SSC CHSL Tier-1 2023: Official Paper (Held On: 11 Aug, 2023 Shift 3) (Previous Year Paper)

SSC Combined Higher Secondary Level (CHSL) • 2023 • 100 questions • 60 minutes • Answer key and solutions

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ENGLISH LANGUAGE

Q1. If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '-', what will come in place of the question mark (?) in the following equation?

124 A 4 C 13 B 12 D 28 = ?

(a) 162
(b) 154
(c) 161
(d) 159

Q2. What will come in the place of the question mark (?) in the following equation if '+' and '-' are interchanged and '×' and '÷' are interchanged?

84 × 7 - 21 ÷ 4 + 29 = ?

(a) 55
(b) 67
(c) 59
(d) 79

Q3. Three of the following four are alike in a certain way and thus form a group. Which is the one that does NOT belong to that group?

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

(a) 153 - 17
(b) 261 - 29
(c) 94 - 11
(d) 207 - 23

Q4. Select the option in which the numbers share the same relationship as that shared by the given pair of numbers.

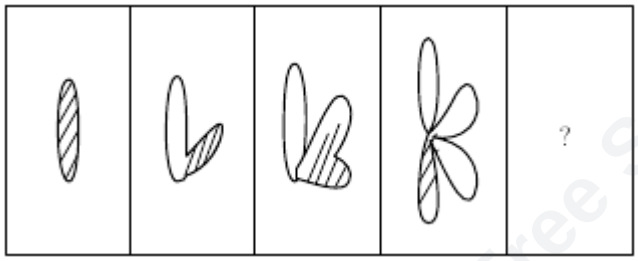
40 : 300

27 : 196

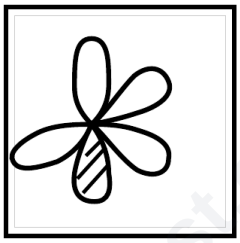
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13-Operations on 13 such as adding/ subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and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

(a) 55 : 400
(b) 130 : 940
(c) 200 : 1580
(d) 25 : 140

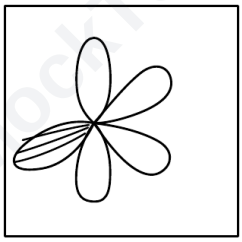
Q5. Identify the figure given in the options which when put in place of the question mark (?) will logically complete the series.



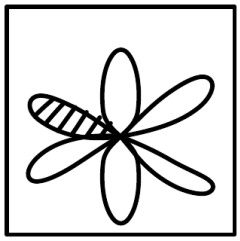
(a)



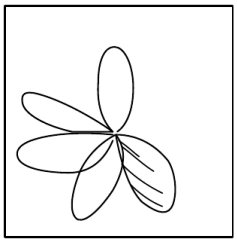
(b)



(c)



(d)



Q6. Which of the following four options will replace the question mark (?) in the following series?

48, 68, ?, 138, 188, 208

(a) 118
(b) 88
(c) 128
(d) 108

Q7. P is the son of C. C is married to D. D is the sister of O. O is the daughter of M. X is the mother of C and married to W. How is P related to W?

(a) Son's son
(b) Brother's son

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(c) Sister's son
(d) Daughter's son

Q8. In a certain code language, 'FLASH' is coded as 'HNCUJ' and 'ENDOW' is coded as 'GPFQY'. What will be the code for 'DEBIT' in the given code language?
(a) EHDLW
(b) FHCLV
(c) GHELW
(d) FGDKV

Q9. Read the given statements and conclusions carefully. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. You have to decide which conclusions logically follow/s from the given statements.
Statements:
All movies are bottles.
Some bottles are steel.
All steel are cupboards.
Conclusions:
(I): Some movies are bottles.
(II): Some cupboards are steel.
(a) Only conclusion (II) follows
(b) Neither conclusion (I) nor (II) follows
(c) Only conclusion (I) follows
(d) Both conclusions (I) and (II) follow

Q10. In a certain code language,
C + F means 'C is the father of F',
C - F means 'C is the sister of F,
C @ F means 'C is the brother of F',
C # F means 'C is the mother of F'.
If A # K + J @ T, then how is J related to A?
(a) Brother
(b) Son
(c) Father's brother
(d) Son's son

Q11. What should come in place of ? in the given series?
3 6 11 18 27 ?
(a) 39
(b) 36
(c) 42
(d) 38

Q12. Four-letter clusters have been given, out of which three are alike in some manner and one is different. Select the one that is different.
(a) TVZB
(b) OPRS
(c) GIMO
(d) JLPR

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Q13. If 20 June of a particular year falls on the 6th day after Tuesday, then what will be the day on 11 August of the same year?

(a) Wednesday
(b) Tuesday
(c) Friday
(d) Thursday

Q14. BK 19 is related to DM 21 in a certain way. In the same way, RC 11 is related to TE 13. To which of the following is MJ 17 related following the same logic?

(a) PL 19
(b) NK 20
(c) OL 19
(d) OM 21

Q15. 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 stars are buttons.

No buttons are clips.

All buttons are ribbons.

Conclusions:

(I) Some stars are ribbons.

(II) Some ribbons are buttons.

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

Q16. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.

DPMW, EOLX, FNKY, ?

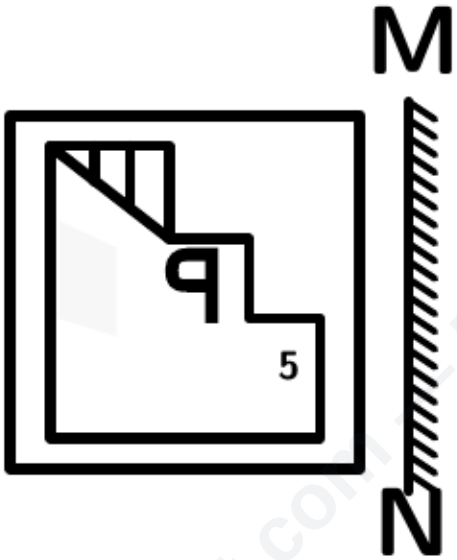
(a) DEWX
(b) EMJX
(c) GOKY
(d) GMJZ

Q17. 9 is related to 80 following a certain logic. Following the same logic. 17 is related to 288. To which of the following is 23 related to, following the same logic?

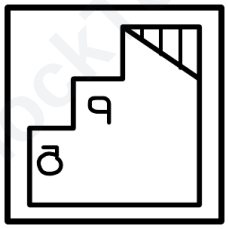
(a) 527
(b) 525
(c) 526
(d) 528

Q18. Select the correct mirror image of the given figure when the mirror is placed at MN as shown.

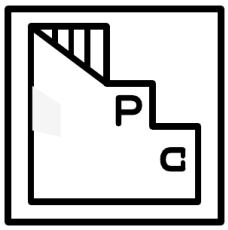
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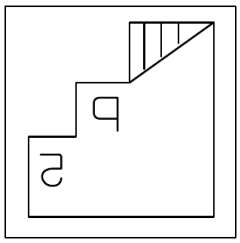
(a)



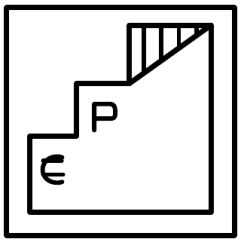
(b)



(c)



(d)



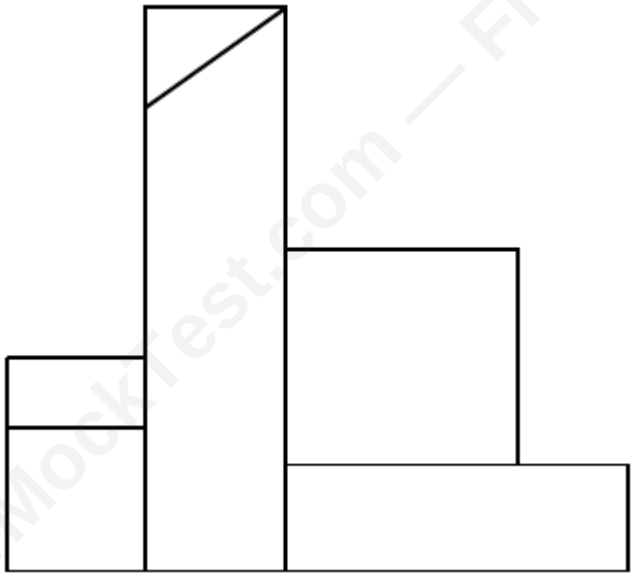
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Q19. Select the combination of letters which when sequentially placed in the blanks of the given series will complete the series.

TU_U_XWXT_TUWX_X

(a) TUWW
(b) TUTU
(c) TWTW
(d) TWUW

Q20. Identify the number of rectangles in the given figure.



(a) 7
(b) 5
(c) 6
(d) 4

Q21. KQTO is related to MSVQ in a certain way based on the English alphabetical order. In the same way, PVYT is related to RXAV. To which of the following is UADY related to, following the same logic?

(a) WCEA
(b) VCEA
(c) VBFZ
(d) WCFA

Q22. If 18 September 1998 is Friday, then what will be the day of the week on 15 September 2009?

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

Q23. What should come in place of? in the given series?

33 35 39 41 45 ?

(a) 47
(b) 49
(c) 51
(d) 48

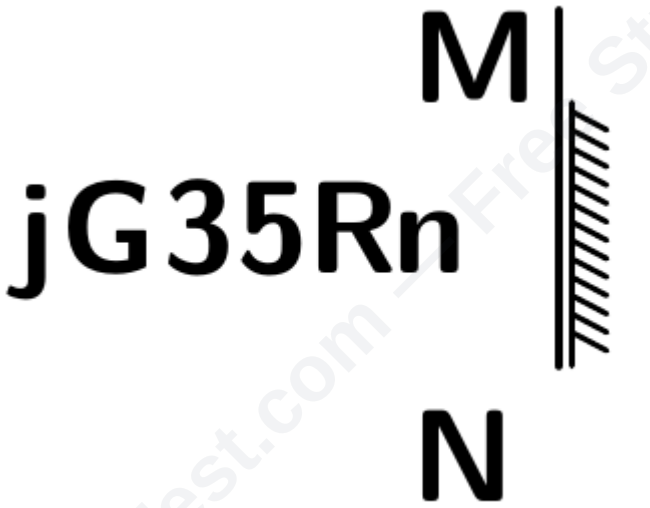
Q24. In a certain code language, 'CRATE' is coded as '27934' and 'TRACK' is coded as '27694'. What is the code for 'E' in the given code language?

(a) 7
(b) 4

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(c) 9
(d) 3

Q25. Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



(a)



(b)



(c)



(d)



GENERAL INTELLIGENCE

Q26. What is the atomic number of Bohrium which is named after physicist Niels Bohr, one of the founders of quantum theory?

(a) 117
(b) 107
(c) 113
(d) 101

Q27. Under the Koppen climate classification system, which climate zone is generally located on the western coasts of continents, receiving rainfall between 35-90 cm?

(a) Mediterranean Climate
(b) Humid Subtropical Climate
(c) Subtropical Steppe Climate
(d) Highland Climate

Q28. The following represent the opportunity cost of holding money, EXCEPT:

(a) loss of utility from goods that could have been purchased from the same amount of money
(b) loss of interest earning on cash holdings
(c) loss of purchasing power of money due to inflation
(d) transaction cost in withdrawing money

Q29. Which of the following is NOT a reason for excessive cold in north India?

(a) Distance from sea
(b) Cold winds from the Caspian Sea
(c) Snowfall in the Himalayas
(d) Equatorial current

Q30. When camphor is heated, which of the following changes will take place?

(a) Solid to gas
(b) Solid to liquid to gas
(c) Liquid to gas
(d) Solid to liquid

Q31. Who among the following personalities is associated with synthesizing classical and modern Indian dance through a theatre group called Ranga Sri Little Ballet Troupe?

(a) Guru Bipin Singh
(b) Pandit Birju Maharaj
(c) Shanti Bardhan
(d) Remo Fernandes

Q32. What is the distance between the hurdles in 100 m women's hurdles in meters?

(a) 7.50
(b) 9.00
(c) 8.00
(d) 8.50

Q33. Which of the following Indian Para Canoeists won the bronze medal in the 2022 International Canoe Federation's Paracanoe World Cup?

(a) Ramya Smruti
(b) Sarita Rao
(c) Prachi Yadav
(d) Pranshi Rawal

Q34. The threshold limit for total income eligible for rebate under Section 87A has been increased from Rs. 5,00,000 to Rs. _____ for assesses opting for the new tax regime as per the Finance Bill 2023.

(a) 7,00,000
(b) 11,00,000
(c) 8,00,000
(d) 10,00,000

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Q35. Which of the following Commissions was appointed by Lord Curzon to enquire into the working of the police administration?

(a) Kitchener Commission
(b) Hunter Commission
(c) Frazer Commission
(d) MacDonnell Commission

Q36. Which of the following is NOT a feature of fundamental duties mentioned in the Indian Constitution?

(a) There is a legal sanction against their violation.
(b) They are civic duties.
(c) They are part of the Indian tradition.
(d) They are not sacrosanct or permanent.

Q37. Name the Indian who won the title at the World Chess Armageddon Asia & Oceania event in Berlin, Germany in April 2023.

(a) Abhimanyu Mishra
(b) R Praggnanandhaa
(c) Nihal Sarin
(d) D Gukesh

Q38. Under the current regulatory framework, what is the maximum tenure of a microfinance loan in India?

(a) 24 months
(b) 12 months
(c) 18 months
(d) 36 months

Q39. Which of the following states has the highest poverty rate in India, according to the Multidimensional Poverty Index (MPI) 2021?

(a) Madhya Pradesh
(b) Jharkhand
(c) Uttar Pradesh
(d) Bihar

Q40. Who among the following singers became the first Indian folk artist to attend the Cannes Film Festival 2022?

(a) Gurudas Man
(b) Daler Mehendi
(c) Teejan Bai
(d) Mame Khan

Q41. Which of the following is India's first all-women-managed railway station?

(a) Chennai Egmore Railway Station, Chennai
(b) Gandhinagar Railway Station, Jaipur
(c) Trivandrum Central Railway Station, Thiruvananthapuram
(d) Matunga Railway Station, Mumbai

Q42. Which of the following personalities is a well-known Indian plant physiologist and physicist?

(a) JC Bose
(b) CV Raman
(c) CNR Rao
(d) JRD Tata

Q43. In the Indian Constitution which of the following Articles deals with the right to move to the Supreme Court for enforcement of Fundamental rights?

(a) Article 30
(b) Article 32

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(c) Article 33
(d) Article 31

Q44. Kamsale is the folk dance of which of the following Indian states?
(a) Jharkhand
(b) Karnataka
(c) Kerala
(d) Bihar

Q45. Which of the following was NOT a goal of the Five-Year Plans?
(a) Self-reliance
(b) Equity
(c) Growth
(d) Security

Q46. Ambubachi fair is held every year in which of the following states?
(a) Manipur
(b) Arunachal Pradesh
(c) Nagaland
(d) Assam

Q47. Which of the following is NOT a primary function of commercial banks?
(a) Transfer of funds
(b) Creation of credit
(c) Lending loans to the public
(d) Receiving deposits from the public

Q48. Which biosphere was declared as India's 16^(th) Biosphere Reserve in 2009, noted for the conservation of Red Fox, Blue Rock Pigeon, and Lammergeier?
(a) Cold Desert
(b) Seshachalam
(c) Agasthyamalai
(d) Dehang Debang

Q49. What is the basic difference in the aggregates at market price and factor cost?
(a) Depreciation
(b) Indirect taxes
(c) Net indirect taxes
(d) Direct taxes

Q50. Who was the first to mention the incident of Jauhar in Persian?
(a) Ibn Batutah
(b) Amir Khusrau
(c) Ziauddin Barani
(d) Hasan Nizami

QUANTITATIVE APTITUDE

Q51. A merchant increases the cost price of an item by 30% and offers a discount of 15% on this marked price. What is his profit percentage?
(a) 10.5%
(b) 8.2%
(c) 9.5%
(d) 11.4%

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Q52. The radius and slant height of a cone are in the ratio 5 : 7. If its curved surface area is 1347.5 cm². find its radius. (Use π = 22/7)

(a) 15 cm
(b) 25.5 cm
(c) 17.5 cm
(d) 21 cm

Q53. If $x^2 - 3.2x + 1 = 0$ and $x > 1$, the value of $(x^2 - 1/(x^2))$ is:

(a) 16.8 √0.39
(b) 12.8 √0.39
(c) 16.8 √0.32
(d) 12.8 √0.32

Q54. A sum of Rs. 12,000 amounts to Rs. 15,000 in 5 years at the rate of simple interest. What is the rate of interest per annum?

(a) 8%
(b) 7%
(c) 6%
(d) 5%

Q55. In an experiment, it was observed that metal A is 19 times heavier than water and metal B is 9 times heavier than water. In what ratio metal A and B mixed so that the mixture thus obtained be 15 times heavier than water?

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

Q56. A dealer offers a discount of 10% on the marked price of an article and still makes a profit of 20%. If the cost price of the article is Rs. 540, then find the marked price (in Rs.) of the article.

(a) 810
(b) 750
(c) 720
(d) 690

Q57. It is given that Δ PQR ≅ Δ MNY and PQ = 8 cm, angle Q = 55° and angle P = 72°. Which of the following is true?

(a) NY = 8 cm, angle Y = 72°
(b) NM = 8 cm, angle M = 53°
(c) NM = 8 cm, angle Y = 53°
(d) NY = 8 cm, angle N = 55°

Q58. The following table gives the distribution of respondents' level of I.Q.

IQ'	Percent
Extremely High	03.4
High	12.6
Moderate	67.1
Low	13.0
Very Low	03.9

The ratio of the number of respondents lies in high to the number of respondents lies in low is (if the total number of respondents is 208):

(a) 63 : 65
(b) 45 : 31

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(c) 27 : 26
(d) 53 : 44

Q59. If $\sin\theta = 6/10$ and $\cos\theta = 8/10$, then $\sin 2\theta$ = _____.
(a) 10/8
(b) 12/10
(c) 16/10
(d) 24/25

Q60. The total number of workers in a company is 960. If the number of female workers in the company is 420, then the respective ratio of the total number of male workers to the total number of female workers in the company is:
(a) 7 : 9
(b) 16 : 9
(c) 16 : 7
(d) 9 : 7

Q61. The lengths of the two sides adjacent to the right angle of a right-angled triangle are 1.6 cm and 6.3 cm. Find the length of the hypotenuse.
(a) 6.7 cm
(b) 7.5 cm
(c) 6.5 cm
(d) 7 cm

Q62. The total distance in a journey is 750 km. A bus travels the first 200 km at a speed of 40 kmph. Find the speed of the bus (in kmph) for the next 550 km such that the average speed of the bus is 50 kmph.
(a) 55
(b) 60
(c) 45
(d) 40

Q63. If $x^2 + y^2 + z^2 = 2(x + z - 1)$, then the value of $x^3 + y^3 + z^3$ is equal to:
(a) 6
(b) 1
(c) 2
(d) 8

Q64. The area of a sector of a circle that subtends a 22.5° angle at the centre is given as 346.5 cm^2. What will be the radius (in cm) of the circle? [Use $\pi = 22/7$]
(a) 35
(b) 45
(c) 42
(d) 48

Q65. If the radii of two circles are 7 cm and 4 cm and the length of the transverse common tangent is 13 cm, then the distance between the two centres is:
(a) √290 cm
(b) √190 cm
(c) √128 cm
(d) √240 cm

Q66. How much time (in minutes) will Nikhil take to cover 600 m, if he runs at a speed of 24 km/h?
(a) 1.0
(b) 1.5
(c) 2.0
(d) 2.5

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Q67. A shopkeeper allows a 10% trade discount and a 10% cash discount. If the marked price is Rs. 1,000, then the selling price is:

(a) Rs. 900
(b) Rs. 850
(c) Rs. 810
(d) Rs. 920

Q68. Let ABC be a triangle right angled at B. If tan A = 12/5, then find the values of cosec A and sec A, respectively.

(a) 13/10,5/13
(b) 13/12,13/5
(c) 10/13,5/13
(d) 12/13,5/13

Q69. The table given below shows the production of bikes by a company during the second half of 2021.

Month Type	July	August	September	October	November	December
P	58	38	56	15	45	33
Q	89	46	45	26	36	40
R	54	64	76	80	54	41
S	72	53	65	37	21	44

In which month was the production of all types of bikes the lowest?

(a) September
(b) December
(c) November
(d) October

Q70. If $4x^2 + y^2 = 40$ and $xy = 6$, then the value of $2x - y$ is:

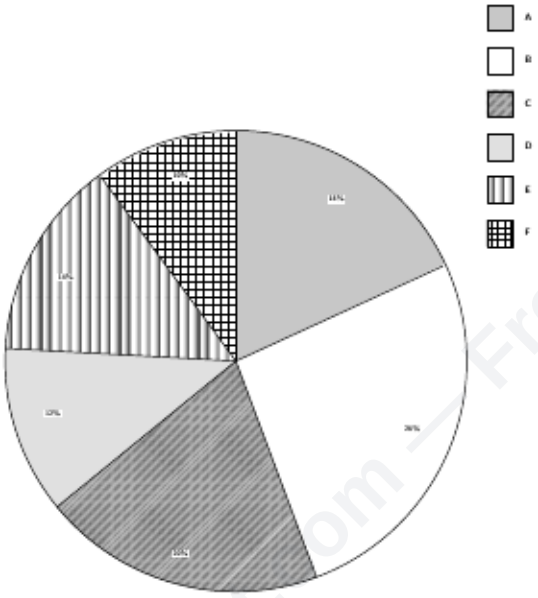
(a) 1
(b) 3
(c) 4
(d) 2

Q71. Refer to the pie chart and table carefully and answer the given questions.

The Pie chart shows the percentage distributions of total number of laptops (both Dell and HP) sold by six stores in March.

Total number = 11200

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Ratio of the numbers of Dell and HP sold	
Store	Ratio
A	5 : 4
B	7 : 6
C	1 : 4
D	11 : 10
E	4 : 3
F	3 : 1

What is the average of Dell laptops sold by stores A, C, D and E together?

(a) 896
(b) 280
(c) 792
(d) 448

Q72. If cos θ - sin θ = 0, then (sin^8θ + cos^8θ) is:

(a) 1/8
(b) 1/4
(c) 1/6
(d) 1/2

Q73. The population of a city increases compounded by 10% annually. The present population of this city is 1,33,100. What was the population of the city 2 years ago?

(a) 1,01,000
(b) 1,10,000
(c) 1,21,000
(d) 1,00,000

Q74. Brijesh can complete a work in 4 days, Ashish in 5 days, and Anand in 10 days. What will be the time taken by Brijesh, Ashish, and Anand to complete the work together?

(a) 1 9/11 days
(b) 2 days
(c) 1 day
(d) 2 9/11 days

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Q75. A sold an item to B at a gain of 25% and B sold it to C at a loss of 10%. If C paid Rs. 6,520 for it, then the cost price of the item for A was:

(a) Rs. 4,355 4/9
(b) Rs. 6,125 1/9
(c) Rs. 4,785 4/9
(d) Rs. 5,795 5/9

GENERAL AWARENESS

Q76. Parts of the following sentence have been given as options. Select the option that contains an error.

The poor undergoes several problems in life that could be solved with money.

(a) that could be
(b) several problems in life
(c) The poor undergoes
(d) solved with money

Q77. Select the most appropriate ANTONYM of the given word.

Attract

(a) Repel
(b) Entice
(c) Knock
(d) Influence

Q78. Select the grammatically correct sentence.

(a) He ate the sweets greedy.
(b) I could not find it anywhere.
(c) I haven’t got none.
(d) He is much weak.

Q79. Select the most appropriate option that can substitute the underlined segment in the given sentence.

The road which is joining two villages is repaired by local authorities.

(a) had joined
(b) joined
(c) join
(d) joins

Q80. Select the most appropriate option that can substitute the underlined segment in the given sentence.

Can you please tell me where is the city park ?

(a) where the city park is?
(b) where are city’s park?
(c) city park where?
(d) where was the city park?

Q81. Select the INCORRECTLY spelt word.

(a) Laison
(b) Lieutenant
(c) Entrepreneur
(d) Fluorescents

Q82. Parts of a sentence are given below in jumbled order. Select the option that arranges the parts in the correct order to form a meaningful sentence.

A. with a supreme sense of rhythm and word appeal;

B. he was capable of writing angelic or weird poetry,

C. or the outlines of an unrelenting plot in a hard and dry style

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D. yet he would write down a problem of morbid psychology

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

Q83. Select the most appropriate ANTONYM of the given word.

Falter

(a) Stabilise
(b) Suspect
(c) Haunt
(d) Transfer

Q84. Select the most appropriate ANTONYM of the underlined word in the given sentence.

It was difficult for her to salvage her reputation after the scam.

(a) Claim
(b) Recover
(c) Damage
(d) Rescue

Q85. Select the most appropriate ANTONYM of the given word from the following sentence.

Allegation

The lawyer's cross-examination tactics were designed to elicit incriminating testimony from the witness.

(a) Incriminating
(b) Designed
(c) Tactics
(d) Testimony

Q86. Select the most appropriate ANTONYM for 'copious' in the given sentence.

To be a successful writer, you need to have plenty of words; otherwise you will write a meagre novel which won't receive good response from the readers.

(a) Successful
(b) Plenty
(c) Meagre
(d) Response

Q87. Parts of the following sentence have been given as options. Select the option that contains an error.

The lower strata are mostly not benifitted by the reign of monarchy.

(a) monarchy
(b) strata
(c) reign
(d) benifitted

Q88. Select the most appropriate option that can substitute the underlined segment in the given sentence.

I told Benny that the die was cast, and there was no further escape.

(a) the course of action ended and it couldn't be restarted
(b) the course of action would never begin
(c) the course of action began and it could not be blocked
(d) the course of action yet to start and it could be postponed

Q89. Select the option that expresses the given sentence in passive voice.

The Indian army airlifted thousands of people from Ukraine.

(a) Thousands of people had been airlifted from Ukraine by the Indian army.
(b) Thousands of people have been airlifted from Ukraine by the Indian army.

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(c) Thousands of people are airlifted from Ukraine by the Indian army.
(d) Thousands of people were airlifted from Ukraine by the Indian army.

Q90. 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 correction required'.

This hill is a nice place to meditate because one can enjoy solitude.

(a) is a nice place to be meditation
(b) is an excellent place to meditates
(c) No correction required.
(d) is a nasty place to meditate

Q91. Select the most appropriate meaning of the given idiom.

Turn his hand to

(a) To resolve
(b) To adapt or apply to
(c) To try new things
(d) To try hard

Q92. Select the option that expresses the given sentence in active voice.

By whom can the problem be solved?

(a) Whom can solve the problem?
(b) Who can solved the problem?
(c) Whom can solved the problem?
(d) Who can solve the problem?

Q93. Select the option that can be used as a one-word substitute for the underlined segment.

The schedule was capable of bending easily without breaking and able to be easily modified.

(a) adherent
(b) inadaptable
(c) versatile
(d) flexible

Q94. Select the ANTONYM of the word affable to fill in the blank.

We were entering the _____ territory.

(a) aggravate
(b) sardonic
(c) hostile
(d) amicable

Q95. Sentences of a paragraph are given below in jumbled order. Select the option that arranges the sentences in the correct logical sequence to form a meaningful and coherent paragraph.

A. Our elders are like living libraries.

B. Next time you meet your grandparents ask them about their lifestyle.

C. Some of the tips may save you a run or two to the pharmacy.

D. Ask them what homemade remedies they use and what habits they follow.

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

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.

Daniel is worried lately. Usually, life is good for him. He (1)__ a nice little shop where he sells souvenirs to tourists and lives in a

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nice cottage with his wife and their three teenage kids. They have a dog and a cat and a backyard (2)__ barbeque. They host all the family (3)_____, and his wife's turkey is the best in the country. What can be better than that, right? But lately, not all is well. There are (4)_ clouds in the sky and all they talk about is terror and war. They feel something may happen. The (5)_____ life as he knows may be lost forever.

Q96. Select the most appropriate option to fill in blank number 1.

(a) blackens
(b) owns
(c) allows
(d) accepts

Q97. Select the most appropriate option to fill in blank number 2.

(a) for
(b) during
(c) from
(d) under

Q98. Select the most appropriate option to fill in blank number 3.

(a) assemblies
(b) gatherings
(c) crowds
(d) rallies

Q99. Select the most appropriate option to fill in blank number 4.

(a) opaque
(b) dark
(c) dire
(d) shadow

Q100. Select the most appropriate option to fill in blank number 5.

(a) flush
(b) agreeable
(c) ease
(d) comfortable

ANSWER KEY

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

SOLUTIONS

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Q1. Answer: (d) 159

Letter	A	B	C	D
Meaning	÷	×	•	•

After replacing letters by their meaning, we get:

124 ÷ 4 + 13 × 12 - 28 = ?

=> 31 + 13 × 12 - 28 = ?

=> 31 + 156 - 28 = ?

=> 187 - 28 = ?

=> 159 = ?

Hence, '159' is the correct answer.

Q2. Answer: (b) 67

If '+' and '-' are interchanged and '×' and '÷' are interchanged, then the equation becomes:

84 ÷ 7 + 21 × 4 - 29 = ?

=> 12 + 21 × 4 - 29 = ?

=> 12 + 84 - 29 = ?

=> 96 - 29 = ?

=> 67 = ?

Hence, '67' is the correct answer.

Q3. Answer: (c) 94 - 11

The logic followed here is:

Logic: First number ÷ 9 = Second number

1. 153 - 17 → 153 ÷ 9 = 17

2. 261 - 29 → 261 ÷ 9 = 29

3. 94 - 11 → 94 ÷ 9 = 10.44 ≠ 11

4. 207 - 23 → 207 ÷ 9 = 23

Hence, '94 - 11' is the correct answer.

Q4. Answer: (c) 200 : 1580

The logic followed here is:

Logic: (First number × 8) - 20 = Second number

• 40 : 300 → (40 × 8) - 20 = 320 - 20 = 300

• 27 : 196 → (27 × 8) - 20 = 216 - 20 = 196

Similarly,

• 200 : 1580 → (200 × 8) - 20 = 1600 - 20 = 1580

Hence, '200 : 1580' is the correct answer.

Q5. Answer: (b) [figure]

The logic followed in the given figure series is:

From Figure (1) to (2):

A new shape is added to the existing form.

From Figure (2) to (3):

A new shape is added to the existing form.

From Figure (3) to (4):

A new shape is added to the existing form.

From Figure (4) to Answer Figure:

A new shape is added to the existing form.

Hence, the correct answer is "Option (2)".

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Q6. Answer: (a) 118

The logic followed here is:

Hence, '118' is the correct answer.

Q7. Answer: (a) Son's son

By using the symbols in the table given below, we can draw the following family tree:

W is father of C and P is son of C.

Therefore, P is W's son's son.

Hence, ‘Son's son’ is the correct answer.

Q8. Answer: (d) FGDKV

The logic followed here is:

• • Similarly,

• Hence, 'FGDKV' is the correct answer.

Q9. Answer: (d) Both conclusions (I) and (II) follow

The least possible Venn diagram is:

Conclusions:

(I): Some movies are bottles. → Follows (As, All movies are bottles, which implies some movies are bottles is definitely true)

(II): Some cupboards are steel. → Follows (As, All steel are cupboards, which implies some cupboards are steel is definitely true)

Hence, ‘Both conclusions (I) and (II) follow’ is the correct answer.

Q10. Answer: (d) Son's son

C is				
Symbol	•	•	@	#
Meaning	Father	Sister	Brother	Mother
to F				

A # K + J @ T → A is mother of K, K is father of J, J is brother of T.

By using the symbols in the table given below, we can draw the following family tree:

J is grandson of A, or we can say that J is A's son's son.

Hence, ‘Son's son’ is the correct answer.

Q11. Answer: (d) 38

The logic followed here is:

Hence, '38' is the correct answer.

Q12. Answer: (b) OPRS

The logic followed here is:

Logic: First letter + 2 = Second letter; Second letter + 4 = Third letter; Third letter + 2 = Fourth letter

1. TVZB → T + 2 = V; V + 4 = Z; Z + 2 = B

2. OPRS → O + 1 = P; P + 2 = R; R + 1 = S

3. GIMO → G + 2 = I; I + 4 = M; M + 2 = O

4. JLPR → J + 2 = L; L + 4 = P; P + 2 = R

Hence, 'OPRS' is the correct answer.

Q13. Answer: (d) Thursday

6th day after Tuesday is Monday.

20 June → Monday

Number of days between 20 June to 11 August = (10 + 31 + 11) = 52

52 when divided by 7, leaves 3 as remainder.

Monday + 3 = Thursday

So, the day on 11 August of the same year will be Thursday.

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Hence, ‘Thursday’ is the correct answer.

Q14. Answer: (c) OL 19

The logic followed here is:

• • Similarly,

• Hence, 'OL 19' is the correct answer.

Q15. Answer: (a) Both conclusions (I) and (II) follow

The least possible Venn diagram is:

Conclusions:

(I) Some stars are ribbons. → Follows (As, Some stars are buttons and All buttons are ribbons, which implies that some stars are ribbons)

(II) Some ribbons are buttons. → Follows (As, All buttons are ribbons, it implies that some ribbons are buttons)

Hence, ‘Both conclusions (I) and (II) follow’ is the correct answer.

Q16. Answer: (d) GMJZ

The logic followed here is:

Hence, 'GMJZ' is the correct answer.

Q17. Answer: (d) 528

The logic followed here is:

Logic: (First Number)^2 - 1 = Second number

• 9 : 80 → 9^2 - 1 = 81 - 1 = 80

• 17 : 288 → 172 - 1 = 289 - 1 = 288

Similarly,

• 23 : ? → 232 - 1 = 529 - 1 = 528

Hence, '528' is the correct answer.

Q18. Answer: (d) [figure]

The correct mirror image of the given figure when the mirror is placed at MN is shown below:

Hence, 'option 4' is the correct answer.

Q19. Answer: (d) TWUW

The logic followed here is:

1. TUWW → TUTUUXWX / TWTUWXWX
2. TUTU → TUTUUXWX / TTTUWXUX
3. TWTW → TUTUWXWX / TTTUWXWX
4. TWUW → TUTUWXWX / TUTUWXWX

• In option 4, TUTUWXWX is repeated.

Hence, 'TWUW' is the correct answer.

Q20. Answer: (c) 6

The number of rectangles in the given figure is shown below:

Hence, '6' is the correct answer.

Q21. Answer: (d) WCFA

The logic followed here is:

• • Similarly,

• Hence, 'WCFA' is the correct answer.

Q22. Answer: (c) Tuesday

An ordinary year has 1 odd day and a leap year has 2 odd days.

So, the day on the same date for an ordinary year will be 1 day ahead and the day on the same date for a leap year will be 2 days ahead for the next year.

If 18 September 1998 is Friday, then the days on these dates will be:

18 September 1999 → Saturday

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18 September 2000 → Monday
18 September 2001 → Tuesday
18 September 2002 → Wednesday
18 September 2003 → Thursday
18 September 2004 → Saturday
18 September 2005 → Sunday
18 September 2006 → Monday
18 September 2007 → Tuesday
18 September 2008 → Thursday
18 September 2009 → Friday
Number of days between 15 September 2009 and 18 September 2009 = 3
Friday - 3 = Tuesday
Clearly, it was Tuesday on 15 September 2009.
Hence, 'Tuesday' is the correct answer.

Q23. Answer: (a) 47

The logic followed here is:
Hence, '47' is the correct answer.

Q24. Answer: (d) 3

The code for each letter is shown below:
Clearly, '3' is the code for 'E' in the given code language.
Hence, '3' is the correct answer.

Q25. Answer: (b) [figure]

The correct mirror image of the given figure when the mirror is placed at MN is shown below:
Hence, 'option 2' is the correct answer.

Q26. Answer: (b) 107

The correct answer is 107.
Key Points
• Bohrium is a synthetic chemical element with the symbol Bh and atomic number 107.
• It was first synthesized in 1981 by a team of Soviet and German scientists.
• Bohrium is a highly radioactive element that does not occur naturally on Earth.
• It is named after physicist Niels Bohr, who made significant contributions to the field of quantum mechanics.
Additional Information
• 117 is the atomic number of Tennessine.
• It is a synthetic chemical element that was first synthesized in 2010.
• 113 is the atomic number of Nihonium
• It is another synthetic chemical element that was first synthesized in 2003.
• 101 is the atomic number of Mendelevium.
• It is a synthetic chemical element that was first synthesized in 1955.

Q27. Answer: (a) Mediterranean Climate

The correct answer is Mediterranean Climate.
Key Points
• The Mediterranean climate zone is characterized by mild, wet winters and hot, dry summers.
• This climate zone is typically located on the western coasts of continents, including regions such as California, the Mediterranean Basin, and parts of Australia and South Africa.
• The 35-90 cm of rainfall received in this climate zone is typically concentrated in the winter months.
• Other characteristics of this climate zone include vegetation such as chaparral, sclerophyll forests, and cork oak forests.
Additional Information
• The Humid Subtropical climate zone is characterized by hot, humid summers and mild winters.
• It is typically found in regions such as the southeastern United States, eastern China, and parts of South America.

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• The Subtropical Steppe climate zone is characterized by hot, dry summers and mild winters.
• It is typically found in regions such as the Great Plains of the United States, parts of Australia, and southern Africa.
• The Highland climate zone is characterized by cooler temperatures at higher elevations.
• It can include a variety of sub-climates such as alpine, tundra, and boreal forests.

Q28. Answer: (d) transaction cost in withdrawing money

The correct answer is transaction cost in withdrawing money.

Key Points

• Opportunity cost is the cost of the next best alternative forgone in order to pursue a certain action.
• Holding money also has an opportunity cost, which is the loss of potential benefits that could have been obtained by using that money for something else.
• Transaction costs are the expenses incurred in buying or selling goods or services and are not related to the opportunity cost of holding money.

Additional Information

• Loss of utility from goods that could have been purchased with the same amount of money is a common opportunity cost of holding money.
• This is because money can only provide utility when it is used to purchase goods or services that satisfy a need or want.
• Loss of interest-earning on cash holdings is another opportunity cost of holding money.
• This is because money that is held in cash does not generate any returns, unlike money that is invested in stocks, bonds, or other financial instruments.
• Loss of purchasing power of money due to inflation is also a significant opportunity cost of holding money.
• Inflation reduces the value of money over time, making it less valuable in terms of the goods and services it can purchase.

Q29. Answer: (d) Equatorial current

The correct answer is Equatorial current.

Key Points

• Equatorial current is not a reason for excessive cold in north India.
• It is a warm ocean current that flows towards the west and affects the climate of regions near the equator.
• The Himalayas are the highest mountain range in the world and play a significant role in shaping the climate of north India.
• The region is also influenced by the monsoon winds that bring rainfall during the summer months.

Additional Information

• Distance from the sea is a reason for excessive cold in north India because the absence of a moderating influence of the sea makes the winters harsh and the summers hot.
• Cold winds from the Caspian Sea are a reason for excessive cold in north India because they bring dry and cold air to the region and cause a drop in temperature.
• Snowfall in the Himalayas is a reason for excessive cold in north India because it leads to the formation of glaciers and snow cover that reflect sunlight and reduce the amount of heat absorbed by the ground.

Q30. Answer: (a) Solid to gas

The correct answer is Solid to gas.

Key Points

• When camphor is heated, it sublimates directly from a solid to a gas state without passing through the liquid state.
• This is because camphor has a low melting point and a high vapor pressure, which means that it can easily transition from a solid to a gas without melting into a liquid first.
• Camphor is a white crystalline substance that is commonly used in medicine, as well as in the production of plastics, fragrances, and insecticides.

Additional Information

• The wood and bark of the camphor tree were the primary sources of the powder known as camphor.
• Nowadays, synthetic camphor predominates.
• It is present in some skin care products, including as treatments that have FDA approval.
• It's a typical component of topical treatments for skin irritation and cough.

Q31. Answer: (c) Shanti Bardhan

The correct answer is Shanti Bardhan.

Key Points

• Shanti Bardhan is associated with synthesizing classical and modern Indian dance through Ranga Sri Little Ballet Troupe.
• Guru Bipin Singh was a Manipuri dancer and choreographer.
• Pandit Birju Maharaj is a Kathak dancer and choreographer.
• Remo Fernandes is a musician and choreographer known for his work in Bollywood films.

Additional Information

• Classical Indian dance forms include Bharatanatyam, Kathak, Kuchipudi, Manipuri, Mohiniyattam, Odissi, and Sattriya.
• Modern Indian dance forms include Bollywood, contemporary, and fusion styles.
• Ranga Sri Little Ballet Troupe was founded in Kolkata in the 1950s by Shanti Bardhan.

Q32. Answer: (d) 8.50

The correct answer is 8.5 meters.

Key Points

• The women's 100m hurdles race consists of 10 hurdles, and the distance between each hurdle is 8.5 meters.
• The women's 100m hurdles race is a popular event in athletics, and it requires a combination of speed, agility, and technique to clear the hurdles successfully.
• Thirteen meters are run up from the starting line to the first hurdle.
• The final stretch from the last hurdle to the finish line is 10.5 meters long, while the next 9 hurdles are spaced 8.5 meters apart.

Additional Information

• The hurdles are weighed down, making it detrimental for the runner to bump against them and cause them to topple over.
• As long as runners do not intentionally collide with fallen hurdles, they are not penalized.
• The 100-meter hurdlers who run the fastest clock in about 12.5 seconds.
• At 12.12 seconds, Tobi Amusan set the world record.

Q33. Answer: (c) Prachi Yadav

The correct answer is Prachi Yadav.

Key Points

• Prachi Yadav won the bronze medal in the 2022 International Canoe Federation's Paracanoe World Cup.
• Para Canoeing is a Paralympic sport that involves athletes with physical disabilities paddling kayaks or canoes in a race against each other.

Additional Information

• Ramya Smruti is an Indian Para Swimmer who has won several medals at national and international events.
• Sarita Rao is a former Indian national champion in canoeing and kayaking.
• Pranshi Rawal is an Indian Para Badminton player who has won several medals at national and international events.
• All of the sports played during the Summer and Winter Paralympic Games are referred to as Paralympic sports.
• In 2020, there were 22 sports and 539 medal events in the Summer Paralympics, and roughly 80 events in 5 sports and disciplines in the Winter Paralympics.

Q34. Answer: (a) 7,00,000

The correct answer is 7,00,000.

Key Points

• The Finance Bill 2023 has proposed an increase in the threshold limit for total income eligible for rebate under Section 87A for assesses who opt for the new tax regime.
• Section 87A provides a rebate of up to Rs.12,500 to taxpayers whose total income does not exceed a certain limit.
• This limit has been increased from Rs. 5,00,000 to Rs. 7,00,000 for assesses opting for the new tax regime.
• The new tax regime was introduced in the Union Budget 2020 and offers lower tax rates to taxpayers who forego certain deductions and exemptions.

Additional Information

• The tax rates under the new regime are as follows:
• For income up to Rs. 2.5 lakhs: Nil
• For income between Rs. 2.5 lakhs and Rs. 5 lakhs: 5%
• For income between Rs. 5 lakhs and Rs. 7.5 lakhs: 10%
• For income between Rs. 7.5 lakhs and Rs. 10 lakhs: 15%
• For income between Rs. 10 lakhs and Rs. 12.5 lakhs: 20%
• For income between Rs. 12.5 lakhs and Rs. 15 lakhs: 25%

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• For income above Rs. 15 lakhs: 30%

• 11,00,000 is the threshold limit for availing the standard deduction for salaried individuals.

• The standard deduction is a fixed deduction allowed to salaried individuals in lieu of certain expenses such as conveyance, medical expenses, etc.

• 8,00,000 is the threshold limit for senior citizens to avail of tax exemption on interest income from deposits with banks, post offices, and cooperative banks.

• 10,00,000 is the threshold limit for tax exemption on long-term capital gains arising from the sale of equity shares or equity-oriented mutual funds.

Q35. Answer: (c) Frazer Commission

The correct answer is Frazer Commission.

Key Points

• The Frazer Commission was appointed by Lord Curzon in 1902 to enquire into the workings of the police administration in British India.

• The commission was headed by Sir James Frazer, a retired judge of the Calcutta High Court, and had six other members.

• The commission submitted its report in 1903, which recommended several reforms in the police system, including the separation of investigation and law and order functions, the establishment of a central training institution, and the improvement of working conditions for police personnel.

• The recommendations of the Frazer Commission were implemented in various parts of British India and laid the foundation for the modern police system in India.

Additional Information

• The Kitchener Commission was appointed in 1913.

• It was made to enquire into the military system of British India and recommend reforms.

• The Hunter Commission was appointed in 1919.

• Its goal was to enquire into the Jallianwala Bagh massacre and the Punjab disturbances of 1919.

• The MacDonnell Commission was appointed in 1924.

• Its aim was to enquire into the communal riots in Kohat and Peshawar in the North-West Frontier Province of British India.

Q36. Answer: (a) There is a legal sanction against their violation.

The correct answer is There is a legal sanction against their violation.

Key Points

• The fundamental duties mentioned in the Indian Constitution do not have a legal sanction against their violation.

• They are non-enforceable in nature.

• Fundamental duties are a part of the Indian tradition, as they reflect the values and principles that have been upheld by Indian society for centuries.

• Through the 42^(nd) Amendment Act of 1976, the essential responsibilities of citizens were enumerated in this constitution.

Additional Information

• Fundamental duties are indeed civic duties that citizens are expected to perform.

• These duties include respecting the national flag and the Constitution, protecting the sovereignty and integrity of India, promoting harmony and brotherhood among all people, etc.

• Fundamental duties are based on Indian tradition and culture.

• They reflect the values and principles that have been upheld by Indian society for centuries.

• Fundamental duties are not sacrosanct or permanent.

• They can be amended or repealed by the Parliament if necessary.

Q37. Answer: (d) D Gukesh

The correct answer is D Gukesh.

Key Points

• The Indian who won the title at the World Chess Armageddon Asia Oceania event in Berlin, Germany in April 2023 is D Gukesh.

• D Gukesh is a 16-year-old Indian chess player who became the world's second-youngest Grandmaster in 2019.

• In the September 2023 rating list, Gukesh officially surpassed Viswanathan Anand as the top-ranked Indian player.

Additional Information

• Abhimanyu Mishra is another Indian chess player who holds the record for being the youngest-ever Grandmaster in the world at the age of 12 years, 4 months, and 25 days.

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• R Praggnanandhaa is also an Indian chess player who became the world's second-youngest Grandmaster in 2018 at the age of 12 years, 10 months, and 13 days.

• Nihal Sarin is yet another Indian chess player who became the world's youngest International Master in 2016 at the age of 12 years, 9 months, and 11 days.

Q38. Answer: (d) 36 months

The correct answer is 36 months.

Key Points

• The maximum tenure of a microfinance loan in India under the current regulatory framework is 36 months, which means a borrower can take a loan for up to 3 years.

• Microfinance loans are typically small loans given to people who do not have access to traditional banking services, especially in rural areas.

• These loans are used for various purposes such as starting a small business, buying essential goods, or paying for education.

Additional Information

• The shorter the tenure of a loan, the higher the monthly installments, which can be difficult for borrowers to repay.

• Therefore, a longer tenure allows for smaller monthly installments, making it easier for borrowers to pay back the loan.

• It is important to note that microfinance institutions may have their own policies regarding loan tenure, which may be different from the regulatory framework.

• It is also worth mentioning that microfinance institutions in India are regulated by the Reserve Bank of India (RBI) and must comply with its guidelines to operate.

• These guidelines are periodically reviewed and updated to ensure that microfinance institutions operate in a fair and transparent manner.

Q39. Answer: (d) Bihar

The correct answer is Bihar.

Key Points

• According to the Multidimensional Poverty Index (MPI) 2021, Bihar has the highest poverty rate in India.

• The MPI is a measure of acute poverty that captures the various deprivations experienced by individuals at the same time.

• Bihar has consistently ranked among the poorest states in India, with a high percentage of people living below the poverty line.

• The state has also been affected by various socio-economic challenges such as low literacy rates, lack of access to basic amenities, and limited job opportunities.

• Madhya Pradesh, Jharkhand, and Uttar Pradesh are also among the poorest states in India, but they have a relatively lower poverty rate compared to Bihar.

Additional Information

• India's MPI value decreased by almost half between 2015–16 and 2019–21, from 0.117 to 0.066.

• Madhya Pradesh:

• The state has made significant progress in reducing poverty in recent years, but still faces challenges related to malnutrition, low literacy rates, and inadequate infrastructure.

• Jharkhand:

• The state has a high poverty rate and faces challenges related to low literacy rates, lack of basic amenities, and limited job opportunities.

• However, it has made progress in reducing poverty through various government initiatives.

• Uttar Pradesh:

• The state has a large population and a high poverty rate, with a significant proportion of people living in rural areas.

• It faces challenges related to low literacy rates, inadequate infrastructure, and limited job opportunities.

• However, the state government has launched several poverty alleviation programs to address these issues.

Q40. Answer: (d) Mame Khan

The correct answer is Mame Khan.

Key Points

• Mame Khan became the first Indian folk artist to attend the Cannes Film Festival 2022.

• He is a renowned Rajasthani folk singer who belongs to the Manganiyar community.

• Mame Khan has been associated with the music industry for over 20 years and has performed on various national and international platforms.

• He has also collaborated with several Bollywood music composers and has lent his voice to many popular songs.

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Additional Information

• Indian singer-songwriter-actor Gurdas Maan is primarily known for his work in Punjabi movies and music.

• In 1980, he became well-known across the country because of the song "Dil Da Mamla Hai".

• Indian singer, author, composer, and record producer Daler Mehndi.

• He has contributed to the global popularity of Bhangra.

• As a practitioner of the ancient performing art form known as pandavani, Teejan Bai narrates stories from the Mahabharata while accompanied by music.

• Teejan Bai is a folk artist from Chhattisgarh, who has received several awards for her contribution to the field of folk music.

Q41. Answer: (b) Gandhinagar Railway Station, Jaipur

The correct answer is Gandhinagar Railway Station, Jaipur.

Key Points

• India's first all-women-managed railway station is Gandhinagar Railway Station, Jaipur.

• It is a historic step towards women's empowerment in the male-dominated railway industry.

• The station is managed by a team of 40 women, including station master, ticket collectors, and security personnel.

• The initiative was launched by the North Western Railway zone in 2017 to promote gender equality and women's participation in the workforce.

• The station has various facilities designed for the convenience of women passengers, such as a separate waiting room, washroom, and baby feeding room.

Additional Information

• Chennai Egmore Railway Station is one of the busiest railway stations in South India.

• The South Indian Railway Company's terminus was constructed at the station between 1906 and 1908.

• Trivandrum Central Railway Station, Thiruvananthapuram is the largest railway station in Kerala.

• It is the busiest train station in Kerala and a major Southern Railway rail hub.

• Matunga Railway Station, Mumbai is the first railway station in India to be entirely operated by women, but it is not an all-women-managed station.

• The station is managed by a team of 41 women, but it also has male staff working in other departments.

Q42. Answer: (a) JC Bose

The correct answer is JC Bose.

Key Points

• Jagadish Chandra Bose was a multi-talented personality who made significant contributions to the fields of physics, biology, and archaeology.

• He is credited with inventing the first wireless communication device, known as the "coherer", and for demonstrating the response of plants to various stimuli, such as light, sound, and electricity.

• Bose's research on plant physiology laid the foundation for modern biophysics and helped advance the understanding of how plants respond to their environment.

Additional Information

• CV Raman was a physicist who discovered the Raman Effect.

• It won him a Nobel Prize in Physics in 1930.

• CNR Rao is a chemist who has made significant contributions to the field of solid-state chemistry.

• One of the first people to synthesize two-dimensional oxide materials, like La2CuO4, was Rao.

• JRD Tata was a pioneering Indian industrialist and philanthropist.

• He was given the French Legion of Honour in 1983, and the Padma Vibhushan and Bharat Ratna, two of India's highest civilian honors, were given to him in 1955 and 1992.

Q43. Answer: (b) Article 32

The correct answer is Article 32.

Key Points

• Article 32 of the Indian Constitution deals with the right to move to the Supreme Court for enforcement of Fundamental rights.

• This article is considered as the heart and soul of the Indian Constitution as it provides the citizens with a powerful tool to safeguard their fundamental rights.

• This article empowers the Supreme Court to issue writs for the enforcement of fundamental rights, which include the right to life and personal liberty, the right to equality, the right against exploitation, the right to freedom of religion, and cultural and educational rights.

Additional Information

• Article 30 deals with the right of minorities to establish and administer educational institutions.

• This article provides a framework for the protection of minority rights in the field of education.

• Article 33 empowers the Parliament to restrict or abrogate the fundamental rights of armed forces, police, intelligence agencies, and other similar organizations.

• This provision is necessary to maintain the discipline and effectiveness of these organizations.

• Article 31 deals with the right to property, which was removed from the list of fundamental rights by the 44^(th) Amendment Act of 1978.

• This amendment was made to ensure that the government could acquire private property for public use without any hindrance.

Q44. Answer: (b) Karnataka

The correct answer is Karnataka.

Key Points

• Kamsale is a folk dance form from the state of Karnataka.

• It is primarily performed by the devotees of Lord Mahadeshwara, a deity worshipped in the southern parts of Karnataka.

• The dance involves the use of small bronze discs, called kamsale, tied to the ankles of the dancers.

• The dancers produce rhythmic sounds by striking the kamsale against each other.

• Kamsale is considered to be a sacred dance form and is performed during religious festivals and fairs in Karnataka.

Additional Information

• Folk dances of Jharkhand include Chhau, Jhumar, Santhal, and Karma.

• Folk dances of Kerala include Kathakali, Mohiniyattam, Thullal, and Theyyam.

• Folk dances of Bihar include Jat-Jatin, Jhijhian, and Bidesia.

Q45. Answer: (d) Security

The correct answer is Security.

Key Points

• The Five-Year Plans were a series of economic plans implemented in the Soviet Union between 1928 and 1991, aimed at developing the country's economy.

• The goals of the plans were to achieve rapid industrialization, increase agricultural production, improve transportation and communication infrastructure, and develop the country's natural resources.

• Self-reliance was a key goal of the plans, as the Soviet Union wanted to reduce its dependence on foreign imports and technology.

• Equity was also a goal, as the Soviet Union aimed to reduce income inequality and provide basic necessities to all citizens.

• Growth was a central goal, as the plans aimed to increase the country's GDP and improve living standards.

Additional Information

• Security was not a stated goal of the Five-Year Plans, although it could be argued that the plans were aimed at strengthening the Soviet Union's military and geopolitical power.

• Other goals of the plans included improving education and healthcare, promoting cultural development, and advancing science and technology.

• The Five-Year Plans were controversial, as they often involved forced labor, collectivization of agriculture, and suppression of dissent.

• Despite their flaws, the plans did lead to significant industrial and technological advancements in the Soviet Union, but also contributed to environmental degradation and economic inefficiencies.

Q46. Answer: (d) Assam

The correct answer is Assam.

Key Points

• Ambubachi Fair is an annual religious festival held at the Kamakhya Temple in Guwahati, Assam.

• The festival celebrates the menstruation of the goddess Kamakhya and is considered to be a symbol of fertility and womanhood.

• During the festival, the temple remains closed for three days and reopens on the fourth day, which is considered to be the most auspicious day.

• The fair attracts a large number of devotees and tourists from all over the country and is a major cultural event in Assam.

Additional Information

• Manipur is known for its rich cultural heritage and is famous for its traditional dance forms like Manipuri and Nata Sankirtana.

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• Famous festivals of Manipur are the Yaoshang Festival, Kut Festival, Gang Ngai Festival, Cheiraoba Festival, Kang Rath Yatra, Lui Ngai Ni Festival.

• Arunachal Pradesh is known for its scenic beauty and is home to a diverse range of tribes and cultures.

• Arunachal Pradesh celebrates a number of events, including the Mopin Festival, the Losar Festival, the Dree Festival of Apatani, Chalo-Loku of Nocte, Solung of Adis, the Ziro Festival of Music, the Pangsau Pass Winter Festival, and Siang River Festival.

• Nagaland is known for its vibrant tribal culture and is famous for its traditional festivals like Hornbill Festival and Moatsu Festival.

• Famous festivals of Nagaland are The Hornbill Festival, Ngada Festival, Hega Festival, Mim Kut Festival, Bushu Festival, Tsukhenye Festival, Sukrenye Festival and Yemshe Festival.

Q47. Answer: (a) Transfer of funds

The correct answer is Transfer of funds.

Key Points

• Transfer of funds is not a primary function of commercial banks, but rather a secondary function.

• The primary functions of commercial banks include creating credit, lending loans to the public, and receiving deposits from the public.

• The creation of credit involves the bank lending money to borrowers, which increases the money supply in the economy.

• Lending loans to the public includes providing various types of loans such as personal loans, home loans, and business loans.

• Receiving deposits from the public involves accepting money from individuals and businesses and holding it in accounts such as savings accounts, current accounts, and fixed deposit accounts.

Additional Information

• Transfer of funds is a secondary function of commercial banks that involves facilitating the movement of funds from one account to another, either within the same bank or between different banks.

• The creation of credit is an important function of commercial banks as it helps to stimulate economic growth by providing access to capital for businesses and individuals.

• Lending loans to the public is a key way in which commercial banks generate revenue, by charging interest on the loans they provide.

• Receiving deposits from the public is an important function of commercial banks as it provides a source of funds that can be used for lending and other activities.

Q48. Answer: (a) Cold Desert

The correct answer is Cold Desert.

Key Points

• Cold Desert was declared as India's 16th Biosphere Reserve in 2009.

• The Cold Desert Biosphere Reserve is located in the state of Himachal Pradesh and covers an area of 7,770 square kilometers.

• The reserve is home to several endangered species including the Red Fox, Blue Rock Pigeon, and Lammergeier (also known as Bearded Vulture).

• The Cold Desert Biosphere Reserve is also known for its unique landscape, with cold deserts, alpine meadows, and high-altitude lakes.

Additional Information

• The Seshachalam Biosphere Reserve is located in the state of Andhra Pradesh and is known for its rich biodiversity.

• The area is drained by the Penneru River's tributaries.

• Agasthyamalai Biosphere Reserve is located in the southern Western Ghats and is known for its cultural and ecological significance.

• 2,000 different types of medicinal plants call it home, at least 50 of which are rare and endangered species.

• The Dehang Debang Biosphere Reserve is located in the state of Arunachal Pradesh and is known for its diverse flora and fauna.

• Dehang-Debang was established in 1998 as a biosphere reserve.

Q49. Answer: (c) Net indirect taxes

The correct answer is Net indirect taxes.

Key Points

• The basic difference in the aggregates at market price and factor cost is net indirect taxes.

• The taxes that a nation's government levies on the creation and sale of products and services are known as indirect taxes.

• One such tax is the GST (Goods and Services Tax).

Additional Information

• Depreciation:
• It is the decrease in the value of an asset over time due to wear and tear, obsolescence, or other factors.
• It is considered in the calculation of national income at factor cost, but not at market price.
• Indirect taxes:
• These are taxes levied on goods and services rather than on income or profits.
• Examples include GST, excise duty, customs duty, etc.
• They are included in the calculation of national income at market price, but not at factor cost.
• Direct taxes:
• These are taxes levied on the income or profits of individuals or companies.
• Examples include income tax, corporate tax, etc.
• They are not considered in the calculation of national income at either market price or factor cost.

Q50. Answer: (b) Amir Khusrau

The correct answer is Amir Khusrau.

Key Points

• Amir Khusrau was the first to mention the incident of Jauhar in the Persian language.
• He was a famous poet, musician, and scholar in the court of the Delhi Sultanate.
• Jauhar was a practice in which women of a besieged fort committed mass suicide to avoid being captured by the enemy.

Additional Information

• Ibn Battuta was a Moroccan traveler and scholar who visited India during the reign of Muhammad bin Tughlaq.
• Ibn Battuta observed that the land's soil was very fruitful, enabling farmers to cultivate the two crops of Rabi and Kharif each year.
• The most well-known piece by Ziauddin Barani is "Tarikh-i-Firuz Shahi."
• He placed a strong emphasis on using primary materials and historical authenticity.
• Hasan Nizami was also a famous historian of the Delhi Sultanate.
• After moving to Delhi, India, from Nishapur, he wrote Tajul-Ma'asir, the Delhi Sultanate's first official history.

Q51. Answer: (a) 10.5%

Given:

Discount % = 15%

Mark-up = 30%

Formula:

SP - CP = Profit

Profit % = (SP - CP)/CP × 100

Selling price = Marked price × Discount/100

Calculation:

Let the cost price of goods be Rs.100

Marked price of goods = 100 × 130/100 = Rs.130

The selling price of goods = 130 × (100 - 15)/100

= 130 - 19.5 = Rs.110.5

Profit % = (110.5 - 100)/100 × 100

= 10.5%

Therefore His profit percentage is 10.5

Q52. Answer: (c) 17.5 cm

Given:

The radius and slant height of a cone = 5 : 7

Curved surface area = 1347.5 cm2

Formula used:

Volume of cone = (1/3) π r2 h

Slant height = √(h2 + r2)

Where,

r = Radius of the cone

h = Height of the cone
l = slant height
Curved surface area = πrl
Calculation
let the radius and height of the cone be 5x and 7x.
Curved surface area = πrl = 1347.5
=> 22/7 × 5x × 7x = 1347.5
=> 2 × 5x × x = 122.5
=> x^2 = 12.25
=> x = 3.5 cm
5x → 5 × 3.5 = 17.5 cm
The radius of a cone is 17.5 cm.

Q53. Answer: (b) 12.8 √0.39

Given
x2 - 3.2 x + 1 = 0
Formula used
(a - b)2 = (a + b)2 - 4ab
(a^2 - b^2) = (a + b)(a - b)
Calculation
If we simplify the given equation,x2 - 3.2 x + 1 = 0, by dividing it by x.
=> x + 1/x = 3.2
Applying the above-mentioned formula:
=> (x - 1/x)2 = (3.2)2 - 4
=> (x - 1/x)2 = 10.24 - 4
=> (x - 1/x)2 = 6.24
=> x - 1/x = √ (16 × 0.39)
=> x - 1/x = 4√ 0.39
=> (x2 - 1/x2) = 3.2 × 4√ 0.39
=> (x2 - 1/x2) = 12.8√ 0.39
The answer is 12.8√ 0.39.

Q54. Answer: (d) 5%

Given:
Principal = Rs. 12000
Amount = Rs. 15000
Time = 5 years
Formula used:
SI = (PRT)/100
A = P + SI
where,
SI = Simple interest, P = Principal, R = Rate, T = Time and A = Amount
Calculations:
According to the question, we have
Simple interest
=> SI = Rs. 15000 - Rs. 12000
=> SI = Rs. 3000
Now, according to the formula used
=> SI = (PRT)/100
=> 3000 = (12000 × R × 5)/100
=> 3000 = 600R
=> R = 5

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=> R = 5%

Therefore The Rate of interest per annum is 5%.

Shortcut Trick SI = Rs. 15000 - Rs. 12000 = 3000

The rate in SI is the interest of one year on the given principle.

Rs. 3000 is the interest of 5 years, hence for one year:

=> 3000/5 = 600

Rate = 600/12000 × 100 = 5%

Q55. Answer: (d) 3 : 2

GIVEN:

weight of metal A = 19 × weight of water

weight of metal B = 9 × weight of water

CALCULATION:

Let the ratio of metal A and metal B be a : l

(19a + 9l)/(a + l) = 15/1

=> 19a + 9l = 15a + 15l

=> 19a − 15a = 15l − 9l

=> 4a = 6l

=> 2a = 3l

=> l : a = 3 : 2

Therefore Metal A and metal B are taken in the ratio 3: 2.

Therefore Metal A and Metal B are taken in the ratio 3: 2

Q56. Answer: (c) 720

Shortcut Trick

The ratio of Cost Price (CP) to Marked Price (MP) can be calculated directly using the profit and discount percentages.

CP : MP = (100 − D%) : (100 + P%)

CP : MP = (100 − 10) : (100 + 20) = 90 : 120 = 3 : 4

Since 3 units represent the given CP of Rs. 540, 1 unit = 540 ÷ 3 = Rs. 180.

Therefore, MP = 4 units = 4 × 180 = Rs. 720.

Therefore The correct answer is Rs. 720.

Alternate Method

Given:

Cost Price (CP) = Rs. 540

Discount (D) = 10%

Profit (P) = 20%

Formula Used:

Selling Price (SP) = CP × (100 + P%) ÷ 100

Marked Price (MP) = SP × 100 ÷ (100 − D%)

CP = 540

SP = 648

MP = 720

+20% Profit

-10% Discount

CP : MP = (100 − 10) : (100 + 20) = 3 : 4

3 units = Rs. 540 → 4 units = Rs. 720

Calculations:

=> SP = 540 × (100 + 20) ÷ 100

=> SP = 540 × 120 ÷ 100 = Rs. 648

=> Since Selling Price is also equal to Marked Price minus Discount:

=> 648 = MP × (100 − 10) ÷ 100

=> 648 = MP × 90 ÷ 100

=> MP = 648 × 100 ÷ 90

=> MP = Rs. 720

Therefore The correct answer is Rs. 720.

Additional Information

Marked Price (MP)

It is the price printed on an article or list price. Any discount offered by a seller is always computed on the Marked Price unless stated otherwise.

Successive Discounts

If two successive discounts of a% and b% are given sequentially, the equivalent overall discount is calculated using the formula: Equivalent Discount = (a + b − ab ÷ 100)%.

Dishonest Dealer

If a dealer claims to sell goods at his Cost Price but uses false weights to cheat buyers, his actual Profit % = (True Weight − False Weight) ÷ False Weight × 100.

Q57. Answer: (c) NM = 8 cm, angle Y = 53°

Given:

Δ PQR and Δ MNY are congruent to each other

PQ = 8 cm,

angle Q = 55° and angle P = 72°.

Concept Used:

If two triangle is congruent to each other then the corresponding angle is are equal to the other triangle

Calculations:

As the triangle is congruent

=> angle R = angle Y

=> angle R = 180 - (55 + 72)

=> angle R = 180 - 127

=> angle R = 53°

similarly,

PQ = NM

=> NM = 8 cm

Hence, The value of NM is 8 cm and angle Y equal to 53º

Q58. Answer: (a) 63 : 65

Calculation

The number of respondents lies in high = 12.6% of 208

= 12.6 × 20.8

The number of respondents lies in low = 13% of 208

= 13 × 20.8

The ratio of the number of respondents lies in high to the number of respondents lies in low:

=> 12.6 × 20.8 : 13 × 20.8

=> 12.6 : 13

=> 63 : 65

The answer is 63 : 65.

Q59. Answer: (d) 24/25

Given

sinθ = 6/10

cosθ = 8/10

Formula used:

sin 2θ = 2 × sinθ × cosθ

Calculation

From the above-mentioned formula:

sin 2θ = 2 × sinθ × cosθ

= 2 × 6/10 × 8/10

= 24/25

The value is 24/25.

Q60. Answer: (d) 9 : 7

Calculation:

The total number of workers in a company = 960

The number of female workers in the company = 420

The number of male workers in the company = 960 - 420

= 540

The respective ratio of the total number of male workers to the total number of female workers in the company = 540 : 420

= 9 : 7

The answer is 9 : 7.

Q61. Answer: (c) 6.5 cm

Given

The lengths of the two sides adjacent to the right angle are 1.6 cm and 6.3 cm.

Concept used

The two sides adjacent to the right angle of a right-angled triangle are perpendicular and base.

$P^2 + B^2 = H^2$

Calculation

P2 + B2 = H2

$H^2 = 1.6^2 + 6.3^2$

H2 = 2.56 + 39.69

H2 = 42.25

H = 6.5 cm

The length of the hypotenuse is 6.5 cm.

Q62. Answer: (a) 55

Shortcut Trick

Total time for the journey = 750 ÷ 50 = 15 hours.

Time spent on the first 200 km = 200 ÷ 40 = 5 hours.

Remaining time for the next 550 km = 15 − 5 = 10 hours.

Required speed for remaining distance = 550 ÷ 10 = 55 kmph.

Therefore The correct answer is 55 kmph.

Alternate Method

Given:

Total distance = 750 km

Distance of 1^(st) part = 200 km, Speed of 1^(st) part = 40 kmph

Distance of 2^(nd) part = 550 km

Overall average speed = 50 kmph

Formula Used:

Average Speed = Total Distance ÷ Total Time

Speed = Distance ÷ Time

200 km

550 km

Total Distance: 750 km (Avg Speed: 50 kmph)

Speed = 40 kmph

Time = 5 hrs

Speed = ? kmph

Time = 10 hrs

Calculations:

=> Total Time = Total Distance ÷ Average Speed

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=> Total Time = 750 ÷ 50 = 15 hours

=> Time taken for the first 200 km = Distance ÷ Speed = 200 ÷ 40 = 5 hours

=> Time remaining for the next 550 km = Total Time − Time taken for the first part

=> Time remaining = 15 − 5 = 10 hours

=> Required speed for the next 550 km = Distance ÷ Time

=> Required speed = 550 ÷ 10 = 55 kmph

Therefore The correct answer is 55 kmph.

Additional Information

Average Speed

Average speed is the total distance traveled divided by the total time taken. It is not simply the arithmetic mean of the different speeds.

Average Speed for Equal Distances

If an object covers two equal distances at speeds x and y, the average speed over the entire journey is directly calculated using the formula 2xy ÷ (x + y).

Relative Speed

When two objects move in opposite directions, their relative speed is the sum of their individual speeds. When moving in the same direction, it is the difference between their individual speeds.

Q63. Answer: (c) 2

Given

x2 + y2 + z2 = 2(x + z - 1)

Formula used:

$(a + b)^2 = a^2 + b^2 + 2ab$

Calculation

$x^2 + y^2 + z^2 = 2(x + z - 1)$

=> $x^2 + y^2 + z^2 = 2x + 2z - 2$

=> $x^2 - 2x + 1 + z^2 – 2z + 1 + y^2 = 0$

=> $(x - 1)^2 + (z – 1)^2 + y^2 = 0$

As we know square of any real number is never negative, Therefore only way above sum will add up to 0 is individual squares are of value 0.

Therefore $(x - 1)^2 = 0$

=> x = 1

& $(z – 1)^2 = 0$

=> z = 1

$y^2 = 0$

=> y = 0

Therefore $x^3 + y^3 + z^3 = (1)^3 + 0^3 + 1^3$

=> $x^3 + y^3 + z^3 = 2$

The answer is 2.

Q64. Answer: (c) 42

Given

The area of a sector of a circle = 346.5 cm2

Central angle = 22.5°

Formula used:

Area of sector whose central angle is θ = (πr2 / 360) × θ

Calculation

=> (πr2 / 360) × 22.5 = 346.5

=> 22/7 × r × r × (1/16) = 346.5

=> r × r = 56 × 31.5

=> $r^2 = 1764$

=> r = 42

Therefore The radius is 42 cm.

Q65. Answer: (a) √290 cm

Given:

Radii are 7 cm and 4 cm

The length of the transverse common tangent = 13 cm

Formula used:

Length of transverse common tangent = $\sqrt{(d^2 - (r1 + r2)^2)}$

Where d = distance between their centers

r1 and r2 are radii of circles

Calculation:

PA = 7

QB = 4

PQ = 13

Length of transverse common tangent = √(d2 - (7 + 4)2)

=> 13 = $\sqrt{d^2 - 11^2}$

=> 169 = d^2 - 121

=> d^2 = 290

=> d = √290

Therefore The distance between the two centres is √290 cm.

Q66. Answer: (b) 1.5

Given

Distance = 600 m

Speed = 24 km/h

Formula used:

Speed = Distance/Time

Calculation

Time = 600/(24 × 5/18)

Time = 90 sec or 1.5 minutes

The answer is 1.5 minutes.

Q67. Answer: (c) Rs. 810

Given

Trade discount = 10%

Cash discount = 10%

Formula used:

Selling price = M.P × (1 - d/100)

Calculation

Selling price after both the discount = 1000 × (1 - 10/100) × (1 - 10/100)

= 1000 × (9/10) × (9/10)

Selling price after discount = 810

The answer is 810.

Q68. Answer: (b) 13/12,13/5

Given

tan A = 12/5

Formula used:

$P^2 + B^2 = H^2$

tan A = P/B

Calculation

From the above-mentioned formula:

tan A = 12/5 = P/B

122 + 52 = H2

=> H^2 = 144 + 25

=> H2 = 169
=> H = 13
cosec A = H/P = 13/12
sec A = H/B = 13/5
The answer is 13/12 and 13/5.

Q69. Answer: (c) November

Calculation
The production of all types of bikes in July = 58 + 89 + 54 + 72 = 273
The production of all types of bikes in August = 38 + 46 + 64 + 53 = 201
The production of all types of bikes in September = 56 + 45 + 76 + 65 = 242
The production of all types of bikes in October = 15 + 26 + 80 + 37 = 158
The production of all types of bikes in November = 45 + 36 + 54 + 21 = 156
The production of all types of bikes in December = 33 + 40 + 41 + 44 = 158
We can clearly conclude the production was lowest in November.

Q70. Answer: (c) 4

Given
$4x^2 + y^2 = 40$
$xy = 6$
Formula used:
$(a - b)^2 = a^2 + b^2 - 2ab$
Calculation
$(2x - y)^2 = 4x^2 + y^2 - 4xy$
Putting the given value in the expression:
$(2x - y)^2 = 40 - 4 \times 6$
$(2x - y)^2 = 40 - 24 = 16$
$2x - y = 4$
Therefore The answer is 4.

Q71. Answer: (c) 792

Calculation
The total number of laptops Dell sold by A
= 18% of 11200 × 5/9
= 1120
The total number of laptops Dell sold by C
= 20% of 11200 × 1/5
= 448
The total number of laptops Dell sold by D
= 12% of 11200 × 11/21
= 704
The total number of laptops Dell sold by E
= 14% of 11200 × 4/7
= 896
The average of Dell laptops sold by stores A, C, D and E together:
= (1120 + 448 + 704 + 896)/4
= 280 + 112 + 176 + 224 = 792

Q72. Answer: (a) 1/8

Shortcut Trick
Given $\cos\theta - \sin\theta = 0$, which implies $\tan\theta = 1$.
This means the angle $\theta = 45°$.
At $\theta = 45°$, $\sin\theta = 1/\sqrt{2}$ and $\cos\theta = 1/\sqrt{2}$.

Substitute the values: (1/√2)^8 + (1/√2)^8
=> 1/16 + 1/16 = 2/16 = 1/8.
Therefore The correct answer is 1/8.
Alternate Method
Given:
cos θ − sin θ = 0
Calculations:
=> cos θ = sin θ
Squaring both sides, we get:
=> cos² θ = sin² θ
Using the standard trigonometric identity:
=> sin² θ + cos² θ = 1
Substituting cos² θ with sin² θ:
=> sin² θ + sin² θ = 1
=> 2sin² θ = 1
=> sin² θ = 1/2 and cos² θ = 1/2
Now, we need to find the value of (sin^8 θ + cos^8 θ):
=> (sin² θ)^4 + (cos² θ)^4
=> (1/2)^4 + (1/2)^4
=> 1/16 + 1/16
=> 2/16 = 1/8
Therefore The correct answer is 1/8.
Additional Information
Pythagorean Identities
sin²θ + cos²θ = 1 | sec²θ − tan²θ = 1 | cosec²θ − cot²θ = 1
Important Higher Power Expansions
sin^4θ + cos^4θ = 1 − 2sin²θ cos²θ | sin^6θ + cos^6θ = 1 − 3sin²θ cos²θ
Equalities at 45°
In the first quadrant, sin θ = cos θ only when θ = 45°. Similarly, tan θ = cot θ and sec θ = cosec θ are equal at θ = 45°.

Q73. Answer: (b) 1,10,000

Given
Increases = 10% annually
The present population of this city = 1,33,100
Formula used
Final = Initial(1 + r/100)^n
where, r= percentage increase and n = no.of years
Calculation
Let the population two years ago be P.
133100 = P(1 + 10/100)²
=> 133100 = P(11/10)2
=> 133100 = P × 121/100
=> P = 1,10,000
The answer is 1,10,000.

Q74. Answer: (a) 1 9/11 days

Given:
Brijesh can complete a work in 4 days.
Ashish can complete the same work in 5 days.
Anand can complete the same work in 10 days.
Concept used:
Entire work = Work done each day × Time taken to finish the entire work

Calculation:

LCM (4, 5 and 10) = 20

Let the entire work be given by the LCM of the time taken by Brijesh, Ashish & Anand

So, the entire work = 20 units

Now,

Brijesh does each day = 20 ÷ 4 = 5 units

Ashish does each day = 20 ÷ 5 = 4 units

Anand does each day = 20 ÷ 10 = 2 units

Together they will do the remaining work = 20/11

= 1(9/11) days

The answer is 1(9/11) days

Q75. Answer: (d) Rs. 5,795 5/9

Given:

A sold an item to B at a gain of 25%

B sold it to C at a loss of 10%

Total money paid by C = Rs. 6520

Formula used

S.P = C.P(1 +/- r/100)

where, r = gain/loss%

Calculation:

Let, the A paid for the item = x

So, x × (125/100) × (90/100) = 6520

=> x = 6520 × (100/125) × (100/90)

=> x = 5795 5/9

Therefore A paid Rs. 5795 5/9 (in Rs.) for the item.

Q76. Answer: (c) The poor undergoes

The correct answer is: "The poor undergoes"

Key Points

• The error in the original sentence arises from a subject-verb agreement issue.

• The subject "the poor" is a plural noun phrase, but the verb "undergoes" is in the singular form.

• In English, verbs must agree in number with their subjects.

• So, "The poor undergo" should be corrected to "The poor undergo".

• The correct form would be "The poor undergo," where the verb "undergo" is in the plural form to match the plural subject "the poor."

• The correct sentence should be: "The poor undergo several problems in life that could be solved with money."

• In this corrected version, "undergo" is used correctly with the plural noun "problems," and the verb "undergo" agrees with the plural subject "the poor."

Therefore, the correct answer is option 3.

Q77. Answer: (a) Repel

The solution is in Hindi. Read it online.

Q78. Answer: (b) I could not find it anywhere.

The correct answer is: I could not find it anywhere.

Key Points

• The structure of the sentence is:

• Subject: "I" (first-person singular pronoun)

• Verb: "could not find" (a compound verb phrase indicating the inability to locate something)

• Object: "it" (a pronoun representing the thing that couldn't be found)

• Adverb: "anywhere" (modifying the verb phrase, indicating the lack of a specific location where the speaker could find the object)

• The sentence is grammatically complete and makes sense on its own.

• The sentence follows the English word order (subject-verb-object) and effectively communicates the idea that the speaker was

unable to locate the object in any place.

Therefore, the correct answer is option 2.

Q79. Answer: (d) joins

The correct answer is Option: Joins

Key Points

• The sentence is in the present tense, so the correct answer should also be in the present tense.

• "Joins" is in the present simple tense, which is often preferred for general statements and facts.

• In this case, it is describing a characteristic of the road—it joins two villages.

• The present simple is suitable for such timeless or habitual situations.

• Therefore, "joins" is preferred because it aligns with the timeless nature of the road connecting two villages, fits well within the defining relative clause, and contributes to a clear and concise expression.

Thus, option 4 is the correct answer.

Corrected sentence: The road which joins two villages is repaired by local authorities.

Q80. Answer: (a) where the city park is?

The correct answer is: "where the city park is?"

Key Points

• The overall structure of the sentence is an interrogative sentence, starting with the auxiliary verb "can".

• It's asking someone else to provide information. An embedded indirect question "where the city park is" is used, and this follows English rule of structure for indirect questions.

• In indirect questions or embedded questions, the usual word order of a statement is kept. That's why we use "where the city park is" instead of "where is the city park?" which is how the question would be posed directly.

• The subject (the city park) precedes the auxiliary verb (is) in indirect questions, hence 'where the city park is' is correct.

Therefore, the correct answer is: Can you please tell me where the city park is ?

Q81. Answer: (a) Laison

The solution is in Hindi. Read it online.

Q82. Answer: (c) B, A, D, C

The correct answer is: B, A, D, C.

Key Points

• B: This part introduces the subject (he) and sets the tone for the sentence by describing the subject's capability in writing.

• A: This part provides additional information about the subject's writing style, specifying that he writes with a supreme sense of rhythm and word appeal.

• D: This part introduces a contrast or contradiction in the subject's writing style, mentioning that despite his capability to write angelic or weird poetry, he also writes about a problem of morbid psychology.

• C: This part concludes the sentence by further expanding on the subject's diverse writing style, stating that he can also write about the outlines of an unrelenting plot in a hard and dry style.

• So, the sequence flows logically from introducing the subject's capability, providing additional details about his writing style, introducing a contrast, and then concluding with another aspect of his writing style.

Therefore, the correct answer is option 3.

Q83. Answer: (a) Stabilise

The solution is in Hindi. Read it online.

Q84. Answer: (c) Damage

The solution is in Hindi. Read it online.

Q85. Answer: (d) Testimony

The solution is in Hindi. Read it online.

Q86. Answer: (c) Meagre

The solution is in Hindi. Read it online.

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Q87. Answer: (d) benifitted

The solution is in Hindi. Read it online.

Q88. Answer: (c) the course of action began and it could not be blocked

The solution is in Hindi. Read it online.

Q89. Answer: (d) Thousands of people were airlifted from Ukraine by the Indian army.

The correct answer is: "Thousands of people were airlifted from Ukraine by the Indian army."

Key Points

• In passive voice, the object of the active sentence becomes the subject, and the original subject often becomes the agent (or is omitted).

• The structure generally follows the pattern:

• Active Voice: Subject + Verb + Object + Additional information

• Passive Voice: Object + Was/were + V3 + by + agent + additional information

• The subject in the active voice sentence, "The Indian army," becomes the agent in the passive voice construction.

• It is placed at the end of the sentence preceded by "by."

• The object in the active voice sentence, "thousands of people," becomes the subject in the passive voice construction.

• The verb "airlifted" changes to "were airlifted" in the passive voice, indicating the past participle.

• So, the passive construction maintains the same essential information but shifts the focus from the doer of the action (the Indian army) to the receiver of the action (thousands of people).

Therefore, the correct answer is option 4.

Q90. Answer: (c) No correction required.

The correct answer is: "No correction required."

Key Points

• The sentence follows a clear and coherent structure, with a subject ("This hill"), a linking verb ("is"), a subject complement ("a nice place to meditate"), and a subordinate clause introduced by "because."

• The use of "one" as a pronoun is grammatically appropriate for creating a general, indefinite reference to any person.

• The sentence conveys a clear and logical idea.

• It suggests that the hill is an ideal location for meditation because it offers solitude, which aligns with the common understanding that peaceful and quiet surroundings enhance the meditation experience.

• The cause-and-effect relationship between the hill being a nice place to meditate and the ability to enjoy solitude is conceptually sound.

• Overall, the sentence effectively combines grammatical correctness with a coherent and meaningful expression of the idea, making it both grammatically and conceptually correct.

Therefore, the correct answer is option 3.

Q91. Answer: (c) To try new things

The solution is in Hindi. Read it online.

Q92. Answer: (d) Who can solve the problem?

The correct answer is: "Who can solve the problem?"

Key Points

• In active voice, the subject performs the action.

• Active Voice structure: Subject + verb + object + question mark

• Passive voice structure: By + agent(subject) + modal verb + object + be + v3 + question mark

• Therefore, we need to rephrase the sentence to make the subject (who) the doer of the action (solving the problem).

• We use the modal verb "can" to indicate ability.

• The sentence becomes: "Who can solve the problem?"

Thus, option 4 is the correct answer.

Q93. Answer: (d) flexible

The solution is in Hindi. Read it online.

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Q94. Answer: (c) hostile

The solution is in Hindi. Read it online.

Q95. Answer: (a) B, D, C, A

The correct answer is: B, D, C, A

Key Points

• The paragraph talks about the importance of asking grandparents about their lifestyle and home remedies.

• Sentence B suggests asking grandparents about their lifestyle.

• Sentence D suggests asking about their homemade remedies and habits.

• Sentence C mentions that some of these tips may be helpful in avoiding trips to the pharmacy.

• Sentence A concludes the paragraph by comparing grandparents to living in libraries.

Therefore, the correct answer is option 1.

Q96. Answer: (b) owns

The solution is in Hindi. Read it online.

Q97. Answer: (a) for

The correct answer is: For

Key Points

• Using "for" in this sentence helps to establish a clear connection between the backyard and its intended function, providing context about how they use or enjoy that particular outdoor space.

• The preposition "for" is used to indicate the purpose or reason for an action, which makes it the most appropriate option to fill in the blank.

Therefore, the correct answer is option 1.

Additional Information

• During is a preposition that indicates a time when something is happening.

• From is a preposition that indicates the starting point of a time.

• Under is a preposition that indicates being beneath or below something.

Q98. Answer: (b) gatherings

The solution is in Hindi. Read it online.

Q99. Answer: (b) dark

The solution is in Hindi. Read it online.

Q100. Answer: (d) comfortable

The solution is in Hindi. Read it online.

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