SSC CHSL Tier-1 2022: Official Paper (Held On: 16 March, 2023 Shift 1) (Previous Year Paper)

SSC Combined Higher Secondary Level (CHSL) • 2022 • 100 questions • 60 minutes • Answer key and solutions

Take this paper as a timed mock test

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

yourmocktest.com/pyq/ssc-chsl/ssc-chsl-tier-1-2022-official-paper-held-on-16-march-2023-shift…

Scan the QR code or click the link to open it.

YourMockTest.com — Free Study Material

ENGLISH LANGUAGE

Q1. Words given on the left side of (::) are related with each other by some Logic/Rule /Relation. Select the missing word/word pair on the right side of (::) from the given alternatives based on the same Logic/Rule/Relation.

Square : Four :: ?

(a) Six : Hexagon
(b) Triangle : Five
(c) Rectangle : Four
(d) Five : Pentagon

Q2. Words given on the left side of (::) are related with each other by some Logic/Rule /Relation. Select the missing word/word pair on the right side of (::) from the given alternatives based on the same Logic/Rule/Relation.

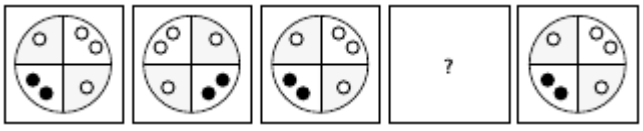
Arena : Wrestling :: Pitch : ?

(a) Hockey
(b) chess
(c) Skating
(d) Cricket

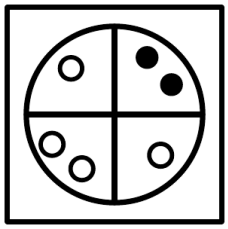
Q3. Bharti is the sister of Chavi. Avni is the mother of Bharti. Chavi is the wife of Dhruv. Dhruv is the father of Esha. Who is the maternal grandmother of Esha?

(a) Dhruv
(b) Avni
(c) Chavi
(d) Bharti

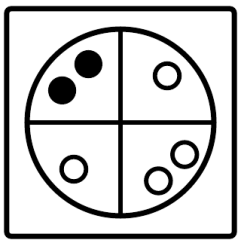
Q4. select the figure from the given options that can replace the question mark(?) in the following series.



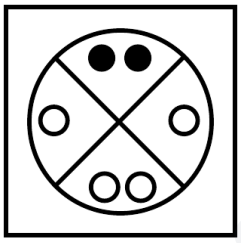
(a)



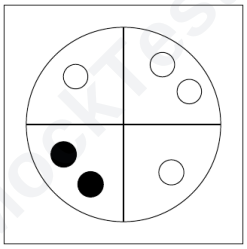
(b)



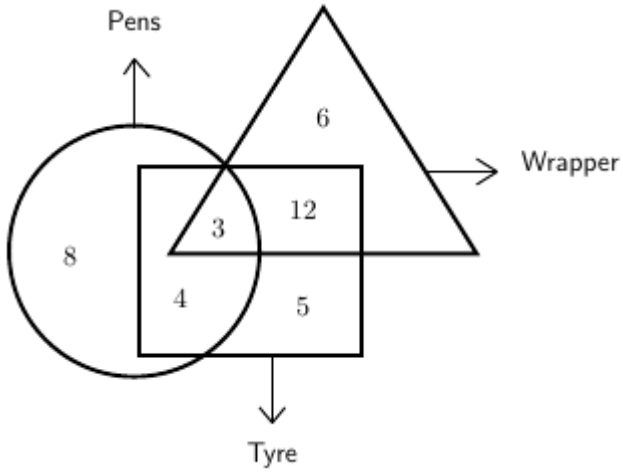
(c)



(d)



Q5. How many wrappers are not pens?



(a) 7
(b) 18
(c) 12
(d) 15

Q6. In the following question, select the odd letter/letters from the given alternatives.

(a) JJG
(b) FFC
(c) XXT
(d) PPM

YourMockTest.com — Free Study Material

Q7. In the following question, four number pairs are given. In each pair the number on left side of (–) is related to the number of the right side of (–) with some Logic/Rule /Relation. Three pairs are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives. (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) 225 – 5733
(b) 169 – 7912
(c) 361 – 9786
(d) 289 – 3194

Q8. By interchanging which two signs and two numbers (Not digits) the equation will be correct?

9 ÷ 3 + 7 × 4 – 5 = 20

(a) ÷ and –, 5 and 4
(b) × and –, 3 and 5
(c) • and ×, 9 and 7
(d) ÷ and –, 7 and 5

Q9. Four words have been given, out of which three are alike in some manner and one is different. Select the odd word.

(a) Mobile
(b) Laptop
(c) Computer
(d) Bulb

Q10. If 7 @ 3 = 343 and 9 @ 3 = 729, then 6 @ 3 = ?

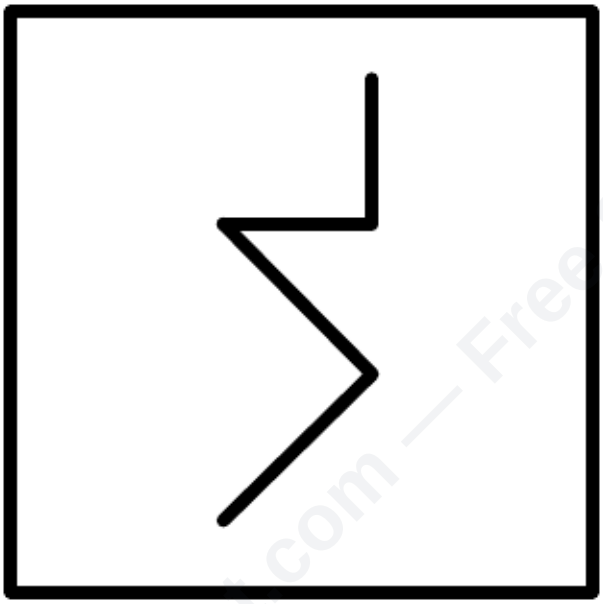
(a) 144
(b) 216
(c) 108
(d) 36

Q11. In a certain code language, ‘YEAH’ is coded as ‘207’, ‘BULK’ is coded as ‘186’. What is the code for ‘CORD’ in that code language?

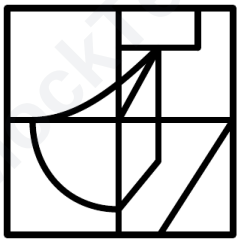
(a) 204
(b) 236
(c) 208
(d) 242

Q12. Select the option figure in which the given figure is embedded. (rotation is NOT allowed)

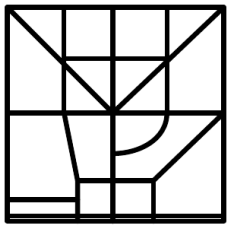
YourMockTest.com — Free Study Material



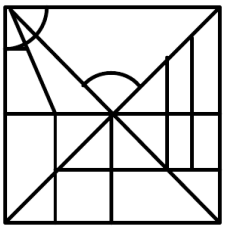
(a)



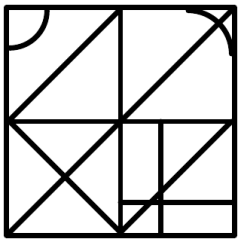
(b)



(c)

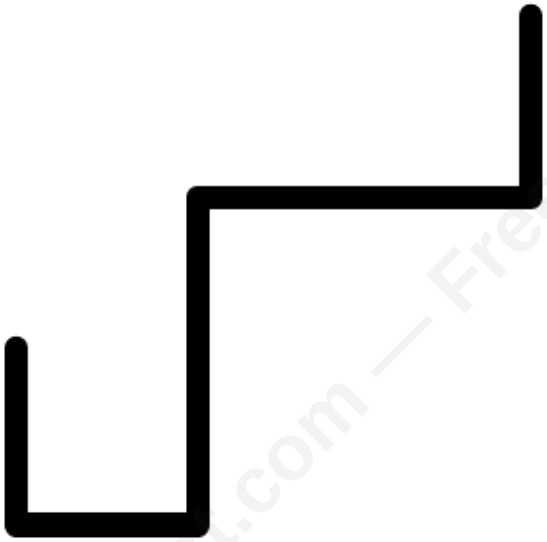


(d)

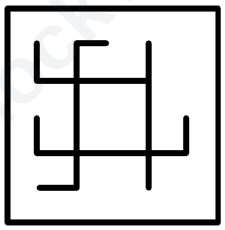


YourMockTest.com — Free Study Material

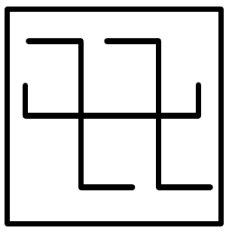
Q13. Select the option figure in which the given figure is embedded. (Rotation is NOT allowed).



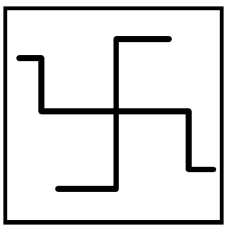
(a)



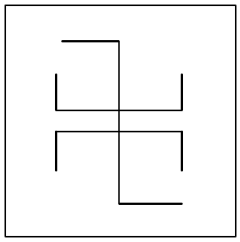
(b)



(c)



(d)



YourMockTest.com — Free Study Material

Q14. Arrange the given words in the sequence in which they occur in the dictionary.

1. Maternity
2. Mundane
3. Maternal
4. Motor
5. Mother

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

Q15. In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.

Statements:

I. No R is T.

II. All T are H.

Conclusions:

I. No T is R.

II. No H is T.

III. No R is H.

(a) Only conclusion I follows
(b) All conclusion follows
(c) Only conclusion III follows
(d) Only conclusion II follows

Q16. In a certain code language, ‘SHOWER’ is coded as ‘SEXOIS’. What is the code for ‘TOPICS’ in that code language?

(a) TDJJPT
(b) TCJJPT
(c) TCJPPT
(d) TDJPPT

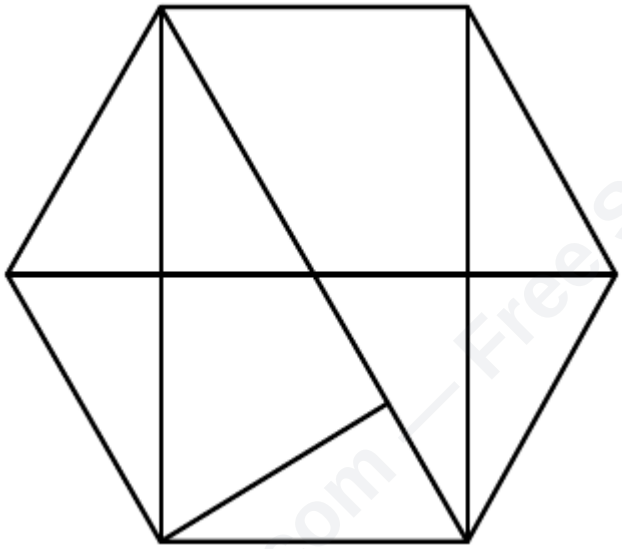
Q17. Words given on the left side of (::) are related with each other by some Logic/Rule /Relation. Select the missing word/word pair on the right side of (::) from the given alternatives based on the same Logic/Rule/Relation.

Axe : Woodcutter :: ?

(a) Author : Pen
(b) Surgeon : Scalpe
(c) Spade : Labourer
(d) Doctor : Stethoscope

Q18. How many triangles are there in the given figure?

YourMockTest.com — Free Study Material



(a) 20
(b) 18
(c) 25
(d) 14

Q19. In the following question, four number pairs are given. In each pair the number on left side of (–) is related to the number of the right side of (–) with some Logic/Rule /Relation. Three pairs are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives. (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) 6666 – 3333
(b) 8888 – 4444
(c) 4444 – 2222
(d) 3333 – 1111

Q20. In the following question, select the missing number from the given series.

120, 110, 101, 93, 86, ?

(a) 80
(b) 79
(c) 82
(d) 81

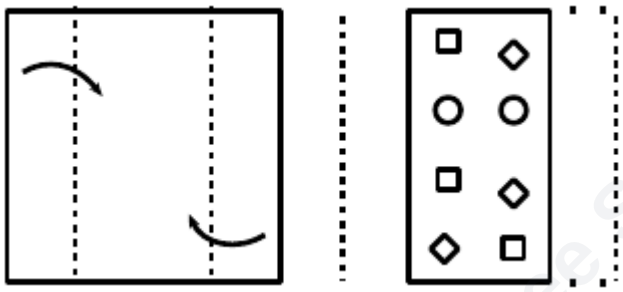
Q21. Select the option that is related to the fifth number in the same way as the first number is related to the second number and the third number is related to the fourth number.

7 : 512 :: 11 : 1728 :: 10 : ?

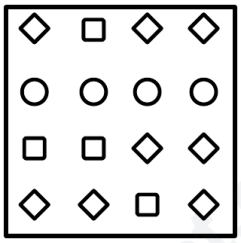
(a) 1331
(b) 2197
(c) 1397
(d) 1133

Q22. A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened?

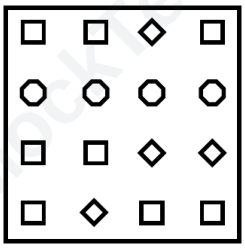
YourMockTest.com — Free Study Material



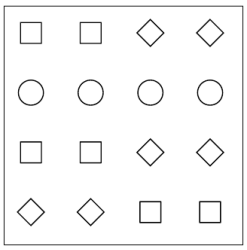
(a)



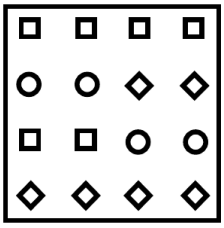
(b)



(c)

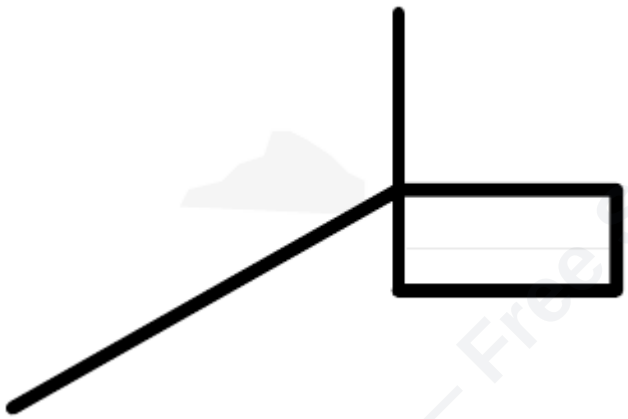


(d)

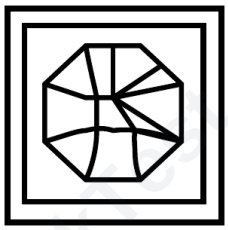


Q23. Select the option figure in which the given figure is embedded. (rotation is NOT allowed)

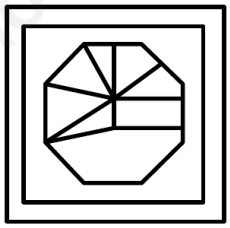
YourMockTest.com — Free Study Material



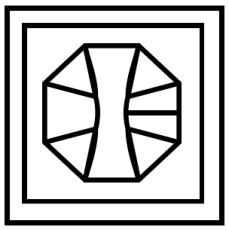
(a)



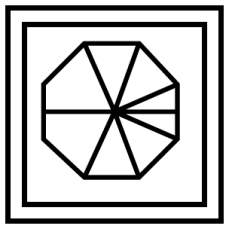
(b)



(c)



(d)



Q24. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

PHD, TZU, XRL, BJC, ?

(a) FGS
(b) FBT
(c) BBT
(d) BMR

YourMockTest.com — Free Study Material

Q25. Select the option in which the numbers shares the same relationship in set as that shared by the numbers in the given set.

(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)

(28, 53, 78)

(34, 49, 64)

(a) (46, 69, 71)
(b) (22, 54, 66)
(c) (38, 40, 42)
(d) (54, 55, 27)

GENERAL INTELLIGENCE

Q26. Which among the following is a river that originates in the Western Ghats?

(a) Narmada
(b) Luni
(c) Banas
(d) Mandovi

Q27. Among the following, in which material the speed of sound is highest? (at 25°C)

(a) Nickel
(b) Steel
(c) Iron
(d) Aluminium

Q28. The second five-year plan of India focused on _____.

(a) rapid industrialization
(b) foreign direct investment
(c) balance of payment
(d) family Planning Programmes

Q29. _____ came into existence on 12 July 1982 by transferring the agricultural credit functions of RBI and refinance functions of the then Agricultural Refinance and Development Corporation.

(a) Securities and Exchange Board of India
(b) Small Industries Development Bank of India
(c) Reserve Bank of India
(d) National Bank for Agriculture and Rural Development

Q30. Which of the following was the runners-up at Durand Cup 2022?

(a) Kerala Blasters
(b) Mumbai City FC
(c) Bengaluru FC
(d) Mohammedan SC

Q31. Kalsubai peak is located in which of the following Indian states?

(a) Madhya Pradesh
(b) Maharashtra
(c) Andhra Pradesh
(d) Himachal Pradesh

YourMockTest.com — Free Study Material

Q32. As of 2022, there are _____ states in India.

(a) 30
(b) 28
(c) 31
(d) 29

Q33. Which among the following won the best film (critics') award in the 67th Filmfare Awards 2022?

(a) Sherni
(b) Sardar Udham
(c) Sandeep Aur Pinky Farar
(d) Ramprasad ki Tehrvi

Q34. Which among the following is India’s first indigenously developed COVID-19 vaccine?

(a) Sputnik V
(b) Covishield
(c) COVAXIN
(d) Novavax

Q35. Which of the following is used to view pages and navigate the World Wide Web?

(a) Hyperlink
(b) Web Browser
(c) World Wide Web
(d) Joystick

Q36. Which among the following forts was principal capital of Qutb Shahi dynasty in Hyderabad?

(a) Chiktan Fort
(b) Rajgad Fort
(c) Red Fort
(d) Golconda Fort

Q37. Which among the following is not a type of Right to freedom in the Indian constitution?

(a) Protection of certain rights regarding freedom of speech, etc.
(b) Protection of life and personal liberty
(c) Offences for armed assembly
(d) Protection in respect of conviction for offences.

Q38. International Day for the preservation of the Ozone layer is observed on _____.

(a) September 13
(b) September 10
(c) September 16
(d) September 18

Q39. The poet - saint Kabir Das was born in _____ sometime in the 15th century.

(a) Kashi
(b) Amritsar
(c) Somnath
(d) Agra

Q40. Which of the following planets is considered as Earth’s twin planet?

(a) Neptune
(b) Uranus
(c) Venus
(d) Mars

YourMockTest.com — Free Study Material

Q41. On 12 August _____, the Mughal emperor appointed the East India Company as the Diwan of Bengal.

(a) 1765
(b) 1768
(c) 1772
(d) 1760

Q42. Lovely Choubey is a famous Indian sportswoman associated with _____ sport.

(a) Table Tennis
(b) Lawn Bowls
(c) Cricket
(d) Kho-Kho

Q43. Article related to compulsory acquisition of property has been omitted now from the Indian constitution. What is the number of this article?

(a) 31D
(b) 31
(c) 31B
(d) 31A

Q44. Which animal's memorial was inaugurated in September 2022 at Kaziranga National Park in Assam?

(a) Rhinoceros
(b) Hippopotamus
(c) Langur
(d) Gibbon

Q45. Which of the following base is found in lime water?

(a) Calcium hydroxide
(b) Potassium hydroxide
(c) Magnesium hydroxide
(d) Ammonium hydroxide

Q46. In a drama, Hima spoke “Swaraj is my birth right and I shall have it.’’. Which Indian freedom fighter gave this slogan?

(a) Bhagat Singh
(b) Bal Gangadhar Tilak
(c) Mahatma Gandhi
(d) Ambika Charan Majumdar

Q47. Which of the following shortcut key displays the Editor task pane to check spelling and grammar in the document or the selected text in MS-Word 365?

(a) F7
(b) F1
(c) F10
(d) F2

Q48. Who won the Men’s Single title at Wimbledon 2022?

(a) Nick Kyrgios
(b) Rafael Nadal
(c) Novak Djokovic
(d) Daniil Medvedev

Q49. Godaan is a novel written by Munshi Premchand, published in the year _____.

(a) 2006
(b) 1936
(c) 1976
(d) 1906

YourMockTest.com — Free Study Material

Q50. What is the name of indigenously developed special aviation fuel by the Indian Oil Corporation in September 2022?

(a) LNG 30
(b) CNG 101
(c) AVGAS 100 LL
(d) ATF NEW 50

QUANTITATIVE APTITUDE

Q51. Angle subtended by a chord MN on the circumference of a circle is 90 degree. If diameter of the circle is 44 cm. then what will be the length of chord MN?

(a) 44 cm
(b) 88 cm
(c) 66 cm
(d) 22 cm

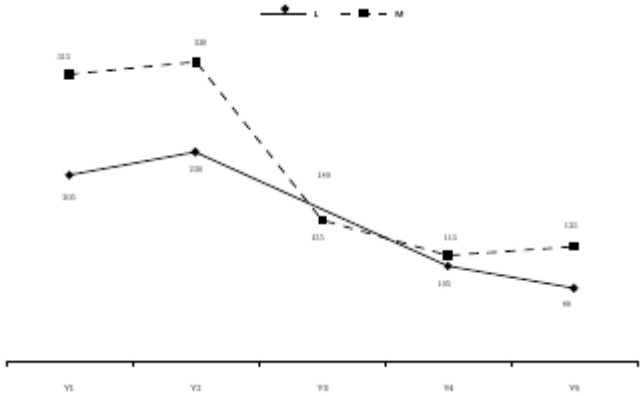
Q52. If $\cos\theta + \sin\theta = \sqrt{2}$, then what is the value of $\sec\theta \operatorname{cosec}\theta$?

(a) 1/2
(b) 1
(c) 2
(d) 0

Q53. The marked price of a trouser and a jacket is in the ratio of 1 : 3. The shopkeeper gives 20 percent discount on the trouser. If the total discount offered on both of them together is 30 percent. then what is the discount percentage offered on the jacket?

(a) 28.56 percent
(b) 41.25 percent
(c) 33.33 percent
(d) 16.66 percent

Q54. The line chart given below shows the GDP of two countries L and M in five different years.



J1 = The value of average GDP of countries L and M in year Y1.

J2 =The value of average GDP of countries L and M in year Y4.

What is the value of (J1/J2)?

(a) 4.42
(b) 2.36
(c) 3.48
(d) 1.56

Q55. The radii of two concentric circles are 34 cm and 50 cm. A and D are the points on larger circle and B and C are points on smaller circle. If ABCD is a straight line and BC = 32 cm, then what is the length of AD?

(a) 60 cm
(b) 80 cm
(c) 75 cm

(d) 40 cm

Q56. If P : Q = 3 : 5 and P : R = 2 : 3, then what is the value of 3P : 4Q : 3R?

(a) 12 : 8 : 9
(b) 18 : 40 : 27
(c) 10 : 5 : 4
(d) 9 : 5 : 4

Q57. x y and z are 3 values, such that x + y = 12, y + z = 17 and z + x = 19. What is the average of x, y and z?

(a) 10
(b) 8
(c) 6
(d) 4

Q58. What amount a man would have received on a principal of Rs. 7,500 after two years at simple interest at the rate of 7 per cent per annum ?

(a) Rs. 8,400
(b) Rs. 8,550
(c) Rs. 7,600
(d) Rs. 7,400

Q59. In Δ XYZ, points P, Q and R are points on the sides XY, YZ and XZ respectively angle YXZ = 50 degree, XR = PR, ZR = QR and angle RQZ = 80 degree. What is the value of angle PRQ?

(a) 80 degree
(b) 90 degree
(c) 75 degree
(d) 60 degree

Q60. Distance of a chord JK from the centre is 7 cm. If diameter of this circle is 50 cm, then what will be length of this chord?

(a) 74 cm
(b) 96 cm
(c) 48 cm
(d) 24 cm

Q61. What is the value of 8×5÷25/(7÷14× 2)-(14÷7-5)/(7÷14-25) ?

(a) 362/245
(b) 115/245
(c) 306/245
(d) 106/245

Q62. How many numbers are there between 501 and 701 which are divisible by 10 but are not divisible by 3?

(a) 20
(b) 14
(c) 15
(d) 13

Q63. The table shows the number of hours, a teacher invests on his daily activities.

What is the ratio between sum of time invested by the teacher on 'teaching and reading' & 'sleep and play' ?

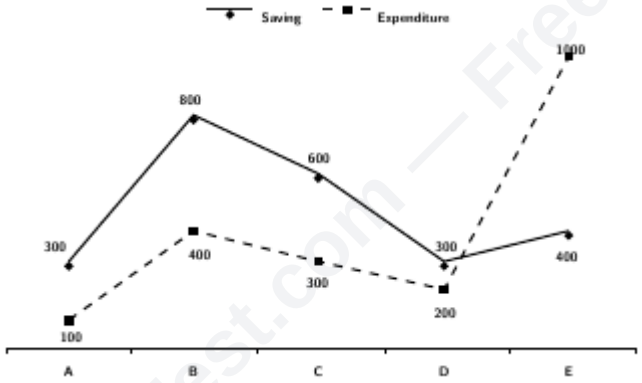
Teaching	**8 hours**
Reading	6 hours
Sleeping	7 hours
Playing	1 hours

YourMockTest.com — Free Study Material

Other activities	2 hours

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

Q64. The line chart given below shows the saving and expenditure of 5 companies.



Income = Saving + Expenditure

Which of the following sequence is correct about the income of company A, B, C, D and E?

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

Q65. If the diagonals of a rhombus are 10 cm and 24 cm, then what is the perimeter of the rhombus?

(a) 50 cm
(b) 60 cm
(c) 56 cm
(d) 52 cm

Q66. Manoj bought two T.V. for Rs. 2,280, He sold one at a loss of 20 percent and other at a profit of 10 percent. If each TV was sold for the same price, then what is the cost price of the T.V which was sold at loss?

(a) Rs. 1,380
(b) Rs. 1,320
(c) Rs. 1,050
(d) Rs. 1,440

Q67. If $a^2 + b^2 + c^2 = 62$ and $a + b + c = 12$, then what is the value of $4ab + 4bc + 4ca$?

(a) 164
(b) 148
(c) 152
(d) 160

Q68. The average of 15 numbers is 53. A number is removed and the average of 14 numbers now becomes 55. Which number was removed?

(a) 26
(b) 23
(c) 25
(d) 24

YourMockTest.com — Free Study Material

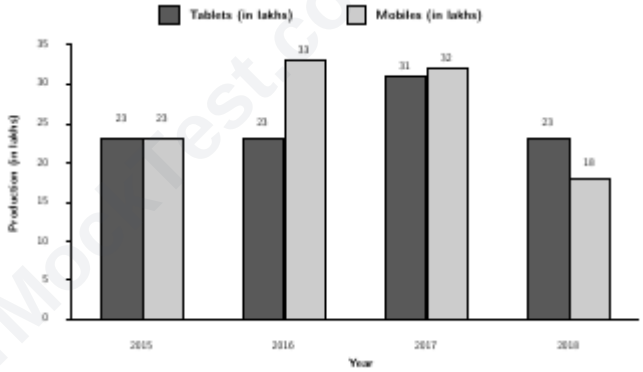
Q69. If x+1/x=K/2, then what is the value of (x^8+1)/(x^4) ?

(a) (K^4-16K²+32)/16
(b) (K^4-8K²-36)/32
(c) (K^4-8K²-32)/16
(d) (K^4-8K²+32)/16

Q70. 4 men and 7 women can do a work in 8 days. 7 men and 4 women can do the same work in 5 days. Find the number of days in which 8 women can finish the work.

(a) 60 Days
(b) 55 Days
(c) 40 Days
(d) 45 Days

Q71. The bar graph shows the production of tablets and mobiles in four consecutive years, Calculate the ratio of mobiles in 2015 to tablets in 2018.



(a) 2 : 5
(b) 2 : 1
(c) 1 : 2
(d) 1 : 1

Q72. If sin C=9/10, then what is the value of cos² C?

(a) 19/100
(b) 81/√19
(c) 19/10
(d) √19/100

Q73. One third part of a certain journey is covered at the speed of 10 km/hr, one fourth part at the speed of 15 km/hr and the rest part at the speed of 20 km/hr. What will be the average speed for the whole journey?

(a) 15 km/hr
(b) 200/17 km/hr
(c) 240/17 km/hr
(d) 280/17 km/hr

Q74. Price of 15 chairs is 20 percent more than the price of 8 tables, If price of 2 tables is Rs. 2400, then what is the price of 15 chairs?

(a) Rs. 10,320
(b) Rs. 12,380
(c) Rs. 11,520
(d) Rs. 10,780

Q75. What is the value of (1+tan A)/(cosec A)+(1+cot A)/(sec A) ?

(a) 2 sec² A
(b) sec A + cosec A
(c) sec A - cosec A

YourMockTest.com — Free Study Material

(d) 2 cosec² A

GENERAL AWARENESS

Q76. Select the most appropriate one-word substitution for the given group of words.

A person who renounces a religious or political belief or principle.

(a) Arsonist
(b) Apostate
(c) Anarchist
(d) Agnostic

Q77. In the following question, out of the given four alternatives, select the alternative which best expresses the meaning of the Idiom/Phrase.

Dead lock

(a) To be anxious
(b) A state in which progress is impossible
(c) To lose an important asset
(d) To attract

Q78. Choose the incorrectly spelt word.

(a) Brinjal
(b) Mouse
(c) Sliede
(d) Blink

Q79. Select the most appropriate 'one word' for the expression given below.

Fear of heights.

(a) Agoraphobia
(b) Claustrophobia
(c) Acrophobia
(d) Homophobia

Q80. Choose the word that can substitute the given group of words.

One who loves mankind

(a) Philistine
(b) Philologist
(c) Philanderer
(d) Philanthropist

Q81. Choose the word that means the same as the given word.

Quail

(a) Approach
(b) Cringe
(c) Assail
(d) Tyrant

Q82. Improve the underlined part of the sentence. Choose ‘No improvement’ as an answer if the sentence is grammatically correct.

The efforts of the Government in providing health education and Primary Health Centres is borne fruits.

(a) has borne
(b) No improvement
(c) have borne
(d) was bore

YourMockTest.com — Free Study Material

Q83. Choose the sentence with no spelling error.

(a) A welcoming voice from the open dorway.
(b) A welcoming voice from the open doorway.
(c) A welcoming voise from the open doorway
(d) A welcomng voice from the open doorway.

Q84. Identify the segment in the sentence which contains a grammatical error. If there is no error, then select the option "No error".

We talked about writing a will, but it/ was one of those thing you never/ get around to doing.

(a) was one of those thing you never
(b) No error
(c) get around to doing.
(d) We talked about writing a will, but it

Q85. Choose the option that is the correct passive form of the sentence.

Daniel and Mary invited us to their wedding.

(a) We have been invited to Daniel and Mary's wedding.
(b) We were invited to Daniel and Mary's wedding.
(c) We are invited to Daniel and Mary's wedding.
(d) We had been invited to Daniel and Mary's wedding.

Q86. Rearrange the parts of the sentence in correct order.

Many people
P. learn better when they have something tangible
Q. hold in their hands and get their head
R. to work with, a physical object they can
S. round and low-cost 3D printers make that possible

(a) PRQS
(b) PRSQ
(c) QPRS
(d) QRSP

Q87. Choose the word that means the same as the given word.

Opaque

(a) Unadulterated
(b) Translucent
(c) Clear
(d) Arcane

Q88. Select the word that is opposite in meaning (ANTONYM) to the word given below.

Frighten

(a) Startle
(b) Petrify
(c) Alarm
(d) Reassure

Q89. Choose the word that means the same as the given word.

Abundant

(a) Scarce
(b) Meager
(c) Plentiful
(d) Sparse
(e) Deficient

YourMockTest.com — Free Study Material

Q90. Rearrange the parts of the sentence in correct order.

P. elderly is on the increase, and, although they constitute only

Q. a small minority of the retired population, their

R. in all advanced industrial societies the proportion of infirm

S. claim on social services is disproportionately heavy

(a) PSRQ
(b) RSPQ
(c) QPSR
(d) RPQS

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

Method to my madness

(a) Someone who is unpredictable and can cause damage if not kept in check.
(b) To get someone drunk.
(c) To state a fact so that there are no doubts or objections.
(d) Strange or crazy actions that appear meaningless but in the end are done for a good reason.

Q92. Direction: Find the part of the given sentence that has an error in it. If there is no error, choose 'No error'.

People that are lonely have higher levels of the hormone cortisol.

(a) People that are lonely
(b) have higher levels of
(c) the hormone cortisol.
(d) No error

Q93. Improve the underlined part of the sentence. Choose 'No improvement' as an answer if the sentence is grammatically correct.

She dedicated her entire life to the serviced of the poorest of the poor.

(a) service of the poorest
(b) No improvement
(c) services off the poorest
(d) serviced of the poorer

Q94. Select the correct indirect form of the given sentence.

"I have heard the podcast before," Nita says.

(a) Nita says that she is hearing the podcast before.
(b) Nita says that she had heard the podcast before.
(c) Nita says that she has heard the podcast before.
(d) Nita says that she had heard the podcast ago.

Q95. Fill in the blank with an appropriate option.

The _____ of revenge demanded a life for a life.

(a) cheering
(b) moaning
(c) crowning
(d) obligations

Directions

Direction: In the following passage some of the words have been deleted. Read the passage carefully and select the correct answer for the given blank out of the four alternatives.

Social media platforms and many people on them have their own (1)____ and they are often trying to sell you things. So, be (2) __ of how much time and energy you give to sellers and users and think about (3) __ they want from you when engaging.To gauge which uses are positive and (4) __ and which are detrimental, ask yourself simply, when does using social media make me feel good or bad, and why? Do I (5) ____use it all of the time?

YourMockTest.com — Free Study Material

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

(a) agendas
(b) steam
(c) excuses
(d) considerations

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

(a) aroused
(b) valiant
(c) calm
(d) aware

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

(a) that
(b) whilst
(c) which
(d) what

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

(a) pliable
(b) possessive
(c) punitive
(d) productive

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

(a) could
(b) need to
(c) ought to
(d) must

ANSWER KEY

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

SOLUTIONS

Q1. Answer: (c) Rectangle : Four

Logic is "Shape : Number of sides".
Square : Four => A square is a shape that has four sides.
Similarily,
Rectangle : Four => A rectangle is a shape that also has four sides.
Therefore, "Rectangle : Four" follows the same relationship.

YourMockTest.com — Free Study Material

As for the other options:

• "Six : Hexagon" and "Five : Pentagon" also relate their number of sides to shape, So, these two options are wrong as they follow a reverse relationship.

• "Triangle : Five" is incorrect because a triangle has three sides, not five.

Hence, the correct answer is "Rectangle : Four".

Q2. Answer: (d) Cricket

In the given pair, "Arena : Wrestling", an arena is the place where the sport of wrestling typically takes place. So the relationship here is "Place : Sport".

Following this logic, a pitch is the place where the sport of cricket typically takes place. Therefore, "Pitch : Cricket" is the correct answer, following the same relationship.

While a pitch can also refer to the playing field in other sports (like hockey), it is most commonly associated with cricket. The other options, chess and skating, don't have a 'pitch' as their standard playing areas.

Hence, the correct answer is "Cricket".

Q3. Answer: (b) Avni

Family Chart:

Given:

Bharti is the sister of Chavi.

Avni is the mother of Bharti.

Chavi is the wife of Dhruv.

Dhruv is the father of Esha.

So, Avni is the maternal grandmother of Esha.

Hence, the correct answer is "Option 2".

Q4. Answer: (a) [figure]

The logic followed here is:

Logic: Images are placed same in alternate places.

So, 'Option 1' will replace the question mark.

Hence, the correct answer is "Option 1".

Q5. Answer: (b) 18

According to the given Venn diagram:

The shaded area shows the "total number of wrappers are not pens".

So, the total number of 'wrappers are not pens' = 6 + 12 = 18.

Hence, the correct answer is "18".

Q6. Answer: (c) XXT

The logic followed here is:

Option 1) JJG

Option 2) FFC

Option 3) XXT

Option 4) PPM

Here, 'XXT' is odd among the given options.

Hence, the correct answer is "Option 3".

Q7. Answer: (c) 361 – 9786

The pattern followed here is,

(1) 225 – 5733 →

$15^2 = 225$, $15^3 = 3375$ reverse order 5733

(2) 169 – 7912 →

$13^2 = 169$, $13^3 = 2197$ reverse order 7912

(3) 361 – 9786 →

$19^2 = 361$, $19^3 = 6859$ reverse order $9586 \neq 9786$

(4) 289 – 3194 →

172 = 289, 173 = 4913 reverse order 3194

Hence, "361 – 9786" is odd from the given alternatives.

Q8. Answer: (c) • and ×, 9 and 7

Given equation: 9 ÷ 3 + 7 × 4 – 5 = 20.

BODMAS Table:

Let's check each option one by one.

Option 1) ÷ and –, 5 and 4

Given: 9 ÷ 3 + 7 × 4 – 5 = 20

After interchanging the numbers and signs we get;

=> 9 - 3 + 7 × 5 ÷ 4 = 20

=> 9 - 3 + 7 × 1.25 = 20

=> 9 - 3 + 8.75 = 20

=> 17.75 - 3 = 20

=> - 14.75 ≠ 20

=> LHS ≠ RHS

Option 2) × and –, 3 and 5

Given: 9 ÷ 3 + 7 × 4 – 5 = 20

After interchanging the numbers and signs we get;

=> 9 ÷ 5 + 7 - 4 × 3 = 20

=> 1.8 + 7 - 4 × 3 = 20

=> 1.8 + 7 - 12 = 20

=> 8.8 - 12 = 20

=> - 3.2 ≠ 20

=> LHS ≠ RHS

Option 3) + and ×, 9 and 7

Given: 9 ÷ 3 + 7 × 4 – 5 = 20

After interchanging the numbers and signs we get;

=> 7 ÷ 3 × 9 + 4 – 5 = 20

=> 21 + 4 – 5 = 20

=> 25 - 5 = 20

=> 20 = 20

=> LHS = RHS

Option 4) ÷ and –, 7 and 5

Given: 9 ÷ 3 + 7 × 4 – 5 = 20

After interchanging the numbers and signs we get;

=> 9 - 3 + 7 × 4 ÷ 5 = 20

=> 9 - 3 + 7 × 0.8 = 20

=> 9 - 3 + 5.6 = 20

=> 14.6 - 3 = 20

=> 11.6 ≠ 20

=> LHS ≠ RHS

Hence, the correct answer is "Option 3".

Q9. Answer: (d) Bulb

The first three items - Mobile, Laptop, and Computer - are all computing devices. They can process information, run software programs, connect to the internet, and perform multiple complex tasks.

On the other hand, a bulb, while it's an electrical device, does not have computing capabilities. Its primary function is to provide light. Therefore, it is different from the other three and is the correct answer.

Hence, the correct answer is "Bulb".

YourMockTest.com — Free Study Material

Q10. Answer: (b) 216

The logic followed here is:
Consider '3' as '3 times',
Now,
7 @ 3 = 343
→ 7^3 => 7 × 7 × 7 = 343.
9 @ 3 = 729
→ 93 => 9 × 9 × 9 = 729.
Similarly, for 6 @ 3 = ?
→ 63 => 6 × 6 × 6 = 216.
Hence, the correct answer is "216".

Q11. Answer: (a) 204

The logic followed here is:
Logic: (Sum of the Opposite value of all letters) × 3 = Code of the word.
'YEAH' is coded as '207'.
'YEAH' opposite 'BVZS'
=> (2 + 22 + 26 + 19) × 3
=> 69 × 3 = 207.
'BULK' is coded as '186'.
'BULK' opposite 'YFOP'
=> (25 + 6 + 15 + 16) × 3
=> 62 × 3 = 186.
Similarly, for 'CORD'
'CORD' opposite 'XLIW'
=> (24 + 12 + 9 + 23) × 3
=> 68 × 3 = 204.
So, 'CORD' will be written as '204'.
Hence, the correct answer is "204".

Q12. Answer: (c) [figure]

The image embedded in given figure is as shown below:
Hence, "Option 3" is the correct answer.

Q13. Answer: (a) [figure]

The image embedded in given figure is as shown below:
Hence, "Option 1" is the correct answer.

Q14. Answer: (c) 3, 1, 5, 4, 2

The correct dictionary order for the give words are:
3. Maternal
1. Maternity
5. Mother
4. Motor
2. Mundane
So, the correct sequence is '3, 1, 5, 4, 2'.
Hence, the correct answer is "Option 3".

Q15. Answer: (a) Only conclusion I follows

Given Statements:
I. No R is T.
II. All T are H.
The least possible Venn diagram for the given statement is:

YourMockTest.com — Free Study Material

Conclusions:

I. No T is R - True (No R is T, so No T will be R).

II. No H is T - False (Because, All T are H).

III. No R is H - False (Because, No definite relation given between R and H, so it can be possible only).

So, Only conclusion I follows.

Hence, the correct answer is "Option 1".

Q16. Answer: (c) TCJPPT

The logic followed here is:

'SHOWER' is coded as 'SEXOIS',

Similarly, for 'TOPICS'

So, 'TOPICS' is coded as 'TCJPPT'.

Hence, the correct answer is "Option 3".

Q17. Answer: (c) Spade : Labourer

Logic: The relationship that is established in the given example is "tool : user".

In the given pair "Axe : Woodcutter", an Axe is the tool that a Woodcutter uses in their profession.

Following this logic, from the given options, a Spade is the tool that a Labourer (particularly one working in fields like construction or agriculture) uses in their profession.

Thus, "Spade : Labourer" follows the same relationship.

Hence, the correct answer is "Option 3".

Q18. Answer: (d) 14

The triangles are:

So, there are '14' triangles in the given figure.

Hence, the correct answer is "14".

Q19. Answer: (d) 3333 – 1111

The pattern followed here is,

(1) 6666 – 3333 → 6666 is divided by 2 = 3333.

(2) 8888 – 4444 → 8888 is divided by 2 = 4444.

(3) 4444 – 2222 → 4444 is divided by 2 = 2222.

(4) 3333 – 1111→ 3333 is divided by 3 = 1111.

Hence, "3333 – 1111" is odd from the given alternatives.

Q20. Answer: (a) 80

The logic followed here is:

Here, '80' will complete the given series.

Hence, the correct answer is "80".

Q21. Answer: (a) 1331

The logic followed here is:

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

Now,

For, 7 : 512

→ (7 + 1)3

=> 83 = 512.

For, 11 : 1728

→ (11 + 1)3

=> 123 = 1728.

Similarly, for 10 : ?

→ (10 + 1)3

=> 113 = 1331.

Hence, the correct answer is "Option 1".

YourMockTest.com — Free Study Material

Q22. Answer: (c) [figure]

The logic followed here is

Hence, the correct answer is "Option 3".

Q23. Answer: (b) [figure]

The image embedded in given figure is as shown below:

Hence, "Option 2" is the correct answer.

Q24. Answer: (b) FBT

The logic followed here is:

Hence, the correct answer is "Option 2".

Q25. Answer: (c) (38, 40, 42)

The logic followed here is:

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

Now,

For, (28, 53, 78)

→ (28 + 78) ÷ 2

=> 106 ÷ 2 = 53.

For, (34, 49, 64)

→ (34 + 64) ÷ 2

=> 98 ÷ 2 = 49.

Similarly, for (38, 40, 42)

→ (38 + 42) ÷ 2

=> 80 ÷ 2 = 40.

Hence, the correct answer is "Option 3".

Q26. Answer: (d) Mandovi

The correct answer is Mandovi.

Key PointsMandovi River-

• It originates from a cluster of 30 springs at Bhimgad in the Western Ghats in the Belagavi district of Karnataka.

• The river has a total catchment area of 2032 sq km, of which 1580 sq km lies in Goa.

• Panaji is situated on the banks of the river Mandovi.

• Dudhsagar Falls in Goa are also formed by this river.

• The river passes through Karnataka and Goa before it empties into the Arabian Sea.

Additional InformationNarmada River-

• Narmada originates from Amarkantak in the Anupur district of Madhya Pradesh.

• Narmada is the longest river in MP and the 5th largest river in the country.

• Narmada is also the largest west-flowing river in India.

• The total length of Narmada is 1312 km and its total length in Madhya Pradesh is 1077 km.

• Narmada does not form a delta, it forms an estuary.

Luni River-

• Luni River originates from Nag Pahar or Naga hills in the Ajmer district of Rajasthan.

• Luni originates in the Pushkar valley of the Aravalli Range, near Ajmer, and passes through the southeastern portion of the Thar Desert.

• It ends in the marshy lands of Rann of Kutch in Gujarat.

• Jaswant Sagar Dam was built in 1892 by Maharaja Jaswant Singh. It is one of the largest artificial lakes in India.

Banas River-

• Banas River originates from Khamnor Hills of Aravalli Range, near Kumbhalgarh in Rajsamand, Rajasthan.

• Banas River is a tributary of the Chambal River and it is approximately 512 kilometers in length.

• This river is also called ‘Van Ki Asha‘.

YourMockTest.com — Free Study Material

Q27. Answer: (d) Aluminium

The correct answer is Aluminium.

Key Points

• Out of the following, the speed of sound is maximum in Aluminium.

• Speed of sound in Aluminium at 25 deg Celsius is around 6420 m/s.

• Sound is a mechanical wave and needs a material medium for its propagation. It cannot travel through a vacuum.

• Sound travels at different speeds depending on what it is traveling through.

• Of the three mediums (gas, liquid, and solid) sound waves travel the slowest through gases, faster through liquids, and fastest through solids.

• Temperature also affects the speed of sound.

• For Example, at 0º Celcius, sound travels through air at 331 meters per second, but, at 20ºC, at room temperature, sound travels at 343 meters per second.

Important Points

Speed of sound in different media at 25 ºC		
State	Medium	Speed of sound (m/s)
Solid	Solids Aluminium	6420
Nickel	6040	
Steel	5960	
Iron	5950	
Brass	4700	
Glass (Flint)	3980	
liquid	Liquids Water (Sea)	1531
Water (distilled)	1498	
Ethanol 1207	1207	
Methanol	1103	
gas	Gases Hydrogen	1284
Helium	965	
Air	346	
Oxygen	316	
Sulfur dioxide	213	

Q28. Answer: (a) rapid industrialization

The correct answer is rapid industrialization.

Key Points

• The second five-year plan's main focus was on the rapid industrial development of the country.

• It was made from 1956 to 1961, under the leadership of Jawaharlal Nehru.

• The Second Five Year Plan was based on Mahalanobis Model.

• P. C. Mahalanobis was a famous Indian statistician who founded the Indian Statistical Institute.

• This plan lags behind its target growth rate of 4.5% and achieved a growth rate of 4.27%.

Additional Information

Plan	**Period**	**Objective**	**Actual growth rate (percent)**
First	1951-55	Agricultural development of the country.	3.6
Second	1956-61	industrial development (based on P.C. Mahalanobis model)	4.1

YourMockTest.com — Free Study Material

Third	1961-66	Make the economy independent and to reach the self-active position of take-off (also called Gadgil Yojana)	2.4
Fourth	1969-74	Growth with stability and progressive achievement of self-reliance.	3.3
Fifth	1974-79	Top priority was given to agriculture	4.8
Sixth	1980-85	Poverty eradication and technological self-reliance.	5.7
Seventh	1985-90	Establishment of a self-sufficient economy, opportunities for productive employment.	6.0
Eight	1992-97	development of human resources i	6.8
Ninth	1997-02	growth with justice and equity	5.4
tenth	2002-07	Double the per capita income	7.2
Eleventh	2007-12	faster and more inclusive growth	7.7
Twelveth	2012-17	Faster, More Inclusive and Sustainable Growth	7.9

Q29. Answer: (d) National Bank for Agriculture and Rural Development

The correct answer is National Bank for Agriculture and Rural Development.

Key PointsNABARD-

• National Bank for Agriculture and Rural Development is the full form of NABARD.

• The National Bank for Agriculture and Rural Development was established on 12 July 1982.

• It is under the jurisdiction of the Ministry of Finance, Government of India.

• The bank has been entrusted with "matters concerning policy, planning, and operations in the field of credit for agriculture and other economic activities in rural areas in India".

• NABARD is active in developing and implementing financial inclusion.

• NABARD operates at 32 Regional Offices in the country.

• Headquarters of NABARD is located in Mumbai.

Additional InformationSEBI-

• SEBI stands for Securities and Exchange Board of India.

• The SEBI is the regulator of the securities and commodity market in the country owned by the Indian Government.

• SEBI was established on 12 April 1988 and its headquarters are located in Mumbai.

• On 30 January 1992, Statutory powers given were to it through the SEBI Act, 1992.

• The regional offices of SEBI are located in Ahmadabad, Kolkata, Chennai, and Delhi.

SIDBI-

• Small Industries Development Bank of India (SIDBI) is a development financial institution in India.

• It was established on April 2, 1990.

• It is headquartered in Lucknow.

• Its purpose is to provide refinance facilities and short-term lending to industries and serves as the principal financial institution in the Micro, Small, and Medium Enterprises (MSME) sector.

RBI-

• Reserve of India (RBI) was established in India on 1st April, in Kolkata in 1935 under the Reserve Bank Of India Act, 1934.

• It was set up on the recommendation of the Hilton Young Commission.

• RBI is the central bank of India and is responsible for the issue and supply of Indian currency,

• RBI is the regulatory body of the Indian Banking system and it is also managing a country's Payment system.

YourMockTest.com — Free Study Material

Q30. Answer: (b) Mumbai City FC

The correct answer is Mumbai City FC.

Key Points

• The Durand Cup is one of the oldest football tournaments in the world and the oldest in India.

• It's named after its founder, Sir Mortimer Durand, who started the tournament in 1888.

• In the 2022 Durand Cup, Bengaluru FC emerged as the winner and the runners-up is Mumbai City FC.

Important PointsDurand Cup -

• Founded- 1888

• Number of teams: 20

• Organizing body: Durand Football Tournament Society, and AIFF

Additional InformationOther tournaments related to Football are:-

• Senior NFC (Santosh Trophy)

• B.C. Roy Trophy

• Senior Women's National Football Championship

• Junior Girl's National Football Championship

• Sub–Junior Girl's National Football Championship

Q31. Answer: (b) Maharashtra

The correct answer is Maharashtra.

Key Points

• Kalsubai Peak, the highest point of the Sahyadri Mountains, is situated in the Ahmednagar district of Maharashtra, India.

• Standing at an impressive height of 5,400 feet (1,646 meters), it is often referred to as the 'Everest of Maharashtra'.

• The mountain range is part of the Western Ghats, a UNESCO World Heritage site renowned for its biodiversity.

Additional InformationOther state's highest peak-

State	Highest Peak	Height
Madhya Pradesh	Dhupgarh	1,350 m
Andhra Pradesh	Arma Konda	1,680 m
Himachal Pradesh	Reo Purgyil	6,816 m
Maharashtra	Kalsubai Shikhar	1,646 m

Q32. Answer: (b) 28

The correct answer is 28.

Key Points

• Currently India has a total of 28 states and 8 Union Territories.

• With effect from October 31st, 2019 the state of Jammu and Kashmir has been officially bifurcated into the Union Territories of Jammu & Kashmir and Ladakh.

• Currently 8 Union Territories are

1. Andaman and Nicobar Islands
2. Chandigarh
3. Dadra Nagar Haveli & Daman and Diu
4. Delhi
5. Jammu & Kashmir
6. Ladakh
7. Puducherry
8. Lakshadweep

Important Points

• With the States Reorganisation Act, of 1956 and, the 7th Constitutional Amendment Act 1956, the distinction between Part A, and Part B states was done away with, and Part C states were abolished.

• On 1 November 1956, 14 states and 6 union territories were created.

• Andhra Pradesh was the first state of independent India formed on a linguistic basis it was formed on October 1, 1953.

YourMockTest.com — Free Study Material

Q33. Answer: (b) Sardar Udham

The correct answer is Sardar Udham.

Key Points

• The 67th Filmfare Awards were given out on 30 August 2022 at Jio World Centre, Mumbai.

• The 67th edition of the awards honored the films released in 2021.

• Sardar Udham won the best film (critics) award at the 67th Filmfare Awards.

• Director of Sardar Udham Singh's movie is Shoojit Sircar.

Important Points68th Filmfare Awards-

• Best Film- Gangubai Kathiawadi

• Best Film (Critics') - Badhaai Do

• Best Actor (Male) - Rajkummar Rao for Badhaai Do

• Best Actor (Female) - Alia Bhatt for Gangubai Kathiawadi

Q34. Answer: (c) COVAXIN

The correct answer is COVAXIN.

Key Points

• COVAXIN India's first indigenous vaccine against COVID-19.

• Hyderabad-based Bharat Biotech has developed Covaxin.

• It is done in collaboration with the Indian Council of Medical Research (ICMR) and the National Institute of Virology (NIV).

Important PointsCOVID-19

• COVID-19 stands for Corona Virus disease of 2019.

• Coronavirus disease (COVID-19) is an infectious disease caused by the SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) virus.

Additional InformationOther vaccines of COVID-19-

Vaccine	Sputnik V	Covishield	Covaxin
Developed by	RDIF	AstraZeneca	Bharat Biotech
Indian Manufacturer	DRL, Mankind, Hetero	Serum Institute of India	Bharat Biotech
Technology	Used two modified human adenovirus	Use Chimpanzee adenovirus vector	Inactivated vaccine using virus strain

Q35. Answer: (b) Web Browser

The correct answer is Web Browser.

Key Points

• Web Browser is a software application used to access information on the WWW (World Wide Web).

• When a user requests some information, the web browser fetches the data from a web server and then displays the webpage on the user’s screen.

• Visiting any website can be done using a web browser. When a URL (Uniform Resource Locator) is entered in a browser, the web server takes us to that website.

• Example of Web Browser- Google Chrome, Firefox, Safari, Opera Mini, Microsoft edge, etc.

Additional InformationHyperlink-

• A hyperlink is a text or an icon that you can click on to get to another website.

• Hyperlinks are found on virtually every webpage to help navigate readers to other pages and websites.

• The default formatting for a hyperlink on a webpage or in a document is blue, underlined text.

World Wide Web-

• The World Wide Web (WWW) is a network of online content that is formatted in HTML (Hypertext Markup Language) and accessed via HTTP (Hypertext Transfer Protocol).

• Tim Berners Lee invented the World Wide Web in 1989.

Joystick-

• A joystick is an input device that can be used for controlling the movement of the cursor or a pointer in a computer device.

• A joystick is also known as the control column.

• The joystick is used for gaming purposes.

YourMockTest.com – Free Study Material

Q36. Answer: (d) Golconda Fort

The correct answer is Golconda Fort.

Key Points

• Golconda Fort:-

• The Golconda Fort was built by the Qutubshahi of the Qutub Shahi Dynasty.

• Golconda Fort is a fortified citadel.

• It was the capital city of the Qutb Shahi dynasty.

• It is located in Hyderabad, Telangana.

• It was originally known as Mankal and built on a hilltop in 1143.

• It has thick walls and tall heavy gates with sharp iron spokes.

• In some places, a part of the wall comes out in a round shape.

• These are called bastions (Burj).

• These bastions have small holes in them to attack enemies while being hidden.

• These are even higher than the wall.

• The outer wall of this fort has 87 bastions.

• The Golconda Fort was made strong and big to protect it from any outside enemy attack.

• In 1200, this fort was made of mud and different rulers lived here.

Additional Information

• Red Fort (Lal Qila):-

• It is a monument built in 1638 that rises 33 meters (108 ft) above Old Delhi.

• It was built by the Mughal Emperor Shah Jahan in the mid-17th century. The fort is located in what is now the center of Delhi, India.

• Red Fort massive, 2.5-km-long enclosing walls are made of red sandstone and that's where the monument got its name from.

• A few parts of the fort are also made of red stone while the remaining structure is built using marble.

• Rajgad Fort:-

• It is a fort situated in the Pune district of Maharastra.

• It was also known as Murumdev.

• It served as the capital of the Maratha Empire under the rule of Chatrapati Shivaji Maharaj.

• Chiktan Fort:-

• Chiktan Fort is located in Chiktan village of Kargil district by the river Indus.

• The fort was built in the 16th century and had nine stories.

• Balti craftsmen constructed the castle in the 16th century which served as a royal residence for centuries.

Q37. Answer: (c) Offences for armed assembly

The correct answer is offences for armed assembly.

Key Points

• Right to Freedom

• The objective of the Indian Constitution is to ensure freedom of thought, expression, belief, religion, and worship. Therefore, the Right to Freedom has been mentioned in the Indian Constitution from Articles 19 to 22.

• In these, provisions have been given keeping in mind all the sections of the people of the country, so that any person can do any work of his mind, but that work should not be illegal and unconstitutional, nor should that work be done by any other person such that the fundamental rights should be violated.

• Article 19 of the Indian Constitution is most important in this regard. Article 19 of the Indian Constitution at present describes only 6 freedoms for the citizens of the country, which are as follows

• Freedom of thought and expression

• Freedom of arms and peaceful assembly.

• Community and freedom of association

• Freedom of travel

• Freedom of residence

• Freedom of trade (Hence option 1 is correct)

• Article 20 offers protection in respect of conviction for offences. (Hence option 4 is correct)

• Article 21 offers protection of life and personal liberty. (Hence option 2 is correct)

• Article 22 offers protection against arrest and detention in certain cases.

Q38. Answer: (c) September 16

The correct answer is September 16.

Key Points

• Ozone Layer:-

• International Day for the Preservation of the Ozone Layer or World Ozone Day is observed on September 16, every year.

• It is celebrated to spread awareness among people about the depletion of the Ozone Layer and search for possible solutions to preserve it.

• On December 19, 1994, the United Nations General Assembly proclaimed September 16 the International Day for the Preservation of the Ozone Layer.

• On September 16, 1987, the United Nations and 45 other countries signed the Montreal Protocol, on substances that deplete the Ozone layer.

• The purpose of the Montreal Protocol is to protect the Ozone layer by reducing the production of substances that are supposed to be responsible for Ozone layer depletion.

• In 1985, the world's governments adopted the Vienna Convention for the Protection of the Ozone Layer.

Additional Information

• Other Important Days of September:-

Date	Famous For
September 8	International Literacy Day
September 10	World Suicide Prevention Day (WSPD)
September 15	International Day of Democracy
September 18	World Bamboo Day
September 21	International Day of Peace (UN)

Q39. Answer: (a) Kashi

The correct answer is Kashi.

Key Points

• Saint Kabir Das:-

• Kabir believed in a formless Supreme God and preached that the only path to salvation was through bhakti or devotion.

• The language of his poetry was a form of spoken Hindi widely understood by ordinary people.

• His great writing, Bijak, has a huge collection of poems.

• Some of these were later collected and preserved in the Guru Granth Sahib, Panch Vani and Bijak.

• We get to know of his ideas from a vast collection of verses called sakhis and pads said to have been composed by him and sung by wandering Bhajan singers.

• He was brought up in a family of Muslim julahas or weavers settled in or near the city of Benares (Varanasi).

• He was an Indian mystic poet, whose writings influenced the Bhakti movement.

• He lived in the fifteenth-sixteenth centuries and was one of the most influential saints.

• Kashi:-

• It is one of the oldest cities in the world.

• It is located on the left bank of the Ganges (Ganga) River and is one of the seven sacred cities of Hinduism

Additional Information

• Amritsar:-

• The famous Golden Temple is situated the Amritsar city of Punjab state of India.

• Somanth:-

• It is famous for the Somanth Temple of Gujrat.

• Agra:-

• The city of Agra is famous for various World Heritage Sites including Taj Mahal, Agra Fort.

Q40. Answer: (c) Venus

The correct answer is Venus.

Key Points

• Venus:-

• Venus is sometimes called Earth's twin because Venus and Earth are almost the same size, have about the same mass (they weigh about the same), and have a very similar composition (are made of the same material).

• They are also neighboring planets.

• However, Venus and Earth are also very different.

• Venus has an atmosphere that is about 100 times thicker than Earth's and has surface temperatures that are extremely hot.

• Venus does not have life or water oceans like Earth does.

• Venus also rotates backward compared to Earth and the other planets.

Additional Information

• Neptune:-

• It was discovered on the basis of the law of gravitation.

• It is the farthest known planet from the Sun in the Solar System.

• Its revolution period is 164 years and the rotation period is 16 hours and 7 minutes.

• Neptune and Uranus are the only two planets discovered with the help of a telescope.

• Uranus:-

• It is the seventh planet from the Sun and has the third-largest diameter in our solar system.

• It was the first planet found with the aid of a telescope, Uranus was discovered in 1781 by astronomer William Herschel, although he originally thought it was either a comet or a star.

• Mars:-

• Mars is called Red Planet.

• It has two satellites - Phobos and Deimos.

• Mars is the fourth planet in the solar system.

• It is the second smallest planet in the solar system.

• In English Mars carries the name of the Roman God of War.

Q41. Answer: (a) 1765

The correct answer is 1765.

Key Points

• East India Company:-

• It was a privately owned company that was established to create profitable trade with countries in the region of Asia called the "East Indies".

• It was granted a Royal Charter by Queen Elizabeth in 1600.

• The company was formed to own a stake in the East Indian spice business.

• That trade was a monopoly of Spain and Portugal until the defeat of the Spanish Armada (1588) by England gave the British a chance to break the monopoly.

• By 1612 the company made separate trips, subscribing separately.

• There were temporary joint stocks until 1657 when a permanent joint stock was raised.

• On 12 August 1765 the Mughal emperor appointed the East India Company as the Diwan of Bengal.

Q42. Answer: (b) Lawn Bowls

The correct answer is Lawn Bowls.

Key Points

• Lawn Bowls:-

• In this game, a ball (known as a bowl) is rolled toward a smaller stationary ball, called a jack.

• Bowls is generally played on a flat lawn, about 40–42 yards (37–38 meters) square, and surrounded by a shallow ditch and grass banks beyond.

• Lovely Choubey:-

• She is a female international lawn bowler

• She won a silver medal in the singles as well as the pairs events at the 2014 Asian Lawn Bowls Championship.

• In 2023, she won the fours gold medal at the 14th Asian Lawn Bowls Championship in Kuala Lumpur.

Q43. Answer: (b) 31

The correct answer is 31.

Key Points

• Article 31:-

• Article 31 which contained the right to property was abolished.
• It is still a constitutional right but not a Fundamental Right.
• Constitution of India:-
• It took 2 years, 11months, 18 days to be written.
It is the lengthtiest written constitution in the world.
• Dr. B. R. Ambedkar is known as the Father of the Indian Constitution.
Additional Information
• Article 31 A of the Constitution of India, speaks about the acquisition of estates.
• Article 31B states that the acts which are present in the ninth schedule and are inconsistent with the provisions laid down by the constitution or resist any decree or order will be left on the competent legislature to amend, revoke, or to let it be in force.
• Article 31 D mentioned about Saving of laws in respect of anti-national activities.

Q44. Answer: (a) Rhinoceros

The correct answer is Rhinoceros
Key Points
• Rhinoceros:-
• They are found in the Indian subcontinent.
• It is listed as Vulnerable on the IUCN Red List.
• 90% are found in Kaziranga National Park.
• There are 2,640 rhinoceros in four protected areas in Assam.
• They are mainly found in Assam, West Bengal, and Uttar Pradesh.
• The one-horned rhinoceros (Indian rhinoceros) are the largest of the rhino species.
• The National Rhino Conservation Strategy was launched in the year 2019 for the conservation of big-horned rhinos.
• Indian Rhino Vision 2020 was launched in 2005, it is an ambitious effort to attain a wild population of at least 3,000 greater one-horned rhinos spread over seven protected areas in the Indian state of Assam by the year 2020.
• Kaziranga National Park:-
• Kaziranga National Park's 430 sq. km. area sprinkled with dense forests
• This is home to more than 2200 Indian one-horned rhinoceros, approximately 2/3rd of their total world population.
• It was formed in 1908 on the recommendation of Mary Curzon, the park is located on the edge of the Eastern Himalayan biodiversity hotspots – Golaghat and Nagaon districts.
• Kaziranga national park present in Assam is famous for conserving Rhinoceros (Rhinoceros unicorns).
• It is basically a reserve of natural, semi-natural, or developed land that a sovereign state declares or owns.
• Kaziranga National Park is a national park in the Golaghat and Nagaon districts of the state of Assam, India.
• Kaziranga National Park also shelters about 15 species of India's threatened mammals.
Additional Information
• Hippopotamus:-
• Hippopotamuses are large, semiaquatic mammals native to sub-Saharan Africa.
• Although their name comes from the Greek for "river horse"—because of the time they spend in the water—their closest living relatives are whales, dolphins, and pigs.
• They can't swim, breathe underwater, or even float—but they have developed a tactic that lets them nap underwater.
• Langur:-
• The general name given to numerous species of Asian monkeys belonging to the subfamily Colobinae.
• The head and body are about 40 to 80 cm (16 to 31 inches) long and the tail about 50 to 110 cm;
• weight varies from 5.5 kg to 19 kg.
• Gibbon:-
• A species of small apes found in the tropical forests of Southeast Asia.

Q45. Answer: (a) Calcium hydroxide

The correct answer is Calcium hydroxide
Key Points
• Calcium hydroxide:-
• It is used to neutralize excess acidity.
• For example, lakes and soils are affected by acid rain.

• Calcium hydroxide dissolves in water to produce limewater, which is used to test carbon dioxide.

• The pH value of Calcium hydroxide is ranging from 9 to 11.5.

Additional Information

• Potassium hydroxide:-

• Potassium hydroxide is an inorganic compound with the components KOH and is generally referred to as caustic potash.

• KOH is noteworthy as the precursor to maximum smooth and liquid soaps, as well as numerous potassium-containing chemicals.

• Even at high temperatures, solid KOH does not dehydrate without difficulty.

• Magnesium hydroxide:-

• It is a white-colored substance, slightly soluble in water.

• A suspension of Mg(OH)2 in water is called Milk of magnesia.

• It is used as an antacid, as a laxative, and for neutralizing acid wastewater.

• It is also used in the treatment of scalp dandruff.

• Ammonium hydroxide:-

• The chemical formula for ammonium hydroxide is NH4OH.

• Ammonium hydroxide is a colorless liquid with a strong, pungent odor.

• It is made by dissolving ammonia gas in water, and the resulting solution contains around 30-35% ammonia by weight.

Q46. Answer: (b) Bal Gangadhar Tilak

The correct answer is Bal Gangadhar Tilak.

Key Points

• The slogan "Swaraj is my birthright and I shall have it" was famously spoken by Bal Gangadhar Tilak.

• He was one of the prominent leaders of the Indian independence movement.

• Tilak was an influential figure in the late 19th and early 20th centuries and played a crucial role in mobilizing people against British colonial rule in India.

• His slogan became a rallying cry for India's struggle for self-rule and was widely embraced by freedom fighters and nationalists during that era.

Additional Information

• Bhagat Singh

• Bhagat Singh was a revolutionary and freedom fighter who played a significant role in India's struggle for independence from British rule.

• He was born on September 28, 1907, in Punjab, India, and became a prominent member of the Hindustan Socialist Republican Association (HSRA).

• He is remembered for his acts of resistance against British rule, including his involvement in the Lahore Conspiracy Case and the assembly bomb incident.

• Bhagat Singh was an advocate of socialist ideals and believed in the power of armed struggle to achieve freedom and justice for the Indian masses.

• Mahatma Gandhi

• Mahatma Gandhi, also known as the Father of the Nation, was a prominent leader and the guiding force behind India's nonviolent struggle for independence.

• He was born on October 2, 1869, in Gujarat, India, and led various movements such as the Non-Cooperation Movement and the Salt March.

• One of his famous quotes is "Be the change that you wish to see in the world."

• He promoted nonviolent civil disobedience as a means to achieve political and social change, emphasizing the principles of truth (Satya) and nonviolence (Ahimsa).

• Ambika Charan Majumdar

• Ambika Charan Majumdar was also an Indian revolutionary who actively participated in the freedom struggle against British colonial rule.

• He was born on November 13, 1888, in Bengal, India, and was associated with organizations like Anushilan Samiti and Jugantar.

• Majumdar's quote "I am prepared to make the supreme sacrifice, but I will not beg for mercy." also sparked the struggle for freedom among the revolutionaries.

• He assassinated a British district judge, Kingsford, in retaliation for his brutal suppression of freedom fighters.

• His dedication and fearlessness in the face of adversity made him an iconic figure in India's revolutionary movement during the

YourMockTest.com — Free Study Material

early 20th century.

Q47. Answer: (a) F7

The correct answer is F7.

Key Points

• In MS-Word 365, the shortcut key to display the Editor task pane and check spelling and grammar in the document or selected text is F7.

• It provides a fast way to open the Editor task pane for spell and grammar checking in MS-Word 365.

• The Editor task pane examines spelling, grammar, style, and more, offering suggestions for improvements.

• We can also customize settings in the Editor task pane to ignore specific errors or modify language preferences.

Additional Information

• F10

• Pressing F10 activates the "KeyTips" feature.

• KeyTips are keyboard shortcuts that allow you to navigate and access various commands and options in the Ribbon interface.

• Pressing F10 displays KeyTips on the Ribbon, enabling you to use the keyboard to access different tabs, commands, and options.

• F1

• Pressing F1 in Microsoft Word opens the Help pane.

• It provides access to the Word Help feature, where you can find assistance, tutorials, and information on using different features and functions within the application.

• We can search for specific topics or browse through the available help resources.

• F2

• Pressing F2 allows you to edit the selected text directly.

• It activates the editing mode and places the cursor at the location of the selected text, enabling you to make changes or modifications easily.

• This can be helpful for quickly editing or updating content within your document.

Q48. Answer: (c) Novak Djokovic

The correct answer is Novak Djokovic.

Key Points

• Novak Djokovic won the Men’s Single title at Wimbledon 2022.

• He defeated Nick Kyrgios and earned his seventh Wimbledon title.

• He has won a total of 93 singles titles in total till date.

• He is a Serbian professional tennis player and one of the most successful athletes in the sport.

Additional Information

• Nick Kyrgios

• He is a professional tennis player from Australia.

• He has won seven ATP (Association of Tennis Professionals) singles titles, including the 2019 and 2022 Washington Open.

• In doubles, he has won four titles, including a major doubles title at the Australian Open in 2022.

• Rafael Nadal

• He is a professional tennis player from Spain.

• He has won a joint-record 22 Grand Slam men’s singles titles, including a record 14 French Open titles.

• He has also won 92 ATP singles titles.

• Rafael Nadal is one of only two men to complete the Career Golden Slam in singles.

• Daniil Medvedev

• He is a professional tennis player from Russia.

• He has won 20 ATP Tour singles titles, including the 2021 US Open and 2020 ATP Finals.

• He has also won six Masters titles, and contested four major finals and nine Masters finals in all.

Important Points

• Women’s Single Title at Wimbledon 2022

• Elena Rybakina won the Women’s Single title at Wimbledon 2022.

• She defeated Ons Jabeur in the final to win the Women’s’ singles tennis title at the 2022 Wimbledon Championships.

• This was her first Grand Slam title and the first for Kazakhstan.

YourMockTest.com — Free Study Material

• Rybakina was born in Russia but switched nationalities in 2018.

Q49. Answer: (b) 1936

The correct answer is 1936.

Key Points

• Godaan is a Hindi novel written by Munshi Premchand, published in the year 1936.

• It was first published in 1936 and is considered one of Premchand's most renowned works.

• Munshi Premchand, whose real name was Dhanpat Rai Srivastava, was born on July 31, 1880, in Lamhi, near Varanasi.

• His literary contributions earned him the title of "Upanyas Samrat" (Emperor of Novels).

• Some of his famous novels are Nirmala, Rangbhoomi, Gaban, Kafan etc.

Additional Information

• Rangbhoomi

• It was published in 1924 and is considered one of Munshi Premchand's significant works.

• This novel explores various social issues prevalent in Indian society during the colonial era, such as corruption, exploitation, and the struggle for justice.

• It revolves around the world of theatre, highlighting the challenges and complexities faced by artists, their conflicts, and their efforts to bring about social change through their art.

• Gaban

• It was published in 1931 and is considered one of Munshi Premchand's notable works.

• The novel delves into themes of greed, social hypocrisy, and the consequences of materialism in Indian society.

• The story revolves around Ramanath, the main character, who succumbs to his desires for wealth and social status. The novel follows his journey as he becomes entangled in a web of deceit and faces the consequences of his actions.

• Kafan

• It depicts the bleak and tragic life of a poor peasant named Gheesu and his son Madhav, who struggle with extreme poverty and societal indifference.

• The story explores themes of poverty, social inequality, and the dehumanizing effects of a rigid caste system prevalent in rural Indian society.

• "Kafan" serves as a sharp critique of the oppressive social conditions and the apathy of the privileged classes towards the suffering of the poor.

Q50. Answer: (c) AVGAS 100 LL

The correct answer is AVGAS 100 LL.

Key Points

• AVGAS 100 LL is the f indigenously developed special aviation fuel by the Indian Oil Corporation in 2022.

• AVGAS 100 LL stands for Aviation Gasoline 100 Low Lead.

• It is a special aviation fuel meant for piston-engine aircraft and unmanned aerial vehicles.

• It was produced at IOCL's Gujarat refinery.

Additional Information

• Indian Oil Corporation Limited (IOCL)

• It is an Indian central public sector undertaking under the ownership of the Ministry of Petroleum and Natural Gas, Government of India.

• It is headquartered in New Delhi, India.

• Indian Oil is ranked 142nd on the Fortune Global 500 list of the world’s biggest corporations as of 2022.

• It is the largest government-owned oil producer in the country, with a net profit of $6.1 billion for the financial year 2020-21.

Q51. Answer: (a) 44 cm

Shortcut Trick

By the property of circles, a chord subtends a 90° angle at the circumference if and only if it is the diameter of the circle.

Given diameter = 44 cm.

Therefore The length of chord MN = 44 cm.

Therefore The correct answer is 44 cm.

Alternate Method

Given:

Diameter of the circle = 44 cm

Angle subtended by chord MN at the circumference = 90°

Formula Used:

Angle in a semi-circle: The angle subtended by the diameter of a circle at any point on its circumference is always 90°.

Calculations:

=> Let P be any point on the circumference of the circle.

=> Given that angle MPN = 90°.

=> According to Thales' Theorem, if an angle subtended by a chord at the circumference is a right angle, then that chord must be the diameter of the circle.

=> Chord MN = Diameter of the circle

=> MN = 44 cm

Therefore The correct answer is 44 cm.

Additional Information

Thales' Theorem

It states that if M, N, and P are points on a circle where the line MN is a diameter, then the angle angle MPN is a right angle (90°).

Chord and Central Angle

The central angle subtended by the diameter is 180°. Since the angle at the circumference is half the angle at the center, 180° ÷ 2 = 90°.

Longest Chord

The diameter is the longest possible chord in any circle and its length is twice the radius (D = 2 × r).

Q52. Answer: (c) 2

Given:

$\cos \Theta + \sin \Theta = \sqrt{2}$

Formula:

$\sec \Theta = 1/\cos \Theta$

$\operatorname{cosec} \Theta = 1/\sin \Theta$

Solution:

$((\cos \Theta + \sin \Theta)^2 = (\sqrt{2})^2$

$\cos^2 \Theta + 2\cos \Theta \sin \Theta + \sin^2 \Theta = 2$

$(\cos^2 \Theta + \sin^2 \Theta) + 2\cos \Theta \sin \Theta = 2$

$1 + 2\cos \Theta \sin \Theta = 2$

$2\cos \Theta \sin \Theta = 1$

$2 = 1/\cos \Theta \sin \Theta$

$\sec \Theta \operatorname{cosec} \Theta = 2$

Therefore, the value of $\sec \Theta \operatorname{cosec} \Theta$ is 2.

Q53. Answer: (c) 33.33 percent

Given:

Ratio of the marked price(MP) of a trouser and a jacket = 1 : 3

Discount on trouser = 20%

Total discount on both of them = 30%

Formula used:

Discount% = (Discount/MP) × 100

Calculation:

Let the MP of trouser and jacket be x and 3x

Discount on trouser = 0.2 × x = 0.2x

Total discount on both = 0.3 × (x + 3x) = 1.2x

=> Discount on jacket = 1.2x - 0.2x = x

Discount% on jacket = (x/3x) × 100 = 33.33

Shortcut TrickLet the discount on the jacket is x.

3x - 90 = 10

3x = 100

x = 33.33%

Therefore Discount on jacket = 33.33%

Q54. Answer: (b) 2.36

Calculation:

J1 = The value of average GDP of countries L and M in year Y1 = (205 + 315)/2 = 520/2 = 260

J2 =The value of average GDP of countries L and M in year Y4 = (105 + 115)/2 = 220/2 = 110

The value of (J1/J2) = 260/110 = 2.36

Therefore Option 2 is the correct answer.

Q55. Answer: (b) 80 cm

Given:

The radii of two concentric circles are 34 cm and 50 cm.

ABCD is a straight line and BC = 32 cm.

A and D are the points on larger circle and B and C are points on smaller circle.

Concept Used:

Pythagoras theorem

Hypotenuse^2 = Perpendicular^2 + Base^2

Perpendicular drawn from the centre to the chord divide the chord into two equal parts.

Calculation:

BC = 32 cm

BP = 32/2 = 16 cm

In triangle OBP

Apply Pythagoras Theorem

$OB^2 = BP^2 + OP^2$

$34^2 = OP^2 + 16^2$

$OP^2 = 1156 - 256$

$OP^2 = 900$

OP = 30 cm

In triangle OPD

$OD^2 = OP^2 + PD^2$

$50^2 = 30^2 + PD^2$

$PD^2 = 2500 - 900$

$PD^2 = 1600$

PD = 40 cm

AD = 2 × PD = 2 × 40 = 80 cm

The length of AD is 80 cm.

Therefore Option 2 is the correct answer.

Q56. Answer: (b) 18 : 40 : 27

Given:

P : Q = 3 : 5 and P : R = 2 : 3

Calculation:

P : Q = 3 : 5

P : R = 2 : 3

Make P equal

P : Q = 6 : 10

P : R = 6 : 9

So, P : Q : R = 6 : 10 : 9

Hence, P = 6k, Q = 10k and R = 9k (k = constant)

Now, 3P : 4Q : 3R

=> 3 × 6k : 4 × 10k : 3 × 9k

=> 18 : 40 : 27

Therefore 3P : 4Q : 3R equals 18 : 40 : 27.

Therefore Option 2 is the correct answer.

Q57. Answer: (b) 8

Given:

x + y = 12

y + z = 17

z + x = 19

Calculation:

Add all the given equation,

2(x + y + z) = 12 + 17 + 19

x + y + z = 48/2 = 24

Average of x, y and z = 24/3 = 8

Therefore Option 2 is the correct answer.

Q58. Answer: (b) Rs. 8,550

Given:

Principal = Rs. 7500

Rate = 7%

Time = 2 years

Concept Used:

Simple Interest = PRT/100

Amount = Principal + Simple Interest

Calculation:

Simple Interest = PRT/100

Simple Interest = (7500 × 7 × 2)/100

Simple Interest = Rs. 1050

Amount = Principal + Simple Interest

Amount = 7500 + 1050

Amount = Rs. 8550

Therefore Option 2 is the correct answer.

Q59. Answer: (a) 80 degree

Given:

angle YXZ = 50 degree

XR = PR, ZR = QR

angle RQZ = 80 degree

Concept Used:

If two sides of the triangle are equal then the triangle is isosceles triangle. The two angles opposite to the equal sides are congruent to each other.

Calculation:

In Δ XPR,

angle PXR = 50°

PR = XR

Therefore Triangle is isosceles

angle XPR = angle PXR = 50°

angle XRP = 180° - 50° - 50°

angle XRP = 80°

Similarly,

angle RQZ = angle RZQ = 80°

angle QRZ = 180° - 80° - 80°

angle QRZ = 20°

Now,

angle PRQ = 180° - 20° - 80° = 80°

YourMockTest.com — Free Study Material

Therefore Option 1 is the correct answer.

Q60. Answer: (c) 48 cm

Shortcut Trick

In a circle, the radius, distance from center, and half-chord length form a right-angled triangle.

Radius (r) = 50 ÷ 2 = 25 cm. Distance (d) = 7 cm.

Using the Pythagorean triplet (7, 24, 25):

Half-chord length = 24 cm.

Length of chord JK = 2 × 24 = 48 cm.

Therefore The correct answer is 48 cm.

Alternate Method

Given:

Diameter of the circle = 50 cm

Distance of chord JK from centre (O) = 7 cm

Formula Used:

Radius (r) = Diameter ÷ 2

In triangle OMJ (Right-angled), $OJ^2 = OM^2 + MJ^2$ (Pythagoras Theorem)

Chord length JK = 2 × MJ (Perpendicular from center bisects the chord)

Calculations:

=> Radius (r) = 50 ÷ 2 = 25 cm

=> In right triangle OMJ, OJ = 25 cm and OM = 7 cm

=> $MJ^2 = OJ^2 - OM^2$

=> $MJ^2 = 25^2 - 7^2$

=> $MJ^2 = 625 - 49 = 576$

=> MJ = √576 = 24 cm

=> Total length of chord JK = 2 × MJ

=> JK = 2 × 24 = 48 cm

Therefore The correct answer is 48 cm.

Additional Information

Perpendicular Bisector Property

A perpendicular drawn from the center of a circle to a chord always bisects the chord into two equal segments.

Pythagorean Triplets

Sets of three integers that satisfy $a^2 + b^2 = c^2$, such as (3, 4, 5), (5, 12, 13), (7, 24, 25), and (8, 15, 17), are extremely useful for quick circle calculations.

Chord Distance Relation

Chords that are equidistant from the center of a circle are equal in length, and longer chords are closer to the center.

Q61. Answer: (a) 362/245

Given:

8×5÷25/(7÷14× 2)-(14÷7-5)/(7÷14-25)

(8×1/5)/(1/2× 2)-(2-5)/(1/2-25)

8/5-(-3)/(-49/2)

8/5-6/49

(392 - 30)/245

362/245

Therefore Option 1 is the correct answer.

Q62. Answer: (d) 13

Given:

The range of numbers is between 501 and 701.

We are looking for numbers divisible by 10 but not divisible by 3.

Formula:

A number is divisible by 10 if its last digit is 0.

A number is divisible by 3 if the sum of its digits is divisible by 3.

Solution:

The smallest number greater than 501 and divisible by 10 is 510

The largest number smaller than 701 and divisible by 10 is 700.

(700 - 510)/10 + 1 = 190/10 + 1 = 19 + 1 = 20

So, there are 20 numbers between 501 and 701 inclusive that are divisible by 10.

Next, we need to subtract those that are also divisible by 3.

A number is divisible by 30 if it is divisible by both 3 and 10, so we need to find numbers divisible by 30 between 501 and 701.

The smallest number greater than 501 and divisible by 30 is 510.

The largest number smaller than 701 and divisible by 30 is 690.

To find the count of such numbers, we calculate:

(690 - 510)/30 + 1 = 180/30 + 1 = 6 + 1 = 7

We subtract these 7 from the 20 we found earlier:

20 - 7 = 13

Therefore, there are 13 numbers between 501 and 701 which are divisible by 10 but are not divisible by 3.

Q63. Answer: (c) 7 : 4

Given:

Teaching	**8 hours**
Reading	6 hours
Sleeping	7 hours
Playing	1 hours
Other activities	2 hours

Solution:

Sum of time invested in 'teaching and reading' = 8 hours + 6 hours = 14 hours

Sum of time invested in 'sleep and play' = 7 hours + 1 hour = 8 hours

Ratio = 14 hours : 8 hours

Ratio = 7 : 4

Therefore, the ratio between the sum of time invested in 'teaching and reading' and 'sleep and play' is 7 : 4.

Q64. Answer: (b) E > B > C > D > A

Calculation:

Income of company A = 300 + 100 = 400

Income of company B = 800 + 400 = 1200

Income of company C = 600 + 300 = 900

Income of company D = 300 + 200 = 500

Income of company E = 1000 + 400 = 1400

Sequence is correct about the income of company A, B, C, D and E is E > B > C > D > A.

Therefore Option 2 is the correct answer.

Q65. Answer: (d) 52 cm

Shortcut Trick

The side of a rhombus is the hypotenuse of a right triangle formed by half of its diagonals.

Side = $\sqrt{((d1 \div 2)^2 + (d2 \div 2)^2)}$

=> Side = $\sqrt{(12^2 + 5^2)} = \sqrt{(144 + 25)} = \sqrt{169} = 13$ cm

Perimeter = 4 × Side = 4 × 13 = 52 cm

Therefore The correct answer is 52 cm.

Alternate Method

Given:

Length of first diagonal (AC) = 24 cm

Length of second diagonal (BD) = 10 cm

Formula Used:

The diagonals of a rhombus bisect each other at right angles (90°).

By Pythagoras theorem: Hypotenuse² = Perpendicular² + Base²

Perimeter of a rhombus = 4 × side

Calculations:

=> Half of diagonal AC (OA) = 24 ÷ 2 = 12 cm

=> Half of diagonal BD (OB) = 10 ÷ 2 = 5 cm

=> In right-angled ΔAOB, the intersection at center O forms a 90° angle.

=> Applying Pythagoras theorem in ΔAOB:

=> $AB^2 = OA^2 + OB^2$

=> $a^2 = 12^2 + 5^2$

=> $a^2 = 144 + 25$

=> $a^2 = 169$

=> $a = \sqrt{169} = 13$ cm

=> The perimeter of the rhombus = 4 × a

=> Perimeter = 4 × 13 = 52 cm

Therefore The correct answer is 52 cm.

Additional Information

Direct Formula for Perimeter

The perimeter of a rhombus can be calculated directly from its diagonals using the formula: $P = 2 \times \sqrt{(d1^2 + d2^2)}$.

Area of Rhombus

The area of a rhombus is half the product of the lengths of its diagonals: Area = (1/2) × d1 × d2.

Properties of Rhombus

All four sides of a rhombus are equal in length, and opposite sides are parallel. Its diagonals bisect interior angles and are perpendicular bisectors of each other.

Q66. Answer: (b) Rs. 1,320

Given:

Manoj bought two TVs for Rs. 2,280.

One TV was sold at a loss of 20% and the other at a profit of 10%.

Calculation:

CP1 = Cost price of the first TV (the one sold at a loss).

CP2 = Cost price of the second TV (the one sold at a profit).

We know from the given conditions that:

CP1 + CP2 = Rs. 2,280 (since Manoj bought two TVs for this amount).

Each TV was sold for the same price, which means:

The price at which the first TV was sold (with a loss of 20%) equals the price at which the second TV was sold (with a profit of 10%).

So, CP1 - 20% of CP1 = CP2 + 10% of CP2.

Simplifying that, we get 0.8 × CP1 = 1.1 × CP2.

0.8 × CP1 = 1.1 × (2,280 - CP1)

Solving this gives:

0.8 × CP1 = 2,508 - 1.1 × CP1

1.9 × CP1 = 2,508

CP1 = Rs. 1,320

So, the cost price of the TV which was sold at a loss is Rs. 1,320.

Alternate Method 1st article at loss = 20% = 1/5

2nd article at profit = 10% = 1/10

	CP	SP
1st	5	4
2nd	10	11

But both articles sold at the same SP.

	CP	SP
1st	5 × 11= 55	4 × 11= 44
2nd	10 × 4 = 40	11 × 4 = 44
Total	95	88

Now, 95 unit = 2280 (Manoj bought two TVs for this amount)

=> 55 unit = 2280/95 × 55 = Rs. 1320

Therefore The cost price of the TV which was sold at a loss is Rs. 1,320.

Q67. Answer: (a) 164

Given:

a2 + b2 + c2 = 62

a + b + c = 12

Formula used:

(a + b + c)2 = a2 + b2 + c2 + 2(ab + bc + ca)

Calculation:

(a + b + c)2 = a2 + b2 + c2 + 2(ab + bc + ca)

12^2 = 62 + 2(ab + bc + ca)

144 = 62 + 2(ab + bc + ca)

82 = 2(ab + bc + ca)

41 = ab + bc + ca

The value we want to find is 4 times this, so:

4ab + 4bc + 4ca = 4 × 41 = 164

So, 4ab + 4bc + 4ca = 164.

Q68. Answer: (c) 25

Given:

The average of 15 numbers is 53.

The average of 14 numbers is 55.

Calculation:

Let's denote:

N = the number that was removed.

The sum of the initial 15 numbers can be calculated as 15 × Average = 15 × 53 = 795.

The sum of the 14 remaining numbers can be calculated as 14 × Average = 14 × 55 = 770.

The number removed is the difference between these two sums:

N = 795 - 770 = 25

So, the number that was removed is 25.

Q69. Answer: (a) (K^4-16K²+32)/16

Given:

x+1/x=K/2

Concept Used:

x+1/x=a, then

$x^2+1/(x^2)=a^2 - 2$

x^4+1/(x^4)=[x²-1/(x²)]² - 2

Calculation:

x+1/x=K/2

=> $x^2+1/(x^2)=(K^2)/4 - 2$

=> $x^2+1/(x^2)=(K^2 - 8)/4$

=> x^4+1/(x^4)=[(K² - 8)/4]² - 2

=> x^4+1/(x^4)=[(K^4 + 64 - 16K²)/16] - 2

=> x^4+1/(x^4)=[(K^4 + 32 - 16K²)/16]

Therefore Option 1 is the correct answer.

Q70. Answer: (b) 55 Days

Shortcut Trick

Equating total work: (4M + 7W) × 8 = (7M + 4W) × 5

=> 32M + 56W = 35M + 20W => 3M = 36W => M = 12W

Total Work = (4 × 12W + 7W) × 8 = 440W units

Time for 8 women = 440W ÷ 8W = 55 days

Therefore The correct answer is 55 Days.

Alternate Method

Given:

4 men and 7 women complete the work in 8 days.

7 men and 4 women complete the work in 5 days.

Person	Days	Total Work	Efficiency
4M + 7W	8	40	5
7M + 4W	5	8	

Calculations:

Let the efficiency of 1 man be M and 1 woman be W.

=> 4M + 7W = 5.... (1)

=> 7M + 4W = 8.... (2)

Multiplying equation (1) by 7 and equation (2) by 4:

=> 28M + 49W = 35

=> 28M + 16W = 32

Subtracting the two equations:

=> 33W = 3

=> W = 1/11

Efficiency of 8 women = 8 × (1/11) = 8/11

Time taken by 8 women = Total Work ÷ Efficiency of 8 women

=> Time taken = 40 ÷ (8/11)

=> Time taken = (40 × 11) ÷ 8 = 55 days

Therefore The correct answer is 55 Days.

Additional Information

Total Work Concept

Total Work is assumed as the LCM of the days taken by different groups to simplify calculation of individual efficiencies, keeping fractions to a minimum until the final steps.

MDH Formula

(M1 × D1 × H1) ÷ W1 = (M2 × D2 × H2) ÷ W2, where M is number of workers, D is days, H is hours per day, and W is the total work done.

Pipes & Cisterns Analogy

Follows the exact same efficiency principles as Time & Work, where an inlet pipe represents positive work (filling) and an outlet pipe represents negative work (emptying).

Q71. Answer: (d) 1 : 1

Calculation:

Years	2015	2016	2017	2018
Tablets	23	23	31	23
Mobiles	23	33	32	18

Number of mobiles in 2015 = 23

Number of Tablet in 2018 = 23

YourMockTest.com — Free Study Material

23 : 23

1 : 1

Therefore Option 4 is the correct answer.

Q72. Answer: (a) 19/100

Given:

sin C = 9/10

Formula used:

$\sin^2 C + \cos^2 C = 1$

Calculation:

sin2 C + cos2 C = 1

$(9/10)^2$ + cos2 C = 1

cos2 C = 1 - (9/10)2

cos2 C = 19/100

Therefore Option 1 is the correct answer.

Q73. Answer: (c) 240/17 km/hr

Calculation:

Let;

Total Distance = x km

Speeds S1, S2, and S3 are 10 km/h, 15 km/h, and 20 km/h respectively.

Time taken is T1, T2, and T3 respectively.

According to the question;

Time = Distance/Speed

T1 = (x/3)/S1 = x/30 hr

T2 = (x/4)/S2 = x/60 hr

Remaining Distance = x - (x/3) - (x/4) = 5x/12

So, T3 = (5x/12)/S3 = x/48 hr

Total time = T1 + T2 + T3

= (x/30) + (x/60) + (x/48)

= 17x/240

Average Speed = Total Distance/Total Time

= x/(17x/240)

= 240/17 km/hr

Hence, 240/17 km/h is the correct answer.

Q74. Answer: (c) Rs. 11,520

Given:

Price of 15 chairs is 20% more than the price of 8 tables.

Price of 2 tables is Rs. 2400.

Calculation:

Let's denote:

P_C = Price of 15 chairs.

P_T = Price of 8 tables.

We know from the given conditions:

P_C = 1.2 × P_T

P_T = 4 × Price of 2 tables (since 2 × 4 = 8)

Substitute the given value of the price of 2 tables into the second equation:

P_T = 4 × 2400 = Rs. 9600

Substitute this into the first equation to get the price of 15 chairs:

P_C = 1.2 × 9600 = Rs. 11,520

So, the price of 15 chairs is Rs. 11,520.

YourMockTest.com — Free Study Material

Q75. Answer: (b) sec A + cosec A

Calculation:

(1+tan A)/(cosec A)+(1+cot A)/(sec A)

=> (1+(sin A)/(cos A))/(1/(sin A))+ (1+(cos A)/(sin A))/(1/(cos A))

=> (cos A+sin A)/(cos A)/(1/(sin A))+ (sin A +cos A)/(sin A)/(1/(cos A))

=> (sin A(cos A+sin A))/(cos A)+(cos A(sin A +cos A))/(sin A)

=> (cos A+sin A)[(sin A)/(cos A)+(cos A)/(sin A)]

=> (cos A+sin A)[(sin² A + cos²)/(sin Acos A)]

=> [(cos A+sin A)/(sin Acos A)]

=> sec A + cosec A

Therefore Option 2 is the correct answer.

Q76. Answer: (b) Apostate

The solution is in Hindi. Read it online.

Q77. Answer: (b) A state in which progress is impossible

The solution is in Hindi. Read it online.

Q78. Answer: (c) Sliede

The solution is in Hindi. Read it online.

Q79. Answer: (c) Acrophobia

The solution is in Hindi. Read it online.

Q80. Answer: (d) Philanthropist

The solution is in Hindi. Read it online.

Q81. Answer: (b) Cringe

The solution is in Hindi. Read it online.

Q82. Answer: (c) have borne

The correct answer is 'Option 3' i.e. "have borne".

Key Points

• The subject of the sentence, "efforts," is plural.

• Thus, the verb form should also be plural, hence "have" instead of "is" or "has".

• The past participle form "borne" is correctly used, which is the past participle of "bear" in the sense of producing or yielding something.

Therefore, the sentence should be: "The efforts of the Government in providing health education and Primary Health Centres have borne fruits."

Additional Information

• Now, let's look at the meanings of the other options:

• "has borne" would be correct if the subject of the sentence was singular.

• "was bore" is grammatically incorrect. The correct past participle of "bear" is "borne" when it means to produce or yield something, and "was" should not be used with "borne" in this context.

Q83. Answer: (b) A welcoming voice from the open doorway.

The correct answer is 'Option 2'.

Key Points

• The correct sentence with no spelling error is "A welcoming voice from the open doorway."

• The spelling of all the words in this sentence is correct.

• Let's correct the spelling in the other sentences:

• "A welcoming voice from the open dorway." should be "A welcoming voice from the open doorway." The correct spelling of "dorway" is "doorway".

• "A welcoming voise from the open doorway." should be "A welcoming voice from the open doorway." The correct spelling of "voise" is "voice".

• "A welcomng voice from the open doorway." should be "A welcoming voice from the open doorway." The correct spelling of "welcomng" is "welcoming".

YourMockTest.com — Free Study Material

Therefore, the correct sentence is: 'A welcoming voice from the open doorway.'

Q84. Answer: (a) was one of those thing you never

The correct answer is 'Option 1'.

Key Points

• The segment of the sentence that contains a grammatical error is "was one of those thing you never".

• In the phrase "one of those things", the word "things" should be plural because "one of" is referring to any one member of a group or category.

• The group or category (in this case, "things") is always plural in this construction.

Therefore, the correct sentence should be: "We talked about writing a will, but it was one of those things you never get around to doing."

Q85. Answer: (b) We were invited to Daniel and Mary’s wedding.

The correct answer is 'Option 2'.

Key Points

• In English, the passive voice is formed by using the verb 'to be' + past participle (V3) of the main verb.

• The past participle of 'invite' is 'invited'.

• The original sentence is in the simple past tense, and hence the passive form should also be in the simple past tense.

• Therefore, 'were invited' is the correct form.

Therefore, the correct answer is: 'We were invited to Daniel and Mary’s wedding.'

Additional Information

• Now, let's look at the other options:

• "We have been invited to Daniel and Mary’s wedding." This sentence is in the present perfect tense, not the simple past tense.

• "We are invited to Daniel and Mary’s wedding." This sentence is in the present simple tense, not the simple past tense.

• "We had been invited to Daniel and Mary’s wedding." This sentence is in the past perfect tense, not the simple past tense.

Q86. Answer: (a) PRQS

The correct answer is 'Option 1' i.e. "PRQS".

Key Points

• P: This part introduces the idea that people learn better when they can interact with something tangible.

• R: This part completes the thought started in P and gives specifics - a physical object that they can work with.

• Q: It further elaborates on the idea of tangibility, stating that they can hold it in their hands and wrap their head around it.

• S: This part introduces the solution - low-cost 3D printers - which make the previously described scenario possible.

Therefore, the correct sequence is: 'PRQS'. i.e. "Many people learn better when they have something tangible to work with, a physical object they can hold in their hands and get their head round and low-cost 3D printers make that possible."

Q87. Answer: (d) Arcane

The solution is in Hindi. Read it online.

Q88. Answer: (d) Reassure

The solution is in Hindi. Read it online.

Q89. Answer: (c) Plentiful

The solution is in Hindi. Read it online.

Q90. Answer: (d) RPQS

The correct answer is 'Option 4' i.e. "RPQS".

Key Points

• R: This part introduces the topic of the sentence, which is the increasing proportion of infirm elderly in all advanced industrial societies.

• P: This part continues the idea from R by giving more information about the increasing proportion of infirm elderly.

• Q: This part provides a contrast to the previous statement. It emphasizes that even though the infirm elderly constitute a small minority of the retired population...

• S: This part concludes the sentence by saying that the claim of the infirm elderly on social services is disproportionately heavy.

Therefore, the correct sequence is: 'RPQS'. i.e. "In all advanced industrial societies the proportion of infirm elderly is on the increase, and, although they constitute only a small minority of the retired population, their claim on social services is

YourMockTest.com — Free Study Material

disproportionately heavy."

Q91. Answer: (d) Strange or crazy actions that appear meaningless but in the end are done for a good reason.

The solution is in Hindi. Read it online.

Q92. Answer: (a) People that are lonely

The correct answer is 'People that are lonely'.

Key Points

• The error in the sentence is in the first segment: "People that are lonely".

• In English, we use "who" instead of "that" when we are referring to people.

• "That" is typically used when referring to things.

• So, while it's not uncommon to hear people use "that" when referring to people in casual conversation, it's considered more correct to use "who".

Therefore, the correct sentence is : "People who are lonely have higher levels of the hormone cortisol."

Q93. Answer: (a) service of the poorest

The correct answer is 'Option 1' i.e. 'Service of the poorest'.

Key Points

• The phrase should be "service of the poorest" as it's referring to the act of serving the poorest people, which is a singular concept,

• Thus "service" is the correct word to use.

• "Serviced" is the past tense of the verb "service", which doesn't fit here since we are talking about a continuous dedication throughout her entire life.

Therefore, the correct sentence is: "She dedicated her entire life to the service of the poorest of the poor."

Additional Information

• The other options don't fit the sentence:

• "services off the poorest": Here "off" is incorrect, it should be "of". Also, "services" should be in the singular form as "service".

• "serviced of the poorer": This doesn't make sense in this context, as "serviced" is not the correct term to use and "poorer" is not as emphatic as "the poorest".

Q94. Answer: (c) Nita says that she has heard the podcast before.

The correct answer is 'Option 3'.

Key Points

• Here, Nita's experience of having heard the podcast before is still a relevant fact when she is reporting it, so the present perfect tense ("has heard") will be retained in the reported speech.

• When the Direct Speech is in Present Tense (in this case, 'says') or Future Tense, there is no change in the Indirect Speech.

• 'Has' will be used instead of 'Have' as we use 'Has' with singular noun or singular pronoun.

Therefore, the correct sentence is: 'Nita says that she has heard the podcast before.'

Additional Information

• Let's look at the other options:

• "Nita says that she is hearing the podcast before." : This is incorrect because "is hearing" is present continuous tense, which doesn't fit the meaning of the sentence, and "before" can't be used with this tense in this context.

• "Nita says that she had heard the podcast before." : This is not incorrect, but it's more common to use "has heard" in this context for the reasons explained above.

• "Nita says that she had heard the podcast ago." : This is incorrect because "ago" is not used with the past perfect tense. It's used with the past simple tense to indicate how much time has passed since an event. Also, the word "before" is missing from the sentence.

Q95. Answer: (d) obligations

The correct answer is 'Option 4' i.e. 'Obligations'.

Key Points

• The word "obligations" refers to duties or actions one is bound to perform, either morally or legally.

• In the context of this sentence, it implies that the code or rules of revenge demand an equal response—in this case, a life for a life.

Therefore, the correct sentence is: 'The obligations of revenge demanded a life for a life.'

Additional Information

• Now let's look at why the other options are not correct:

• "Cheering" - This word generally refers to shouts of encouragement or celebration, which doesn't fit the serious, almost solemn tone of the sentence.

• "Moaning" - This word often refers to a sound of pain or distress. It doesn't fit here because the sentence is about a requirement or duty, not a sound or expression of emotion.

• "Crowning" - This word is often used to describe the act of placing a crown on a monarch's head or the achievement of a significant accomplishment. Neither meaning fits well in this sentence.

Q96. Answer: (a) agendas

The correct answer is 'Option 1' i.e. 'Agendas'.

Key Points

• The correct option to fill in the blank number 1 is "agendas".

• The word "agendas" refers to underlying intentions or motives of individuals or groups.

• In the context of this sentence, it fits perfectly as it is referring to the intentions of social media platforms and people using them, who often have the motive of selling something.

Therefore, the correct sentence is: Social media platforms and many people on them have their own agendas and they are often trying to sell you things. So, be (2) ____ of how much time and energy you give to sellers and users and think about (3) __ they want from you when engaging. To gauge which uses are positive and (4) __ and which are detrimental, ask yourself simply, when does using social media make me feel good or bad, and why? Do I (5) ____use it all of the time?

Additional Information

• Let's look at why the other options are not correct:

• "Steam" - This word generally refers to the vapor into which water is converted when heated, or to energy or power. Neither of these meanings fit well in this context.

• "Excuses" - While people on social media may indeed offer excuses, this word would not make sense in the context of this sentence, which is more about underlying motives than about justifying or excusing actions.

• "Considerations" - While social media platforms and users might indeed have considerations, this word doesn't quite convey the underlying motives or intentions implied by the sentence.

Q97. Answer: (d) aware

The correct answer is 'Option 4' i.e. 'Aware'.

Key Points

• The correct option to fill in the blank number 2 is "aware".

• The word "aware" means having knowledge or perception of a situation or fact.

• In this context, the word "aware" makes sense because it is advising social media users to be conscious of how much time and energy they're investing in interactions with sellers and other users on these platforms.

Therefore, the correct sentence is: Social media platforms and many people on them have their own agendas and they are often trying to sell you things. So, be aware of how much time and energy you give to sellers and users and think about (3) ____ they want from you when engaging. To gauge which uses are positive and (4) __ and which are detrimental, ask yourself simply, when does using social media make me feel good or bad, and why? Do I (5) ____use it all of the time?

Additional Information

• Let's look at why the other options are not correct:

• "Aroused" - This term often refers to being stimulated or excited, particularly in a sexual context. It doesn't fit well in this sentence, which is about consciousness or knowledge of one's behavior on social media, not about stimulation or excitement.

• "Valiant" - This term refers to showing courage or determination. While being courageous or determined might be good qualities for a social media user in some situations, they're not what this sentence is advising. It's advising awareness, not courage or determination.

• "Calm" - This term refers to being peaceful, quiet, or not disturbed. Being calm might be a good quality for a social media user in some situations, but again, it's not what this sentence is advising. The sentence is advising users to be aware or conscious of their behavior, not necessarily to be calm.

Q98. Answer: (d) what

The correct answer is 'Option 4' i.e. 'What'.

Key Points

• The correct option to fill in blank number 3 is "what".

• The word "what" is used here as a pronoun to introduce a clause specifying something.

• In this context, the word "what" makes sense because it is asking the reader to consider the intentions or desires of sellers and other users on social media platforms.

Therefore, the correct sentence is: Social media platforms and many people on them have their own agendas and they are often trying to sell you things. So, be aware of how much time and energy you give to sellers and users and think about what they want from you when engaging. To gauge which uses are positive and (4) ____ and which are detrimental, ask yourself simply, when does using social media make me feel good or bad, and why? Do I (5) ____use it all of the time?

Additional Information

• Let's look at why the other options are not correct:

• "That" - This word can be used as a relative pronoun to introduce a clause, but in this case, it doesn't fit well because we are trying to introduce a clause specifying something rather than defining or identifying it.

• "Whilst" - This is a formal equivalent to "while," but it doesn't fit in this context because it introduces a time-related or contrasting clause, not a clause specifying something.

• "Which" - This word is used as a relative pronoun to introduce non-defining relative clauses. In this sentence, we need to introduce a clause specifying something, not providing additional information about it.

Q99. Answer: (d) productive

The correct answer is 'Option 4' i.e. 'Productive'.

Key Points

• The correct option to fill in blank number 4 is "productive".

• In this context, "Productive" means yielding positive or useful results.

• This is the ideal choice as it aligns with the context of the sentence that is trying to differentiate between positive/productive and detrimental uses of social media.

Therefore, the correct sentence is: Social media platforms and many people on them have their own agendas and they are often trying to sell you things. So, be aware of how much time and energy you give to sellers and users and think about what they want from you when engaging. To gauge which uses are positive and productive and which are detrimental, ask yourself simply, when does using social media make me feel good or bad, and why? Do I (5) _____use it all of the time?

Additional Information

• Let's look at why the other options are not correct:

• "Pliable" - This means easily bent or flexible. In this context, it doesn't fit because the sentence is not talking about flexibility but about the positive or useful results of using social media.

• "Possessive" - This means demanding someone’s total attention and love. This does not fit the context here as the sentence is about evaluating the outcomes of using social media, not about demanding attention or love.

• "Punitive" - This means inflicting or intended as punishment. This does not fit the context of the sentence, which is about differentiating between the positive and negative aspects of using social media, not about punishment.

Q100. Answer: (b) need to

The correct answer is 'Option 2' i.e. 'Need to'.

Key Points

• The correct option to fill in blank number 5 is"need to".

• The phrase "need to" is used to express necessity or obligation.

• In this context, it fits best because it's asking the reader to consider whether it's necessary or obligatory for them to be using social media all the time.

Therefore, the correct sentence is: Social media platforms and many people on them have their own agendas and they are often trying to sell you things. So, be aware of how much time and energy you give to sellers and users and think about what they want from you when engaging. To gauge which uses are positive and productive and which are detrimental, ask yourself simply, when does using social media make me feel good or bad, and why? Do I need to use it all of the time?

Additional Information

• Let's look at why the other options are not correct:

• "Could" - This is used to express possibility or past ability. However, the sentence is asking about necessity, not possibility or ability.

• "Ought to" - This is used to indicate duty or correctness, typically when criticizing someone's actions. It doesn't quite fit here because the sentence is asking the reader to consider whether they "need to" use social media all the time, not whether they "should" in a moral or ethical sense.

• "Must" - This word is used to express obligation or necessity, similar to "need to". However, "must" is stronger and more urgent than "need to", and in this context, it could come across as too forceful. "Need to" is more neutral and better fits the tone of the sentence.

More previous year papers and mock tests: **www.yourmocktest.com/pyq**

YourMockTest.com — Free Study Material