SSC MTS 2024 Official Paper (Held On: 15 Oct, 2024 Shift 3) (Previous Year Paper)

SSC Multi-Tasking Staff (MTS) • 2024 • 90 questions • 90 minutes • Answer key and solutions

Take this paper as a timed mock test

Practise under exam conditions, then review your answers after you submit.

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SESSION 1

Q1. Find the simple interest (in Rs.) on Rs. 2000 as a sum borrowed at 7% per year rate of interest for 2 years.

(a) 280
(b) 320
(c) 220
(d) 240

Q2. Two trains 280 metres and 260 metres long, respectively, are running towards each other on parallel lines, one at the speed of 58 km/hr and another at the speed of 50 km/hr. How much time (in seconds) will they take to cross each other?

(a) 15
(b) 18
(c) 17
(d) 12

Q3. A sum of Rs. 312 was divided among 100 boys and girls in such a way that each boy gets Rs. 3.60 and each girl Rs. 2.40. The number of girls is:-

(a) 65
(b) 60
(c) 40
(d) 35

Q4. Find the area of an equilateral triangle whose side is 14 cm.

(a) $49\sqrt{3}cm^2$
(b) $36\sqrt{3}cm^2$
(c) $46\sqrt{3}cm^2$
(d) $44\sqrt{3}cm^2$

Q5. A trader sells 25 kg of rice at Rs. 1,400. A customer asks for 15% discount. The shopkeeper agrees to it but instead of 1 kg he gives 10% less rice. What is the effective discount that the customer gets (correct to one decimal place)?

(a) 5.8%
(b) 5.7%
(c) 5.6%
(d) 5.1%

Q6. Find the simple interest (in Rs.) on Rs. 4000 as a sum borrowed at 4% per year rate of interest for 5 years.

(a) 840
(b) 740
(c) 800
(d) 760

Q7. Raman purchased an iron at a cost of Rs. 2,400 and sold it to Rohan at a loss of 8%. Rohan sold it to Soham at a gain of 12.5%. At what price should Soham sell the iron to gain 15%?

(a) Rs. 2,568.60
(b) Rs. 2,658.60
(c) Rs. 2,856.60
(d) Rs. 2,860.56

Q8. A student's final grade is determined by their final examination scores (weighted at 60%) and a final project score (weighted at 40%). If the student scores 75 in the final examination and 90 in the project, then the final grade of the student is:

(a) 81.5
(b) 82.5
(c) 82
(d) 81

Q9. The ratio of the base radii of two cylinders is 5 : 6 and the ratio of their corresponding heights is 49 : 36. Find the ratio of their volumes.

(a) 1230/1296
(b) 1225/1296
(c) 1220/1296
(d) 1235/1296

Q10. Find the simple interest on Rs. 3,500 at 15% per annum for 5 years.

(a) Rs. 2,675
(b) Rs. 2,700
(c) Rs. 2,625
(d) Rs. 2,650

Q11. As part of the partial work from home process, Amita went to office every 2nd day, Amrita went to office every 3rd day, and Tosita went to office every 6th day, respectively. All three went to office on 31 October 2021. On how many days did all three attend office on the same date during the remaining two months of the year?

(a) 9
(b) 10
(c) 11
(d) 12

Q12. Study the given table and answer the question that follows.

The given table shows the number of different types of batteries (numbers in lakhs) sold by a company over the years.

Year	Types of Batteries			
	7AH	32AH	35AH	55AH
2010	75	112	110	90
2011	82	100	130	120
2012	60	135	128	145
2013	85	165	112	162

The total number of all types of batteries sold in 2013 is what percentage more or less (rounded off to the nearest integer) than the total number of all types of batteries sold in 2011?

(a) More, 21%
(b) Less, 24%
(c) Less, 21%
(d) More, 24%

Q13. The ratio of the incomes of Rama and Ganga is 4 : 3 and the ratio of their expenditures is 3 : 2. If each person saves Rs. 2,700, then find their expenditures, respectively.

(a) Rs. 8,100 and Rs. 5,000
(b) Rs. 8,000 and Rs. 5,000

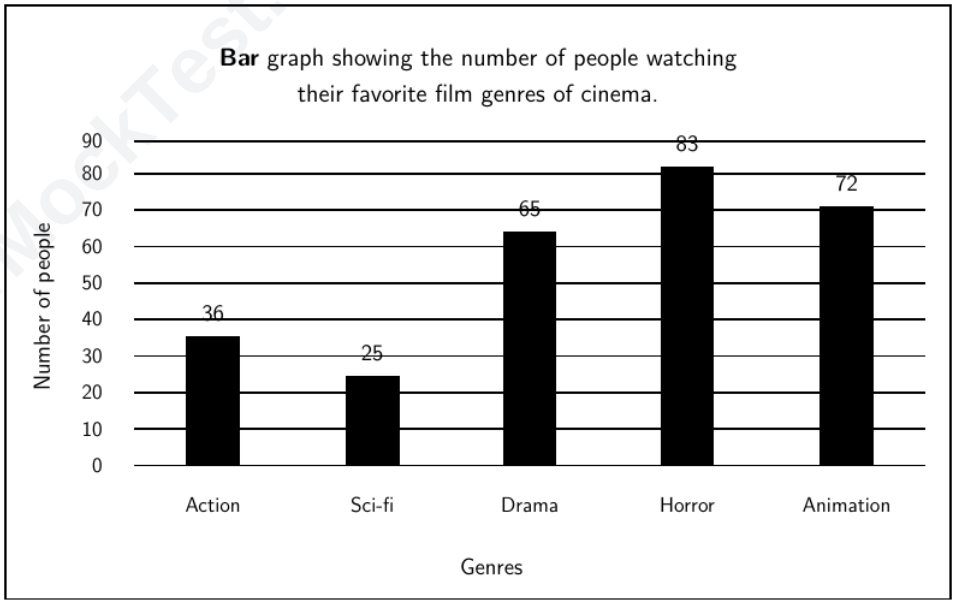
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(c) Rs. 8,100 and Rs. 5,400
(d) Rs. 8,000 and Rs. 5,400

Q14. In an election between A and B, A gets double the votes of B and wins with a margin of 150 votes. 10% of votes were invalid. What is the total number of votes polled in the election?
(a) 550
(b) 600
(c) 450
(d) 500

Q15. The average weight of a family of five members (in kg) whose weights are 40 kg, 49 kg, 56 kg, 67 kg and 38 kg is:
(a) 51
(b) 52
(c) 50
(d) 49

Q16. The bar graph below shows the number of people watching films of their favourite genres.



The number of people watching Action, Sci-fi and Animation films is what percentage (rounded off to the nearest integer) of the number of people watching Drama and Horror films?
(a) 90%
(b) 89%
(c) 93%
(d) 87%

Q17. The marked price of an article is Rs. 1,500 and it is sold at a discount of 19%. If there is a gain of 8%, then by what per cent above the cost price was the article marked?
(a) 331/3%
(b) 291/3%
(c) 361/3%
(d) 311/3%

Q18. A solid metallic sphere of radius 15 cm is melted and recast into solid spherical balls of radius 3 cm each. What is the ratio of the surface area of the original sphere to the sum of the surface areas of all the balls?
(a) 2 : 7
(b) 3 : 8
(c) 1 : 5
(d) 1 : 3

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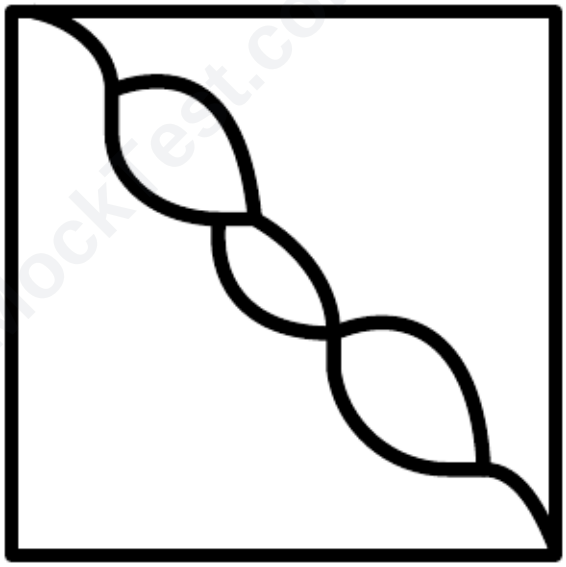
Q19. The average of nine consecutive integers is 54. The second largest of these numbers is:

(a) 57
(b) 50
(c) 58
(d) 59

Q20. A thief is spotted by a policeman at a distance of 300 m. the policeman chases the thief at speed of 10 km/h and the thief is running at a speed of 11 km/h, then the distance between them after 12 minutes is:

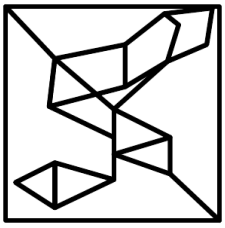
(a) 100 m
(b) 200 m
(c) 500 m
(d) 250 m

Q21. Select the option figure in which the given figure (X) is embedded as its part (rotation is NOT allowed).

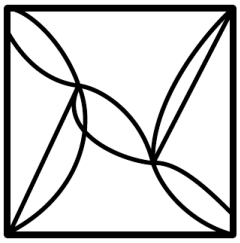


(X)

(a)

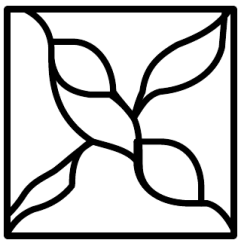


(b)

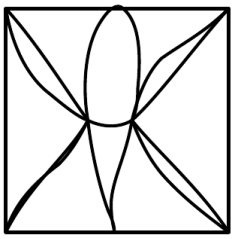


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(c)



(d)



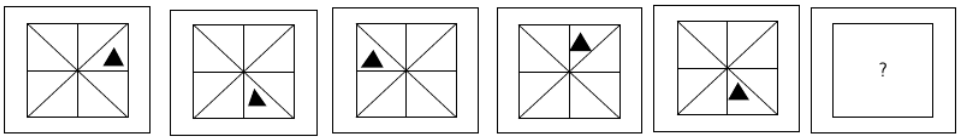
Q22. In a code language, 'FORK' is coded as 'GLWD' and 'CAVF' is coded as 'DXAY'. How will 'TRHA' be coded in that language?

(a) UOPR
(b) UONQ
(c) UNMS
(d) UOMT

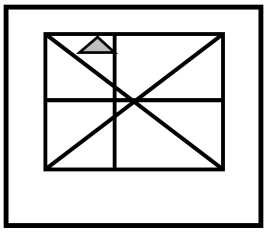
Q23. In a certain code language, ‘pen pencil eraser’ is written as ‘pq rq lq’ and ‘pages book eraser’ is written as ‘rq mq bq’. How is ‘eraser’ written in the given language?

(a) bq
(b) lq
(c) pq
(d) rq

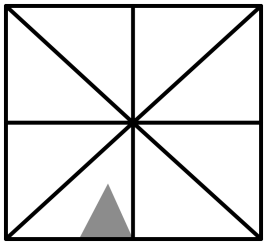
Q24. Select the figure from among the given options that can replace the question mark (?) in the following series.



(a)

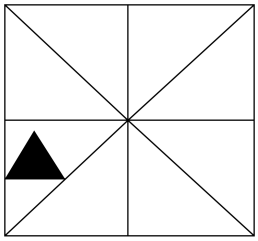


(b)

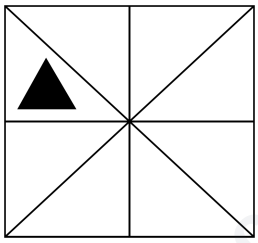


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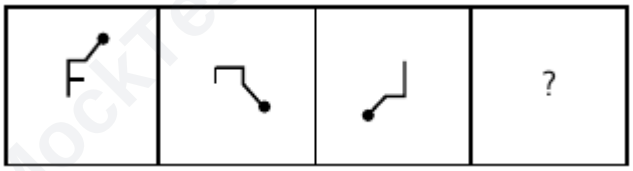
(c)



(d)



Q25. Select the figure that will come next in the following figure series.



(a)

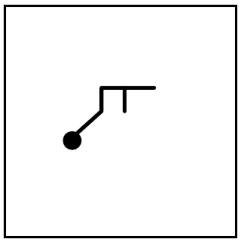




(b)

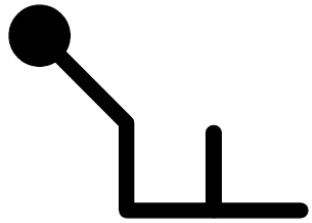


(c)

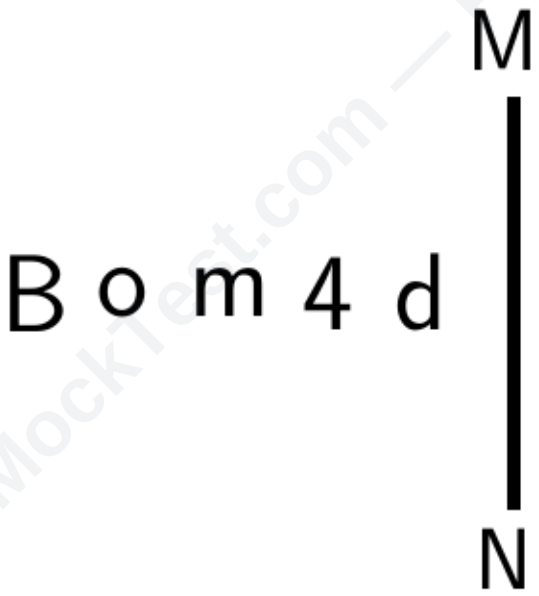


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(d)



Q26. Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



(a)



(b)



(c)



(d)



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Q27. In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. 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 their constituent digits. E.g. 13 – Operations on 13 such as adding/subtracting/multiplying to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

22, 31

26, 35

(a) 38, 47
(b) 44, 59
(c) 48, 52
(d) 32, 49

Q28. In a certain code language, 'CORNER' is written as 'REORNC' and 'BUDGET' is written as 'TEUDGB'. How will 'DEVICE' be written in that language?

(a) ECIVED
(b) EVECID
(c) EDEVIC
(d) ECEVID

Q29. What will come in the place of '?' in the following equation, if '+' and '–' are interchanged and '×' and '÷' are interchanged?

35 × 7 ÷ 6 + 3 – 14 = ?

(a) 41
(b) 42
(c) 35
(d) 39

Q30. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

• All pens are markers.

• Some erasers are pens.

Conclusions:

(I) Some markers are erasers.

(II) All markers are pens.

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

Q31. What should come in place of the question mark (?) in the given series based on the English alphabetical order?

BDG, EGJ, HJM, KMP, ?

(a) PSN
(b) PNS
(c) NSP
(d) NPS

Q32. JMGI is related to QTNP in a certain way based on the English alphabetical order. In the same way, GJDF is related to NQKM. To which of the following is DGAC related, following the same logic?

(a) NKJH
(b) NKHJ
(c) KNHJ
(d) KNJH

Q33. What will come in the place of '?' in the following equation, if '+' and '–' are interchanged and '×' and '÷' are interchanged?

16 ÷ 8 + 13 + 36 × 18 – 3 = ?

(a) 100
(b) 98
(c) 116
(d) 96

Q34. A, B, C, D, E, F and G are sitting around a circular table facing the centre (but not necessarily in the same order). D sits third to the left of E. G sits second to the left of B. Only E sits between F and G. A is not an immediate neighbour of D. Who sits fourth to the right of C?

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

Q35. Seven friends, A, B, C, D, E, F and G, are sitting around a circular table, facing the centre (but not necessarily in the same order). D is an immediate neighbour of both A and F. B is sitting to the immediate right of F. C is sitting second to the left of A. G and E both are C's immediate neighbours and G is not an immediate neighbour of A.

Who is the immediate neighbour of both B and D?

(a) F
(b) G
(c) A
(d) C

Q36. 3 is related to 8 following a certain logic. Following the same logic, 24 is related to 35. To which of the following is 99 related following the same logic?

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

(a) 80
(b) 143
(c) 110
(d) 120

Q37. CJ16 is related to EL26 in a certain way. In the same way, MT42 is related to OV52. To which of the following is HO11 related following the same logic?

(a) JQ21
(b) JK21
(c) KS31
(d) JQ31

Q38. What should come in place of the question mark (?) in the given series?

2, 3, 6, 12, 10, 21, 14, ?

(a) 25
(b) 27
(c) 29
(d) 30

Q39. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

Some flutes are violins.

Some violins are tablas.

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All tablas are sitars.

Conclusions:

(I) Some violins are sitars.

(II) Some flutes are tablas.

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

Q40. In a certain code language, 'car drive steady' is coded as 'mi ku pa' and 'steady is safe' is coded as 'tu an mi'. How is 'steady' coded in the given language?

(a) an
(b) tu
(c) ku
(d) mi

SESSION 2

Q41. Harshvardhan's ambitions of extending his power to Deccan and South India were stopped by:

(a) Vikramaditya
(b) Pulakesin II
(c) Rajaraja I
(d) Ashoka

Q42. When was India's first ever budget presented?

(a) 1935
(b) 1857
(c) 1948
(d) 1860

Q43. The cytoplasmic zone surrounding the Golgi complex possesses no cell organelles. This zone of clear cytoplasm is called

(a) cytosine
(b) cytochrome
(c) zone of exclusion
(d) cytosol

Q44. Which of the following statements is/are correct in context of Buddhist architecture?

i. Uddeshika stupa was created as a memorial.

ii. Paribhogika stupa contained the buried bodily remains of Buddha.

iii. Bharhut stupa is situated in Uttar Pradesh.

(a) Only i and ii
(b) i, ii and iii
(c) Only i and iii
(d) Only i

Q45. If an Indian citizen is denied entry to a public place because of his caste, which of the following Fundamental Rights is denied to him?

(a) Right to constitutional remedies
(b) Right against exploitation
(c) Right to equality
(d) Cultural and educational right

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Q46. 'Ram Navami' is celebrated in India to commemorate the:

(a) death of Ravana.
(b) coronation ceremony of Lord Rama as a king.
(c) return of Lord Rama from forest.
(d) birth of Lord Rama.

Q47. In February 2024, who took an oath as the 12^(th) Chief Minister of Jharkhand?

(a) Babulal Marandi
(b) Arjun Munda
(c) Champai Soren
(d) Saryu Rai

Q48. Udit Narayan was conferred the Padma Bhushan in 2016 for which of the following fields?

(a) Art - Classical Dance
(b) Art - Theatre
(c) Public Affairs
(d) Art - Playback Singing

Q49. Which river is known as 'Langchen Khambab' in Tibet?

(a) Tista
(b) Indus
(c) Sutlej
(d) Kosi

Q50. Bal Gangadhar described _____ as a diamond of India.

(a) Baba Saheb Ambedkar
(b) Mahatma Gandhi
(c) Gopal Krishna Gokhale
(d) Motilal Nehru

Q51. 'The Blue Umbrella', 'The Cherry Tree', 'The Hidden Pool' are novels written by who among the following authors?

(a) Ruskin Bond
(b) Anant Pai
(c) Sudha Murthy
(d) Twinkle Khanna

Q52. What is the overarching programme introduced in the Union Budget, 2018-19 by Government of India, for the school education sector?

(a) Right to Education
(b) Rashtriya Unnat Shiksha Abhiyan
(c) Sarva Vidya Abhiyan
(d) Samagra Shiksha

Q53. Who was the highest run scorer in Men's World Cup cricket - 2019?

(a) Rohit Sharma
(b) Virat Kohli
(c) DA Warner
(d) Shikhar Dhawan

Q54. The approximate number of water molecules present in 9 gm of water is _____.

(a) 9.023×10^{23}
(b) 6.022×10^{23}
(c) 3.011×10^{23}
(d) 6.022×10^{22}

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Q55. Who among the following was one of the founders of the Indian National Congress in 1885?

(a) Annie Besant
(b) Mahatma Gandhi
(c) Charles Freer Andrews
(d) Allan Octavian Hume

Q56. Who among the following was defeated by Babur in the Battle of Khanwa in 1527 CE?

(a) Rana Sanga
(b) Hasan Khan
(c) Ibrahim Lodi
(d) Medini Rai

Q57. Where was the inaugural match of the first edition of the Women's Premier League (WPL) organised in the year 2023?

(a) Mumbai
(b) Bengaluru
(c) Dharamshala
(d) Gujarat

Q58. 'Chakyar Koothu', the folk dance form in which the entire story is presented by a single performer, primarily belongs to which of the following states?

(a) Tripura
(b) Kerala
(c) Sikkim
(d) Tamil Nadu

Q59. Which of the following sectors had the largest percentage of workforce in urban India in the year 2019-2020?

(a) Agriculture
(b) Industry
(c) Service
(d) Mining

Q60. National Prophylaxis Program, which was launched in 1970 as an immediate remedial measure to address which of the following medical conditions/diseases caused by nutritional deficiencies?

(a) Blindness
(b) Hypercalcemia
(c) Goitre
(d) Beriberi

Q61. Which Article of the Constitution directs the Council of Ministers to aid and advise the Governor?

(a) Article 167
(b) Article 153
(c) Article 163
(d) Article 157

Q62. As per the reforms of the Mines and Minerals (Development and Regulation) Amendment Bill, 2023, how many minerals have been removed from the list of atomic minerals?

(a) 8
(b) 3
(c) 11
(d) 6

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Q63. K Kalyanasundaram Pillai was honoured with the Sangeet Natak Akademi Award, 1999, for his contribution to which of the following dance forms?

(a) Kuchipudi
(b) Manipuri
(c) Bharatnatyam
(d) Mohiniyattam

Q64. A portion of landmass from the shore line up to the shelf break that is submerged under shallow water is known as:

(a) Trenches
(b) Continental Drift
(c) Oceanic Basin
(d) Continental Shelf

Q65. Which of the following is NOT included in the three main dimensions of the New Industrial Policy, 1991, announced by the Government of India?

(a) Liberalisation
(b) Privatisation
(c) Globalisation
(d) Urbanisation

Q66. What is the correct substitution for the word 'screw' in the idiom 'Hit the screw on the head'?

(a) Bolt
(b) Crew
(c) Nail
(d) Tack

Q67. Select the most appropriate option that can substitute the underlined segment in the given sentence. If there is no need to substitute it, select "No substitution required".

She prepares an unique dish in the cooking competition and won it.

(a) prepares a unique
(b) prepared an unique
(c) No substitution required
(d) prepared a unique

Q68. In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in the blanks.

Mosquito means small fly. It has a transmitter segmented body and a _____ of wings. Male mosquitoes mainly feed on plant _____.

(a) kind; drink
(b) set; beverage
(c) pair; nectar
(d) couple; liquor

Q69. Select the most appropriate option to fill in the blank.

He had always wanted to work for himself; so, last year he _____ his job at the bank and is now running a tool business.

(a) left
(b) bereft
(c) halted
(d) cleft

Q70. Select the most appropriate degree of comparison to fill in the blank.

Work in this office is done in the _____ way.

(a) little efficient
(b) lesser efficient way

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(c) less efficient
(d) least efficient

Q71. Select the INCORRECTLY spelt word from the given sentence.
The chef's delicious recipies are a favourite among the restaurant's patrons.
(a) Delicious
(b) Recipies
(c) Chef's
(d) Restaurant's

Q72. Select the most appropriate synonym of the underlined word in the following sentence.
I graciously welcomed my boss at my birthday party.
(a) Bravely
(b) Cleverly
(c) Courageously
(d) Nicely

Q73. Select the most appropriate synonym of the given word.
Futile
(a) Vicious
(b) Adequate
(c) Useless
(d) Thoughtful

Q74. The following sentence has been split into four segments. Identify the segment that contains a grammatical error.
I have lived with my parents / in Mumbai / in a residential flat / yet two years.
(a) yet two years
(b) in Mumbai
(c) I have lived with my parents
(d) in a residential flat

Q75. Select the most appropriate synonym of the word given in brackets to fill in the blank.
Many fraud companies _____ (deceive) innocent customers and earn millions of dollars.
(a) hamper
(b) facilitate
(c) mislead
(d) resolve

Q76. Select the most appropriate option that can substitute the underlined segment in the given sentence.
We have perhaps never seen an ablest series of advocates than these ten standing in a row.
(a) more able
(b) abler
(c) the ablest
(d) most ablest

Q77. Select the most appropriate synonym of the underlined word in the given sentence.
To his surprise, it swung back at his touch.
(a) Anger
(b) Regret
(c) Shock
(d) Boredom

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Q78. Select the most appropriate synonym of the given word.

Ephemeral

(a) Ugly
(b) Permanent
(c) Pleasing
(d) Transient

Q79. Parts of the following sentence have been given as options. Select the option that contains an error.

A fox and an hyena were spotted in the animal reserve.

(a) A fox
(b) were spotted in
(c) and an hyena
(d) the animal reserve

Q80. Select the sentence that has a grammatical error.

(a) She always cuts out unhealthy snacks.
(b) The manager cuts the discussion to address an urgent matter.
(c) Can you cut through the traffic to get here on time?
(d) They need to cut down the old tree in the garden.

Q81. Select the most appropriate option that can substitute the underlined segment in the given sentence.

The questions in part B looks difficult than the questions in part A.

(a) difficultier
(b) difficulty
(c) more difficult
(d) most difficult

Q82. Select the most appropriate meaning of the given proverb.

Bite the bullet

(a) To be the first to attack someone
(b) To take the blame for something one didn't do
(c) To buy something with no prior inspection
(d) To face up to trouble with fortitude

Q83. Select the most appropriate option to fill in the blank.

The student received an _____ for his outstanding performance.

(a) accolad
(b) acolade
(c) accolade
(d) acolayd

Q84. Select the most appropriate option that can substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

The soldiers are all on their toes and anxiously waiting for the orders to start marching towards the enemy.

(a) No substitution required
(b) all on their toes and anxiously dancing
(c) all on their fingers and anxiously waiting
(d) paying through the nose

Q85. Select the option that rectifies the spelling of the underlined word in the given sentence.

We have pledged our allegance to the nation.

(a) allegaince
(b) allegiance
(c) alegiance

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(d) ellegance

Directions

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Are you familiar with the movie 'Jurassic Park'? Do you recall the enormous dinosaurs? Do you know that there is still a mammal that is as big and amazing as them? Blue whales are the world's largest living things and (1)_____ vast oceanic expanses. The adult is more than 100 feet long and (2)_ more than 190 metric tons. According to scientists, a blue whale's heart weighs as much as a car while its tongue weighs as much as an elephant! They eat meat, but they don't have teeth. They gulp and swallow huge quantities of krill and shrimp for their diet. Their mouths have bristles that look like combs and remove water while keeping their food (3)_____.

Whales are social animals that live in 'pods', which are made up of more females than males. They take care of their children. Another female takes over and cares for the calf if one mother is unable to provide it with milk. Their bond is very strong, and they cry when another whale dies. The male makes sure that everyone in the pod gets their fair share of food. Whistles, clock-like sounds, and songs—frequent, high-pitched sounds—are the means by which the whales (4)_____ with one another. It assists them in locating one another, locating the position of the pod, searching for prey, and attracting mates. Every pod has a distinctive song that sets it apart from the others. These songs can be heard for not only hours, but also days (5)_____ miles of ocean.

Q86. Select the most appropriate option to fill in blank no. 1.

(a) employ
(b) depart
(c) inhabit
(d) engage

Q87. Select the most appropriate option to fill in blank no. 2.

(a) lifts
(b) weighs
(c) counts
(d) loads

Q88. Select the most appropriate option to fill in blank no. 3

(a) beckon
(b) brokerage
(c) fair
(d) intact

Q89. Select the most appropriate option to fill in blank no. 4.

(a) meet
(b) horrid
(c) catch
(d) communicate

Q90. Select the most appropriate option to fill in blank no. 5.

(a) across
(b) beside
(c) although
(d) off

ANSWER KEY

1	a	2	b	3	c	4	a	5	c	6	c	7	c	8	d	9	b	10	c
11	b	12	a	13	c	14	d	15	c	16	a	17	a	18	c	19	a	20	c
21	c	22	d	23	d	24	c	25	d	26	a	27	a	28	d	29	a	30	b
31	d	32	c	33	c	34	a	35	a	36	d	37	a	38	d	39	d	40	d

41	b	42	d	43	c	44	a	45	c	46	d	47	c	48	d	49	c	50	c
51	a	52	d	53	a	54	c	55	d	56	a	57	a	58	b	59	c	60	a
61	c	62	d	63	c	64	d	65	d	66	c	67	d	68	c	69	a	70	d
71	b	72	d	73	c	74	a	75	c	76	b	77	c	78	d	79	c	80	b
81	c	82	d	83	c	84	a	85	b	86	c	87	b	88	d	89	d	90	a

SOLUTIONS

Q1. Answer: (a) 280

Given:

Principal (P) = Rs. 2000

Rate of Interest (R) = 7% per year

Time (T) = 2 years

Formula Used:

Simple Interest (SI) = (P × R × T)/100

Calculation:

SI = (2000 × 7 × 2)/100

=> SI = 28000/100

=> SI = 280

The simple interest is Rs. 280.

Q2. Answer: (b) 18

Given:

Length of the first train = 280 metres

Length of the second train = 260 metres

Speed of the first train = 58 km/hr

Speed of the second train = 50 km/hr

Formula Used:

Time = Total Distance / Relative Speed

Calculation:

Total Distance = 280 + 260 = 540 metres

Relative Speed = 58 + 50 = 108 km/hr

Convert speed to m/s:

108 km/hr = 108 × (1000/3600) m/s

108 km/hr = 108 × (5/18) m/s

108 km/hr = 30 m/s

Time = Total Distance / Relative Speed

=> Time = 540 / 30

=> Time = 18 seconds

The correct answer is option 2.

Q3. Answer: (c) 40

Given:

Total sum = Rs. 312

Total number of children = 100

Each boy gets = Rs. 3.60

Each girl gets = Rs. 2.40

Formula used:

Let number of boys = x → then girls = 100 - x

Total amount = (boys × 3.60) + (girls × 2.40)

Calculation:

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3.60x + 2.40(100 - x) = 312
=> 3.60x + 240 - 2.40x = 312
=> (3.60 - 2.40)x = 312 - 240
=> 1.20x = 72
=> x = 72/1.20 = 60
=> Number of boys = 60
=> Number of girls = 100 - 60 = 40
Therefore The number of girls is 40.

Q4. Answer: (a) 49√3cm²

Given:
Side of equilateral triangle (s) = 14 cm
Formula used:
Area of an equilateral triangle = √3/4 s²
Calculation:
Area = √3/4 × 14²
=> √3/4 × 196
=> 196√3/4
=> 49√3 cm²
Therefore The area of the equilateral triangle is 49√3 cm².

Q5. Answer: (c) 5.6%

Shortcut Trick
Effective Discount % = [1 − (Paid Price % ÷ Received Quantity %)] × 100
Paid Price % = 100% − 15% = 85%
Received Quantity % = 100% − 10% = 90%
Effective Multiplier = 85 ÷ 90 = 17/18
Effective Discount % = (1 − 17/18) × 100 = 1/18 × 100 = 5.55...%
Rounding to one decimal place, we get 5.6%.
Therefore The correct answer is 5.6%.
Alternate Method
Given: Total rice = 25 kg, Price = Rs. 1,400, Discount offered = 15%, Quantity cheated = 10% less.
Formula: Effective Price per unit = Total Paid ÷ Total Quantity Received
=> Original rate per kg = 1400 ÷ 25 = Rs. 56
=> Discounted total amount paid = 1400 − (15% of 1400) = 1400 − 210 = Rs. 1,190
=> Actual quantity received by customer = 25 − (10% of 25) = 25 − 2.5 = 22.5 kg
=> Effective price paid per kg = 1190 ÷ 22.5 = Rs. 52.888...
=> Discount amount per kg = 56 − 52.888 = Rs. 3.111
=> Effective Discount % = (3.111 ÷ 56) × 100 = 5.555...%
=> Correct to one decimal place = 5.6%
Therefore The correct answer is 5.6%.
Additional Information
Dishonest Dealer Profit Concept
Profit % = [(True Weight − Faulty Weight) ÷ Faulty Weight] × 100. This is used when the dealer cheats on quantity while selling.
Successive Percentage Changes
For two successive changes of a% and b%, the net change is given by [a + b + (ab ÷ 100)] %. For discounts, use negative values.
Effective Rate Method
Effective Discount = [1 − (Ratio of Final Cost ÷ Ratio of Final Quantity)] × 100. This helps solve combined price-quantity variation problems quickly.

Q6. Answer: (c) 800

Given:
Principal (P) = Rs. 4000

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Rate of interest (R) = 4% per year
Time (T) = 5 years
Formula Used:
Simple Interest (SI) = (P × R × T) / 100
Calculation:
=> SI = (4000 × 4 × 5) / 100
=> SI = 80000 / 100
=> SI = 800
The simple interest is Rs. 800.

Q7. Answer: (c) Rs. 2,856.60

Given:
Raman's cost price = Rs. 2400
Raman sells to Rohan at 8% loss
Rohan sells to Soham at 12.5% gain
Soham wants to gain 15%
Formula used:
Selling Price = Cost Price × (1 ± (Gain or Loss)/100)
Calculation:
Raman's SP to Rohan = 2400 × (1 - 8/100) = 2400 × 0.92 = Rs. 2208
Rohan's SP to Soham = 2208 × (1 + 12.5/100) = 2208 × 1.125 = Rs. 2484
Soham wants 15% profit → SP = 2484 × (1 + 15/100) = 2484 × 1.15 = Rs. 2856.6
Therefore Soham should sell the iron at Rs. 2856.60

Q8. Answer: (d) 81

Given:
Final examination score = 75
Final project score = 90
Weight of final examination = 60%
Weight of final project = 40%
Formula Used:
Final grade = (Final examination score × Weight of final examination) + (Final project score × Weight of final project)
Calculation:
Weight of final examination = 60/100 = 0.6
Weight of final project = 40/100 = 0.4
Final grade = (75 × 0.6) + (90 × 0.4)
=> Final grade = 45 + 36
=> Final grade = 81
The final grade of the student is 81.

Q9. Answer: (b) 1225/1296

Given:
The ratio of the base radii of two cylinders = 5 : 6
The ratio of their corresponding heights = 49 : 36
Formula Used:
Volume of a cylinder = $\pi r^2 h$
The ratio of volumes = $(r1^2 h1) : (r2^2 h2)$
Calculation:
Let r1 = 5, r2 = 6, h1 = 49, h2 = 36
The ratio of volumes = $(r1^2 h1) : (r2^2 h2)$
=> $(5^2 \times 49) : (6^2 \times 36)$
=> $(25 \times 49) : (36 \times 36)$
=> 1225 : 1296

The correct answer is option 2.

Q10. Answer: (c) Rs. 2,625

Given:

Principal (P) = Rs. 3,500

Rate (R) = 15% per annum

Time (T) = 5 years

Formula Used:

Simple Interest (SI) = (P × R × T)/100

Calculation:

SI = Rs. 3,500 × 15 × 5 / 100

SI = Rs. 3,500 × 75 / 100

SI = Rs. 2,625

The simple interest on Rs. 3,500 at 15% per annum for 5 years is Rs. 2,625.

Q11. Answer: (b) 10

Given:

Amita goes every 2nd day

Amrita goes every 3rd day

Tosita goes every 6th day

All went on 31 Oct 2021

Find number of common attendance days in Nov & Dec 2021

Formula used:

Find LCM of 2, 3, and 6 = Common interval when all three attend together

Calculation:

LCM(2, 3, 6) = 6 → All attend every 6th day

Days from 1 Nov to 31 Dec = 30 (Nov) + 31 (Dec) = 61 days

We start counting from 31 Oct, so next common attendance = 6th day after 31 Oct = 6 Nov

List all dates from 6 Nov to 31 Dec with gap of 6 days:

6 Nov, 12 Nov, 18 Nov, 24 Nov, 30 Nov

6 Dec, 12 Dec, 18 Dec, 24 Dec, 30 Dec

Total = 10 dates

Therefore All three attended office together on 10 days during Nov & Dec 2021

Q12. Answer: (a) More, 21%

Given:

Table showing number of different types of batteries sold over the years (in lakhs).

Formula used:

Percentage change = [(New value - Old value) / Old value] × 100

Calculation:

Total batteries sold in 2011 = 82 + 100 + 130 + 120 = 432 lakhs

Total batteries sold in 2013 = 85 + 165 + 112 + 162 = 524 lakhs

Difference = 524 - 432 = 92 lakhs

Percentage increase = (92 / 432) × 100

Percentage increase ≈ 21.29%

Rounded off to the nearest integer = 21%

Therefore The total number of all types of batteries sold in 2013 is 21% more than the total number of all types of batteries sold in 2011.

Therefore The correct answer is option 1. More, 21%

Q13. Answer: (c) Rs. 8,100 and Rs. 5,400

Given:

Income ratio (Rama : Ganga) = 4 : 3

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Expenditure ratio (Rama : Ganga) = 3 : 2
Savings of each = Rs. 2700
Formula used:
Savings = Income - Expenditure
Calculation:
Let incomes be:
Rama = 4x, Ganga = 3x
Let expenditures be:
Rama = 3y, Ganga = 2y
Savings:
Rama → 4x - 3y = 2700 ... (1)
Ganga → 3x - 2y = 2700 ... (2)
Multiply (1) by 2: 8x - 6y = 5400
Multiply (2) by 3: 9x - 6y = 8100
Subtract: (9x - 6y) - (8x - 6y) = 8100 - 5400
=> x = 2700
Put x = 2700 in (2):
3×2700 - 2y = 2700
8100 - 2y = 2700
2y = 5400 => y = 2700
Now find expenditures:
Rama = 3y = 3×2700 = Rs. 8100
Ganga = 2y = 2×2700 = Rs. 5400
Therefore Expenditures of Rama and Ganga are Rs. 8100 and Rs. 5400 respectively.

Q14. Answer: (d) 500

Given:
A gets double the votes of B
Margin = 150 votes
10% of total votes are invalid
Calculation:
A = 2B
Margin = A - B = 150
Valid votes = A + B
Total votes = Valid votes ÷ 0.90
Let B = x → A = 2x
Margin = 2x - x = x = 150
=> x = 150
=> B = 150, A = 2×150 = 300
Valid votes = A + B = 300 + 150 = 450
Total votes = 450 ÷ 0.90 = 500
Therefore Total number of votes polled = 500

Q15. Answer: (c) 50

Given:
Weights of the family members = 40 kg, 49 kg, 56 kg, 67 kg, 38 kg
Formula Used:
Average weight = Sum of weights / Number of members
Calculation:
Sum of weights = 40 + 49 + 56 + 67 + 38
Sum of weights = 250 kg
Number of members = 5

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Average weight = 250 / 5
=> Average weight = 50 kg
The average weight of the family is 50 kg.

Q16. Answer: (a) 90%

Given:
People watching:
Action = 36
Sci-fi = 25
Animation = 72
Drama = 65
Horror = 83
Formula used:
Percentage = (Group A total)/(Group B total) × 100
Calculation:
Action + Sci-fi + Animation = 36 + 25 + 72 = 133
Drama + Horror = 65 + 83 = 148
Required % = 133/148 × 100 ≈ 89.86%
Rounded to nearest integer = 90%
Therefore Required percentage = 90%

Q17. Answer: (a) 331/3%

Given:
Marked Price (MP) = Rs. 1500
Discount = 19%
Gain = 8%
Formula used:
Selling Price (SP) = MP × (1 - Discount/100)
Cost Price (CP) = SP ÷ (1 + Gain/100)
Required % = (MP - CP)/CP × 100
Calculation:
SP = 1500 × (1 - 0.19) = 1500 × 0.81 = Rs. 1215
CP = 1215 ÷ 1.08 = Rs. 1125
Required % = (1500 - 1125)/1125 × 100 = 375/1125 × 100 = 33.33%
Therefore The article was marked 331/3% above the cost price.

Q18. Answer: (c) 1 : 5

Given:
Radius of original sphere (R) = 15 cm
Radius of each small ball (r) = 3 cm
Formula used:
Volume of sphere = $4/3\pi r^3$
Surface area of sphere = $4\pi r^2$
Calculation:
Volume of original sphere = $4/3\pi (15)^3 = 4/3\pi \times 3375 = 4500\pi$
Volume of one small ball = $4/3\pi (3)^3 = 4/3\pi \times 27 = 36\pi$
No. of small balls = $4500\pi/36\pi = 125$
Surface area of original sphere = $4\pi (15)^2 = 4\pi \times 225 = 900\pi$
Surface area of 1 small ball = $4\pi (3)^2 = 4\pi \times 9 = 36\pi$
Total surface area of 125 balls = $125 \times 36\pi = 4500\pi$
Required ratio = $900\pi/4500\pi = 1/5$
Therefore Required ratio = 1 : 5

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Q19. Answer: (a) 57

Given:

The average of nine consecutive integers is 54.

Formula Used:

Average of an odd number of consecutive integers = Middle integer

Calculation:

Let the nine consecutive integers be x - 4, x - 3, x - 2, x - 1, x, x + 1, x + 2, x + 3, x + 4.

The average of these integers is the middle integer, which is xx.

Given that the average is 54, we have:

=> x = 54

The integers are: 50, 51, 52, 53, 54, 55, 56, 57, 58

The second largest of these integers is:

=> 57

The correct answer is option 1.

Q20. Answer: (c) 500 m

Given:

Initial distance between thief and policeman = 300 m

Speed of policeman = 10 km/h

Speed of thief = 11 km/h

Time = 12 minutes = 12 ÷ 60 = 0.2 hours

Formula used:

Relative speed = Thief's speed − Policeman's speed

Distance = Relative speed × Time

Calculation:

Relative speed = 11 − 10 = 1 km/h

Distance increased in 0.2 hrs = 1 × 0.2 = 0.2 km = 200 m

New distance = 300 + 200 = 500 m

Therefore Distance between them after 12 minutes = 500 m

Q21. Answer: (c) [figure]

The embedded figure is

Hence, the correct answer is "Option 3".

Q22. Answer: (d) UOMT

The logic followed here is:

'FORK' is coded as 'GLWD'

'CAVF' is coded as 'DXAY'

Similarly,

'TRHA' is coded as

Thus, 'TRHA' is coded as 'UOMT'.

Hence, the correct answer is "Option 4".

Q23. Answer: (d) rq

Given code language:

Thus, code for eraser is 'rq'.

Hence, the correct answer is "Option 4".

Q24. Answer: (c) [figure]

Given image series:

Hence, the correct answer is "Option 3".

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Q25. Answer: (d) [figure]

Given image:

Logic: Rotate 90° clockwise direction.

Hence, the correct answer is "Option 4".

Q26. Answer: (a) [figure]

The mirror image of given figure is:

Hence, the correct answer is "Option 1".

Q27. Answer: (a) 38, 47

The logic followed here is:

Logic: 1st number + 9 = 2nd number.

22, 31

→ 22 + 9

→ 31 = 2nd number.

and

26, 35

→ 26 + 9

→ 35 = 2nd number.

Similarly,

Option 1)

38, 47

→ 38 + 9

→ 47 = 2nd number.

Hence, the correct answer is "Option 1".

Q28. Answer: (d) ECEVID

The logic followed here is:

'CORNER' is written as 'REORNC'

'BUDGET' is written as 'TEUDGB'

Similarly,

'DEVICE'

Thus, 'DEVICE' is written as 'ECEVID'

Hence, the correct answer is "Option 4".

Q29. Answer: (a) 41

Given: 35 × 7 ÷ 6 + 3 – 14 = ?

Sign Interchange: '+' and '–', and '×' and '÷'.

After sign Interchange: 35 ÷ 7 × 6 – 3 + 14

Apply the order of operations (BODMAS).

→ 35 ÷ 7 × 6 – 3 + 14

→ 5 × 6 – 3 + 14

→ 30 – 3 + 14

→ 27 + 14

→ 41

Hence, the correct answer is "Option 1".

Q30. Answer: (b) Only conclusion (I) follows

The least possible venn diagram:

Conclusions:

(I) Some markers are erasers → True (As, All pens are markers, Some erasers are pens. so, Some markers are erasers holds true)

(II) All markers are pens → False (As, All pens are markers is given. so, All markers are pens is possibility but not definite)

Thus, Only conclusion (I) follows.

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Hence, the correct answer is "Option 2".

Q31. Answer: (d) NPS

The logic followed here is:

Thus, 'NPS' will be the next in the series.

Hence, the correct answer is "Option 4".

Q32. Answer: (c) KNHJ

Given:

JMGI is related to QTNP

GJDF is related to NQKM

Similarly,

DGAC

Thus, 'DGAC' is written as ' KNHJ'.

Hence, the correct answer is "Option 3".

Q33. Answer: (c) 116

Given: 16 ÷ 8 + 13 + 36 × 18 – 3 = ?

Sign Interchange '+' and '–', and '×' and '÷'.

After sign interchange: 16 × 8 – 13 – 36 ÷ 18 + 3

Apply the order of operations (BODMAS).

→ 16 × 8 – 13 – 36 ÷ 18 + 3

→ 16 × 8 – 13 – 2 + 3

→ 128 – 13 – 2 + 3

→ 115 – 2 + 3

→ 116

Hence, the correct answer is "Option 3".

Q34. Answer: (a) A

Given:

A, B, C, D, E, F and G are sitting around a circular table facing the centre.

G sits second to the left of B. Only E sits between F and G.

D sits third to the left of E. A is not an immediate neighbour of D.

Thus, 'A' sits fourth to the right of C.

Hence, the correct answer is "Option 1".

Q35. Answer: (a) F

Given:

Seven friends, A, B, C, D, E, F and G, are sitting around a circular table, facing the centre.

C is sitting second to the left of A.

G and E both are C's immediate neighbours and G is not an immediate neighbour of A.

D is an immediate neighbour of both A and F. B is sitting to the immediate right of F..

Thus, 'F' is the immediate neighbour of both B and D.

Hence, the correct answer is "Option 1".

Q36. Answer: (d) 120

The logic followed here is:

Logic: {√(1st number + 1) + 1}² - 1 = 2nd number.

3 is related to 8

→ {√(3+ 1) + 1}2 - 1

→ {√4 + 1}2 - 1

→ {2 + 1}2 - 1

→ {3}2 - 1

→ 9 - 1.

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→ 8. = 2nd number

24 is related to 35

→ {√(24+ 1) + 1}2 - 1

→ {√25 + 1}2 - 1

→ {5 + 1}2 - 1

→ {6}2 - 1

→ 36 - 1.

→ 35. = 2nd number

Similarly,

99 is related

→ {√(99+ 1) + 1}2 - 1

→ {√100 + 1}2 - 1

→ {10 + 1}2 - 1

→ {11}2 - 1

→ 121 - 1.

→ 120.

Hence, the correct answer is "Option 4".

Q37. Answer: (a) JQ21

Given:

CJ16 is related to EL26

MT42 is related to OV52

Similarly,

HO11

Thus, 'HO11' is related to 'JQ21'.

Hence, the correct answer is "Option 1".

Q38. Answer: (d) 30

The logic followed here is:

Thus, 30 will be the next number in the series.

Hence, the correct answer is "Option 4".

Q39. Answer: (d) Only conclusion (I) follows

The least possible venn diagram:

Conclusions:

(I) Some violins are sitars → True (As, Some violins are tablas, All tablas are sitars. so, Some violins are sitars holds true)

(II) Some flutes are tablas → False (As, there is no direct relation between them)

Thus, Only conclusion (I) follows.

Hence, the correct answer is "Option 4".

Q40. Answer: (d) mi

Given code language:

steady is common in both code language.

Thus, code for Steady is 'mi'

Hence, the correct answer is "Option 4".

Q41. Answer: (b) Pulakesin II

The correct answer is Pulakesin II.

Key Points

• Pulakesin II was a renowned Chalukya king who ruled over the Deccan region.

• Harshavardhana, the ruler of North India, attempted to expand his influence to the Deccan and South India.

• Pulakesin II decisively defeated Harshavardhana near the banks of the river Narmada around 618-619 AD, halting his southern expansion.

• This victory is recorded in the Aihole inscription, composed by Pulakesin II's court poet, Ravikirti.

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• The defeat of Harshavardhana by Pulakesin II is considered a significant event in Indian history as it marked the limit of Harshavardhana's territorial expansion.

Additional Information

• Harshavardhana

• Harshavardhana, also known as Harsha, was an Indian emperor who ruled North India from 606 to 647 AD.

• He established his capital at Kannauj and was known for his patronage of arts and literature.

• Harsha's reign is well-documented by the Chinese traveler Xuanzang (Hiuen Tsang).

• Chalukya Dynasty

• The Chalukya dynasty was an important South Indian dynasty that ruled large parts of southern and central India between the 6th and 12th centuries.

• Pulakesin II was one of the most notable rulers of the Chalukya dynasty.

• Aihole Inscription

• The Aihole inscription is a famous historical record composed by Ravikirti, the court poet of Pulakesin II.

• It documents the achievements of Pulakesin II, including his victory over Harshavardhana.

• Narmada River

• The Narmada River is one of the major rivers in central India, flowing westwards over a length of about 1,312 km.

• The battle between Harshavardhana and Pulakesin II took place near this river.

Q42. Answer: (d) 1860

The correct answer is 1860.

Key Points

• James Wilson, a Scottish economist and politician, presented India's first budget on 18 February 1860.

• He was the founder of The Economist magazine and also served as the Finance Member in the Council of the Governor-General of India.

• The budget was presented during the tenure of Lord Canning, the then Governor-General of India.

• This budget laid the groundwork for financial governance and economic management in British India.

• James Wilson's budget was aimed at addressing the financial challenges post the Indian Rebellion of 1857.

Additional Information

• Indian Rebellion of 1857

• Also known as the First War of Indian Independence, it was a major, but ultimately unsuccessful, uprising against the British East India Company.

• The rebellion led to significant changes in British policies and governance in India.

• After the rebellion, the British Crown took direct control of India from the East India Company.

• Lord Canning

• He was the Governor-General of India during the Indian Rebellion of 1857 and the first Viceroy of India.

• He played a crucial role in the reorganization of the Indian administration post-rebellion.

• James Wilson's Contributions

• Besides presenting India's first budget, he established the paper currency system in India.

• He introduced several financial and tax reforms that had long-lasting impacts on the Indian economy.

• Economic Reforms Post-1857

• The British government introduced various reforms to stabilize the economy and administration of India post-rebellion.

• These included the introduction of income tax and the establishment of a structured financial administration.

Q43. Answer: (c) zone of exclusion

The correct answer is zone of exclusion.

Key Points

• The zone of exclusion is a cytoplasmic region surrounding the Golgi apparatus where no other organelles are present.

• This clear zone helps in the efficient functioning of the Golgi complex by providing an unobstructed area for vesicle formation and transport.

• The Golgi complex is a critical organelle involved in modifying, sorting, and packaging proteins and lipids for secretion or use within the cell.

• The zone of exclusion ensures that the Golgi complex remains free from interference by other cellular structures, facilitating its role in cellular logistics.

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Additional Information

• Golgi Apparatus

• Also known as the Golgi complex or Golgi body, it is an essential cell organelle found in most eukaryotic cells.

• It was discovered by the Italian scientist Camillo Golgi in 1898.

• The main function of the Golgi apparatus is to process and package macromolecules like proteins and lipids that are synthesized by the cell.

• It is composed of flattened membranous sacs known as cisternae.

• Vesicle Transport

• Vesicles are small structures within the cell that transport substances between organelles and to the cell membrane for secretion.

• The formation and transport of vesicles are crucial for the functioning of the Golgi apparatus.

• Vesicle-mediated transport ensures that proteins and lipids reach their correct destinations within or outside the cell.

• Cytoplasm

• The cytoplasm is the gel-like substance enclosed within the cell membrane and outside the nuclear membrane.

• It contains all organelles and cell parts, providing a medium for chemical reactions to occur.

• The cytoplasm plays a role in maintaining cell shape and consistency, and in storing nutrients and waste products.

• Endoplasmic Reticulum (ER)

• The ER is a network of membranous tubules within the cytoplasm of eukaryotic cells.

• It comes in two forms: rough ER (with ribosomes on its surface) and smooth ER (without ribosomes).

• The rough ER is involved in protein synthesis and quality control, while the smooth ER is involved in lipid synthesis and detoxification processes.

Q44. Answer: (a) Only i and ii

The correct answer is Only i and ii.

Key Points

• Uddeshika stupa was created as a memorial, often constructed to commemorate significant events or places associated with Buddha's life.

• Paribhogika stupa contained the buried bodily remains (relics) of Buddha or other important monks, serving as a relic shrine.

• Bharhut stupa is not situated in Uttar Pradesh; it is located in Madhya Pradesh.

• Bharhut stupa is renowned for its intricate railings and gateways adorned with detailed carvings depicting Jataka tales.

Additional Information

• Sanchi Stupa: Located in Madhya Pradesh, it is one of the oldest stone structures in India and a significant monument of Buddhist architecture.

• Amaravati Stupa: Situated in Andhra Pradesh, this stupa is known for its rich and elaborate carvings depicting scenes from the life of the Buddha.

• Great Stupa at Sanchi: Originally commissioned by Emperor Ashoka in the 3rd century BCE, it has a large hemispherical dome and houses relics of the Buddha.

• Stupa Components: Key elements include the dome (anda), the square railing (harmika) atop the dome, and the central pillar (yasti) symbolizing the axis mundi.

• Function of Stupas: Stupas functioned as places of meditation, pilgrimage, and veneration, reflecting the spread and influence of Buddhism.

Q45. Answer: (c) Right to equality

The correct answer is Right to equality.

Key Points

• The Right to Equality is enshrined in Articles 14 to 18 of the Indian Constitution.

• It guarantees that every citizen shall be treated equally before the law and prohibits discrimination on grounds of religion, race, caste, sex, or place of birth.

• Denial of entry to a public place based on caste is a direct violation of Article 15(2), which prohibits discrimination on such grounds in public places.

• This fundamental right ensures that all citizens have equal access to public places like shops, restaurants, hotels, and places of public entertainment.

Additional Information

• Article 14: Ensures equality before the law and equal protection of the laws within the territory of India.

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• Article 15: Prohibits discrimination on grounds of religion, race, caste, sex, or place of birth.
• Article 16: Guarantees equality of opportunity in matters of public employment.
• Article 17: Abolishes "untouchability" and forbids its practice in any form.
• Article 18: Abolishes titles except military and academic distinctions.

Q46. Answer: (d) birth of Lord Rama.

The correct answer is birth of Lord Rama.

Key Points

• Ram Navami is a Hindu festival that celebrates the birth of Lord Rama, the seventh avatar of the god Vishnu.
• It falls on the ninth day of the Hindu lunar calendar month of Chaitra, which typically occurs in March or April.
• Lord Rama is believed to have been born at noon, and this time is marked by special prayers and rituals.
• The festival is celebrated with various activities including fasting, singing devotional songs, reading the Ramayana, and visiting temples.

Additional Information

• Significance of Ram Navami
• Ram Navami marks the descent of Vishnu as Lord Rama, who is considered a symbol of virtue and chivalry.
• Lord Rama's story is chronicled in the ancient Indian epic, the Ramayana, which is revered by Hindus worldwide.
• Celebration Practices
• Devotees clean and decorate their homes, perform puja (worship), and recite verses from the Ramayana.
• Many people observe a day-long fast, breaking it only after performing evening prayers.
• Temples and Public Celebrations
• In Ayodhya, the birthplace of Lord Rama, grand celebrations are held with processions, and the city is illuminated with lights.
• Temples dedicated to Lord Rama organize special events, including recitations of the Ramayana and theatrical performances of his life story.
• Symbolic Importance
• Lord Rama's life and deeds exemplify righteousness, moral values, and the importance of fulfilling one's duties.
• Ram Navami serves as a reminder of these virtues, inspiring devotees to embody these qualities in their lives.

Q47. Answer: (c) Champai Soren

The correct answer is Champai Soren.

Key Points

• Champai Soren was sworn in as the 12th Chief Minister of Jharkhand in February 2024.
• He is a member of the Jharkhand Mukti Morcha (JMM) party.
• Soren has previously held various ministerial positions in the Jharkhand state government.
• His political career is known for focusing on the rights and welfare of the tribal communities in Jharkhand.
• Soren succeeded Hemant Soren, who was the 11th Chief Minister of Jharkhand.

Additional Information

• Jharkhand Mukti Morcha (JMM)
• It is a state political party in Jharkhand founded by Shibu Soren.
• The party primarily focuses on the issues of tribal rights and regional development.
• JMM has been influential in Jharkhand politics since the state's formation in 2000.
• Tribal Welfare in Jharkhand
• Jharkhand has a significant tribal population, comprising around 26% of the state's total population.
• Various state and central government schemes aim to improve the socio-economic status of the tribal communities.
• Key initiatives include educational scholarships, health programs, and land rights legislation.
• Political Landscape of Jharkhand
• Jharkhand has a multi-party system with major parties including JMM, BJP, and Congress.
• Political dynamics in the state often revolve around issues like tribal rights, resource management, and industrial development.
• The state has witnessed frequent changes in leadership and coalition governments.
• Hemant Soren
• He served as the 11th Chief Minister of Jharkhand.
• He is also a member of the Jharkhand Mukti Morcha (JMM).
• His tenure focused on tribal welfare, development projects, and combating corruption.

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Q48. Answer: (d) Art - Playback Singing

The correct answer is Art - Playback Singing.

Key Points

• Udit Narayan is a renowned playback singer in the Indian film industry, predominantly known for his work in Bollywood.

• He has lent his voice to numerous hit songs in various Indian languages, making him a celebrated figure in the music industry.

• In recognition of his significant contributions to the field of playback singing, he was awarded the Padma Bhushan in 2016.

• The Padma Bhushan is the third-highest civilian award in India, conferred to individuals for distinguished service of a high order in any field.

• Udit Narayan's melodious voice has earned him multiple awards and accolades throughout his career, including several Filmfare Awards.

Additional Information

• Padma Awards

• The Padma Awards include Padma Vibhushan, Padma Bhushan, and Padma Shri.

• These awards are announced annually on Republic Day and are among the highest civilian honors in India.

• Padma Vibhushan is awarded for exceptional and distinguished service, Padma Bhushan for distinguished service of a high order, and Padma Shri for distinguished service in any field.

• Playback Singing

• Playback singing is a recording technique in which singers pre-record songs for movies, and actors lip-sync to the songs on screen.

• This practice is highly prevalent in the Indian film industry, particularly in Bollywood.

• Some of the most famous playback singers in India include Lata Mangeshkar, Kishore Kumar, and Asha Bhosle.

• Udit Narayan's Career

• Udit Narayan began his career in the early 1980s and quickly rose to fame with his versatile singing style.

• He has sung in numerous languages, including Hindi, Tamil, Telugu, Kannada, and Bengali.

• Some of his most popular songs include "Pehla Nasha," "Tip Tip Barsa Pani," and "Papa Kehte Hain."

• Filmfare Awards

• The Filmfare Awards are one of the oldest and most prestigious film awards in India, presented annually by The Times Group.

• They recognize artistic and technical excellence in the Hindi film industry.

• Udit Narayan has won several Filmfare Awards for Best Male Playback Singer throughout his career.

Q49. Answer: (c) Sutlej

The correct answer is Sutlej.

Key Points

• The Sutlej River is known as 'Langchen Khambab' in Tibet.

• It is the longest of the five rivers that flow through the historic region of Punjab in northern India and Pakistan.

• The Sutlej originates from Lake Rakshastal in Tibet near Mount Kailash.

• It flows through India and Pakistan, eventually merging with the Chenab River in Pakistan.

• The Sutlej plays a vital role in the Indus Basin irrigation system, which is crucial for agriculture in the region.

Additional Information

• Geographical Importance

• The Sutlej is an essential part of the Indus River system, contributing significantly to the region's water resources.

• It supports extensive irrigation systems that are critical for the agriculture of Punjab in both India and Pakistan.

• Hydropower Projects

• The Sutlej River hosts several hydropower projects, such as the Bhakra-Nangal Dam, which is one of the largest dams in India.

• These projects are vital for generating electricity and providing water for irrigation.

• Historical Significance

• The river has been historically significant, with several ancient civilizations and cities flourishing along its banks.

• It has been a crucial route for trade and cultural exchange between India and Tibet.

• Environmental Concerns

• Like many rivers, the Sutlej faces environmental challenges such as pollution, over-extraction of water, and impacts of climate change.

• Efforts are being made to address these issues through sustainable management practices.

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Q50. Answer: (c) Gopal Krishna Gokhale

The correct answer is Gopal Krishna Gokhale.

Key Points

• Bal Gangadhar Tilak, a prominent Indian nationalist leader, described Gopal Krishna Gokhale as the "diamond of India".

• Gokhale was a senior leader of the Indian National Congress and a social reformer during the Indian independence movement.

• He was known for his moderate views and advocacy of dialogue and reform over confrontation with the British government.

• Gokhale founded the Servants of India Society in 1905, which worked for the expansion of education and social welfare in India.

Additional Information

• Indian National Congress (INC)

• Founded in 1885, the INC was a major political party in India that led the country to independence.

• It played a crucial role in the Indian freedom struggle against British rule.

• Servants of India Society

• Founded by Gokhale in 1905, it aimed to promote education, sanitation, healthcare, and fight against social evils.

• The society was instrumental in mobilizing public opinion for social reforms.

• Bal Gangadhar Tilak

• Known as "Lokmanya", Tilak was a fiery independence activist and a contemporary of Gokhale.

• He was a proponent of self-rule and used the slogan "Swaraj is my birthright and I shall have it".

• Moderates and Extremists

• In the early 20th century, the INC was divided into two factions: the Moderates led by Gokhale, and the Extremists led by Tilak.

• Moderates advocated for gradual reforms, while Extremists favored more direct action against British rule.

Q51. Answer: (a) Ruskin Bond

The correct answer is Ruskin Bond.

Key Points

• Ruskin Bond is a celebrated Indian author of British descent.

• He has written numerous novels, short stories, and children's books.

• Notable works include 'The Blue Umbrella', 'The Cherry Tree', and 'The Hidden Pool'.

• His works are characterized by their simplicity and the depiction of nature and rural life in India.

Additional Information

• Ruskin Bond's Literary Contributions

• He has written over 500 short stories, essays, and novels.

• His first novel, 'The Room on the Roof', won the John Llewellyn Rhys Prize in 1957.

• He was awarded the Sahitya Akademi Award in 1992 for his short story collection 'Our Trees Still Grow in Dehra'.

• He received the Padma Shri in 1999 and the Padma Bhushan in 2014.

• The Blue Umbrella

• This novella was published in 1980 and is one of Bond's most famous works.

• It tells the story of a young girl named Binya and her blue umbrella, exploring themes of kindness and material desire.

• The book was adapted into a film directed by Vishal Bhardwaj in 2005.

• The Cherry Tree

• A children's book that illustrates the importance of nature and nurturing.

• It follows the story of a young boy named Rakesh who plants a cherry seed and watches it grow.

• The Hidden Pool

• Published in 1966, it is Bond's first novel for children.

• The story revolves around three friends and their adventures around a hidden pool in the hills of Mussoorie.

Q52. Answer: (d) Samagra Shiksha

The correct answer is Samagra Shiksha.

Key Points

• Samagra Shiksha is an integrated scheme for school education extending from pre-school to class XII.

• It was launched by the Government of India in the Union Budget 2018-19.

• The scheme subsumes three earlier schemes: Sarva Shiksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA), and Teacher Education (TE).

• Samagra Shiksha aims to improve school effectiveness in terms of equal opportunities for schooling and equitable learning outcomes.
• It focuses on the holistic development of children, enhancing the quality of education at all levels of schooling.

Additional Information

• Right to Education (RTE)
• Enshrined in Article 21A of the Indian Constitution.
• Makes education a fundamental right for children aged 6 to 14 years.
• Mandates free and compulsory education for this age group.
• Aims to improve literacy rates and ensure access to education for all children.
• Rashtriya Madhyamik Shiksha Abhiyan (RMSA)
• Launched in 2009 to enhance access to secondary education.
• Aimed at improving the quality of education at the secondary level.
• Focused on reducing the drop-out rate and enhancing the enrolment ratio.
• Now subsumed under the Samagra Shiksha scheme.
• Sarva Shiksha Abhiyan (SSA)
• Launched in 2001 to achieve universalization of elementary education.
• Focused on providing useful and relevant elementary education for all children.
• Aimed at bridging social, regional, and gender gaps in education.
• Now part of the Samagra Shiksha initiative.
• Teacher Education (TE)
• Aims to improve the quality of teachers through professional development.
• Focuses on training and re-training teachers to enhance their teaching skills.
• Supports continuous professional development programs for teachers.
• Also integrated into the Samagra Shiksha scheme.

Q53. Answer: (a) Rohit Sharma

The correct answer is Rohit Sharma.

Key Points

• Rohit Sharma was the highest run-scorer in the 2019 ICC Men's Cricket World Cup.
• He scored a total of 648 runs in the tournament.
• Rohit Sharma achieved this feat by scoring five centuries in the tournament, a record in World Cup history.
• His batting average in the 2019 World Cup was 81.00.

Additional Information

• ICC Men's Cricket World Cup 2019
• The 2019 ICC Men's Cricket World Cup was held in England and Wales from May 30 to July 14, 2019.
• The tournament featured ten teams competing in a round-robin format followed by semi-finals and a final.
• England won the tournament, defeating New Zealand in the final via boundary count after a Super Over tie.
• Rohit Sharma's World Cup Performance
• Rohit Sharma became the first player to score five centuries in a single World Cup tournament.
• His centuries came against South Africa, Pakistan, England, Bangladesh, and Sri Lanka.
• Other Top Performers
• David Warner of Australia was the second-highest run-scorer with 647 runs.
• Shakib Al Hasan of Bangladesh had an outstanding tournament, scoring 606 runs and taking 11 wickets.
• Historical Context
• Prior to Rohit Sharma's record, the highest number of centuries in a single World Cup was four, achieved by Kumar Sangakkara in 2015.
• Sachin Tendulkar held the previous record for the most runs in a single World Cup, scoring 673 runs in the 2003 tournament.

Q54. Answer: (c) 3.011×10^{23}

The correct answer is 3.011×10^{23}.

Key Points

• The molecular weight of water (H2O) is approximately 18 grams per mole.
• 1 mole of any substance contains Avogadro's number of molecules, which is 6.022×10^{23} molecules.

• 9 grams of water is equal to 0.5 moles of water (9 grams / 18 grams per mole).

• The number of water molecules in 0.5 moles is $0.5 \times 6.022 \times 10^{23} = 3.011 \times 10^{23}$ molecules.

Additional Information

• Mole Concept

• The mole is a fundamental unit in chemistry representing the amount of a substance.

• 1 mole of any substance contains exactly 6.022×10^{23} entities (atoms, molecules, ions, etc.)—a number known as Avogadro's number.

• The mole allows chemists to count and use substances in a practical and consistent manner.

• Avogadro's Number

• Avogadro's number is 6.022×10^{23}, which is the number of atoms, ions, or molecules in one mole of a substance.

• This constant is named after the Italian scientist Amedeo Avogadro, who contributed to the understanding of molecular theory.

• Molecular Weight

• The molecular weight (or molar mass) of a substance is the mass of one mole of that substance, usually expressed in grams per mole (g/mol).

• For water (H2O), the molecular weight is approximately 18 g/mol (2 g/mol for hydrogen atoms + 16 g/mol for an oxygen atom).

• Calculating Moles

• The number of moles of a substance can be calculated by dividing the mass of the substance by its molecular weight.

• For example, 9 grams of water divided by its molecular weight (18 g/mol) results in 0.5 moles of water.

Q55. Answer: (d) Allan Octavian Hume

The correct answer is Allan Octavian Hume.

Key Points

• Allan Octavian Hume was a British civil servant, political reformer, and one of the founders of the Indian National Congress (INC) in 1885.

• Hume played a pivotal role in establishing the INC along with other prominent leaders such as Dadabhai Naoroji and Dinshaw Wacha.

• The first session of the Indian National Congress was held in Bombay (now Mumbai) in December 1885.

• He is often referred to as the "Father of the Indian National Congress" due to his significant contributions to the formation of the party.

• Hume's efforts were instrumental in providing a platform for Indian leaders to discuss and address national issues.

Additional Information

• Indian National Congress (INC)

• The Indian National Congress was founded in 1885 with the aim of obtaining a greater share in government for educated Indians.

• The INC played a crucial role in the Indian independence movement against British rule.

• It became the principal leader of the Indian independence movement, with over 15 million members and over 70 million participants in the freedom struggle.

• After independence in 1947, the INC emerged as the ruling party in India and has been one of the major political parties in the country.

• Dadabhai Naoroji

• Dadabhai Naoroji was one of the co-founders of the Indian National Congress and a prominent Indian nationalist leader.

• He is also known as the "Grand Old Man of India" and was the first Indian to be elected to the British Parliament.

• Naoroji's work focused on the economic exploitation of India under British rule, and he authored the book "Poverty and Un-British Rule in India."

• Womesh Chunder Bonnerjee

• Womesh Chunder Bonnerjee was the first president of the Indian National Congress.

• He presided over the first session of the INC held in Bombay in December 1885.

• Bonnerjee was a prominent lawyer and one of the leading figures in the early years of the INC.

• Objectives of INC

• The primary objectives of the INC were to promote Indian participation in the legislative process, advocate for civil rights, and address social issues.

• The INC aimed to unite Indians across different regions and communities to work towards common national goals.

• Over time, the INC evolved to become the principal organization fighting for India's independence from British rule.

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Q56. Answer: (a) Rana Sanga

The correct answer is Rana Sanga.

Key Points

• The Battle of Khanwa was fought on 16 March 1527.
• It was a decisive victory for Babur, the founder of the Mughal Empire in India.
• Rana Sanga was the ruler of Mewar and led a Rajput confederacy against Babur.
• This battle consolidated Babur's control over northern India and marked the end of significant Rajput resistance.
• Babur employed modern tactics such as the use of field artillery which played a crucial role in his victory.

Additional Information

• Babur:
• He was the founder of the Mughal Empire in India.
• Babur was a descendant of Timur on his father's side and Genghis Khan on his mother's side.
• He introduced the use of gunpowder and artillery in Indian warfare.
• His memoirs, known as the Baburnama, provide a detailed account of his life and conquests.
• Rana Sanga:
• He was a prominent Rajput ruler of Mewar.
• Rana Sanga is known for his bravery and military prowess.
• He aimed to re-establish Rajput dominance in northern India.
• Despite his defeat, he is remembered as a hero in Rajput history.
• Field Artillery in the Battle:
• The use of field artillery by Babur was revolutionary in Indian warfare.
• It provided a significant advantage against the traditional cavalry-based armies of Indian rulers.
• The effective use of cannons and gunpowder helped Babur secure decisive victories.
• Impact of the Battle:
• The Battle of Khanwa established Mughal supremacy in northern India.
• It marked the decline of the Rajput power in the region.
• This victory paved the way for the expansion of the Mughal Empire.

Q57. Answer: (a) Mumbai

The correct answer is Mumbai.

Key Points

• The inaugural match of the first edition of the Women's Premier League (WPL) was held in Mumbai in 2023.
• The venue chosen for this historic match was the Dr. DY Patil Sports Academy in Navi Mumbai.
• The Women's Premier League is organized by the Board of Control for Cricket in India (BCCI).
• The WPL aims to provide a platform for female cricketers to showcase their talent on a larger stage.
• This league is expected to significantly boost women's cricket in India and worldwide.

Additional Information

• Women's Premier League (WPL)
• The WPL is a professional women's Twenty20 cricket league in India.
• It was officially announced by the BCCI in 2022 as a major step towards promoting women's cricket.
• The league features teams representing different cities and regions of India.
• The WPL follows the format and structure similar to the Indian Premier League (IPL).
• Dr. DY Patil Sports Academy
• Located in Navi Mumbai, Maharashtra, it is a premier sports complex known for hosting various cricket matches.
• It has a seating capacity of approximately 55,000 spectators.
• Besides cricket, the stadium is also used for football and other sporting events.
• Board of Control for Cricket in India (BCCI)
• The BCCI is the national governing body for cricket in India.
• Founded in December 1928, it is responsible for organizing domestic and international cricket matches in India.
• The BCCI also oversees the development of cricket infrastructure and talent at the grassroots level.
• Impact of WPL on Women's Cricket
• The WPL provides female cricketers with greater visibility and opportunities for professional growth.

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• It helps in bridging the gap between men's and women's cricket in terms of popularity and investment.
• The league is expected to inspire young girls to take up cricket as a career.

Q58. Answer: (b) Kerala

The correct answer is Kerala.

Key Points

• Chakyar Koothu is a traditional performing art form from Kerala.
• It is a solo performance where the performer narrates stories from Hindu epics, especially the Mahabharata and Ramayana.
• The performer uses a combination of expressive facial gestures, hand movements, and vocal recitations to convey the story.
• Mani Madhava Chakyar is one of the most famous exponents of Chakyar Koothu.
• The performance is traditionally done in temples and is considered a part of the Koodiyattam genre.

Additional Information

• Koodiyattam:
• An ancient form of Sanskrit theatre performed in Kerala.
• Recognized by UNESCO as a Masterpiece of the Oral and Intangible Heritage of Humanity.
• Natyashastra:
• An ancient Indian treatise on the performing arts, encompassing theatre, dance, and music.
• Attributed to the sage Bharata Muni.
• Mani Madhava Chakyar:
• A legendary performer known for popularizing Chakyar Koothu and Koodiyattam.
• Honored with prestigious awards such as Padma Shri and Sangeet Natak Akademi Award.
• Temple Theatre:
• Traditional venues in Kerala where classical art forms like Chakyar Koothu are performed.
• These performances are often part of temple festivals and rituals.

Q59. Answer: (c) Service

The correct answer is Service.

Key Points

• The service sector dominated the urban workforce in India in 2019-2020.
• Approximately 60% of the urban workforce was employed in the service sector during this period.
• The service sector includes industries like IT, retail, hospitality, healthcare, and education.
• This sector's growth is attributed to the rapid urbanization and increased demand for professional services.

Additional Information

• Urbanization in India
• Urbanization refers to the increasing population in urban areas compared to rural areas.
• India has seen a steady increase in urbanization, with urban population growing from 27.81% in 2001 to 34.93% in 2020.
• Economic opportunities, better living standards, and improved infrastructure are key drivers of urbanization.
• Growth of the IT Sector
• The IT sector has been a significant contributor to the service industry in urban India.
• India is a global leader in IT services, outsourcing, and software development.
• This sector provides employment to millions of professionals in urban areas.
• Employment Distribution
• Employment in urban areas is mainly concentrated in the service sector, followed by industry and agriculture.
• Industries such as manufacturing, construction, and mining also play a role, but to a lesser extent.
• Economic Contribution
• The service sector is the largest contributor to India's GDP, accounting for around 54% as of 2020.
• This sector's significant contribution highlights its importance in the overall economic landscape of the country.

Q60. Answer: (a) Blindness

The correct answer is Blindness.

Key Points

• The National Prophylaxis Programme against Nutritional Blindness was launched in 1970 by the Government of India to tackle nutritional blindness caused by Vitamin A deficiency.

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• It mainly focused on children below 5 years of age, who are most vulnerable to Vitamin A deficiency.
• Severe deficiency of Vitamin A can lead to xerophthalmia (dry eyes), night blindness, and ultimately, complete blindness.
• The program involved distribution of Vitamin A supplements (200,000 IU doses every 6 months) to prevent and treat deficiency.
• Over the years, the program significantly helped reduce cases of nutritional blindness among children.

Additional Information

• Hypercalcemia
• Definition: A condition caused by high levels of calcium in the blood.
• Not related to deficiency but rather an excess (often due to overuse of supplements, hyperparathyroidism, or cancer).
• Keyword: "Hyper" means excessive, "calcemia" means calcium in blood.
• Goitre
• Cause: Caused by iodine deficiency, not Vitamin A.
• Related Program: Addressed under the National Iodine Deficiency Disorders Control Programme (NIDDCP).
• Keyword: Enlargement of the thyroid gland due to lack of iodine in diet.
• Beriberi
• Cause: Caused by Vitamin B1 (Thiamine) deficiency.
• Types: Two types – dry beriberi (affecting nerves) and wet beriberi (affecting cardiovascular system).
• Unrelated to Vitamin A or the blindness program.
• Key Takeaways / Keywords:
• Vitamin A Deficiency → Nutritional Blindness
• Vitamin B1 Deficiency → Beriberi
• Iodine Deficiency → Goitre
• Hypercalcemia → Excess Calcium (Not a deficiency disorder)

Q61. Answer: (c) Article 163

The correct answer is Article 163.

Key Points

• Article 163 of the Indian Constitution mandates that there shall be a Council of Ministers with the Chief Minister at the head to aid and advise the Governor.
• The Governor is generally required to act on the advice of the Council of Ministers, except in cases where the Constitution specifies that he can act in his discretion.
• The Council of Ministers is collectively responsible to the Legislative Assembly of the state.
• This Article ensures a parliamentary system of government in the states, similar to the system followed at the Union level.

Additional Information

• Article 154
• It states that the executive power of the state is vested in the Governor and is exercised by him either directly or through officers subordinate to him.
• Article 164
• This Article deals with the appointment of the Chief Minister and other ministers by the Governor.
• It specifies that the Council of Ministers shall be collectively responsible to the Legislative Assembly of the state.
• Article 167
• The Chief Minister is required to communicate to the Governor all decisions of the Council of Ministers relating to the administration of the state and proposals for legislation.
• Article 153
• It states that there shall be a Governor for each state, but one person can be appointed as Governor for two or more states.

Q62. Answer: (d) 6

The correct answer is 6.

Key Points

• The Mines and Minerals (Development and Regulation) Amendment Bill, 2023 was introduced to reform the mining sector in India.
• A total of 6 minerals have been removed from the list of atomic minerals under this amendment.
• This amendment aims to stimulate private investment and boost the mining sector's growth.
• The removal of these minerals from the list will simplify the regulatory framework and promote ease of doing business.

Additional Information

• Atomic Minerals

• These minerals are used for the generation of nuclear energy and other nuclear applications.

• Examples include uranium, thorium, and other rare earth elements.

• Objectives of the Amendment

• To enhance the ease of doing business in the mining sector.

• To attract private investments and boost the sector's growth.

• Impact on the Mining Sector

• The amendment is expected to create more job opportunities.

• It aims to increase the contribution of the mining sector to the national GDP.

• Regulatory Framework

• The reform intends to simplify the regulatory procedures for mining activities.

• It will enhance transparency and streamline the process of obtaining mining leases.

Q63. Answer: (c) Bharatnatyam

The correct answer is Bharatnatyam.

Key Points

• K Kalyanasundaram Pillai was awarded the Sangeet Natak Akademi Award in 1999 for his exemplary contribution to Bharatnatyam.

• Bharatnatyam is one of the oldest classical dance forms of India, originating from Tamil Nadu.

• Pillai hails from a distinguished family of Bharatnatyam dancers and is known for his exceptional choreography and teaching.

• The Sangeet Natak Akademi Award is one of the highest national recognitions given to practicing artists by the Sangeet Natak Akademi, India's National Academy for Music, Dance, and Drama.

Additional Information

• Bharatnatyam

• Bharatnatyam is characterized by precise footwork, intricate hand gestures, and expressive facial expressions.

• It is traditionally performed by solo dancers and is deeply connected to the music and literature of South India.

• The dance form is known for its fixed upper torso, bent legs, and the combination of abstract dance sequences with expressive dance sequences.

• Key components of Bharatnatyam include Nritta (pure dance), Nritya (expressive dance), and Natya (dramatic storytelling).

• Sangeet Natak Akademi Award

• Established in 1952, the Sangeet Natak Akademi Award is given annually by the Sangeet Natak Akademi, the national academy for music, dance, and drama in India.

• The award is recognized as the highest honor in the field of performing arts in India.

• Awardees receive a citation, an angavastram (a traditional Indian shawl), and a cash prize.

• The award aims to recognize and honor the outstanding contribution of artists in the fields of music, dance, and drama.

• Other Classical Dance Forms of India

• Kathak: Originating from North India, it emphasizes rhythmic foot movements adorned with small bells and the expression of stories through dance.

• Kuchipudi: A dance-drama performance originating from Andhra Pradesh, known for its fast rhythms and fluid movements.

• Odissi: Originating from Odisha, it is known for its sculpturesque poses and fluid movements.

• Manipuri: Originating from the state of Manipur, it is characterized by smooth and graceful movements.

Q64. Answer: (d) Continental Shelf

The correct answer is Continental Shelf.

Key Points

• The continental shelf is the extended perimeter of each continent, which lies submerged under relatively shallow seas and gulfs.

• It extends from the shoreline to the continental slope, where the seafloor drops steeply.

• Continental shelves are typically characterized by their relatively shallow waters, generally less than 200 meters deep.

• These areas are often rich in marine life and resources such as oil and natural gas.

Additional Information

• Continental Slope

• The continental slope marks the boundary between the continental shelf and the deep ocean basin.

• It is characterized by a steep incline and can drop from a depth of about 200 meters to over 3,000 meters.
• Continental Rise
• The continental rise is found between the continental slope and the abyssal plain.
• It consists of thick accumulations of sediments that have been transported down the continental slope.
• Oceanic Basin
• Oceanic basins are large depressions on the Earth's surface that contain the oceans.
• They are composed of the oceanic crust and are usually deeper than 2,000 meters.
• Continental Drift
• Continental drift is the movement of the Earth's continents relative to each other by appearing to drift across the ocean bed.
• This theory was proposed by Alfred Wegener in 1912.

Q65. Answer: (d) Urbanisation

The correct answer is Urbanisation.

Key Points

• The New Industrial Policy of 1991 was formulated to liberalize the Indian economy and stimulate industrial growth.
• The three main dimensions of the New Industrial Policy are Liberalisation, Privatisation, and Globalisation.
• Liberalisation refers to the reduction of government regulations and restrictions in the economy to encourage private sector activity.
• Privatisation involves the transfer of ownership and management of public sector enterprises to the private sector.
• Globalisation focuses on integrating the Indian economy with the global economy through increased foreign trade and investment.

Additional Information

• Liberalisation
• Involves reducing tariffs, trade barriers, and regulatory restrictions to enhance economic efficiency.
• Aims to create a more competitive environment to foster innovation and growth.
• Privatisation
• Focuses on improving the efficiency and productivity of public enterprises.
• Encourages private investment and management in industries previously controlled by the government.
• Globalisation
• Encourages foreign direct investment (FDI) and international trade.
• Aims to integrate the Indian economy with the global market for better access to technology and capital.
• New Industrial Policy of 1991
• Announced by the Government of India to address the economic crisis of the early 1990s.
• Marked a significant shift from a mixed economy towards a more market-oriented economy.

Q66. Answer: (c) Nail

The solution is in Hindi. Read it online.

Q67. Answer: (d) prepared a unique

The correct answer is '4' i.e. prepared a unique.

Key Points

• The given sentence uses the past tense "won", so the verb "prepare" should also be in the past tense (prepared) to maintain tense consistency.
• The article "a" should be used before the word "unique" because "unique" starts with a consonant sound.

Correct sentence: She prepared a unique dish in the cooking competition and won it.

Additional Information

• Consistency in Tense:
• Ensure that all verbs in the sentence agree in tense to maintain clarity and coherence.
• Example: She prepared (past) a unique dish and won (past) the competition.
• Article Usage:
• Use "a" before words that begin with a consonant sound, and "an" before words that begin with a vowel sound.
• Example: a unique (consonant sound), an apple (vowel sound).

Q68. Answer: (c) pair; nectar

The solution is in Hindi. Read it online.

Q69. Answer: (a) left

The solution is in Hindi. Read it online.

Q70. Answer: (d) least efficient

The correct answer is '4' i.e. least efficient.

Key Points

• The given sentence is comparing the efficiency of work done in the office.

• When making comparisons, especially with adjectives, we use the comparative degree (e.g., less efficient) or the superlative degree (e.g., least efficient).

• Since the sentence is indicating the lowest degree of efficiency, the correct form to use is the superlative degree (least).

• Among the given options, "least efficient" is the superlative form and correctly completes the sentence.

Correct sentence: Work in this office is done in the least efficient way.

Additional Information

• Comparative Degree:

• Usage: Used to compare two entities.

• Example: This method is less efficient than the other one.

• Superlative Degree:

• Usage: Used to compare more than two entities and indicate the highest or lowest degree.

• Example: This is the least efficient method of all.

Q71. Answer: (b) Recipies

The solution is in Hindi. Read it online.

Q72. Answer: (d) Nicely

The solution is in Hindi. Read it online.

Q73. Answer: (c) Useless

The solution is in Hindi. Read it online.

Q74. Answer: (a) yet two years

The erroneous part is: yet two years.

Key Points

• The given sentence is a present perfect continuous tense, which is used to show that something started in the past and has continued up until now.

• The correct phrase should be "for two years" instead of "yet two years".

• Using "yet" in this context is incorrect; "for" is the appropriate preposition to indicate the duration of time.

Correct sentence: I have lived with my parents in Mumbai in a residential flat for two years.

Additional Information

• Present Perfect Continuous Tense:

• Structure: Subject + have/has + been + verb(+ing).

• Example: She has been working here for five years.

• Usage: Describes actions that started in the past and are still continuing or were happening recently.

• Common Error:

• Using incorrect prepositions for time duration. For example, "since" is used with specific points in time, and "for" is used with periods of time.

Q75. Answer: (c) mislead

The solution is in Hindi. Read it online.

Q76. Answer: (b) abler

The correct answer is: abler.

Key Points

• The word "ablest" is incorrectly used in the given sentence. The sentence is comparing the ability of advocates, so a

comparative form should be used.

• Among the options, "abler" is the correct comparative form of "able".

• Option 1 "more able" is also a comparative form but "abler" is preferred in this context.

• Option 3 "the ablest" and option 4 "most ablest" are superlative forms and do not fit the context of the sentence.

Correct sentence: We have perhaps never seen an abler series of advocates than these ten standing in a row.

Additional Information

• Comparative Form:

• Used to compare differences between two objects (larger, smaller, faster, higher).

• Example: She is taller than her brother.

• Superlative Form:

• Used to describe an object that is at the upper or lower limit of a quality (the tallest, the smallest, the fastest, the highest).

• Example: She is the tallest girl in the class.

Q77. Answer: (c) Shock

The solution is in Hindi. Read it online.

Q78. Answer: (d) Transient

The solution is in Hindi. Read it online.

Q79. Answer: (c) and an hyena

The erroneous part of the sentence is: and an hyena.

Key Points

• The article "an" is used before words that start with a vowel sound, while "a" is used before words that start with a consonant sound.

• In the given sentence, the word "hyena" starts with a consonant sound "h", so the correct article to use is "a".

Correct sentence: A fox and a hyena were spotted in the animal reserve.

Additional Information

• Articles "a" and "an":

• "A": Used before words that begin with a consonant sound. Example: a car, a university.

• "An": Used before words that begin with a vowel sound. Example: an apple, an hour.

• Common Mistakes:

• Incorrect: an university (since "university" starts with a consonant sound).

• Correct: a university.

Q80. Answer: (b) The manager cuts the discussion to address an urgent matter.

The erroneous sentence is: The manager cuts the discussion to address an urgent matter..

Key Points

• The given sentence in option 2 has a grammatical error.

• It should use "cut short" instead of just "cuts" to convey the meaning of interrupting or ending the discussion prematurely.

Correct sentence: The manager cuts short the discussion to address an urgent matter.

Additional Information

• Examples of Correct Usage of "cut":

• Cut out: She always cuts out unhealthy snacks.

• Cut through: Can you cut through the traffic to get here on time?

• Cut down: They need to cut down the old tree in the garden.

Q81. Answer: (c) more difficult

The correct answer is: more difficult.

Key Points

• The given sentence uses comparative form to compare the difficulty levels of questions in part A and part B.

• The word "difficult" should be made comparative by using "more" before it, as "difficult" is a longer adjective.

• Instead of using incorrect forms like "difficultier" or "difficulty", the correct form is "more difficult".

Correct sentence: The questions in part B look more difficult than the questions in part A.

Additional Information

• Comparative Adjectives:
• Structure: Adjective + er (for short adjectives) or more + Adjective (for longer adjectives).
• Example: This book is thicker than that one. / This task is more complex than the previous one.
• Usage: Used to compare differences between the two objects they modify (larger, smaller, faster, higher).
• Superlative Adjectives:
• Structure: Adjective + est (for short adjectives) or most + Adjective (for longer adjectives).
• Example: This is the tallest building in the city. / She is the most talented artist in the group.
• Usage: Used to describe an object that is at the upper or lower limit of a quality (the tallest, the smallest, the fastest, the highest).

Q82. Answer: (d) To face up to trouble with fortitude

The solution is in Hindi. Read it online.

Q83. Answer: (c) accolade

The solution is in Hindi. Read it online.

Q84. Answer: (a) No substitution required

The correct answer is '1' No substitution required.

Key Points

• The given sentence is correct as it is. The phrase "all on their toes and anxiously waiting" is appropriate and conveys the intended meaning clearly.
• Option 2 "all on their toes and anxiously dancing" changes the meaning and does not fit the context.
• Option 3 "all on their fingers and anxiously waiting" is incorrect as the correct idiom is "on their toes."
• Option 4 "paying through the nose" is irrelevant and does not fit the context at all.

Correct sentence: The soldiers are all on their toes and anxiously waiting for the orders to start marching towards the enemy.

Q85. Answer: (b) allegiance

The solution is in Hindi. Read it online.

Q86. Answer: (c) inhabit

The solution is in Hindi. Read it online.

Q87. Answer: (b) weighs

The solution is in Hindi. Read it online.

Q88. Answer: (d) intact

The solution is in Hindi. Read it online.

Q89. Answer: (d) communicate

The solution is in Hindi. Read it online.

Q90. Answer: (a) across

The solution is in Hindi. Read it online.

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