SSC CHSL Tier-1 2024: Official Paper (Held On: 09 Jul, 2024 Shift 4) (Previous Year Paper)

SSC Combined Higher Secondary Level (CHSL) • 2024 • 100 questions • 60 minutes • Answer key and solutions

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ENGLISH LANGUAGE

Q1. Parts of the following sentence have been given as options. Select the option that contains an error.

There was an gang of thieves spotted at our local bank, make sure to be careful.

(a) of thieves spotted
(b) There was an gang
(c) at our local bank
(d) make sure to be careful

Q2. The given sentence is divided into four segments. Identify the segment that contains a grammatical error.

A great / culture of hospitality of / the Spanish / is well-known.

(a) the Spanish
(b) is well-known.
(c) culture of hospitality of
(d) A great

Q3. The following sentence has been split into four segments. Identify the segment that contains a grammatical error.

After a while, / she look up / and saw that / it was getting dark.

(a) she look up
(b) it was getting dark
(c) After a while
(d) and saw that

Q4. Select the option that will improve the given sentence by using the most appropriate verb.

Alexa have being working as a teacher for five years now.

(a) Alexa has being working as a teacher for five years now.
(b) Alexa has been working as a teacher for five years now.
(c) Alexa was been working as a teacher for five years now
(d) Alexa is being working as a teacher for five years now.

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.

How does a camel survive in the desert? Many people think that the camel stores water in its hump, but the hump is really made up of fats. When a camel (1)____ find water, it passes less urine to conserve (2)__ small amount of water it has in its body. Furthermore, the camel has a higher body temperature than (3)__ of most mammals. This means that it starts to sweat (4)___ a higher temperature than that which human beings, for example, (5)_____ to perspire. This also helps it to keep water loss through sweating to a minimal.

Q5. Select the most appropriate option to fill in blank number 1.

(a) cannot
(b) can
(c) hasn't
(d) do not

Q6. Select the most appropriate option to fill in blank number 2.

(a) very
(b) a
(c) which
(d) the

Q7. Select the most appropriate option to fill in blank number 3.

(a) all
(b) that
(c) the
(d) some

Q8. Select the most appropriate option to fill in blank number 4.

(a) for
(b) in
(c) with
(d) at

Q9. Select the most appropriate option to fill in blank number 5.

(a) start
(b) started
(c) starts
(d) starting

Q10. Select the most appropriate option to substitute the underlined segment in the given sentence.

Shantanu always buries his head in the sand whenever he explains his professional failures to his father.

(a) escapes from all the difficulties
(b) hides from the truth
(c) blames the others for his mistakes
(d) shows a blind eye against social issues

Q11. Select the most appropriate option that can substitute the underlined segment in the given sentence.

Things that do not come from the ground not safe to compost.

(a) is not safe
(b) be not safe
(c) has not been safe
(d) are not safe

Q12. Select the INCORRECTLY spelt word in the given sentence.

King Zheng is known to lead an army of a million armoured soldiers, a thousand chariots and ten thousand horses in his misssion to conquer the neighbouring kingdoms.

(a) Misssion
(b) Chariots
(c) Kingdoms
(d) Thousand

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Q13. Select the most appropriate synonym of the given word.

Luminous

(a) Radiant
(b) Laborious
(c) Amiable
(d) Luxurious

Q14. 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'.

I quietly went out at the door into the veranda.

(a) from
(b) by
(c) No substitution required
(d) through

Q15. Select the option with the correct spelling to replace the underlined word in the given sentence.

A natural clamity causing huge destruction and loss of life and property.

(a) clamanity
(b) climanity
(c) calamitey
(d) calamity

Q16. Select the most appropriate meaning of the underlined idiom in the given sentence.

He got medals time after time by following the instructions of his mentor.

(a) Twice
(b) Once
(c) Repeatedly
(d) Rarely

Q17. Select the most appropriate option that can substitute the underlined segment in the given sentence.

Grasslands should not be foraged and some places are to be closed for grazing.

(a) planted or
(b) over-grazed and some areas should be
(c) grazed and some places is
(d) cut and few areas

Q18. Select the most appropriate option to fill in the blank.

The _____ of the whale is 2 tonnes.

(a) weight
(b) vet
(c) wet
(d) wait

Q19. Fill in the blank with the most appropriate ANTONYM of the underlined word.

In spring the leaves are bright green, whereas they appear _____ in autumn.

(a) dull
(b) gleaming
(c) dazzling
(d) luminous

Q20. Select the most appropriate option to fill in the blank.

It is the _____ to reach Delhi.

(a) fastest route
(b) quickest route

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(c) lowest route
(d) strongest route

Q21. Select the most appropriate option to fill in the blank.
The cat's entry into the store room was _____.
(a) quiet
(b) quit
(c) quite
(d) cute

Q22. Select the most appropriate option that can substitute the underlined word in the given sentence.
Modest stores and welcoming residents populated the charming tiny town.
(a) hideous
(b) nasty
(c) unpleasant
(d) delightful

Q23. Identify the most appropriate ANTONYM of the underlined word in the following sentence.
Harry's behaviour was very blunt during his school days
(a) Excited
(b) Curious
(c) Dull
(d) Polite

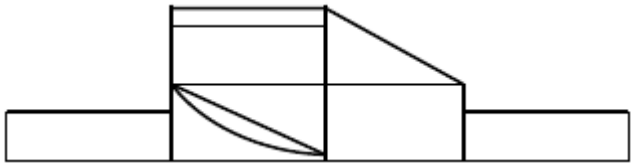
Q24. Select the most appropriate synonym of the given word.
Rectify
(a) Correct
(b) Count
(c) Consider
(d) Connect

Q25. Select the most appropriate ANTONYM of the underlined word.
We should not run after transient pleasures of the world.
(a) Sinful
(b) Permanent
(c) Joyful
(d) Unnatural

GENERAL INTELLIGENCE

Q26. What should come in place of the question mark (?) in the given series based on the English alphabetical order?
CEG, FHJ, IKM, LNP, ?
(a) OQR
(b) QRS
(c) QTV
(d) OQS

Q27. How many rectangles are there in the given figure?



(a) 9

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(b) 10
(c) 11
(d) 8

Q28. Select the set in which the numbers are related in the same way as are the numbers of the following sets.

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding/deleting/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.)

(6, 12, 72)

(8, 16, 96)

(a) (11, 24, 144)
(b) (7, 28, 144)
(c) (12, 24, 144)
(d) (12, 24, 140)

Q29. What will come in the place of the question mark (?) in the following equation, if '+' and '-' are interchanged and '×' and '÷' are interchanged?

15 ÷ 4 - 128 + 123 × 3 = ?

(a) 167
(b) 147
(c) 187
(d) 127

Q30. What will come in the place of the question mark (?) in the following equation, if '+' and '-' are interchanged and '×' and '÷' are interchanged?

16 ÷ 5 - 24 × 6 + 3 = ?

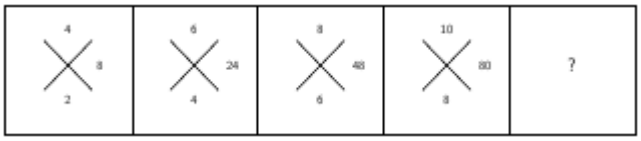
(a) 85
(b) 82
(c) 81
(d) 80

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

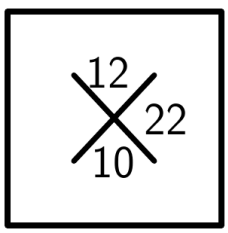
RPM, USP, XVS, AYV, ?

(a) BYD
(b) BDY
(c) DBY
(d) DYB

Q32. Identify the figure in the options that when put in place of the question mark (?) will logically complete the series?

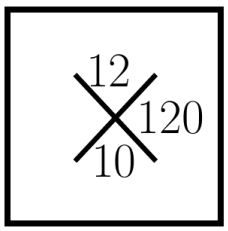


(a)

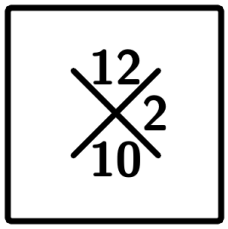


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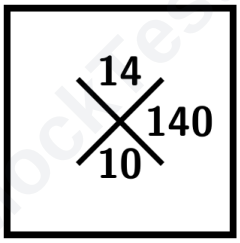
(b)



(c)



(d)



Q33. Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



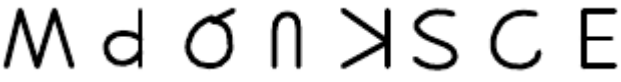
(a)



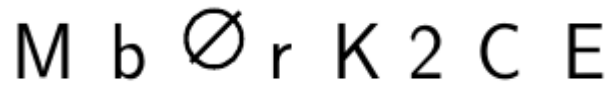
(b)



(c)



(d)



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Q34. Based on the alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which letter-cluster does not belong to that group? (Note: The odd one out is not based on the number of consonants/vowels or their position in the letter cluster.)

(a) RTV
(b) PRT
(c) HJL
(d) TVY

Q35. 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 sweaters are jackets.

Some jackets are pullovers.

No pullover is a glove.

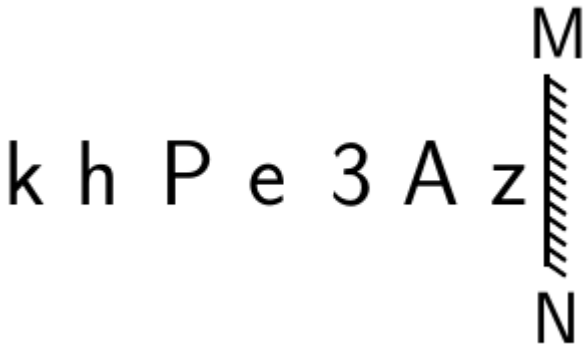
Conclusions:

(I) No jacket is a glove.

(II) Some sweaters are pullovers.

(a) Only conclusion I follows
(b) Both conclusions I and II follow
(c) Only conclusion II follows
(d) None of the conclusions follow

Q36. Select the correct mirror image of the given combination when the mirror is placed at MN as shown below.



(a)



(b)



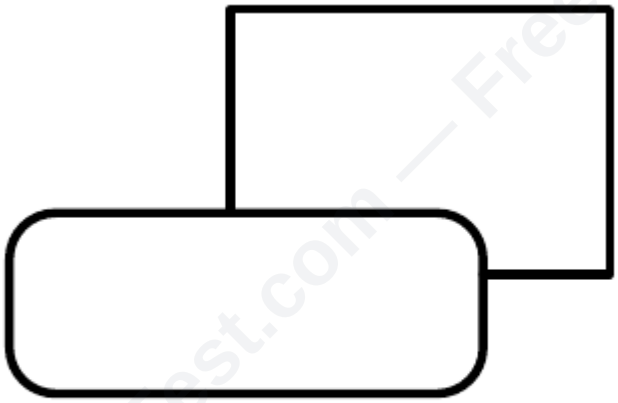
(c)



(d)

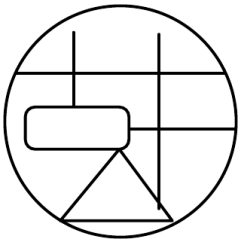
$\Sigma\ 3\ A\ \theta\ P\ \not\Delta\ \not\Upsilon$

Q37. Select the option figure in which the given figure (X) is embedded as its part (rotation is NOT allowed).

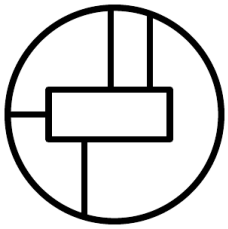


(x)

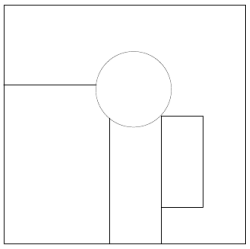
(a)



(b)

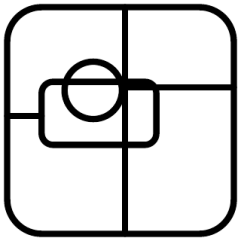


(c)



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(d)



Q38. DFIK is related to EGJL in a certain way based on the English alphabetical order. In the same way, GILN is related to HJMO. To which of the following is MORT related to, following the same logic?

(a) NPSV
(b) NPVS
(c) NPSU
(d) NQSU

Q39. 33 is related to 726 by certain logic. Following the same logic, 43 is related to 946. To which of the following is 53 related, following the same logic?

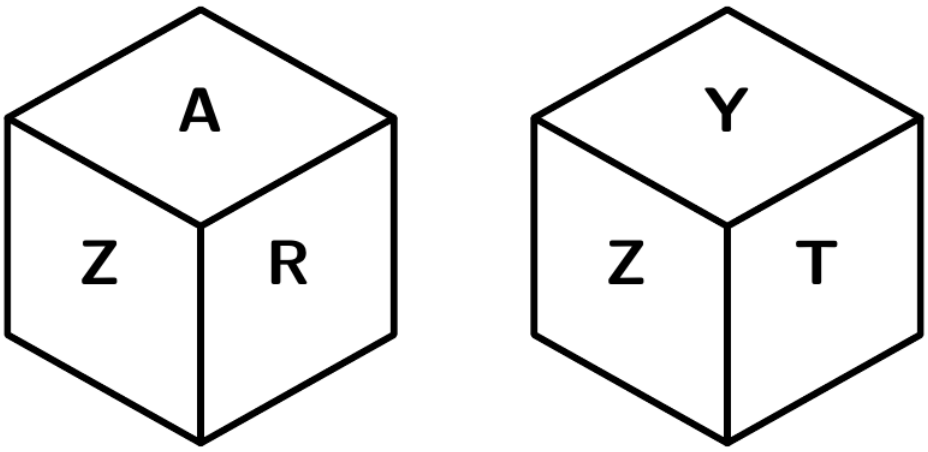
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and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

(a) 1060
(b) 980
(c) 846
(d) 1166

Q40. In a certain code language, ‘time and again’ is coded as ‘zx df mo’ and ‘value your time’ is coded as ‘df pn tv’. How is ‘time’ coded in the given language?

(a) mo
(b) df
(c) tv
(d) zx

Q41. Six letters A, R, T, W, Y and Z are written on different faces of a dice, Two positions of this dice are shown in the figure. Which is the letter on the face opposite to the face containing A?



(a) W
(b) Z
(c) Y
(d) R

Q42. Which of the following numbers will replace the question mark (?) in the given series?

112 113 122 147 196 ?

(a) 277
(b) 294
(c) 253
(d) 282

Q43. What should come in place of the question mark (?) in the given series?

3, 7, 15, 31, 63, ?

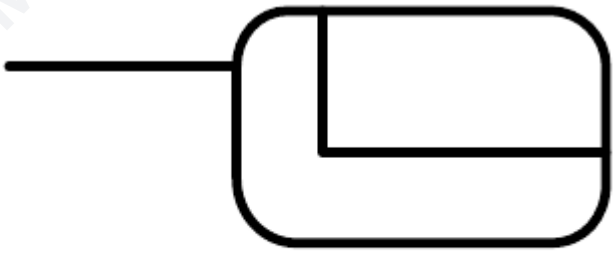
(a) 127
(b) 126
(c) 125
(d) 128

Q44. What will come in the place of the question mark (?) in the following equation, if '+' and '-' are interchanged and '×' and '÷' are interchanged?

14 - 15 ÷ 2 + 56 × 14 = ?

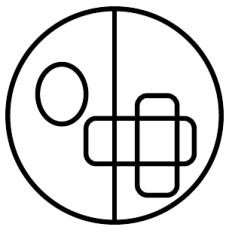
(a) 30
(b) 45
(c) 35
(d) 40

Q45. Select the option figure in which the given figure (X) is embedded as its part (rotation is NOT allowed).

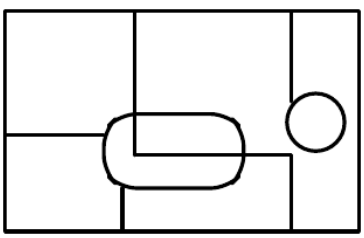


(x)

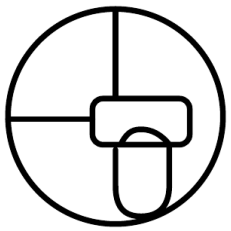
(a)



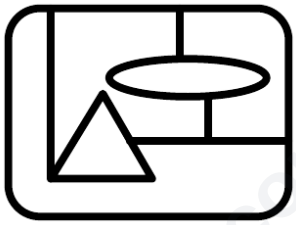
(b)



(c)



(d)



Q46. In a certain code language, ‘BACK’ is coded as ‘4162’ and 'CAB’ is coded as ‘214’ What is the code for ‘K’ in that language?

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

Q47. The position of how many letters will remain unchanged if each of the letters in the word WANDERLUST is arranged from left to right in alphabetical order?

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

Q48. ‘T + W’ means ‘T is the father of W’
‘T – W’ means ‘T is the wife of W’
‘T × W’ means ‘T is the brother of W’
‘T ÷ W’ means ‘T is the daughter of W’.
What does ‘S + T ÷ U’ mean?

(a) S is the brother of U
(b) S is the husband of U
(c) S is the son of U
(d) S is the uncle of U

Q49. Select the word-pair that best represents a similar relationship to the one expressed in the pair of words given below
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word.)
Referee : Field

(a) Arbitrator : Deadlock
(b) Experimenter : Result
(c) Judge : Courtroom
(d) Gladiator : Ring

Q50. If 10 days before was a Sunday and 6 days after would be a Tuesday, then what day is it today?

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

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(d) Friday

QUANTITATIVE APTITUDE

Q51. If three sides of a triangle are 6 cm, 8 cm and 10 cm, then the area of the triangle is:

(a) $12\sqrt{3}$ cm²
(b) 24 cm²
(c) $24\sqrt{3}$ cm²
(d) 30 cm²

Q52. The strength of a school is 640, with the number of boys being 400. Find the ratio of girls to boys.

(a) 4 : 5
(b) 3 : 5
(c) 8 : 5
(d) 5 : 6

Q53. If 20% of 35% of a number is 240.8, then 18% of that number (rounded off to 1 decimal place) is:

(a) 618.2
(b) 621.2
(c) 619.2
(d) 623.2

Q54. The given table shows the percentage of marks obtained by 5 students in different subjects. Study the table and answer the question that follows. (Maximum marks are given beside subject).

Subjects →	Physics	maths	Music	Hindi	Botany
Students ↓	300	300	100	100	200
Ram	60	80	90	60	95
Shyam	90	70	80	70	40
Sohan	70	90	95	80	75
Mohan	80	60	70	95	80
Karn	90	50	85	85	80

The marks obtained by Ram in Botany are less/more than Karn's marks in Botany by how much?

(a) 30 less
(b) 30 more
(c) 25 more
(d) 25 less

Q55. The speed of a thief is 4/5 times the speed of a policeman. The thief covers a distance of 6 km before he was caught by the policeman in 30 minutes. Initially, what was the distance between the policeman and the thief in km?

(a) 1.5
(b) 1.2
(c) 0.8
(d) 1.0

Q56. Find the number of paper balls, each 2 cm in diameter, that can be made from a sphere of diameter 18 cm.

(a) 484
(b) 625
(c) 1020
(d) 729

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Q57. The lengths of the three sides of a triangle are 19 cm, 25 cm and y cm. Which of the following options most accurately gives the possible values of 'y'?

(a) 6 < y < 44
(b) 6 ≤ y < 44
(c) 6 < y ≤ 44
(d) 6 ≤ y ≤ 44

Q58. Simplify

[6-2{3-4(4÷ 1/4-1)+2÷ 1/3}-3× 2]

(a) 98
(b) 96
(c) 92
(d) 102

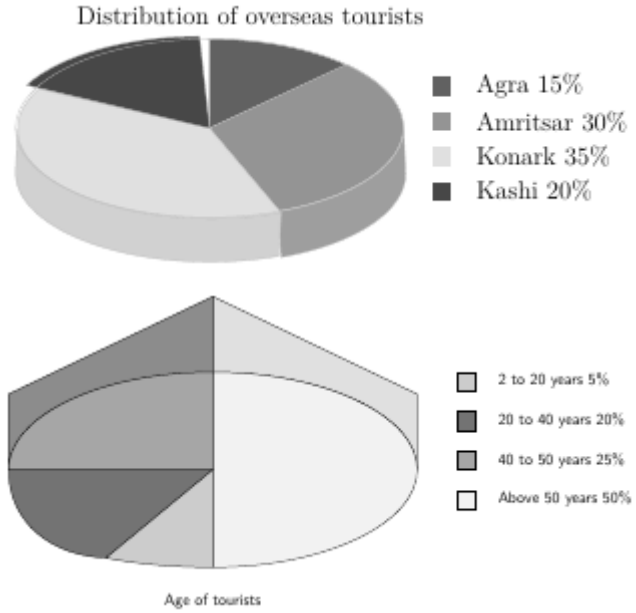
Q59. After decreasing 30%, an article costs Rs.3,500. Find its actual cost.

(a) Rs. 4,500
(b) Rs. 5,500
(c) Rs. 5,000
(d) Rs. 6,500

Q60. By selling 22 items, Rohit gains the selling price of 6 items. His gain per cent is:

(a) 371/3%
(b) 331/2%
(c) 331/3%
(d) 371/2%

Q61. Study the given pie charts and answer the question that follows.



If A = percentage of tourists who went to Agra, Amritsar and Kashi, and B = percentage of tourists whose age lies between 2 years to 50 years, then what is A : B?

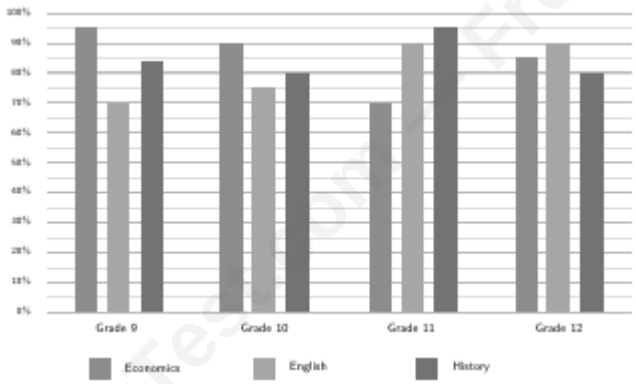
(a) 10 : 7
(b) 11 : 13
(c) 10 : 13
(d) 13 : 10

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Q62. What will be the amount due on Rs. 36,000 in 2 years when the rate of simple interest for successive years is 8% and 6%, respectively?

(a) Rs. 41,040
(b) Rs. 38,880
(c) Rs. 41,760
(d) Rs. 40,320

Q63. The following bar graph represents the percentage marks obtained in grade 9, 10, 11 and 12 students in Economics, English and History. Study the given bar graph carefully and answer the question that follows.



If the full marks in Economics is 100, English is 80 and History is 50, then find the total marks obtained by grade 10 students.

(a) 245
(b) 220
(c) 200
(d) 190

Q64. A metallic sphere of volume 3136 π cm^3 is melted and then, recast into smaller cones, each of radius 3.5 cm and height 4 cm. How many cones are obtained?

(a) 192
(b) 148
(c) 172
(d) 196

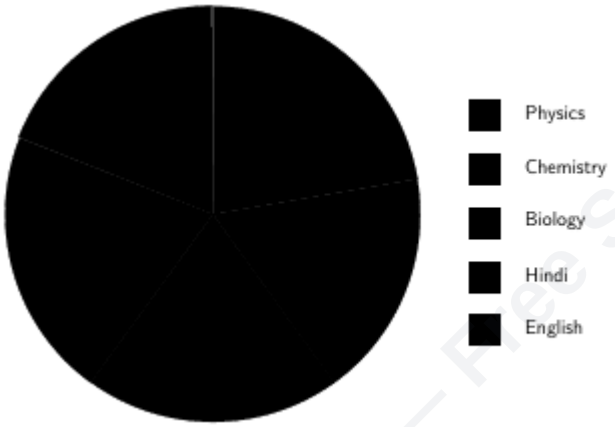
Q65. The price of an electronic watch is first reduced by 25% and then increased by 50%. If the resulting price of the electronic watch is Rs. 7,650, then what was its original price (in Rs.)?

(a) 6,900
(b) 6,800
(c) 6,600
(d) 6,500

Q66. Study the following pie-chart carefully and answer the given question. The pie-chart represents the marks obtained by Sanya in different subjects in class 12. Total marks scored by her in class 12 was 450.

Marks obtained

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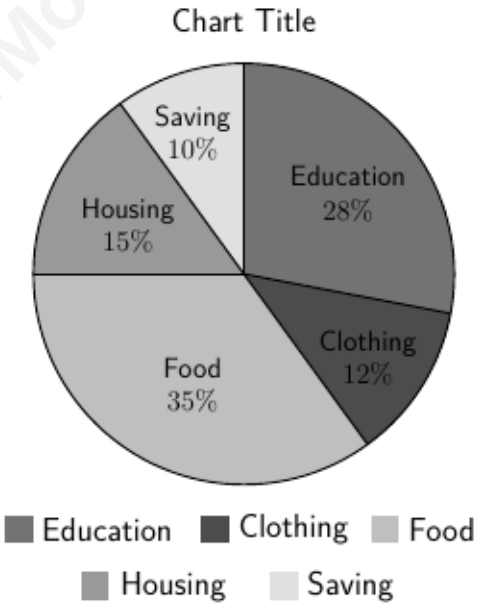


If the total central angles corresponding to the pair of subjects (Physics and Hindi), (Chemistry and Physics) and (Hindi and Chemistry) were 156°, 144° and 140°, respectively, then find the total marks obtained by her in (English and Biology).

(a) 190
(b) 175
(c) 160
(d) 180

Q67. Study the given pie-chart and answer the question that follows.

The pie-chart shows the monthly expenditure incurred by a family on various items and their savings.



If the total expenditure on education is Rs. 23,520, then what is the expenditure on clothing (in Rs.)?

(a) 10080
(b) 10000
(c) 12300
(d) 11000

Q68. In a circle with center O, the diameter AB extended to the point C, outside the circle. CD is a tangent at the point D on the circle. If the radius of circle is 6 cm and angle DBC = 120°, then the length of CD is equal to:

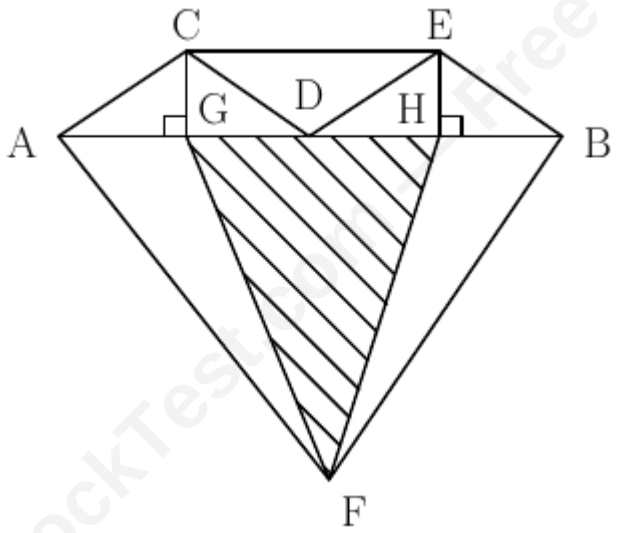
(a) $6\sqrt{3}$ cm
(b) $5\sqrt{3}$ cm
(c) $3\sqrt{3}$ cm
(d) $4\sqrt{3}$ cm

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Q69. What is the maximum value of 7 cos A + 24 sin A + 32?

(a) 25
(b) 39
(c) 57
(d) 32

Q70. In the diagram, if AB||CE, AG = GD = DH = HB, then which of the following is correct?



I. Δ ACG ~= Δ BEH, II. Δ CDE ~= Δ DEB, III. Δ HFB ~= Δ AFG

(a) Only I
(b) I, II and III
(c) I and III
(d) I and II

Q71. By decreasing 17° from each angle of a triangle, the ratio of their angles is 3 : 4 : 7. The radian measure of the greatest angle is:

(a) (163 π)/360
(b) (153 π)/360
(c) (163 π)/180
(d) (167 π)/180

Q72. Simplify the following expression.

111/4÷ 33/5× 62/3+1/6= _____.

(a) 25
(b) 21
(c) 23
(d) 19

Q73. A shopkeeper sells an item at 20% discount on the marked price and earns a profit of 90%. If he sells the same item at 40% discount, then his new profit percentage will be:

(a) 42.5%
(b) 45.8%
(c) 41.8%
(d) 48.2%

Q74. In a class with a certain number of students, if one student weighing 30 kg is added, then the average weight of the class increases by 1 kg. If one more student weighing 30 kg is added, then the average weight of the class increases by 1.5 kg over the original average. What is the original average weight (in kg) of the class?

(a) 26.5
(b) 27

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(c) 25.5
(d) 24

Q75. A can finish a piece of work by working alone in 4 days. B, while working alone, can finish the same work in 12 days. If both of them work together, then in how many days will the work be completed?
(a) 6
(b) 8
(c) 4
(d) 3

GENERAL AWARENESS

Q76. Which of the following is NOT an Olympics Sport? (As of March, 2023)
(a) Sailing
(b) 3×3 Basketball
(c) Cricket
(d) Rowing

Q77. What was the name of the person who has been elected as the Chair of the 62^(nd) session of the United Nations Commission for Social Development?
(a) BM Vinod Kumar
(b) Ruchira Kamboj
(c) Satinder Kumar Lambah
(d) Nirupama Menon Rao

Q78. Baiga is a folk music of Baiga Tribe from which of the following states?
(a) Uttarakhand
(b) Madhya Pradesh
(c) Assam
(d) Bihar

Q79. Jharkhand and Chhattisgarh states are rich with _____ material deposits.
(a) silicon
(b) petroleum
(c) coal
(d) gold

Q80. How does the CPU distinguish between each memory cell?
(a) By its byte size
(b) By its capacity
(c) By its data item
(d) By its address

Q81. In PPT What method can be used to move among slides if your hands are already on the keyboard?
(a) Pressing the Esc key to exit the presentation
(b) Scrolling with the mouse wheel
(c) Clicking on the slide thumbnail in the Slides tab
(d) Using the keyboard directional keys

Q82. In 1955, _____ noted the possibility of using small-scale industries for promoting rural development.
(a) Kelkar Committee
(b) Sarkaria Committee
(c) Karve Committee
(d) Chakravarty Committee

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Q83. The cell wall of bacteria is made up of:

(a) glycogen
(b) cellulose
(c) peptidoglycan
(d) peptone

Q84. Intervention by the monetary authority of a country in the money market to keep money supply stable against exogenous or sometimes external shocks is called _____.

(a) sterilisation
(b) conservation
(c) capitalisation
(d) neutralisation

Q85. According to rules laid down by the International Football Association Board (IFAB), what can be the maximum length of a goal line in football?

(a) 100 m
(b) 90 m
(c) 40 m
(d) 50 m

Q86. Milk of magnesia is a suspension of _____ in water.

(a) magnesium oxalate
(b) magnesium chlorate
(c) magnesium bromide
(d) magnesium hydroxide

Q87. Which of the following date is observed as a national festival?

(a) 2 October
(b) 25 October
(c) 10 October
(d) 24 October

Q88. Rouf is the traditional dance of _____, which is practiced on the festive occasions of Eid and during Ramzan days.

(a) Leh
(b) Puducherry
(c) Chandigarh
(d) Jammu & Kashmir

Q89. In a test match, the captain of the fielding side may demand a new ball after _____.

(a) 80 overs
(b) 70 overs
(c) 75 overs
(d) 85 overs

Q90. The Big Dipper is an asterism formed by the seven brightest stars in the constellation:

(a) Leo Major
(b) Cassiopeia
(c) Ursa Major
(d) Orion

Q91. Who amongst the following Mughal emperors got classical Hindu mythological texts Ramayana and Mahabharata translated into Persian?

(a) Akbar
(b) Shahjahan

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(c) Jahangir
(d) Aurangzeb

Q92. Which party won the Jalandhar (a city in Punjab) Lok Sabha bypoll election held in May 2023?
(a) Indian National Congress
(b) Aam Aadmi Party
(c) Akali Dal
(d) Bharatiya Janata Party

Q93. Aajeevika - National Rural Livelihoods Mission (NRLM) - was launched by the Ministry of Rural Development (MoRD), Government of India, in the year _____.
(a) 2010
(b) 2011
(c) 2012
(d) 2013

Q94. Shattantri Veena, meaning a Veena with hundred strings, is the ancient Sanskrit name of which instrument?
(a) Sarod
(b) Sarangi
(c) Santoor
(d) Tambura/Tanpura

Q95. What kind of a satellite is CMS-01,that was launched by ISRO in December 2020?
(a) Tsunami observation
(b) Communication
(c) Navigation
(d) Resource management

Q96. Warren Hastings became the Governor-General of Bengal from Governor of Bengal after the passing of which of the following Acts?
(a) Pitt's India Act, 1784
(b) Regulating Act, of 1773
(c) Indian Council Act of 1861
(d) Charter Act, 1813

Q97. Which of the following Articles of the Indian Constitution are related to Fundamental Rights?
(a) 32-51
(b) 12-36
(c) 12-35
(d) 14-32

Q98. According to Census 2011, India's population accounts _____ of the world's population.
(a) 10%
(b) 15%
(c) 20%
(d) 17.5%

Q99. Fundamental duties were introduced in Part IVA of the Constitution by the:
(a) Forty-second Amendment Act, 1976
(b) Forty-third Amendment Act, 1977
(c) Forty-fourth Amendment Act, 1978
(d) Forty-first Amendment Act, 1976

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Q100. The Union Cabinet, in Aug 2022, approved the enhancement in the limit of Emergency Credit Line Guarantee Scheme (ECLGS) by _____, with the additional amount being earmarked exclusively for enterprises in hospitality and related sectors.

(a) Rs. 60,000 crore
(b) Rs. 30,000 crore
(c) Rs. 10,000 crore
(d) Rs. 50,000 crore

ANSWER KEY

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

SOLUTIONS

Q1. Answer: (b) There was an gang

The correct answer is Option 2.

Key Points

• The primary issue in the sentence is the use of the article "an" before a word beginning with a consonant sound ("gang").
• The correct article to use in this context is "a" instead of "an".
• The correct phrase should be "There was a gang", ensuring grammatical correctness and clarity.
• Thus, the error is located in Option 2 of the sentence.

Therefore, the correct answer is Option 2.

Correct Sentence: "There was a gang of thieves spotted at our local bank, make sure to be careful."

Additional Information

• Option 1: "of thieves spotted" – This part of the sentence is grammatically correct and does not require any changes.
• Option 3: "at our local bank" – This part of the sentence is grammatically correct and does not require any changes.
• Option 4: "make sure to be careful" – This part of the sentence is grammatically correct and does not require any changes.

Q2. Answer: (c) culture of hospitality of

The correct answer is Option 3.

Key Points

• The primary issue in the sentence is the awkward phrasing and wordiness of "culture of hospitality of."
• It would be more concise and grammatically correct to use "hospitality culture of."
• Thus, the error is located in Option 3 of the sentence.

Therefore, the correct answer is Option 3.

Correct Sentence: "A great hospitality culture of the Spanish is well-known."

Additional Information

• Option 1: "the Spanish" – This part of the sentence is grammatically correct and refers to the people of Spain.
• Option 2: "is well-known." – This part of the sentence is grammatically correct and does not require any changes.
• Option 4: "A great" – This part of the sentence is grammatically correct and does not require any changes.

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Q3. Answer: (a) she look up

The correct answer is Option 1.

Key Points

• The primary issue in the sentence is the incorrect verb form "look" instead of "looked."

• In past tense narratives, the verb should be in the past form.

• The correct phrase should be "she looked up," ensuring grammatical correctness and clarity.

• Thus, the error is located in part 1 of the sentence.

Therefore, the correct answer is Option 1.

Correct Sentence: "After a while, she looked up and saw that it was getting dark."

Additional Information

• After a while, – This part of the sentence is grammatically correct and does not require any changes.

• and saw that – This part of the sentence is grammatically correct and does not require any changes.

• it was getting dark. – This part of the sentence is grammatically correct and does not require any changes.

Q4. Answer: (b) Alexa has been working as a teacher for five years now.

The correct answer is Option 2.

Key Points

• The primary issue in the sentence is the incorrect use of the verb form.

• The correct form is "has been working," indicating the present perfect continuous tense.

• The appropriate verb phrase clarifies that Alexa has been continuously working as a teacher for five years up to the present moment.

Therefore, the correct answer is Option 2.

Correct Sentence: "Alexa has been working as a teacher for five years now."

Additional Information

• Option 1: "has being" is incorrect; the correct form is "has been."

• Option 3: "was been" is incorrect; it should be "has been" for present perfect continuous tense.

• Option 4: "is being" is incorrect; this structure does not fit the context needing the present perfect continuous tense.

Q5. Answer: (a) cannot

The correct answer is Option 1.

Key Points

• The word "cannot" means is unable to. It indicates a lack of ability or possibility.

• In the context of the sentence, "cannot" accurately describes the camel's situation when it is unable to find water.

• The other options: "can," "hasn't," and "do not" do not fit grammatically or contextually with the sentence.

Therefore, the correct answer is 'Option 1'.

Complete Sentence: When a camel cannot find water, it passes less urine to conserve the small amount of water it has in its body.

Additional Information

• can: Indicates ability or possibility, which doesn't fit because the sentence describes a situation where the camel lacks the ability to find water.

• hasn't: A contraction of "has not," which is grammatically incorrect in this context.

• do not: Grammatically incorrect as the subject "camel" requires "does not" instead of "do not".

Q6. Answer: (d) the

The correct answer is Option 4.

Key Points

• The word "the" is a definite article used before singular and plural nouns when the noun is specific or particular.

• In the context of the sentence, "the" is used to specify the small amount of water the camel has in its body.

• The other options: "very," "a," and "which" do not fit grammatically or contextually in this sentence.

Therefore, the correct answer is 'Option 4'.

Complete Sentence: When a camel cannot find water, it passes less urine to conserve the small amount of water it has in its body.

Additional Information

• very: An adverb that describes the extent or degree of something, but does not fit the context here.

• a: An indefinite article used before singular countable nouns when the noun is not specific. It doesn't fit in this context of referring

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to a specific amount of water.

• which: A relative pronoun that introduces information about the noun preceding it, which doesn't fit this sentence structure.

Q7. Answer: (b) that

The correct answer is: Option 2.

Key Points

• Explanation: In the sentence, "the camel has a higher body temperature than (3)_____ of most mammals," the correct word to complete the comparison is "that." It refers back to "body temperature," making the meaning clear and grammatically correct.

• In summary, option 2, "that," is the correct choice as it accurately completes the comparative statement about the camel's body temperature in relation to that of most mammals. Options 1, 3, and 4 do not work appropriately in the context of this sentence.

Additional Information

• all: This option is not appropriate because it does not correctly complete the comparison; the phrase "all of most mammals" doesn't make sense in this context.

• the: This option is incorrect because "the" does not establish a comparison; it needs to be followed by a specific noun when used in this context, which makes the sentence incomplete and unclear.

• some: This option is incorrect because it would imply partiality, whereas the sentence is making a general comparison between the body temperature of camels and most mammals.

Q8. Answer: (d) at

The correct answer is Option 4.

Key Points

• The word "at" is used to indicate a specific point or time. In the context of the sentence, "at" correctly specifies the temperature point at which the camel starts to sweat.

• "For", "in", and "with" do not fit grammatically or logically in this context within the sentence structure.

Therefore, the correct answer is 'Option 4'.

Complete Sentence: This means that it starts to sweat at a higher temperature than that which human beings, for example, start to perspire.

Additional Information

• for: Generally indicates purpose or function but does not specify a point in time or condition.

• in: Indicates location or condition but not a specific point of temperature.

• with: Indicates association or accompaniment but does not specify a condition of starting point.

Q9. Answer: (a) start

The correct answer is Option 1.

Key Points

• The verb "start" is in the present tense, which appropriately matches "than that which human beings" as a general truth or habitual action.

• The options "started", "starts", and "starting" do not fit as well due to tense inconsistency.

Therefore, the correct answer is 'Option 1'.

Complete Sentence: This means that it starts to sweat at a higher temperature than that which human beings, for example, start to perspire.

Additional Information

• Started: Incorrect because it is past tense and does not fit the context of general truth.

• Starts: Seems redundant given the sentence structure.

• Starting: Incorrect form to fit the conditional comparison.

Q10. Answer: (b) hides from the truth

The solution is in Hindi. Read it online.

Q11. Answer: (d) are not safe

The correct answer is Option 4.

Key Points

• The primary issue in the sentence is the verb agreement with the plural subject "Things that do not come from the ground."

• Plural subjects require a plural verb form.

• The correct phrase should be "are not safe to compost," ensuring grammatical correctness and clarity.

Therefore, the correct answer is Option 4.

Correct Sentence: "Things that do not come from the ground are not safe to compost."

Additional Information

• Option 1: "is not safe" – Incorrect as it does not agree with the plural subject.

• Option 2: "be not safe" – Incorrect as it is not grammatically correct in this context.

• Option 3: "has not been safe" – Incorrect as it changes the tense and meaning of the sentence.

Q12. Answer: (a) Misssion

The solution is in Hindi. Read it online.

Q13. Answer: (a) Radiant

The solution is in Hindi. Read it online.

Q14. Answer: (d) through

The correct answer is Option 4.

Key Points

• The primary issue in the sentence is the use of an incorrect preposition.

• The phrase "at the door" is not appropriate in this context.

• The correct phrase should be "through the door," which indicates the action of passing from one side of the door to the other.

• Thus, "through" is the most appropriate substitution for the underlined segment.

Therefore, the correct answer is Option 4.

Correct Sentence: "I quietly went out through the door into the veranda."

Additional Information

• No substitution required would be the correct option if the original sentence was already correct, but "at the door" is incorrect in this context.

• From could indicate direction but does not fit well here.

• By indicates proximity but not the action of moving through a door.

Q15. Answer: (d) calamity

The solution is in Hindi. Read it online.

Q16. Answer: (c) Repeatedly

The solution is in Hindi. Read it online.

Q17. Answer: (b) over-grazed and some areas should be

The correct answer is Option 2.

Key Points

• The term "over-grazed" addresses the idea that grasslands should not be excessively grazed, which matches the context correctly.

• The phrase "and some areas should be" suggests an appropriate recommendation for action, fitting grammatically and contextually.

Therefore, the correct answer is Option 2.

Complete Sentence: Grasslands should not be over-grazed and some areas should be closed for grazing.

Additional Information

• Planted or: Incorrect as it changes the meaning and doesn't fit the context.

• Grazed and some places is: Incorrect due to grammatical inconsistency and incorrect verb agreement.

• Cut and few areas: Incorrect as it changes the meaning and doesn't fit the context.

Q18. Answer: (a) weight

The solution is in Hindi. Read it online.

Q19. Answer: (a) dull

The solution is in Hindi. Read it online.

Q20. Answer: (a) fastest route

The solution is in Hindi. Read it online.

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Q21. Answer: (a) quiet

The solution is in Hindi. Read it online.

Q22. Answer: (d) delightful

The solution is in Hindi. Read it online.

Q23. Answer: (d) Polite

The solution is in Hindi. Read it online.

Q24. Answer: (a) Correct

The solution is in Hindi. Read it online.

Q25. Answer: (b) Permanent

The solution is in Hindi. Read it online.

Q26. Answer: (d) OQS

The logic followed here is:

Hence, the correct answer is "OQS".

Q27. Answer: (b) 10

The rectangles:

So, '10' rectangles are there in the given figure.

Hence, the correct answer is "10".

Q28. Answer: (c) (12, 24, 144)

The logic followed here is:

Logic: (1st number + 2nd number) × 4 = 3rd number.

Now,

For, (6, 12, 72)

=> (6 + 12) × 4 = 18 × 4 = 72.

For, (8, 16, 96)

=> (8 + 16) × 4 = 24 × 4 = 96.

Similarly, for (12, 24, 144)

=> (12 + 24) × 4 = 36 × 4 = 144.

Hence, the correct answer is "Option 3".

Q29. Answer: (b) 147

Given equation: 15 ÷ 4 - 128 + 123 × 3 = ?

If '+' and '-' and '×' and '÷' are interchanged then we get:

=> 15 × 4 + 128 - 123 ÷ 3 = ?

=> 15 × 4 + 128 - 41 = ?

=> 60 + 128 - 41 = ?

=> 188 - 41 = ? = 147

Hence, the correct answer is "147".

Q30. Answer: (c) 81

Given equation: 16 ÷ 5 - 24 × 6 + 3 = ?

If '+' and '-' and '×' and '÷' are interchanged then we get:

=> 16 × 5 + 24 ÷ 6 - 3 = ?

=> 16 × 5 + 4 - 3 = ?

=> 80 + 4 - 3 = ?

=> 84 - 3 = ? = 81

Hence, the correct answer is "81".

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Q31. Answer: (c) DBY

The logic followed here is:

Hence, the correct answer is "DBY".

Q32. Answer: (b) [figure]

The logic followed here is:

• Top number = Bottom number + 2;

• Right number = Top number × Bottom number

Hence, the correct answer is "Option 2".

Q33. Answer: (b) [figure]

The correct mirror image of the given figure is:

Hence, the correct answer is "Option 2".

Q34. Answer: (d) TVY

The logic followed here is:

Option 1) RTV

Option 2) PRT

Option 3) HJL

Option 4) TVY

Hence, the correct answer is "TVY".

Q35. Answer: (d) None of the conclusions follow

Given Statements:

Some sweaters are jackets.

Some jackets are pullovers.

No pullover is a glove.

The least possible Venn diagram:

Conclusions:

(I) No jacket is a glove. - False (Because, there is no direct relation given between jacket and glove, so it can be possible only)

(II) Some sweaters are pullovers. - False (Because, there is no direct relation given between sweaters and pullovers, so it can be possible only)

So, None of the conclusions follow.

Hence, the correct answer is "None of the conclusions follow".

Q36. Answer: (b) [figure]

The correct mirror image of the given figure is:

Hence, the correct answer is "Option 2".

Q37. Answer: (a) [figure]

The image embedded in given figure is as shown below:

Hence, "Option 1" is the correct answer.

Q38. Answer: (c) NPSU

The logic followed here is:

DFIK is related to EGJL

GILN is related to HJMO.

Similarly, MORT related to

Hence, the correct answer is "NPSU".

Q39. Answer: (d) 1166

The logic followed here is:

Logic: (1st number × 22) = 2nd number.

Now,

For, 33 : 726

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=> 33 × 22 = 726.
For, 43 : 946
=> 43 × 22 = 946.
Similarly, for 53 : ?
=> 53 × 22 = 1166.
Hence, the correct answer is "Option 4".

Q40. Answer: (b) df

According to the given information:
So, the code for 'time' = df.
Hence, the correct answer is "df".

Q41. Answer: (c) Y

For find the opposite surface of 'A', we need to compare the common surface in the given dices,
Now, Letter 'Z' is given in Dice 1 and Dice 2,
So, From Dice 1 and Dice 2,
When rotate in clockwise direction then we get:
Z <=> Z; A <=> Y; R <=> T
→ Z is the common surface and A, R, Y, T is the adjacent surface.
So, the remaining 'Y' will be the opposite face of 'Z'.
Hence, the correct answer is "Y".

Q42. Answer: (a) 277

The logic followed here is:
Hence, the correct answer is "277".

Q43. Answer: (a) 127

The logic followed here is:
Hence, the correct answer is "127".

Q44. Answer: (d) 40

Given equation: 14 - 15 ÷ 2 + 56 × 14 = ?
If '+' and '-' and '×' and '÷' are interchanged then we get:
=> 14 + 15 × 2 - 56 ÷ 14 = ?
=> 14 + 15 × 2 - 4 = ?
=> 14 + 30 - 4 = ?
=> 44 - 4 = ? = 40
Hence, the correct answer is "40".

Q45. Answer: (b) [figure]

The image embedded in given figure is as shown below:
Hence, "Option 2" is the correct answer.

Q46. Answer: (c) 6

According to the given information:
The code for A/B/C = 1/2/4
So, the code for 'K' = 6.
Hence, the correct answer is "6".

Q47. Answer: (a) One

Given word: 'WANDERLUST'
After arranged in alphabetical order:

Alphabets	W	A	N	D	E	R	L	U	S	T

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Alphabetical order	A	D	E	L	N	R	S	T	U	W

Now,

there is One alphabet "R" that will remain unchanged if each of the letters in the word 'WANDERLUST' is arranged in English alphabetical order.

Hence, the correct answer is "Option 1".

Q48. Answer: (b) S is the husband of U

Family Chart:

Decoding the Symbols:

Symbol	•	•	÷	×
Meaning	Father	Wife	Daughter	Brother

Given: S + T ÷ U

It means: S is the father of T and T is the daughter of U.

So, S is the husband of U.

Hence, the correct answer is "S is the husband of U".

Q49. Answer: (c) Judge : Courtroom

The logic followed here is:

Logic: Occupations and their Places of Work.

Here,

Referee : Field → Referee is a person who works in a Field.

Similarly,

Judge : Courtroom → Judge is a person who works in a Courtroom.

Hence, the correct answer is "Option 3".

Q50. Answer: (b) Wednesday

Given: 10 days before was Sunday and 6 days after will be Tuesday.

Now,

We know that 10 days before today was Sunday.

So, today - 10 days = Sunday.

Similarly, 6 days after today will be Tuesday.

So, today + 6 days = Tuesday.

Now, let us calculate the days of the week:

Counting forward from Sunday for 10 days, we get:

10 days = 10/7 = 1 week and 3 odd days,

So, Sunday + 3 = Wednesday.

Counting forward from Wednesday(Today) for 6 days, we get:

Wednesday + 6 = Tuesday.

So, today is Wednesday.

Hence, the correct answer is "Option 2".

Q51. Answer: (b) 24 cm²

Given:

Sides of the triangle: a = 6 cm, b = 8 cm, c = 10 cm

Formula used:

Area of the triangle using Heron's formula:

Area = √(s(s-a)(s-b)(s-c))

Where, s = (a + b + c)/2

Calculation:

s = (6 + 8 + 10)/2

=> s = 12 cm

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Area = √(12(12-6)(12-8)(12-10))
=> Area = √(12 × 6 × 4 × 2)
=> Area = √576
=> Area = 24 cm²
Therefore The correct answer is option 2.
Shortcut Trick
6,8,10 is a triplet, making right angle triangle in which 10 is hypotenuse.
So, area of right-angle triangle = 1/2 × 6 × 8 = 24.

Q52. Answer: (b) 3 : 5

Given:
The strength of a school is 640, with the number of boys being 400.
Formula used:
Ratio of girls to boys = Number of girls : Number of boys
Calculation:
Number of girls = Total strength - Number of boys
=> Number of girls = 640 - 400
=> Number of girls = 240
Ratio of girls to boys = 240 : 400
=> Ratio of girls to boys = 240/400
=> Ratio of girls to boys = 3 : 5
Therefore The correct answer is option 2.

Q53. Answer: (c) 619.2

Given:
20% of 35% of a number = 240.8
Formula used:
Let the number be X. We know:
20% of 35% of X = 240.8
=> (20/100) × (35/100) × X = 240.8
Calculation:
=> (7/100) × X = 240.8
=> X = (240.8 × 100) / 7
=> X = 3440
Now, find 18% of X:
=> 18% of 3440 = (18/100) × 3440
=> 18% of 3440 = 619.2
Therefore 18% of the number is 619.2 (rounded off to 1 decimal place).

Q54. Answer: (b) 30 more

Given:
Marks obtained by Ram in Botany = 95% of 200
Marks obtained by Karn in Botany = 80% of 200
Formula used:
Difference in marks = Ram's marks - Karn's marks
Calculation:
Ram's marks in Botany = (95/100) × 200 = 190
Karn's marks in Botany = (80/100) × 200 = 160
Difference in marks = 190 - 160 = 30
Therefore Ram's marks in Botany are 30 more than Karn's marks.

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Q55. Answer: (a) 1.5

Given:

The speed of a thief is (4/5) times the speed of a policeman. The thief covers a distance of 6 km before he was caught by the policeman in 30 minutes.

Formula used:

Distance = Speed × Time

Calculation:

Let the speed of the policeman be S km/hr.

=> Speed of the thief = (4/5)S km/hr

Time taken to catch the thief = 30 minutes = 0.5 hours

Distance covered by the thief = 6 km

=> Speed of the thief = Distance / Time

=> (4/5)S = 6 / 0.5

=> (4/5)S = 12

=> S = 12 × (5/4)

=> S = 15 km/hr

Speed of the thief = (4/5) × 15 = 12 km/hr

Relative speed of the policeman with respect to the thief = 15 - 12 = 3 km/hr

Distance covered by the policeman to catch the thief = Relative speed × Time

=> Distance = 3 × 0.5

=> Distance = 1.5 km

Therefore The correct answer is option 1.

Q56. Answer: (d) 729

Given:

Diameter of larger sphere = 18 cm

Diameter of each paper ball = 2 cm

Formula used:

Volume of a sphere = $(4/3)\pi r^3$

Calculations:

Radius of larger sphere = 18/2 = 9 cm

Radius of each paper ball = 2/2 = 1 cm

Volume of larger sphere = $(4/3)\pi(9)^3$

Volume of each paper ball = $(4/3)\pi(1)^3$

Number of paper balls = Volume of larger sphere / Volume of each paper ball

=> Number of paper balls = $[(4/3)\pi(9)^3] / [(4/3)\pi(1)^3]$

=> Number of paper balls = $9^3 / 1^3$

=> Number of paper balls = 729

Therefore The correct answer is option (4).

Q57. Answer: (a) 6 < y < 44

Given:

The lengths of the three sides of a triangle are 19 cm, 25 cm and y cm.

Formula used:

For any triangle with sides a, b, and c, the sum of the lengths of any two sides must be greater than the length of the third side.

Therefore, for sides 19 cm, 25 cm, and y cm:

1. 19 + 25 > y

2. 19 + y > 25

3. 25 + y > 19

Calculations:

1. 19 + 25 > y

=> 44 > y

=> y < 44

2. 19 + y > 25

=> y > 25 - 19

=> y > 6

3. 25 + y > 19

=> This inequality is always true for positive y, so it doesn't provide any new information.

Combining the results from the inequalities:

6 < y < 44

Therefore The correct answer is option (1).

Q58. Answer: (d) 102

Given:

[6-2{3-4(4÷ 1/4-1)+2÷ 1/3}-3× 2]

Formula used:

BODMAS Rule (Brackets, Of, Division, Multiplication, Addition, Subtraction)

Calculation:

=> [6-2{3-4(4× 4-1)+2× 3}-6]

=> [6-2{3-4(15)+6}-6]

=> [6-2{3-60+6}-6]

=> [6-2{-51}-6]

=> [6+102-6]

=> 102

Therefore The correct answer is option (4).

Q59. Answer: (c) Rs. 5,000

Given:

After decreasing 30%, an article costs Rs. 3,500.

Formula used:

Let the actual cost be Rs. x

Cost after decreasing 30% = x - 0.3x = 0.7x

Calculation:

0.7x = 3500

=> x = 5000

Therefore The correct answer is option 3.

Q60. Answer: (d) 371/2%

Given:

By selling 22 items, Rohit gains the selling price of 6 items.

Formula used:

Gain% = Gain/(Cost Price) × 100

Calculation:

Let SP of each item = Rs. 1

Total SP of 22 items = 22 × 1 = Rs. 22

Gain = SP of 6 items = Rs. 6

CP of 22 items = SP of 22 items - Gain = 22 - 6 = Rs. 16

CP of 1 item = Rs. 16/22

=> CP of 1 item = Rs. 8/11

Gain% = 6/16 × 100

=> Gain% = 3/8 × 100

=> Gain% = 37½%

Therefore The correct answer is option 4.

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Q61. Answer: (d) 13 : 10

Given:

The pie charts show the distribution of overseas tourists by destination and by age group.

Find A (Percentage of tourists who went to Agra, Amritsar, and Kashi):

Agra = 15%

Amritsar = 30%

Kashi = 20%

Total percentage for A = 15% + 30% + 20% = 65%

Find B (Percentage of tourists whose age lies between 2 years and 50 years):

2 to 20 years = 5%

20 to 40 years = 20%

40 to 50 years = 25%

Total percentage for B = 5% + 20% + 25% = 50%

Find the ratio A : B

A : B = 65% : 50%

=> A : B = 65 : 50

=> A : B = 13 : 10

Therefore The ratio A : B is 13:10.

Q62. Answer: (a) Rs. 41,040

Given:

Principal (P) = Rs. 36,000

Time (t) = 2 years

Rate for 1^(st) year (r1) = 8%

Rate for 2^(nd) year (r2) = 6%

Formula used:

Simple Interest (SI) = (P × r × t)/100

Amount (A) = Principal (P) + Simple Interest (SI)

Calculation:

SI1 for 1^(st) year = (36000 × 8 × 1)/100

=> SI1 = Rs. 2,880

SI2 for 2^(nd) year = (36000 × 6 × 1)/100

=> SI2 = Rs. 2,160

Total SI = SI1 + SI2

=> Total SI = Rs. 2,880 + Rs. 2,160 = Rs. 5,040

Amount (A) = Principal (P) + Total SI

=> Amount (A) = Rs. 36,000 + Rs. 5,040 = Rs. 41,040

Therefore The correct answer is option 1.

Q63. Answer: (d) 190

Given:

For Grade 10, the percentages and full marks are:

Economics: 90% of 100

English: 75% of 80

History: 80% of 50

Calculation:

1. Economics marks = (90/100) × 100 = 90

2. English marks = (75/100) × 80 = 60

3. History marks = (80/100) × 50 = 40

Total Marks:

Total marks = 90 + 60 + 40 = 190

Conclusion:

The total marks obtained by Grade 10 students is 190.

Q64. Answer: (a) 192

Given:

A metallic sphere of volume 3136 π cm^3 is melted and recast into smaller cones, each of radius 3.5 cm and height 4 cm.

Formula used:

Volume of sphere = Volume of cone × Number of cones

Volume of sphere = $4/3\pi r^3$

Volume of cone = $1/3\pi r^2h$

Calculation:

Given volume of sphere = 3136 π cm^3

Radius of cone (r) = 3.5 cm

Height of cone (h) = 4 cm

Volume of one cone = $1/3\pi (3.5)^2 \times 4$

=> Volume of one cone = $1/3\pi \times 12.25 \times 4$

=> Volume of one cone = $1/3 \times 49\pi$

=> Volume of one cone = 16.33 π cm^3

Number of cones = (Volume of sphere)/(Volume of one cone)

=> Number of cones = $3136\pi/16.33\pi$

=> Number of cones = 192

Therefore The correct answer is option (1).

Q65. Answer: (b) 6,800

Given:

The price of an electronic watch is first reduced by 25% and then increased by 50%. The resulting price is Rs. 7,650.

Formula used:

Let the original price be P.

After a 25% reduction, the price becomes P - 0.25P = 0.75P.

After a 50% increase, the price becomes 0.75P + 0.5(0.75P) = 1.125P.

We know that 1.125P = Rs. 7,650.

Calculation:

1.125P = 7,650

=> P = 6,800

Therefore The correct answer is option (2).

Q66. Answer: (b) 175

Given:

Total marks scored by Sanya = 450

Central angles:

• (Physics and Hindi) = 156°

• (Chemistry and Physics) = 144°

• (Hindi and Chemistry) = 140°

Formula used:

Total central angle = 360°

Marks corresponding to a subject = (Central angle of the subject / Total central angle) × Total marks

Calculation:

Sum of central angles for Physics, Chemistry, and Hindi = (156° + 144° + 140°) / 2 = 220°

Central angle for English and Biology = 360° - 220°

=> Central angle for English and Biology = 140°

Marks for English and Biology = (140 / 360) × 450

=> Marks = (7 / 18) × 450

=> Marks = 175

Therefore The total marks obtained by Sanya in English and Biology is 175 marks.

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Q67. Answer: (a) 10080

Given:
Total expenditure on education = Rs. 23,520
Percentage spent on education = 28%
Percentage spent on clothing = 12%
Formula used:
Total Expenditure = (Expenditure on education / Percentage spent on education) × 100
Expenditure on clothing = (Percentage spent on clothing / 100) × Total Expenditure
Calculation:
Total Expenditure = (23,520 / 28) × 100 = 84,000
Expenditure on clothing = (12 / 100) × 84,000
=> Expenditure on clothing = 10,080
Therefore The expenditure on clothing is Rs. 10,080.

Q68. Answer: (a) 6√3 cm

Given:
Circle with center O
Diameter AB extended to point C
CD is a tangent at point D
Radius of circle (OD = OB = OA) = 6 cm
angle DBC = 120°
Formula Used:
Angle in a straight line = 180°
Angle between tangent and radius at the point of contact = 90° (angle ODC = 90°)
Sum of angles in a triangle = 180°
Trigonometric ratios in a right-angled triangle: tan(θ) = Opposite side / Adjacent side
Calculation:
angle OBD + angle DBC = 180° (angles in a straight line)
angle OBD + 120° = 180°
angle OBD = 180° - 120° = 60°
In triangle OBD, OB = OD (radii of the same circle).
angle ODB = angle OBD = 60°
In triangle OBD, angle BOD + angle OBD + angle ODB = 180° (sum of angles in a triangle)
angle BOD + 60° + 60° = 180°
angle BOD + 120° = 180°
angle BOD = 180° - 120° = 60°
Since all angles in triangle OBD are 60°, triangle OBD is an equilateral triangle.
Therefore, OB = OD = BD = 6 cm.
Using trigonometry in right-angled triangle ODC:
tan(angle DOC) = CD / OD
tan(60°) = CD / 6
√3 = CD / 6
CD = 6 √3 cm
Therefore The length of CD is 6√3 cm.

Q69. Answer: (c) 57

Given:
7 cos A + 24 sin A + 32
Formula used:
Maximum value of a cos θ + b sin θ is $\sqrt{(a^2 + b^2)}$
Calculation:
Given expression: 7 cos A + 24 sin A + 32

Maximum value of 7 cos A + 24 sin A = √(7² + 24²)
=> √(49 + 576)
=> √625
=> 25
Adding 32 to the maximum value:
=> 25 + 32 = 57
Therefore The correct answer is option (3).

Q70. Answer: (d) I and II

Given:
In the diagram, AB||CE, AG = GD = DH = HB
Formula used:
If two lines are parallel, corresponding angles are equal.
Calculation:
I. Δ ACG ~= Δ BEH
Since AB||CE and AG = GD = DH = HB, the corresponding angles are equal.
=> Δ ACG ~= Δ BEH
II. Δ CDE ~= Δ DEB
Since AB||CE and AG = GD = DH = HB, the corresponding angles are equal.
=> Δ CDE ~= Δ DEB
III. Δ HFB ~= Δ AFG
Since AB||CE and AG = GD = DH = HB, the corresponding angles are equal.
But no relation is given about side AF, BF, or angles of the triangle HFB and AFG,
hence, this statement is not right.
Therefore The correct answer is option (4).

Q71. Answer: (a) (163 π)/360

Given:
By decreasing 17º from each angle of a triangle, the ratio of their angles is 3:4:7. The radian measure of the greatest angle is:
Formula used:
Sum of angles in a triangle = 180º
Conversion of degrees to radians: π/180
Calculation:
Let the angles be 3x, 4x, and 7x after decreasing 17º:
3x + 4x + 7x = 180 - 3×17
=> 14x = 180 - 51
=> 14x = 129
=> x = 129/14
Greatest angle = 7x + 17 = 7 × (129/14) + 17
=> Greatest angle = 64.5 + 17 = 81.5º
Radian measure: 81.5º × π/180
=> 81.5 × π/180
=> (163 π)/360
Therefore The correct answer is option (1).

Q72. Answer: (b) 21

Given:
(11 1/4)/(3 3/5) × 6 2/3 + 1/6 = ?
Formula used:
Convert mixed numbers to improper fractions
Calculation:
(11 1/4)/(3 3/5) × 6 2/3 + 1/6 = ?
11¹/4 = 45/4

$3^3/5 = 18/5$

$6^2/3 = 20/3$

=> $45/4 \div 18/5 \times 20/3 + 1/6$

=> $45/4 \times 5/18 \times 20/3 + 1/6$

=> $(45 \times 5 \times 20)/(4 \times 18 \times 3) + 1/6$

=> $4500/216 + 1/6$

=> $(4500 + 36)/216$

=> $4536/216$

=> 21

Therefore The correct answer is option (2).

Q73. Answer: (a) 42.5%

Given:

A shopkeeper sells an item at 20% discount on the marked price and earns a profit of 90%. If he sells the same item at 40% discount, then his new profit percentage will be:

Formula used:

Let Marked Price (MP) = 100

Discount = 20%

Selling Price (SP) = MP - Discount

Cost Price (CP) = SP / (1 + Profit%)

New Discount = 40%

New Selling Price (NSP) = MP - New Discount

New Profit % = (NSP - CP) / CP × 100

Calculation:

Let Marked Price (MP) = 100

Discount = 20%

Selling Price (SP) = 100 - 20 = 80

Profit = 90%

Cost Price (CP) = 80 / 1.90

=> CP = 42.105

New Discount = 40%

New Selling Price (NSP) = 100 - 40 = 60

New Profit % = (60 - 42.105) / 42.105 × 100

=> New Profit % = 17.895 / 42.105 × 100

=> New Profit % ≈ 42.5%

Therefore The correct answer is option 1.

Q74. Answer: (b) 27

Given:

Weight of each added student = 30 kg

Increase in average after first student = 1 kg

Increase in average after second student = 1.5 kg over original average

Formula used:

Let original number of students be n and original average weight be A kg.

After first student is added:

$(nA + 30) / (n + 1) = A + 1$

After second student is added:

$(nA + 60) / (n + 2) = A + 1.5$

Calculations:

$(nA + 30) / (n + 1) = A + 1$

=> $nA + 30 = (A + 1)(n + 1)$

=> $nA + 30 = An + A + n + 1$

=> 30 = A + n + 1
=> 29 = A + n ... (1)
(nA + 60) / (n + 2) = A + 1.5
=> nA + 60 = (A + 1.5)(n + 2)
=> nA + 60 = An + 1.5n + 2A + 3
=> 60 = 1.5n + 2A + 3
=> 57 = 1.5n + 2A ... (2)
From (1): A = 29 - n
Substitute into (2):
57 = 1.5n + 2(29 - n)
=> 57 = 1.5n + 58 - 2n
=> 57 = 58 - 0.5n
=> -1 = -0.5n
=> n = 2
From (1): A = 29 - 2
=> A = 27
Therefore The correct answer is option (2).

Q75. Answer: (d) 3

Given:
A can finish a piece of work by working alone in 4 days.
B, while working alone, can finish the same work in 12 days.
Formula used:
Work rate of A = 1/4
Work rate of B = 1/12
Combined work rate of A and B = (1/4) + (1/12)
Calculation:
Combined work rate of A and B = (1/4) + (1/12)
=> Combined work rate of A and B = (3/12) + (1/12)
=> Combined work rate of A and B = 4/12
=> Combined work rate of A and B = 1/3
=> Time taken to complete the work together = 1 / (1/3)
=> Time taken to complete the work together = 3 days
Therefore The correct answer is option (4).
Alternate Method L.C.M (4,12) = 12 (Total work)
A does = 12/4 = 3 units of work in one day.
B does = 12/12 = 1 unit of work in one day.
Together A and B do = 3+1 = 4 units of work in one day.
So, they finish work in 12 / 4 = 3 days.

Q76. Answer: (c) Cricket

The correct answer is Cricket.
Key Points
• Cricket is not currently included in the Olympics, but it is scheduled to be included in the 2028 Summer Olympics in Los Angeles.
• The LA28 Organizing Committee has proposed including cricket in the 2028 games as one of five additional sports.
• Cricket was originally scheduled to be included in the 1896 Athens Olympics, but was later removed due to a lack of entries.
• It was included in the 1900 Paris Olympics, where Great Britain won the 12-a-side match over France.
Additional Information
• 3×3 Basketball made its Olympic debut at the Tokyo 2020 Games, highlighting the evolution of Olympic sports to include new formats.
• Rowing has been a part of the modern Olympics since 1900, showcasing a long history in the Games.
• The latest games included in the Olympics are breaking, skateboarding, sport climbing, and surfing, featured in the 2024 Paris Olympic Games.

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• The International Olympic Council(IOC) also proposed ski mountaineering as a new winter sport for the 2026 Winter Olympics in Milano Cortina.

Important Points

• International Olympic Committee

• The IOC was founded on June 23, 1894, by Pierre de Coubertin in Paris, France.

• The IOC is headquartered in Lausanne, Switzerland.

• The IOC's mission is to promote the Olympic Movement, which aims to contribute to building a peaceful and better world through sport.

• The IOC is responsible for organizing the Summer and Winter Olympic Games, held every four years for each, with the Games alternating every two years.

Q77. Answer: (b) Ruchira Kamboj

The correct answer is Ruchira Kamboj.

Key Points

• Ruchira Kamboj has been elected as the Chair of the 62nd session of the United Nations Commission for Social Development held from February 5–14, 2024, at the United Nations Headquarters in New York.

• She is an experienced diplomat, having served in various roles in India's Ministry of External Affairs.

• Kamboj is committed to addressing critical social issues, including poverty alleviation, employment, and social integration.

• She strongly focuses on gender equality and the empowerment of women and children in her policy initiatives.

• Her leadership position reflects India's active role in international organizations and its commitment to social development.

Additional Information

• BM Vinod Kumar

• A seasoned diplomat with experience in international relations, particularly in the field of trade and commerce.

• He has served in various capacities at the Indian Embassy in different countries, contributing to India's bilateral relations.

• Known for his expertise in economic diplomacy and trade negotiations.

• Has participated in numerous international forums addressing trade and development issues.

• Satinder Kumar Lambah

• A retired Indian diplomat, known for his extensive experience in foreign policy and security issues.

• Former Secretary (East) in the Ministry of External Affairs and India's Special Envoy for Disarmament.

• Contributed to various discussions and papers on international relations and strategic studies.

• Often engaged in think tanks and advisory boards focusing on foreign policy.

• Nirupama Menon Rao

• A former Indian Foreign Secretary and Ambassador to the United States and China, with a strong diplomatic background.

• Advocate for women's rights and empowerment in her diplomatic and public service roles.

• Actively participates in discussions and seminars on international relations, focusing on South Asian politics.

• Writes on foreign policy and international affairs, contributing to various publications and forums.

Q78. Answer: (b) Madhya Pradesh

The correct answer is Madhya Pradesh.

Key Points

• Baiga is a traditional folk music form of the Baiga tribe, which is indigenous to the central region of India.

• The Baiga tribe is known for its rich cultural heritage, which includes unique music, dance, and art forms.

• The music often reflects themes related to nature, agriculture, and the daily lives of the Baiga people, showcasing their connection to the environment.

• Baiga folk music is typically performed during festivals, rituals, and community gatherings, emphasizing the tribe's social cohesion and cultural identity.

Additional Information

• Uttarakhand

• Known for its vibrant folk music and dance forms, including "Garhwali" and "Kumaoni" music, reflecting the region's traditions.

• Celebrates various festivals with music, such as "Nanda Devi Mela" and "Kumbh Mela," showcasing local artists.

• Assam

• Famous for the Bihu festival, which features lively folk songs and dances celebrating the Assamese New Year.

• Incorporates different styles influenced by various ethnic communities, showcasing a rich musical tapestry.

• Bihar
• Known for its folk traditions, including Maithili and Bhojpuri songs, often focusing on themes of love, nature, and social issues.
• Celebrates festivals like Chhath Puja with traditional music that resonates with local customs and beliefs.

Q79. Answer: (c) coal

The correct answer is Coal.

Key Points

• Jharkhand and Chhattisgarh are known for their rich deposits of coal, which play a significant role in India's energy production.
• Jharkhand houses major coal fields like the Jharia and Bokaro coalfields, while Chhattisgarh has the Korba coalfield.
• Coal mining is a critical economic activity in both states, contributing significantly to local and national economies.
• The coal extracted from these regions is primarily used for power generation, supporting various industries across the country.

Additional Information

• Silicon
• While silicon is used in various industries, including electronics and solar energy, it is not a major deposit in Jharkhand or Chhattisgarh.
• Silicon is found in minerals like quartz, but not specifically highlighted as a key resource in these states.
• Petroleum
• Jharkhand and Chhattisgarh have some petroleum deposits, but they are not significant compared to other regions in India, such as Assam or Gujarat.
• Efforts are ongoing to explore and enhance petroleum extraction in these areas, but coal remains the primary resource.
• Gold
• Karnataka is the largest producer of gold in India, accounting for 80% of the country's gold production.
• The Kolar Gold Fields in Karnataka is the largest gold mine in India.

Q80. Answer: (d) By its address

The correct answer is By its address.

Key Points

• Each memory cell in a computer's RAM is assigned a unique address that the CPU uses to access and manage data.
• When the CPU needs to read or write data, it specifies the address of the memory cell involved in the operation.
• The CPU uses an address bus to send the memory address to the memory, allowing it to communicate with the appropriate memory cell.
• This addressing scheme enables the CPU to efficiently manage and organize data in memory, ensuring quick access to the required information.

Additional Information

• By its byte size
• Byte size refers to the amount of data that can be stored in a memory cell (typically 8 bits).
• While byte size is important for data representation, it does not help in distinguishing between individual memory cells.
• By its capacity
• Capacity refers to the total amount of data that can be stored in memory (e.g., 4GB, 8GB).
• Capacity is a broader measure and does not specify individual memory locations.
• By its data item
• Data items refer to the type of data stored (e.g., integer, character).
• Different memory cells can store various data items, but this does not provide a unique identifier for each cell.

Q81. Answer: (d) Using the keyboard directional keys

The correct answer is Using the keyboard directional keys.

Key Points

• The keyboard directional keys (left and right arrows) allow you to move between slides quickly without taking your hands off the keyboard.
• This method is convenient for presenters who want to maintain focus on their presentation without needing to use a mouse or touchpad.
• You can use the up and down arrow keys to navigate through the slides in a more controlled manner, allowing for smooth transitions.
• This method works in various presentation software, including Microsoft PowerPoint, making it a universally applicable

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technique.

Additional Information

• Pressing the Esc key to exit the presentation

• The Esc key is used to exit the presentation mode rather than navigate between slides.

• This action interrupts the flow of the presentation, making it unsuitable for moving among slides.

• Scrolling with the mouse wheel

• While you can scroll through slides in editing mode, this method is not effective during an actual presentation.

• Presenters typically do not use the mouse wheel for navigation in slideshow mode.

• Clicking on the slide thumbnail in the Slides tab

• This method requires you to use the mouse, which goes against the premise of keeping your hands on the keyboard.

• It is more appropriate for editing or organizing slides rather than during a live presentation

Q82. Answer: (c) Karve Committee

The correct answer is Karve Committee.

Key Points

• The Karve Committee, also known as the Village and Small-Scale Industries Committee, noted the possibility of using small-scale industries for promoting rural development in 1955.

• The Planning Commission (now NITI AYOG) set up the committee to study the potential of small-scale industries for rural development.

• The committee was named after its head, Dattatreya Gopal Karve.

Additional Information

• Sarkaria Committee

• Formed in 1983 to review the functioning of the Centre-State relations in India.

• Primarily dealt with constitutional issues rather than rural development or small-scale industries.

• Kelkar Committee

• Kelkar committee was formed in India to study and evaluate the extant public-private partnership (PPP) model in India.

• The committee was set up by India's central government and headed by Vijay Kelkar.

Chakravarty Committee

• Set up in 1985 to examine the impact of economic reforms on the Indian economy.

• Primarily dealt with macroeconomic issues and policy recommendations rather than rural development through small-scale industries.

Q83. Answer: (c) peptidoglycan

The correct answer is peptidoglycan.

Key Points

• Peptidoglycan is a polymer that provides structural support to the bacterial cell wall, helping maintain its shape and integrity.

• It is composed of sugars and amino acids, forming a mesh-like structure that is unique to bacteria.

• The amount and structure of peptidoglycan in the cell wall determine whether bacteria are classified as Gram-positive or Gram-negative, affecting their response to antibiotics.

• The cell wall protects bacteria from osmotic pressure and environmental stresses, making it crucial for their survival.

Additional Information

• Glycogen

• Glycogen is a storage form of glucose in animals and fungi, not found in bacterial cell walls.

• It is a polysaccharide composed of glucose units, primarily used for energy storage.

• Cellulose

• Cellulose is a major component of plant cell walls, providing structural support.

• It is not a structural component of bacterial cell walls.

• Peptone

• Peptone is a protein digest used in culture media for growing bacteria, but it is not a component of the bacterial cell wall.

• It is made from the digestion of proteins and provides nutrients for bacteria in laboratory settings.

Q84. Answer: (a) sterilisation

The correct answer is sterilisation.

Key Points

• Intervention by the monetary authority of a country in the money market to keep money supply stable against exogenous or sometimes external shocks is referred to as sterilisation.

• The primary goal of sterilisation is to neutralize the effects of capital flows on the domestic money supply.

• This is achieved by offsetting foreign exchange interventions with domestic monetary operations.

• For instance, when a central bank buys foreign currency to prevent the appreciation of the local currency, it can sell government bonds to absorb the resulting increase in the money supply.

• Without sterilisation, such interventions could lead to inflation or other economic imbalances.

• Therefore, sterilisation helps in maintaining monetary stability and controlling inflation.

Q85. Answer: (b) 90 m

The correct answer is 90 m

Key Points

• The International Football Association Board (IFAB) states that the maximum length of a goal line in football is 90 meters (100 yards).

• The minimum length is 45 meters (50 yards).

• The IFAB also states that the touchline must be longer than the goal line.

• The minimum length of a touchline is 90 meters (100 yards), and the maximum is 120 meters (130 yards).

• The IFAB maintains and updates the 17 laws of soccer.

• The laws are the only rules of association football that FIFA permits its members to use.

Q86. Answer: (d) magnesium hydroxide

The correct answer is magnesium hydroxide

Key Points

• Milk of magnesia is a suspension of magnesium hydroxide (Mg(OH)2Mg(OH)2Mg(OH)2Mg(OH)2

) in water.

• It's a milky-white, alkaline (basic) liquid that's used as an antacid and laxative

• Milk of magnesia is an example of a solid-in-liquid colloid, also known as a sol.

• Colloids are mixtures where one substance of insoluble particles is suspended throughout another substance

Additional Information

• Magnesium Oxalate:

• Chemical Formula: MgC2O4

• It is a salt of oxalic acid and magnesium, commonly found as a white crystalline solid. It

• It is used in some chemical applications and in the study of oxalate metabolism.

• Magnesium Chlorate:

• Chemical Formula: Mg(ClO3)2

• This compound contains magnesium and chlorate ions. It is more commonly associated with chemical reactions and has oxidizing properties.

• Magnesium chlorate is used in some industrial applications and is not related to the antacid properties of milk of magnesia.

• Magnesium Bromide:

• Chemical Formula: MgBr2

• This is a salt composed of magnesium and bromide ions, typically existing as a white or colourless crystalline solid.

• It has applications in pharmaceuticals, particularly as a sedative and for its anticonvulsant properties

Q87. Answer: (a) 2 October

The correct answer is 2 October

Key Points

• The date observed as a national festival in India is 2 October

• 2 October is celebrated as Gandhi Jayanti, marking the birth anniversary of Mahatma Gandhi, the Father of the Nation.

• It is a national holiday and is observed as a day of non-violence and peace in India.

• This date is also observed as the International Day of Non-Violence globall

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Q88. Answer: (d) Jammu & Kashmir

The correct answer is Jammu and Kashmir

Key Points

• Rouf dance form belongs to the state of Jammu and Kashmir.

• The Rouf is a folk dance which mainly practised by women and originated in the Muslim community of J & K.

• The dance is simple footwork which is also called Chakri in the local language.

• Rouf performed on different occasions in Kashmir like Eid, Ramadan, and harvesting season.

Additional Information Some Important Dance :-

Dance Style	State
Bharatanatyam	Tamil Nadu
Kathak	Uttar Pradesh
Odissi	Odisha
Manipuri	Manipur
Kathakali	Kerala
Kuchipudi	Andhra Pradesh
Sattriya	Assam
Mohiniyattam	Kerala
Giddha	Punjab
Garba	Gujarat
Lavani	Maharashtra
Ghoomar	Rajasthan
Bhangra	Punjab
Chhau	Jharkhand, Odisha, West Bengal
Yakshagana	Karnataka

Q89. Answer: (a) 80 overs

The correct answer is 80 overs

Key Points

• According to the rules of cricket, specifically in Test matches, the fielding captain can request a new ball after 80 overs have been bowled.

• The batting team has the option to decline the new ball if they choose to, but this is rare as most teams prefer to take advantage of the fresh ball.

• The new ball can be beneficial as it offers bowlers a chance to generate more swing and bounce, making it easier to dismiss batsmen.

• However, the team must still have bowled 80 overs to be eligible for the new ball.

• Fast bowlers often prefer the new ball as it can bounce more and may swing in the air, leading to more opportunities for dismissals.

• Spinners, however, may prefer the old ball, which is softer and easier to grip, allowing for more turn

Q90. Answer: (c) Ursa Major

The correct answer is Ursa Major

Key Points

• The Big Dipper is an asterism made up of the seven brightest stars in the constellation Ursa Major:

• The Big Dipper is a well-known pattern of stars that's part of the Ursa Major constellation.

• It's always visible because it's circumpolar, meaning it's in the same direction as the North Star.

• The Big Dipper is a useful navigational tool because it points to the North Star, which is a celestial pivot point.

• To find the North Star, you can extend an imaginary line through the front two stars of the Big Dipper, Merak and Dubhe.

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• The Big Dipper is also known by other names, including:
• The Plough, Charles's Wain, Septentriones, and The Wagon.
• The Big Dipper is a prominent asterism in the Ursa Major constellation, which is significant in many cultures.
• In Native American traditions, the stars of Ursa Major are thought to mark the changing seasons and guide spirits

Additional Information

• Leo Major
• Likely refers to Leo, a constellation in the night sky, sometimes called "Leo the Lion."
• Leo Major may be an informal way of distinguishing Leo from the smaller constellation Leo Minor.
• Leo is one of the 12 zodiac constellations and is visible primarily during the spring in the Northern Hemisphere.
• Cassiopeia
• Cassiopeia is a prominent constellation in the northern sky, named after the mythical queen of Ethiopia in Greek mythology.
• It is easily recognizable by its distinctive W or M shape, formed by five bright stars.
• Cassiopeia is visible year-round in the Northern Hemisphere and is often used to locate other celestial objects.
• Orion
• Orion, also known as "The Hunter," is one of the most recognizable and famous constellations.
• It features prominent stars like Betelgeuse and Rigel, as well as the Orion Belt, formed by three aligned stars (Alnitak, Alnilam, and Mintaka).
• Orion is best visible during winter in the Northern Hemisphere and has deep mythological and cultural significance.

Q91. Answer: (a) Akbar

The correct answer is Akbar.

Key Points

• The Mahabharata was translated into Persian at Akbar’s orders, by Faizi and `Abd al-Qadir Bada’uni (c. 1540 – 1615) and named Razmnameh.
• Akbar
• Akbar was the third Mughal emperor, who reigned from 1556 to 1605.
• Akbar succeeded his father, Humayun.
• Jahangir was his son.
• His abolition of Jajiya, his new religion Din-i-Ilahi, his land revenue policy, administrative policy etc. were such that his half century rule proved to be one of the brightest chapters in Indian History

Additional Information

• Jahangir
• Jahangir was a great patron of art and literature he spent lavishly in building splendid buildings and gardens and mausoleums.
• He was easily impressed by poets and writers especially those who wrote verses in his praise.
• Under his rule, he got constructed the Akbar's tomb, Idmaat ud Daulas tomb, and the famous Jahangir Fort.
• Aurangzeb
• Aurangzeb was the last important Mughal ruler and after him, the Mughal empire rapidly decayed and was finally put to an end by the British.
• This King reigned for half a century and died in 1707 leaving behind a war of succession.
• Humayun
• Humayun was the second emperor of the Mughal Empire, who ruled over territory in what is now Afghanistan, Pakistan, Northern India, and Bangladesh from 1530 to 1540 and again from 1555 to 1556.

Q92. Answer: (b) Aam Aadmi Party

The correct answer is Aam Aadmi Party.

Key Points

• AAP was formed in November 2012, led by Arvind Kejriwal, after the India Against Corruption movement, to fight for clean governance and transparency.
• The Aam Aadmi Party (AAP) gained the status of a national party on April 10, 2023.
• The most recent government formation by the Aam Aadmi Party (AAP) took place in Punjab after the 2022 Assembly elections.
• A National Party is a political party recognized in four or more states or one that has won at least 11 seats in the Lok Sabha.

Additional Information

• Indian National Congress (INC)

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• It was founded in 1885, INC played a crucial role in India's independence movement and is one of the oldest political parties in India.

• Its key figures include Mahatma Gandhi, Jawaharlal Nehru, and Indira Gandhi, who shaped Indian politics and policy.

• Although it has faced significant challenges in recent elections, INC remains influential in Indian politics, holding a significant number of seats in various state assemblies and the Lok Sabha.

• Bharatiya Janata Party (BJP)

• It was founded in 1980, The BJP is rooted in Hindutva ideology and represents right-wing politics in India.

• Under Prime Minister Narendra Modi, the BJP has implemented significant policies like GST and the Make in India initiative, leading to substantial electoral success.

• Shiromani Akali Dal (SAD)

• It was founded in 1920, SAD advocates for the rights and interests of the Sikh community in Punjab.

• The party has formed the government in Punjab multiple times and holds significant influence in state politics.

Q93. Answer: (b) 2011

The correct answer is 2011.

Key Points

• NRLM aims to reduce poverty by promoting self-employment and organization of rural poor into self-help groups (SHGs).

• The mission focuses on marginalized and disadvantaged groups, including Scheduled Castes (SCs), Scheduled Tribes (STs), and women, to enhance their livelihood opportunities.

• NRLM emphasizes skill development and capacity building, facilitating training programs to enhance employability and entrepreneurial skills among rural youth.

• The mission promotes sustainable livelihoods through various sectors, including agriculture, animal husbandry, and rural crafts, to improve income levels and enhance quality of life in rural areas.

Additional Information

• Aajeevika Grameen Express Yojana (AGEY)

• AGEY aims to provide rural livelihood opportunities by facilitating the operation of village-level transport services to improve connectivity and access to markets.

• The initiative encourages self-employment by supporting individuals or groups to operate transport vehicles, promoting local entrepreneurship in rural areas.

• Aajeevika Skills

• Aajeevika Skills focuses on providing skill training to rural youth through the establishment of skill development centers to enhance their employability in various sectors.

• The program collaborates with various industries to ensure that the training aligns with market needs, enabling better job placements for trainees.

• Self-Employment through Aajeevika

• This initiative encourages the formation of micro-enterprises by providing financial assistance, mentorship, and capacity-building support to rural entrepreneurs.

• It helps connect self-employed individuals with markets by facilitating access to technology, market information, and business development services.

• Deendayal Antyodaya Yojana (DAY-NRLM)

• DAY-NRLM focuses on promoting sustainable livelihoods by organizing rural poor into self-help groups (SHGs) and facilitating access to credit and financial services.

• The scheme provides skill development and training programs to enhance the employability of rural youth and empower them to start their own businesses.

Q94. Answer: (c) Santoor

The correct answer is Santoor.

Key Points

• The Santoor is a hammered dulcimer from the family of string instruments.

• The Santoor is primarily associated with Indian classical music, especially in the Hindustani tradition.

• Pandit Shivkumar Sharma has received the Padma Vibhushan and Padma Shri for their contributions to music.

• Santoor has gained popularity in contemporary and fusion music genres, showcasing its versatility.

Additional Information

• Sarod

• A fretless string instrument with a deep, rich sound, typically made of wood and played with a plectrum.

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• Renowned players include Ustad Amjad Ali Khan and Ustad Ali Akbar Khan, who have popularized the Sarod in Indian classical music.
• Sarangi
• A bowed string instrument known for its emotional expressiveness, often used in Hindustani classical music.
• Traditionally associated with vocal music accompaniment; famous players include Ustad Sultan Khan and Pandit Ram Narayan.
• Tambura/Tanpura
• A long-necked string instrument used primarily as a drone in Indian classical music, providing a harmonic foundation.
• Renowned musicians like Ustad Vilayat Khan and Pandit Ravi Shankar have included the Tanpura in their performances.

Q95. Answer: (b) Communication

The correct answer is Communication.

Key Points

• CMS-01 is a communication satellite designed to provide various communication services across India, particularly in the areas of telecommunication, broadcasting, and broadband.
• The satellite is intended to serve the Indian subcontinent, enhancing connectivity and communication infrastructure in remote and rural areas.
• CMS-01 was launched on December 17, 2020, aboard the PSLV-C49 rocket from the Satish Dhawan Space Centre, Sriharikota.
• It operates in the Geostationary Orbit and is equipped with 12 Ku-band transponders, enabling high-quality communication services and data transmission.

Additional Information

• INSAT Series
• It was designed for telecommunications, broadcasting, meteorology, and search and rescue operations.
• The series includes multiple satellites that provide critical data for weather forecasting and disaster management.
• IRS (Indian Remote Sensing) Satellites
• It was primarily for earth observation and resource management, including agriculture, forestry, and land-use mapping.
• Usage: Data from IRS satellites supports planning and monitoring of natural resources and environmental management.
• NavIC (Navigation with Indian Constellation)
• A regional navigation satellite system providing accurate positioning services to users in India and surrounding regions.
• It enhances navigation capabilities and is an alternative to GPS for users in India.
• Mangalyaan (Mars Orbiter Mission)
• India's first interplanetary mission, designed to explore Mars and gather data on its surface and atmosphere.
• It made India the first Asian nation to reach Martian orbit and the fourth space agency globally to do so.
• GSAT Series
• Geostationary satellites designed for providing various communication services including TV broadcasting and internet services.
• It enhances telecommunication infrastructure and digital connectivity across the country.
• Astrosat
• India’s first dedicated multi-wavelength space observatory for astronomical observations.
• It enables detailed study of celestial sources across different wavelengths, contributing to advancements in astrophysics.

Q96. Answer: (b) Regulating Act, of 1773

The correct answer is Regulating Act, of 1773.

Key Points

• It established the office of the Governor-General of Bengal, with Warren Hastings as the first holder.
• It created the Supreme Court of Judicature at Calcutta, introducing a formal judicial system.
• It increased government oversight of the British East India Company's activities in India.
• It formed a Council of four members to assist the Governor-General, ensuring checks and balances.

Additional Information

• Pitt’s India Act, 1784
• It established a dual system of governance, separating the political and commercial functions of the East India Company.
• It created a Board of Control to oversee the Company's administration and ensure accountability to the British government.
• Charter Act, 1813
• It renewed the East India Company's charter for another 20 years, allowing it to continue its trade.
• It ended the Company's monopoly on trade with India, permitting British subjects to trade freely.

• It provided for the promotion of education and spread of knowledge in India, including the use of English.

• Indian Council Act of 1861:

• The Act recognized the portfolio system, which allowed members of the Viceroy's council to oversee specific government departments, marking a shift toward a more organized executive structure.

• It restored legislative powers to the Bombay and Madras Presidencies, reversing centralization that began with the Regulating Act of 1773, thus enabling more localized governance.

• The Act empowered the Viceroy to issue ordinances without legislative council approval during emergencies, allowing for swift governance in urgent situations

Q97. Answer: (c) 12-35

The correct answer is 12-35.

Key Points

• Fundamental Rights protect individual freedoms and ensure equality, liberty, and justice as enshrined in the Indian Constitution.

• They include six main categories, such as the Right to Equality, Right to Freedom, and Right against Exploitation.

• Fundamental Rights are justiciable, allowing citizens to seek legal recourse for violations through the courts.

• These rights are not absolute and can be restricted in the interest of public order, morality, and national security.

Additional Information

• Directive Principles of State Policy (DPSP)

• DPSPs aim to promote social and economic justice by reducing inequalities in income, status, and opportunities. This principle supports the idea of a welfare state.

• They direct the State to provide free and compulsory education for children until the age of 14, ensuring that education is accessible to all citizens.

• Right to Work: The DPSPs include provisions for securing a living wage and decent working conditions for workers, aiming to ensure that everyone has the right to work and earn a livelihood.

• Fundamental Duties (FD)

• Article 51A lists the Fundamental Duties of citizens, including the duty to abide by the Constitution and respect its ideals and institutions, which fosters a sense of responsibility.

• Environmental Protection: One of the duties includes the responsibility to protect and improve the natural environment, including forests, lakes, rivers, and wildlife, emphasizing the importance of environmental conservation.

• Promotion of Harmony: The Fundamental Duties encourage citizens to promote harmony and the spirit of common brotherhood amongst all people, transcending religious, linguistic, or regional diversities.

Important Points

• Article 12: Definition of the "State".

• Article 13: It declares that any law or ordinance that is inconsistent with the Fundamental Rights guaranteed by the Constitution shall be deemed void.

• Articles 14-18: Right to equality and prohibition of discrimination.

• Articles 19-22: Right to freedom, protection against arbitrary arrest, etc.

• Articles 23-24: Prohibition of trafficking and child labor.

• Articles 25-32: Freedom of religion and the right to constitutional remedies.

• Article 32: Right to approach the Supreme Court for enforcement of Fundamental Rights.

Q98. Answer: (d) 17.5%

The correct answer is 17.5%.

Key Points

• The Census of India conducted in 2011 reported a population of over 1.2 billion, which contributed to India's significant share of the global population.

• The Census reported a gender ratio of 940 females for every 1,000 males.

• According to the 2011 Census, 31.16% of India's population lived in urban areas, a significant increase from 27.81% in 2001.

• The overall literacy rate in India was recorded at 74.04%, with male literacy at 82.14% and female literacy at 65.46%.

• The first complete census of India was conducted in 1881, and it was the first synchronous census to be conducted across the entire Indian subcontinent.

Additional Information

• The population of Scheduled Castes (SC) and Scheduled Tribes (ST) in India accounted for 16.6% and 8.6%, respectively.

• The Census revealed that children aged 0-6 years constituted about 13.1% of the total population.

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• Uttar Pradesh emerged as the most populous state, with a population exceeding 199 million.

• Sikkim was recorded as the least populous state, with a population of just over 610,000.

• The Census identified 122 major languages and 1,599 other languages spoken across the country.

• The urban sex ratio was recorded at 929 females for every 1,000 males, slightly lower than the overall ratio.

• The 2011 Census was conducted in two phases: the house listing phase (April to July 2010) and the population enumeration phase (February 9 to 28, 2011).

Q99. Answer: (a) Forty-second Amendment Act, 1976

The correct answer is the Forty-second Amendment Act, 1976.

Key Points

• The Forty-second Amendment Act, enacted in 1976 during the Emergency period, introduced Fundamental Duties in Part IVA of the Indian Constitution.

• Article 51A outlines Eleven Fundamental Duties that citizens are expected to perform.

• The idea of Fundamental Duties was influenced by the provisions in the Soviet Constitution.

• Fundamental Duties in India are not enforceable by the courts, meaning citizens cannot be legally punished for not following them; they are moral responsibilities rather than legal obligations.

Additional Information

Year	Key Features
1951	First Amendment: Added restrictions on freedom of speech and allowed land reforms.
1976	Forty-second Amendment: Introduced Fundamental Duties and altered the preamble.
1978	Forty-fourth Amendment: Restored the balance between Fundamental Rights and DPSPs; reduced preventive detention powers.
1985	Eighty-third Amendment: Provided for the reservation of seats for SC and ST in Lok Sabha and State Assemblies.
1992	Seventy-third Amendment: Strengthened Panchayati Raj institutions for local self-government in rural areas.
2002	Eighty-sixth Amendment: Made education a Fundamental Right for children aged 6 to 14 years.
2019	One Hundred and First Amendment: Enhanced reservation for the economically weaker sections among the general category.

Q100. Answer: (d) Rs. 50,000 crore

The correct answer is 50,000 crore.

Key Points

• Emergency Credit Line Guarantee Scheme (ECLGS) a part of the Atma Nirbhar Bharat Package in 2020

• Its objective is to help businesses including MSMEs to meet their operational liabilities and resume businesses the hit caused by the COVID-19 crisis.

• It provides Member Lending Institutions (MLIs), 100 percent guarantee against any losses suffered by them due to non-repayment of the ECLGS funding by borrowers.

• The overall ceiling initially was Rs 3 lakh crore which was increased to Rs 4.5 lakh crore.

Additional Information

• ECLGS is under Department of Financial Services (DFS) in the Ministry of Finance.

• The R.O.I. is 9.25 percent for Banks and Financial Institutions and 14 percent for Non-Banking Financial Institutions.

• Loans under the ECLGS are collateral-free, backed by a government guarantee.

• The scheme is implemented through various scheduled commercial banks, financial institutions, and Non-Banking Financial Companies (NBFCs).

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