a) Ƨ5 W ɯ Ɔ ɟ �4   (b) Ƨ5 W ɯ Ɔ ɟ �4
(c) Ƨ5 W ɯ Ɔ ɟ �4   (d) Ƨ5 W ɯ Ɔ ɟ �4

Q.80. Three of the following four figure pairs are alike in a certain way and thus form a group. Which is the one that does not belong to that group?

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

English

Q.81. Select the correct conclusion based on the meaning of the underlined idiom:
The whole agitation against the new regulations was <u>a storm in a tea cup.</u>
i.   The agitation was so profound that it spread to all parts of the country.
ii. The disagreement over the crucial policy garnered universal support.
iii. The protest died down quickly as it was an unnecessary fuss over a trivial matter.
iv. The agitation was joined by thousands of people despite the adverse weather conditions.
(a) Both i and iv are correct
(b) Only iii is correct
(c) Both ii and iv are correct
(d) Only ii is correct

Q.82. The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.
I wrote to Giordano this morning, /and when we return to Paris/ all will have been being arranged.
(a) and when we return to Paris
(b) I wrote to Giordano this morning,
(c) No error
(d) all will have been being arranged.

Q.83. Match the following groups of words with the correct one-word substitutions.

One-word substitution	phrase
A. turncoat	1. one who is unable to pay debts
B. insolvent	2. To increase the importance, position or wealth
C. abnegate	3. one who switches to an opposing party
D. aggrandize	4. to refuse or deny oneself

(a) A-4, B-3, C-2, D-1   (b) A-3, B-1, C-4, D-2
(c) A-1, B-4, C-3, D-2   (d) A-2, B-3, C-1, D-4

Q.84. In the following passage there are blanks, each of which has been numbered. Select the correct option to fill in the blanks.
The seemingly (1)_____ hummingbird is one of the toughest beasts in the animal kingdom. Some 330 species (2)_____ in diverse and often brutal environments. Mysteriously, the birds are found only in North and South America. 'They're living (3)_____ the edge of what's possible for vertebrates, and they're mastering it,' says Karl Schuchmann, a German (4)_____ , who studied a captive hummer that lived 17 years. 'Imagine the (5)_____ of an organism of only five or six grams to live that long,' he says.
(a) 1 - vulnerable , 2 - endure , 3 - on , 4 - ophthalmologist, 5- durability
(b) 1 - robust , 2 - sustain , 3 - by , 4 - antiquarian , 5 - stamina
(c) 1 - fragile , 2 - thrive , 3 - at , 4 - ornithologist , 5 - endurance
(d) 1 - delicate , 2 - survive , 3 - in , 4 - Geologist , 5 - persistence

Q.85. Select the correct conclusion based on the meaning of the underlined word:
Statement: She is a <u>philatelist</u> who can boast of a rare collection.
Conclusion:
i.   She has a huge collection of stamps from all over the world.
ii. She is a lover of books and possesses a fine collection.
iii. It is her hobby to collect and study coins and medals.
iv. Her collection of antiques is unique and very valuable.
(a) Both i and iv are correct
(b) Only i is correct
(c) Both iii and iv are correct
(d) Only iii is correct

Q.86. Match the following groups of words with the correct one-word

substitutions

phrase	One-word substitution
A. a short, pithy statement expressing a general truth or rule of conduct.	1. gibberish
B. outrageous and disgraceful	2. ensemble
C. unintelligible speech	3. maxim
D. a group of dancers, actors or performers	4. egregious

(a) A-3, B-4, C-1, D-2   (b) A-1, B-4, C-2, D-3
(c) A-4, B-1, C-3, D-2   (d) A-2, B-3, C-1, D-4

Q.87. Select the word that is closest in meaning (SYNONYM) to the word given below.
Exemplary
(a) Deplorable   (b) Substandard
(c) Unworthy   (d) Impeccable

Q.88. Select the correct conclusion based on the meaning of the underlined word:
Statement: These days he is working on a monograph which is very important for him.
  i.   He is writing a memoire of his father who was a successful poet.
  ii. His work on a specialized subject is an important resource for scholars.
  iii. He is rehearsing his lines for the play to be performed at the annual function.
  iv. He is creating an architectural masterpiece out of a single piece of stone.
(a) Only i is correct   (b) Only iii is correct
(c) Only ii is correct   (d) Only iv is correct

Q.89. Select the word that is opposite in meaning (ANTONYM) to the word given below.
Sardonic
(a) Gracious   (b) Lengthy
(c) Podgy   (d) Eternal

Q.90. Select the most appropriate meaning of the given idiom
It's a small world
(a) Make all possible efforts
(b) You frequently see the same people in different places
(c) An aggressive and bold confrontation
(d) A competition where the outcome is difficult to judge or predict

Q.91. Some parts of a sentence have been jumbled up, and labelled P, Q, R and S. Select the option that gives the correct sequence in which these parts can be rearranged to form a meaningful and grammatically correct sentence. Opening and Closing sentence indicate the start of the paragraph and end of the sentence paragraph.
Opening Sentence: The immediate context of the Dunkirk evacuation was Germany's invasion of the Low Countries and northern France in May 1940.
P . The Dutch defenders fell back westward, and by noon on May 12 German tanks were on the outskirts of Rotterdam.
Q . The Dutch Queen Wilhelmina and her government left the country for England on May 13, and the next day the Dutch army surrendered to the Germans.
R . On May 10 the German blitzkrieg attack on the Netherlands began with the capture by parachutists of key bridges deep within the country, with the aim of opening the way for mobile ground forces.
S . The invasion of Belgium also began on May 10, when German airborne troops landed on the fortress of Eben Emael, immediately opposite Maastricht, and on bridges over the Albert Canal.
Closing Sentence: On May 11 the Belgian front was broken, and German tanks ran on westward while Belgian, French, and British divisions fell back to a line between Antwerp and Namur.
(a) QPRS (b) PSRQ (c) RPQS (d) RPSQ

Q.92. Four sentences are given below. Find the odd sentence out.
A. Subsequent generations of kings hid their tombs in the Valley of the Kings in an attempt to elude the robbers.
B. The most imposing tombs are the famous pyramids, shaped like the sacred mound where the gods first appeared in the creation story.
C. The ongoing deciphering of hieroglyphic writings and research on the life of the peasants is answering several questions on Egyptian culture.
D. The gigantic pyramids were conspicuous targets for tomb robbers, whose plundering jeopardizes the hope for eternal life.
(a) Sentence D   (b) Sentence B
(c) Sentence C   (d) Sentence A

Q.93. The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.
Start to relax a hour/ before bedtime with a/ hot bath or your favourite music.
(a) Start to relax a hour
(b) before bedtime with a
(c) hot bath or your favourite music.
(d) No error

Q.94. The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.
If he had been entered a fatstock/ competition, I am sure his story would/ have been one of unrivalled success.
(a) If he had been entered a fatstock
(b) have been one of unrivalled success.
(c) competition, I am sure his story would
(d) No error

Q.95. Arrange the given sentences (A-F) in the correct order to form a coherent paragraph.
A. Nature writing encompasses a wide variety of works.
B. Nature writing often draws heavily on scientific information and facts about the natural world.
C. At the same time, it is frequently written in the first person and incorporates personal observations and philosophical reflections upon nature.
D. Nature writing is nonfiction or fiction prose or poetry about the natural environment.
E. These include natural history essays, poetry, essays of solitude or escape, as well as travel and adventure writing.
F. These works range from those that place primary emphasis on natural history facts to those in which philosophical interpretation predominates.
(a) BFECAD   (b) ACFDBE
(c) DAFEBC   (d) DBFAEC

Q.96. Which of the following statements correctly uses the idiom 'red rag to a bull' by substituting the underlined words?
A. The poor subordinates are made scapegoats for the misdeeds of their superiors.
B. For me, a person playing a double game is someone who specially provokes me.
C. Since your boss is well disposed towards you, you must act promptly and ask for a promotion.
D. The huge loss to our factory due to the floods was a totally unexpected disaster.
(a) Statement D   (b) Statement A
(c) Statement C   (d) Statement B

Q.97. Select the most appropriate meaning of the given proverb from the options.

Knowledge is power
(a) Said when a son is similar to his father, also, "Like mother, like daughter"
(b) No one is truly capable of living alone. We need human connection to be healthy
(c) When you're in a difficult situation, laughing can make it easier to get through that situation
(d) The more you know, the more powerful you can be in different areas of your life

Q.98. There is a sentence that is missing in the paragraph below. Look at the paragraph and decide in which blank (1, 2, 3, or 4) the following sentence would best fit.
Sentence: As a result, they held a trial and sentenced Socrates to death.
Socrates had many disciples and the greatest of these was Plato. Plato wrote several books which have come down to us. (1)_____ It is through these books that we know a great deal of his teacher, Socrates. The Athenian government-just after the time of Pericles- did not like the methods of Socrates. (2)_____They told him that if he promised to give up his discussions with common people and changed his ways, they would pardon him and let him off. (3)_____But Socrates refused to do so and preferred to drink the cup of poison which brought about his death, to giving up what he considered to be his duty. (4)_____
(a) Blank 2   (b) Blank 1
(c) Blank 3   (d) Blank 4

Q.99. The sentence below has been divided into three parts. Select the part of the sentence that has an error. If the sentence has no error, select the option 'No Error'.
Chasing the white stag through the / forests, never catching it, of/ course, for it is a creature of legend.
(a) No error
(b) Chasing the white stag through the
(c) course, for it is a creature of legend.
(d) forests, never catching it, of

Q.100. Select the word that is closest in meaning (SYNONYM) to the word given below.
Inertia
(a) Ardour   (b) Zeal
(c) Idleness   (d) Stamina

Answer Key :-

1.(a)	2.(a)	3.(b)	4.(a)
5.(c)	6.(c)	7.(b)	8.(c)

9.(c)	10.(a)	11.(b)	12.(d)
13.(c)	14.(a)	15.(d)	16.(b)
17.(c)	18.(c)	19.(c)	20.(a)
21.(c)	22.(a)	23.(c)	24.(c)
25.(c)	26.(d)	27.(a)	28.(b)
29.(b)	30.(c)	31.(c)	32.(d)
33.(d)	34.(b)	35.(c)	36.(d)
37.(c)	38.(d)	39.(c)	40.(c)
41.(b)	42.(d)	43.(b)	44.(c)
45.(b)	46.(b)	47.(d)	48.(c)
49.(a)	50.(c)	51.(d)	52.(d)
53.(b)	54.(d)	55.(d)	56.(c)
57.(a)	58.(c)	59.(c)	60.(c)
61.(b)	62.(a)	63.(b)	64.(d)
65.(b)	66.(c)	67.(b)	68.(c)
69.(c)	70.(c)	71.(d)	72.(b)
73.(b)	74.(b)	75.(c)	76.(a)
77.(a)	78.(c)	79.(d)	80.(a)
81.(b)	82.(d)	83.(b)	84.(c)
85.(b)	86.(a)	87.(d)	88.(c)
89.(a)	90.(b)	91.(c)	92.(c)
93.(a)	94.(a)	95.(c)	96.(d)
97.(d)	98.(a)	99.(a)	100.(c)

Solutions :-

Sol.1.(a) Statement 1 and 2. The United in Science 2023 report emphasizes the urgent need to reduce emissions to stay on track with the Paris Agreement goal of limiting global warming to well below 2°C and ideally 1.5°C. The report confirms that fossil fuel CO_2 emissions increased by about 1% in 2022 compared to 2021. The preliminary estimate for January-June 2023 shows only a 0.3% rise in fossil fuel CO_2 emissions. The Paris Agreement is a legally binding global climate treaty adopted by 195 countries at COP21 in Paris on 12 December 2015 and came into force on 4 November 2016.

Sol.2.(a) A, B. The Abua Awas Yojna was launched in 2023 by the Government of Jharkhand with the aim of providing pucca houses to 8,00,000 homeless families in three phases. The scheme prioritizes homeless or unattended individuals and members of Particularly Vulnerable Tribal Groups (PVTGs) as eligible beneficiaries. However, current or retired government and semi-government employees are not eligible under this scheme.

Sol.3.(b) Statement 1 and 2 are correct. In October 2023, the Indian Army inaugurated its first-ever Vertical Wind Tunnel (VWT) at the Special Forces Training School (SFTS) in Bakloh, Himachal Pradesh. The tunnel enhances Combat Free Fall (CFF) training by simulating free-fall conditions.

Sol.4.(a) Karnataka. The Kodava Hockey Festival is an annual community-based hockey tournament held in the Kodagu (Coorg) district of Karnataka. It was started in 1997 by Pandanda Kuttappa, a former SBI employee and referee, to unite the widespread Kodava families through their shared love for hockey.

Sol.5.(c) 1.6 lakh. As of 15 July 2025, over 1.78 lakh Ayushman Arogya Mandirs (AAMs) - formerly known as Ayushman Bharat Health & Wellness Centres - have been established across India to strengthen primary healthcare. Ayushman Bharat, launched on 14th April 2018 by the Prime Minister, has two main components: PM-JAY for health insurance and the establishment of Ayushman Arogya Mandirs by upgrading existing rural and urban PHCs /Sub-Centres.

Sol.6.(c) Shri Bhanubhai Chitara. She is known for his contributions to the Mata ni Pachedi style of Kalamkari painting, a traditional art form practiced in Gujarat. Some 2025 Padma Awardee : Padma Vibhushan (Art) - Kumudini Rajnikant Lakhia (Gujarat), Lakshminarayana Subramaniam (Karnataka), Sharda Sinha (Posthumous, Bihar). Padma Bhushan (Art) - Anant Nag (Karnataka), Jatin Goswami (Assam), Nandamuri Balakrishna (Andhra Pradesh), Shobana Chandrakumar (Tamil Nadu). Padma Shri (Art) - Adwaita Charan Gadanayak (Odisha), Achyut Ramchandra Palav (Maharashtra), Ashok Laxman Saraf (Maharashtra).

Sol.7.(b) Statement 2, 3 and 4. Jan Jatiya Gaurav Divas 2023 was celebrated on 15th November to honor the birth anniversary of Bhagwan Birsa Munda. During the event, the Prime Minister launched PM JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan) and also flagged off the Viksit Bharat Sankalp Yatra.

Sol.8.(c) Statement 1, 3, 4. The Center of Excellence (CoE) named ATMAN (Advanced Technologies for Monitoring Air-quality iNdicators), established at IIT Kanpur, focuses on Advanced

Technologies for Monitoring Air-quality iNdicators. It aims to develop indigenous, low-cost sensor manufacturing and AI/ML capabilities to improve air quality monitoring in India's urban and rural areas.

Sol.9.(c) Govindaraju Thimmaiah for developing a novel drug candidate, TGR63, aimed at treating Alzheimer's disease. National Technology Day in 2025 is on May 11th. The day is celebrated annually to commemorate India's technological advancements, particularly the Pokhran-II nuclear tests and the first flight of the indigenous Hansa-3 aircraft, both of which occurred on May 11, 1998. The theme for 2025 is "YANTRA" -Yugantar for Advancing New Technology, Research & Acceleration.

Sol.10.(a) Statement 1 and 2. The 2023 ICC Men's Cricket World Cup, the 13th edition, was hosted solely by India for the first time, having previously co-hosted in 1987, 1996, and 2011. Australia emerged as champions in this tournament. Virat Kohli won Player of the Tournament for scoring 765 runs in 11 matches. Mohammed Shami led as the highest wicket-taker with 24 wickets in 7 matches. The tournament, first held in 1975 in England.

Sol.11.(b) Statement 1 and 2. The Global Hunger Index score for India in 2023 is 28.7 and undernourishment is 16.6%. India ranks 105th out of 127 countries in the Global Hunger Index (GHI) 2024 with a score of 27.3, highlighting a "serious" hunger crisis driven by ongoing challenges of food insecurity and malnutrition. Somalia was bottom of the Global Hunger Index in 2024.

Sol.12.(d) All are correct. The National Family Health Survey (NFHS-6) 2023-24, the sixth in its series, was funded by the Ministry of Health and Family Welfare and coordinated by the International Institute for Population Sciences, Mumbai. The Indian Council of Medical Research (ICMR) and the National AIDS Research Institute (NARI), Pune, provided assistance for some Clinical, Anthropometric, and Biochemical (CAB) tests.

Sol.13.(c) Statement 1, 2 and 4. India ranks 10th in the CCPI 2025, a high performer among G20 countries, with strong ratings in GHG Emissions (low per capita) and Energy Use (efficient consumption), but a low score in Renewable Energy due to heavy coal

reliance and limited renewable share. The top-ranked countries start from fourth place: Denmark (4th), the Netherlands (5th), and the United Kingdom (6th).

Sol.14.(a) Statement 2. INS Surat is the fourth and final ship of the Project 15B stealth guided missile destroyer class, popularly known as the Visakhapatnam class. It is indigenously constructed, and is the first major warship named after a city in Gujarat. The crest was unveiled on 6 November 2023 by Gujarat's Chief Minister Shri Bhupendra Patel.

Sol.15.(d) Rakesh Pal. He took over the position from Virender Singh Pathania, who served as the 24th DG. As of June 2025, the Director General of the Indian Coast Guard is S. Paramesh. He assumed the position on October 15, 2024. He is the 26th Director General of the Indian Coast Guard.

Sol.16.(b) "T + 6" to "T + 3". SEBI reduced the IPO share listing timeline from T+6 working days to T+3 working days, where 'T' is the issue closing date. This means that after an IPO closes, the shares will now be listed on the stock exchange three working days later, instead of the previous six. This change became effective for public issues opening on or after December 1, 2023. SEBI was established as a non-statutory body in 1988 and acquired statutory powers on January 30, 1992, under the SEBI Act 1992.

Sol.17.(c) A-4 B-3 C-2 D-1. ISRO's Polar Satellite Launch Vehicle (PSLV-C61) mission failed to place the Earth Observation Satellite-09 (EOS-09) into its intended sun-synchronous polar orbit due to a glitch in the rocket's third stage. This was ISRO's 101st mission and the 63rd using the PSLV. The EOS-09 satellite carried a Synthetic Aperture Radar (SAR) payload designed to capture all-weather Earth images.

Sol.18.(c) India. As of November 2023, India became the third-largest ethanol producer in the world, after the USA and Brazil. Global ethanol fuel production 2024: Published by Statista Research Department, Mar 24, 2025. Top Country - The United States and Second - Brazil.

Sol.19.(c) Avinash Sable. At the 2023 Asian Games, Avinash Sable made history as the first Indian man to win gold in the 3000m steeplechase. The next Asian Games, scheduled for September

19 to October 4, 2026, will take place in Aichi Prefecture and Nagoya, Japan. The inaugural Asian Games were held in New Delhi, India, in 1951.

Sol.20.(a) Indore. Indore tops the list once again as India's cleanest city for the 7th consecutive year, but the spotlight now includes Surat, Navi Mumbai, and other rising stars. Some of the top contenders for the cleanest cities in the world in 2025 include: Copenhagen, Singapore, Helsinki, Calgary, and Zurich.

Sol.21.(c) 1 and 3 only. Akbar abolished the Jizya tax on non-Muslims in 1564 and also introduced the Mansabdari system. Aurangzeb, the last prominent Mughal emperor, ruled until 1707, and his reign marked the beginning of the Mughal Empire's decline. While, the last Mughal emperor was Bahadur Shah II (Bahadur Shah Zafar).

Sol.22.(a) 3 only. The 73rd Constitutional Amendment Act, 1992, granted constitutional status to Panchayati Raj institutions, strengthening rural local governance. The 74th Amendment Act extended similar status to urban local bodies. The Panchayats (Extension to Scheduled Areas) Act (PESA), 1996, applied Panchayat provisions to Scheduled Areas in 10 states. National Panchayati Raj Day, celebrated on April 24, commemorates the enactment of the 73rd Amendment.

Sol.23.(c) Rupen. It originates from Taranga hill ranges near Kheralu taluka of Mehsana district in Gujarat. The Rukni River is a tributary of the Barak River, which itself originates in the hills of Manipur. The Dhaleswari River originates as a distributary of the Jamuna River (part of the Brahmaputra River system) in Bangladesh.

Sol.24.(c) 2, 3, and 4 only. The Pradhan Mantri Awas Yojana Gramin (PMAY-G) was launched in 2016 with the aim of achieving "Housing for All by 2022". The National Rural Livelihood Mission (NRLM) was launched on June 3, 2011. It was later renamed Deendayal Antyodaya Yojana in 2016. Sansad Adarsh Gram Yojana (SAGY) is a village development project launched in October 2014.

Sol.25.(c) The Mamluk Dynasty, which ruled from 1206 to 1290, is also known as the Slave Dynasty. It was founded by Qutb-ud-din Aibak, a former slave of Muhammad Ghori. The term Mamluk itself means "owned" or "slave" in Arabic,

and many of its rulers were originally military slaves who rose to power.

Sol.26.(d) 1 and 3 only. Under Article 75 of the Indian Constitution, the Council of Ministers, headed by the Prime Minister, is collectively responsible to the Lok Sabha, ensuring accountability to the lower house. A national emergency can only be proclaimed under Article 352 upon the Cabinet's written recommendation, as mandated by the 44th Amendment Act, 1978. The 91st Amendment Act, 2003, limits the Council's size to 15% of the Lok Sabha's total strength (up to 81 ministers). It is not mandatory for the Council to include members from both Houses of Parliament, allowing flexibility in its composition.

Sol.27.(a) Rai Bahadur Daya Ram Sahni in 1921. Other Indus Civilisation sites: Mohenjo-Daro (Mound of Dead) was discovered by R.D. Banerjee in 1922, located on the bank of river Indus in Larkana district of Punjab (Pakistan). Chanhudaro and Amri were discovered by N.G. Majumdar in 1931 and 1935 respectively. Sir John Marshall, Director-General of the Archaeological Survey of India (1902–1928), led the discovery of the Indus Valley Civilization through major excavations.

Sol.28.(b) Mizoram. The state with sex ratio as per the 2011 Census is Mizoram, with 976 females per 1,000 males, which is lower than Odisha (978), Chhattisgarh (991), and Kerala (1084). The sex ratio was highest in Kerala (1084) followed by Puducherry (1037) and lowest in Daman & Diu (618) followed by Dadar & Nagar Haveli (774) and then Chandigarh (818) and in States Haryana (879).

Sol.29.(b) Both A and B are true. Statutory bodies are created through laws passed by Parliament (e.g., SEBI, NHRC), and Constitutional bodies (like the Election Commission, UPSC, CAG) get their powers directly from provisions in the Constitution.

Sol.30.(c) Pushyamitra Sunga. King Brihadratha, the last ruler of the Mauryan Empire, was assassinated by his general Pushyamitra Sunga, who later established the Sunga dynasty. The Mauryan Empire, founded by Chandragupta Maurya, was the largest empire created by an Indian dynasty. It covered most of the Indian subcontinent and lasted from 322 to 185 BCE.

Sol.31.(c) Canada. Government of India Act, 1935 - Federal Scheme, Public Service Commissions, etc. British Constitution - Parliamentary Government, Rule of Law, Legislative Procedure, Single Citizenship, Bicameralism, etc. USA - Fundamental Rights, Independence of Judiciary, Judicial Review, Impeachment of President, Removal of Supreme Court and High Court Judges, Post of Vice-President. Ireland - DPSP, Nomination of Members to Rajya Sabha. Canada - Federation with a Strong Centre, Vesting of Residuary Powers in the Centre, Appointment of State Governors by the Centre. Australia - Concurrent List, Joint Sitting of Two Houses of Parliament. Germany - Suspension of Fundamental Rights During Emergency. USSR (Russia) - Fundamental Duties, Ideal of Justice (Social, Economic, and Political) in Preamble. France - Republic and Ideals of Liberty, Equality, and Fraternity in Preamble. South Africa - Procedure for Amendment of Constitution, Election of Members of Rajya Sabha. Japan - Procedure Established by Law.

Sol.32.(d) Tertiary Sector. Primary Sector: This sector involves activities that directly use natural resources, such as agriculture, mining, fishing, forestry, and dairy. Secondary Sector: This sector includes industries that manufacture finished products from raw materials produced in the primary sector, such as textile mills, steel factories, chemical plants, and food processing units. Tertiary Sector: Also known as the service sector, it supports the primary and secondary sectors through activities like transportation, banking, insurance, and finance. Jobs in this sector are referred to as white-collar jobs.

Sol.33.(d) A-iv B-ii C-iii D-i. Major Indian Port and Their respected states: West Coast - Deendayal Port (Kandla): Gujarat. Jawaharlal Nehru Port (Nhava Sheva): Maharashtra. Mormugao Port: Goa. New Mangalore Port: Karnataka. Cochin Port: Kerala. East Coast - Haldia Dock Complex: West Bengal (part of Kolkata Port). Paradip Port: Odisha. Visakhapatnam Port: Andhra Pradesh. Ennore Port (Kamarajar Port) and Tuticorin Port: Tamil Nadu.

Sol.34.(b) 1, 2, 3, and 4. Bal Gangadhar Tilak was termed the "Father of Indian Unrest" by the British. Dadabhai Naoroji, known as the Grand Old Man of India, was the first to estimate India's national income. Subhas Chandra Bose resigned from the Congress presidency and later led the Indian National Army. Bhagat Singh, one of the youngest freedom fighters, was a prominent member of the Hindustan Socialist Republican Association.

Sol.35.(c) 1, 2, and 3 only. The Hadith is a record of the sayings and actions of Prophet Muhammad. Prophet Muhammad was born in Mecca around the year 570. Sufism emphasizes a personal, spiritual connection with God. The Five Pillars of Islam are fundamental duties for all Muslims. However, the Chishti Order originated in Chisht, located in present-day Afghanistan.

Sol.36.(d) A, B, C, D. All the listed effects were negative consequences of the Green Revolution. The Green Revolution had several positive impacts, including a significant increase in food production, leading to greater food security and reduced poverty in many developing countries. The Green Revolution was initiated by Norman Borlaug in the 1960s. He is known as the 'Father of Green Revolution' in world. In India, the Green Revolution was mainly led by M.S. Swaminathan.

Sol.37.(c) 1 only. Hindi in Devanagari script is the official language of the Government of India (Article 343). English was to continue as an associate official language for initially 15 years, and it was later extended indefinitely by the Official Languages Act, 1963. Marathi and Tamil are among the 22 languages officially recognized in the Eighth Schedule of the Indian Constitution.

Sol.38.(d) 1, 2 and 3. The South Asian Free Trade Area (SAFTA) was signed in 2004 to promote trade and economic cooperation among SAARC countries, which includes India, Pakistan, Bangladesh, and others. Bangladesh is India's biggest trade partner in South Asia and India is the second largest trade partner of Bangladesh in Asia.

Sol.39.(c) Maharashtra. As per the 2011 Census, Maharashtra has the highest percentage of Jain population (about 1.4 million) among Indian states, at 1.25% of its total population. The Jain population in India is estimated to be around 4.5 million, or 0.4% of the total population. Total Population of India in 2011 is 121.09 crores ; Hindu 96.63 crores (79.8%); Muslim 17.22 crores (14.2%);

Christian 2.78 crores (2.3%); Sikh 2.08 crores (1.7%); Buddhist 0.84 crores (0.7%); Jain 0.45 crores (0.4%), Other Religions & Persuasions (ORP) 0.79 crores (0.7%) and Religion Not Stated 0.29 crores (0.2%).

Sol.40.(c) 1, 2 and 3 only. The Eastern and Western Ghats do indeed meet at the Nilgiri Hills in Tamil Nadu. The Thar Desert is the most densely populated desert globally. The Patkai range, also known as Purvanchal, is indeed part of the Eastern Himalayas and runs along the India-Myanmar border. However, the Satpura range generally rises between 600 -1,300 m.

Sol.41.(b) Ratio of alcohol and water in mixture = 4 : 7
According to the question,
$7x - 4x = 9$ ltr $\Rightarrow x = 3$ ltr
Hence, quantity of water in mixture ($7x$) = 21 ltr

Sol.42.(d) Let the income of Bobby and Ron be B and R
ATQ, p% of B = q% of R
$\frac{B}{R} = \frac{q}{p}$ ----------- (1)
and, $\frac{B - y}{R + z} = \frac{m}{n}$ ----------- (2)
Also, B + R = x ---------- (3)
From statement 1, we have ;
p = 40, q = 56, y = 3200, z = 2000, m = 6, n = 5, x = 67200
$\frac{B}{R} = \frac{56}{40} = \frac{7}{5}$ **(using eqn1)**
7a + 5a = 12 a = 67200**(using eqn3)**
$\Rightarrow$ a = 5600
Now, using eqn2;
$\frac{7a - 3200}{5a + 2000} = \frac{6}{5}$
35a - 16000 = 30a + 12,000
5a = 28,000
a = $\frac{28,000}{5}$ = 5600
So, statement 1 is correct.
From statement 2, we have ;
p = 20, q = 32, y = 1200, z = 5500, m = 4, n = 3, x = 83200
$\frac{B}{R} = \frac{32}{20} = \frac{8}{5}$ **(using eqn1)**
8a + 5a = 13 a = 83200**(using eqn3)**
$\Rightarrow$ a = 6400
Now, using eqn2;
$\frac{8a - 1200}{5a + 5500} = \frac{4}{3}$
24a - 3600 = 20a + 22000
4a = 25600
a = $\frac{25600}{4}$ = 6400
So, statement 2 is correct.
Therefore, Both Statements are feasible.

Sol.43.(b) CP of mixture of pulses per kg
= $\frac{132 \times 9 + 160 \times 2 + 192 \times 1}{12}$
= Rs.$\frac{1700}{12}$
MP of mixture of pulses per kg = Rs.238
Now, profit 40% = $\frac{2}{5}$ $\Rightarrow$ CP = 5 , SP = 7
Then, SP = $\frac{1700 \times 7}{12 \times 5}$ = Rs. $\frac{595}{3}$
Now, discount = 238 - $\frac{595}{3}$ = Rs. $\frac{119}{3}$
discount % = $\frac{\frac{119}{3}}{238}$ = 16.67%
Hence, $\frac{1}{n}$ = $\frac{16.67}{100}$, n = 6

Sol.44.(c) $\frac{567201}{9}$ = 3(remainder)
Hence, least required number = 9 - 3 = 6

Sol.45.(b) Let principal = x
According to the question,
$11x = \frac{x \times 44 \times T}{100}$
$T = \frac{1100}{44}$ = 25 years

Sol.46.(b) Cost price of article
= 5600 - 1600 = ₹4000
Required % = $\frac{1600}{4000}$ × 100 = 40%

Sol.47.(d) Length of the track = 960m
$\frac{5}{8}$ th of the length = 960 × $\frac{5}{8}$ = 840 m
So, time taken by Rajiv to reach 840 m
= $\frac{840}{10}$ = 84 second
Ravi start running 5 seconds before Rajiv
So, time taken by Ravi to reach 840 m
= $\frac{840}{8}$ - 5 = 100 second
Hence, we conclude that $\frac{3}{8}$ th of the track length is still to be covered, but Rajeev has not equaled but surpassed Ravi.

Sol.48.(c)

	Danny	Edwin	Fahim
Type A	a	a	4a
Type B	3b	5b	2b
Type C	c	c	c

Now, we have following equations ;
2a - 3b - 12c = 125 ----------- (1)
2a - 30b + 6c = 110 ----------- (2)
4a + 2b - 3c = 210 ----------- (3)
Solving eqn(1) and (2), we get ;
27b - 18c = 15 ----------- (4)
Solving eqn(2) and (3), we get ;
-62b + 15c = 10 ----------- (5)
Solving eqn(4) and (5) we get ;
b = - $\frac{45}{79}$, which is not possible. as a,b,c
$\in$ n(natural no)

Clearly, we can conclude that Assertion (A) is false and Reason (R) is true.

Sol.49.(a) Let number = 100 unit
According to the question,
100 × 132% - 100 × 72% = 180
(132 - 72)unit = 180 $\Rightarrow$ 1 unit = 3
Hence, (number) 100 unit = 300

Sol.50.(c)
Let the fixed entity be x and other be y
So, total expense(E) = x + ny
From statement 1, we have ;
payment done by each boarder = 780
From statement 2, we have ;
Total profit of 50 boarders.
= 108 × 50 = 5400
From statement 3, we have ;
Total profit of 60 boarders
= 128 × 60 = 7680
Using all the three statements together, we have ;
payment done by 50 boarder
= 780 × 50 = 39000
payment done by 60 boarder
= 780 × 60 = 46800
39000 - (x + 50y) = 5400
x + 50y = 33,600 ---------- (1)
46800 - (x + 60y) = 7680
x + 60y = 39,120 ---------- (2)
Solving eqn(1) and (2) , we get the value of x and y.
Then, required profit
= 780 × 80 - (x + 80y)
Putting the value of x and y , we will get the answer.
Clearly, we can see that all the three statements together are sufficient to answer the question.

Sol.51.(d) The square of the natural numbers are grouped as ;
$1^2 \rightarrow$ 1st term
$(2^2, 3^2) \rightarrow$ 2nd term = 1 + 2 = 3, last term ends with the square of 3
$(4^2, 5^2, 6^2).\rightarrow$ 3rd term
= 1 + 2 + 3 = 6,
last term ends with the square of 6
So, 1 + 2 + 3 +.........n = 210
n($\frac{n + 1}{2}$) = 210
n(n + 1) = 420 $\Rightarrow$ n = 20
So, there are 20 groups in all

For statement 1 :
(1 + 2 +....19) = $\frac{19 \times 20}{2}$ = 190
So, the last term ends with the square of 190 in the 19th group.
20th group = $(191^2, 192^2,...... 210^2)$
The sum of the terms in the last group(20th)
= $(1^2 + 2^2 + ...210^2)$ - $(1^2 + 2^2 + ...190^2)$
= $\frac{210 \times 211 \times 421}{6}$ - $\frac{190 \times 191 \times 381}{6}$

= 3109085 - 2304415
= 804670

For statement 3 :

The sum of all the terms excluding the last group(20th) = $(1^2 + 2^2 +.....190^2)$
= 2304415

Clearly, we can see that statements 2 and 3 both are correct, but Statement 1 is incorrect.

Sol.52.(d) No of students joined the morning shift

= $\dfrac{6}{6 + 11}$ × 153 = 54

No of students joined the evening shift

= $\dfrac{11}{6 + 11}$ × 153 = 99

Balancing the given ratio, we have ;

Morning shift   Evening shift
$13_{×3}$: $9_{×3}$ = 22)×3

  |-n |+n

$19_{×2}$: $14_{×2}$ = 33)×2

  |+54 |+99

24   :   19

Using cross method, we have ;
$[38 × 19 − 28 × 24]$ unit
= 99 × 24 - 54 × 19
50 unit = 1350 ⇒ 1 unit = 27
n = 39 - 38 = 1 unit = 27

Sol.53.(b)
Present age of Harsh = 40 - 10 = 30 years
According to the question,
30 - 6 = 4 × (Present age of Dev - 6)
6 = Present age of Dev - 6
Present age of Dev = 12 years

Sol.54.(d) Required difference
= 10,000 × (67 - 33)% = 3400

Sol.55.(a)
Speed of train = $\dfrac{364}{26}$ = 14 m/sec

Sol.56.(c) Total CI for 3 year = 12.4864%
Hence, total CI after three year
= 30000 × 12.4864% = ₹3745.92

Sol.57.(a)
Using Alligation method, we have ;

7.5%   22.5%

    17.5%

5%   10%
1   :   2

Cost of mixture which contains 22.5%

salt = $\dfrac{450}{12}$ = ₹37.5/litre

Now, we have ;
Quantity   1   :   2

Price   22.5   37.5

$\dfrac{22.5 × 1 × 1 + 37.5 × 2}{1 + 2} = \dfrac{97.5}{3}$ = 32.5

⇒ z = 32.50

Sol.58.(c) $x = 7 + 7^{\frac{2}{3}} + 7^{\frac{1}{3}}$

$x - 7 = 7^{\frac{2}{3}} + 7^{\frac{1}{3}}$

After taking cube both sides

$(x − 7)^3 = \left(7^{\frac{2}{3}} + 7^{\frac{1}{3}}\right)^3$

$x^3 − 7^3 − 21x^2 + 147x = [(7^{\frac{2}{3}})^3 + (7^{\frac{2}{3}})^3$

$+ 3 × (7^{\frac{2}{3}} × 7^{\frac{1}{3}})\{7^{\frac{2}{3}} + 7^{\frac{1}{3}}\}]$

$x^3 − 7^3 − 21x^2 + 147x$

$= [49 + 7 + 3 × (7)\{(x − 7)\}]$

$x^3 − 343 − 21x^2 + 147x$

$= [56 + 21x − 147]$

$x^3 − 343 − 21x^2 + 147x − 56 − 21x$

$+ 147 = 0$

$x^3 − 21x^2 + 126x − 252 = 0$

Sol.59.(c) Third number = 87.8 + [(87.8 - 81.5) × 2 - (93.5 - 87.8) × 2] = 89

Sol.60.(c)
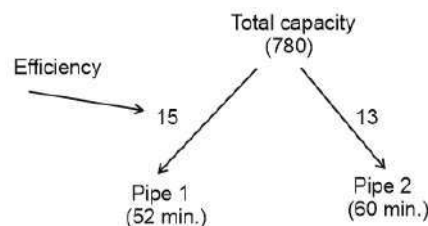
According to the question,

In last $15\dfrac{3}{5}$ min. Pipe 1 and Pipe 2 flows with full efficiency

So, tank filled in $15\dfrac{3}{5}$ min.

= (15 + 13) × $15\dfrac{3}{5}$ = 436.8 unit

Remaining capacity
= 780 - 436.8 = 343.2 unit

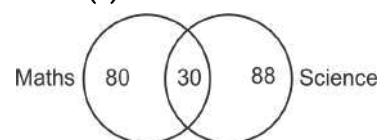Now, 343.2 unit filled by Pipe 1 and Pipe 2 with $\dfrac{13}{20}$ and $\dfrac{3}{4}$ of his efficiency respectively,

Hence, required time

= $\dfrac{343.2}{15 × \frac{13}{20} + 13 × \frac{3}{4}} = \dfrac{343.2}{19.5}$

= 17.6 = $17\dfrac{3}{5}$ min.

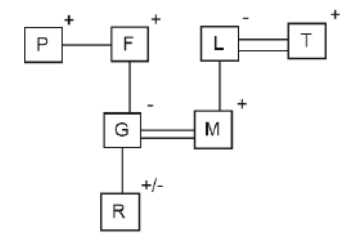**Sol.61.(b)**

Students who like either Math or Science.
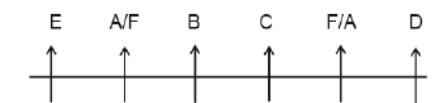= (Students who like Math) + (Students who like Science) - Students who like both
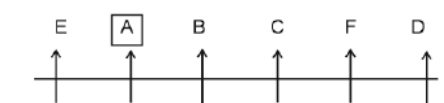80 + 88 - 30 ⇒ 168 - 30 = 138.

Sol.62.(a)

T is the paternal grandfather of R. It is only possible when both the reasons follow.
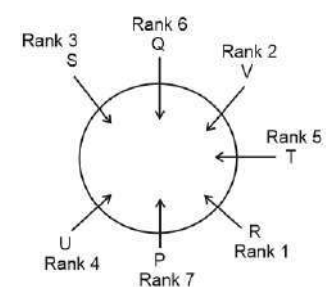
Sol.63.(b) From statement 1

From statement 2 : In statement 2 there is not any fixed position to start.
After combining both the statements we get,

Hence Data in statements I and II together are necessary to answer the question.
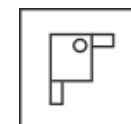
Sol.64.(d)

Only I and III are true.

Sol.65.(b)

1	M	Cricket
2	P	Football
3	K	Chess
4	N	Polo
5	O	Hockey
6	L	Tennis

Neither I nor II is true.

Sol.66.(c)

Sol.67.(b)

Sol.68.(c)
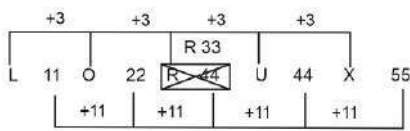
Sol.69.(c)
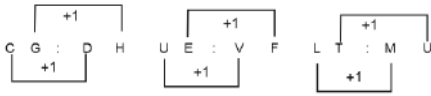
But,
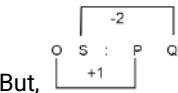
Sol.70.(c) Efforts have been taken to provide access of the banking services to some identified areas by not including unbanked sections of the society this statement weaken the argument that Banking system in India has become an efficient system.

Sol.71.(d) Arranging the letters meaningfully we get,
J(3) → U(2) → D(5) → G(4) → E(1)
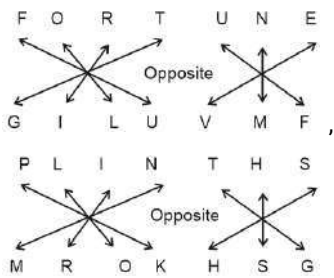The correct word formed from the letters = JUDGE

Sol.72.(b)

Sol.73.(b) Given: $24 ÷ 2 = 20 - 4 × 6 + 8$
In this type of questions we will check options one by one and doing so option b gets satisfied.
After interchanging the signs = and + we get,
$24 ÷ 2 + 20 - 4 × 6 = 8$
L.H.S = 12 + 20 - 24 = 8 = R.H.S

Sol.74.(b)

Similarly,
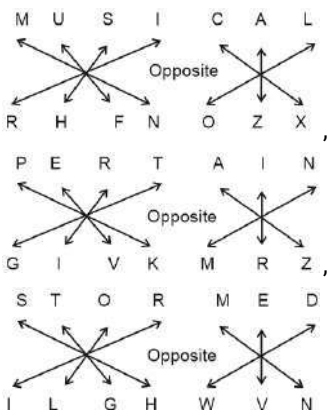
Sol.75.(c) Logic: Reverse of the Sum of the place value of the letters = Number
SALT:- 19 + 1 + 12 + 20 = 52 → 25
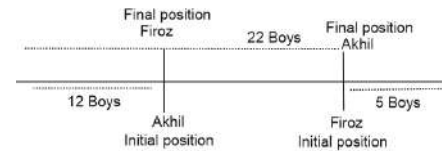GAIT:- 7 + 1 + 9 + 20 = 37 → 73
TOMB:- 20 + 15 + 13 + 2 = 50 → 05
ZOOM:- 26 + 15 + 15 + 13 = 69 → 96
But,
BEAT:- 2 + 5 + 1 + 20 = 28 → 82 (Not 28)
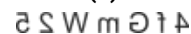
Sol.76.(a)

Total number of boys = 22 + 1 + 5 = 28

Sol.77.(a)
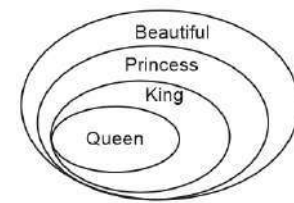
Both conclusions I and II follow.

Sol.78.(c) Logic: $(2nd num)^2 + (1st num) × 3 = 3rd num$
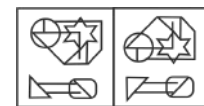$(17, 9, 132) :- (9)^2 + (17) × 3 = 81 + 51 = 132$
$(24, 8, 136) :- (8)^2 + (24) × 3 = 64 + 72 = 136$
Similarly, $(26, 6, 114) :- (6)^2 + (26) × 3 = 36 + 78 = 114$

Sol.79.(d)
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Sol.80.(a) In all other options the both figures are mirror images of each other except option (a).

Option a is odd one.

Sol.81.(b) Only iii is correct.
The idiom "a storm in a teacup" refers to a great deal of anger or worry about a matter that is not important. Therefore, the conclusion that the protest was an unnecessary fuss over a trivial matter is the only one that aligns with the idiom's meaning.

Sol.82.(d)
all will have been being arranged.
'Being' should be removed from this sentence. "Will + have + been + V_3(arranged)" is the passive form of future perfect tense. Hence, 'all will have been arranged' is the most appropriate answer.

Sol.83.(b) A-3, B-1, C-4, D-2
Turncoat- one who switches to an opposing party.
Insolvent- one who is unable to pay debts.
Abnegate- to refuse or deny oneself.
Aggrandise- to increase the importance, position or wealth.

Sol.84.(c) 1-fragile, 2- thrive, 3- at, 4-ornithologist, 5- endurance
Blank 1: The word 'fragile' describes the hummingbird as small, delicate, and seeming weak, which contrasts with its real toughness.
Blank 2: 'Thrive' means to live strongly or grow well. It fits because these birds do well even in hard environments.
Blank 3: The correct preposition to show they are living at the limit of what is possible for vertebrates.
Blank 4: An "ornithologist" is a scientist who specializes in the study of birds.
Blank 5: "Endurance" correctly describes the capacity of a tiny organism to survive for such a long period.

Sol.85.(b) Only i is correct
Philatelist - a person who collects or studies postage stamps.

Sol.86.(a) A-3, B-4, C-1, D-2
Gibberish- unintelligible speech.
Ensemble- a group of dancers, actors or performers.
Maxim- a short, pithy statement expressing a general truth or rule of conduct.
Egregious- outrageous and disgraceful.

Sol.87.(d)
Impeccable- flawless or faultless.
Exemplary- serving as a desirable model or perfect example.
Deplorable- shockingly bad in quality.
Substandard- below the usual or required standard.
Unworthy- not deserving effort, attention, or respect.

Sol.88.(c) Only ii is correct.
A monograph is a detailed written study on a single specialised subject. Hence, statement ii is the correct conclusion.

Sol.89.(a) Gracious- courteous and kind.
Sardonic- grimly mocking or cynical.
Lengthy- long in duration or extent.
Podgy- somewhat fat or chubby.
Eternal- lasting or existing forever.

Sol.90.(b)
It's a small world- You frequently see the same people in different places.
E.g.- I bumped into my school friend while vacationing in Paris. It's a small