SSC CHSL 2020 Official Paper 5 (Held On: 13 April 2021 Shift 2) (Previous Year Paper)

SSC Combined Higher Secondary Level (CHSL) • 2020 • 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-2020-official-paper-5-held-on-13-april-2021-shift-2-pre…

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

YourMockTest.com — Free Study Material

ENGLISH LANGUAGE

Q1. Select the INCORRECTLY spelt word.

(a) Duration
(b) Condition
(c) Convertion
(d) Addition

Q2. Select the correct indirect form of the given sentence.

The policeman said to the Inspector, "I arrested a man who broke the window of a car."

(a) The policeman told the inspector that he had arrested a man who broke the window of a car.
(b) The policeman told the inspector that he arrested a man who broke the window of a car.
(c) The policeman told the inspector that I arrested a man who broke the window of a car.
(d) The policeman told the inspector that he had arrested a man who had broken the window of a car.

Q3. Select the most appropriate meaning of the given idiom.

To run around like a headless chicken

(a) To be unable to catch escaping chicken
(b) To be lazy and unwilling to work
(c) To do things methodically one by one
(d) To do many things in a disorganised manner

Q4. Select the option which means the same as the group of words given.

A person authorised to examine and verify accounts

(a) auditor
(b) commentator
(c) distributor
(d) anchor

Q5. Select the most appropriate meaning of the given idiom.

To leave no stone unturned

(a) To try everything possible to solve a problem
(b) To turn everything upside down
(c) To become accustomed to routine things
(d) To become furious with somebody

Q6. Select the correct passive form of the given sentence.

The Indian government has introduced a ban on spitting in public.

(a) The Indian government had introduced a ban on spitting in public places.
(b) A ban on spitting in public has been introduced by the Indian government.
(c) The ban on spitting was being introduced by the Indian government.

(d) The ban on spitting had been introduced by the Indian government.

Q7. Select the most appropriate ANTONYM of the given word.

INNOCUOUS

(a) Innocent
(b) Harmless
(c) Harmful
(d) Indifferent

Q8. Select the word which means the same as the group of words given.

A place where coins are manufactured

(a) Mine
(b) Mint
(c) Warehouse
(d) Factory

Q9. Given below are four jumbled sentences. Out of the given options pick the one that gives their correct order.

A.They made fruit mash for me.
B. They extracted 30 worms from my wounds on my legs and arms.
C. But I was unable to eat.
D. They washed me with salt water and bandaged my wounds after putting a lotion on them.

(a) BDAC
(b) BACD
(c) ADBC
(d) DBAC

Q10. Select the most appropriate ANTONYM of the given word.

SEVERE

(a) Mild
(b) Harsh
(c) Cruel
(d) Strict

Q11. Select the most appropriate word to fill in the blank.

He was not ready at first to come with us for the picnic but we _____him.

(a) persuaded
(b) isolated
(c) controlled
(d) consulted

Q12. Select the most appropriate synonym of the given word.

ATTRACT

(a) Disgust
(b) Fascinate
(c) Release
(d) Prevent

Q13. Select the INCORRECTLY spelt word.

(a) maintanance
(b) encouragement
(c) environment
(d) immediate

YourMockTest.com — Free Study Material

Q14. Select the most appropriate synonym of the given word.

CONDESCENSION

(a) intention
(b) disdain
(c) cohesion
(d) effusion

Q15. Select the most appropriate option to fill in the blank.

Courts help in the resolution of _____ issues.

(a) contentious
(b) conscientious
(c) presumptuous
(d) contemptuous

Q16. In the given sentence, identify the segment which contains the grammatical error.

I think someone has been picked my pocket while I was travelling in the metro.

(a) in the metro
(b) someone has been picked my pocket
(c) while I was travelling
(d) I think

Q17. Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No improvement'.

I wrote a novel for the last two years but it is not finished yet.

(a) I have been writing a novel
(b) No improvement
(c) I am writing the novel
(d) I wrote the novel

Q18. Examine the four jumbled sentences. Out of the given options, pick the one that gives their correct order.

A. Some Europeans demand that Europe slam its gates.
B. Today more and more humans are crossing more and more borders in search of a job.
C. Nowhere is it more apparent than in Europe.
D. But others call for opening the gates wider.

(a) BCAD
(b) ACBD
(c) BACD
(d) DCBA

Q19. In the sentence identify the segment which contains the grammatical error.

Participating in the Republic Day Parade are considered an honour by many people.

(a) are considered an honour
(b) Participating in
(c) the Republic Day Parade
(d) by many people

Q20. Select the option that will improve the underlined segment in the given sentence. In case no improvement is needed, select 'No improvement'

How much does it cost to travels from the airport to Noida?

(a) travelling
(b) travel
(c) No improvement
(d) travelled

YourMockTest.com — Free Study Material

Directions

In the following passage, some words have been deleted. Fill in the blanks with the help of the alternatives given. Select the most appropriate option for each blank.

Graduation Day was at hand. Primary school graduation (1) ____ in those days followed a prescribed order-conventional, courteous and (2) __. First, the school principal made a long speech (3) __ encouragement and blessing for the future of the graduates. (4) __ one of the representatives of the graduating class (5) ____ with a vote of thanks.

Q21. Select the most appropriate option for blank no. 1.

(a) ceremonious
(b) ceremonially
(c) ceremonials
(d) ceremonies

Q22. Select the most appropriate option for blank no. 2.

(a) sentimental
(b) sentiments
(c) sentiment
(d) sentimentally

Q23. Select the most appropriate option for blank no. 3.

(a) off
(b) in
(c) of
(d) about

Q24. Select the most appropriate option for blank no. 4.

(a) Those
(b) Then
(c) When
(d) These

Q25. Select the most appropriate option for blank no. 5.

(a) responded
(b) responsive
(c) respond
(d) response

GENERAL INTELLIGENCE

Q26. Select the option in which the numbers are related in the same way as are the numbers of the following set.

{22, 17, 31}

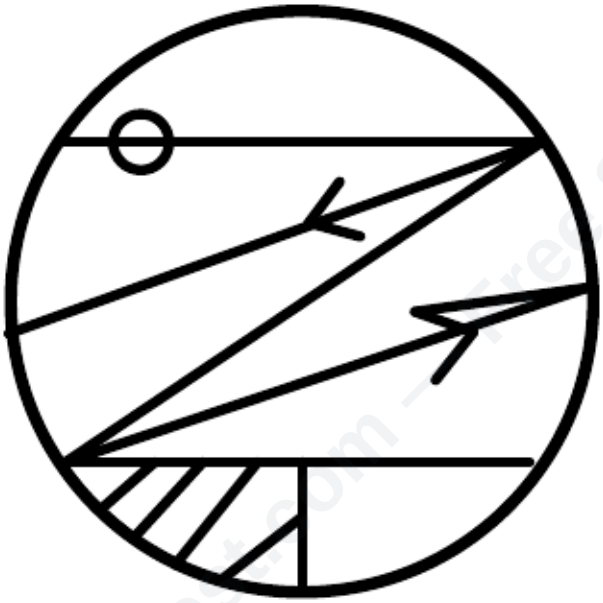
(a) {16, 9, 25}
(b) {31, 26, 40}
(c) {18, 23, 27}
(d) {14, 8, 23}

Q27. In a certain code language, REFUSAL is coded as 100 and SHORTEN is coded as 83. How will INERTIA be coded in that language?

(a) 106
(b) 160
(c) 150
(d) 105

YourMockTest.com — Free Study Material

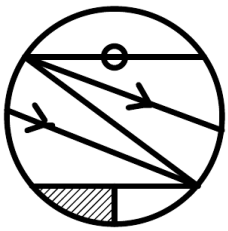
Q28. Select the correct mirror image of the given figure when the mirror is placed at the right side of the figure.



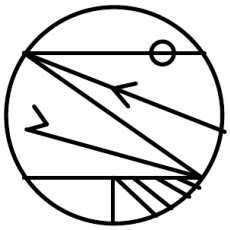
(a)



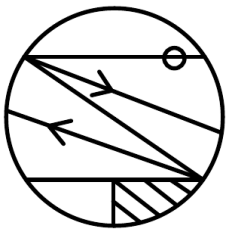
(b)



(c)



(d)



YourMockTest.com — Free Study Material

Q29. In a certain code language, ROCKET is written as BNQSDJ. How will NOTICE be written in that language?

(a) SPMFBJ
(b) UPOFDJ
(c) NMHSDB
(d) SNMDBH

Q30. Four words have been given, out of which three are alike in some manner and one is different. Select the word that is different.

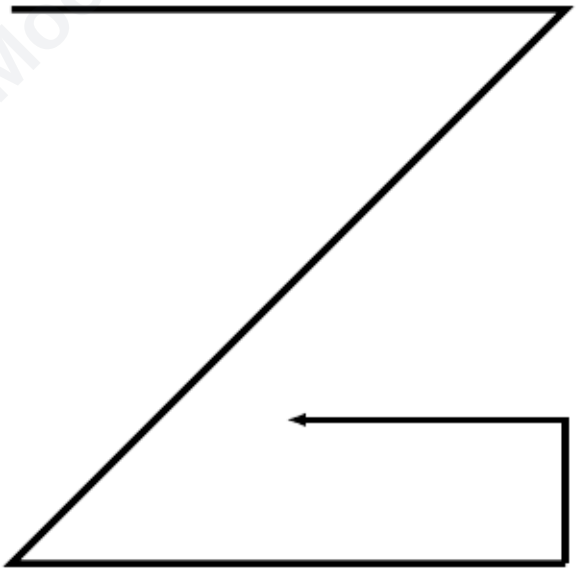
(a) Director
(b) Minister
(c) Mayor
(d) Speaker

Q31. Select the option in which the words share the same relationship as that shared by the given pair of words.

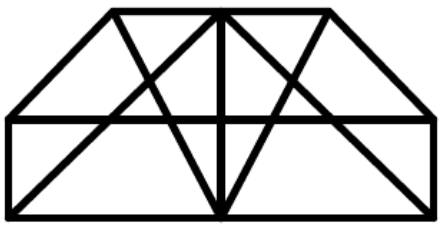
Pullover : Wool

(a) Prism : Glass
(b) Fabric : Ore
(c) Linen : Latex
(d) Pulp : Sack

Q32. Select the option in which the given figure is embedded (rotation is NOT allowed).

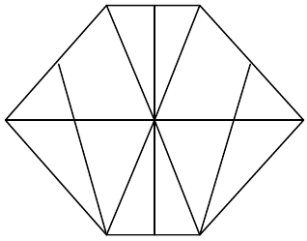


(a)

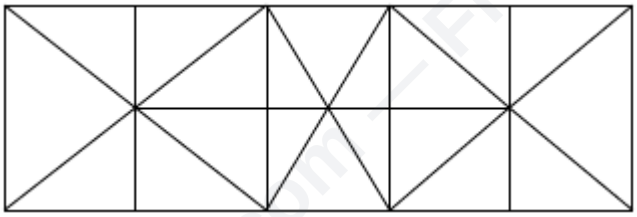


YourMockTest.com — Free Study Material

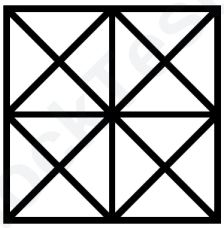
(b)



(c)



(d)



Q33. Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.

(a) SNPJ
(b) FBDX
(c) TPRL
(d) HDFZ

Q34. Select the option that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

MORV : NJGE : : DGKP : ?

(a) ZVSQ
(b) PLIG
(c) WRNK
(d) WTPK

Q35. An online entrance exam was conducted in 250 centres all over a country. The average number of applicants per centre was found to be 1250. However, it was later realised that in one centre, the number of applicants was counted as 1758 instead of 1658. What was the correct average number of applicants per centre?

(a) 1492.6
(b) 1429.6
(c) 1249.6
(d) 1294.6

Q36. Four numbers have been given, out of which three are alike in some manner and one is different. Select the number that is different.

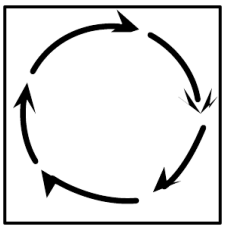
(a) 127
(b) 1049
(c) 4095
(d) 255

YourMockTest.com – Free Study Material

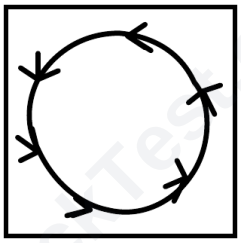
Q37. Select the figure from among the given options that can replace the question mark (?) in the following series.



(a)

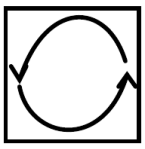


(b)

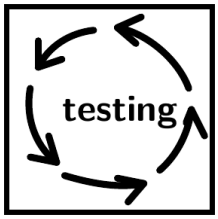


(c)

test00



(d)



Q38. Which two signs should be interchanged to make the following equation correct?

14 + 12 × 18 ÷ 6 – 12 = 6

(a) ÷ and ×
(b) × and +
(c) − and +
(d) ÷ and −

Q39. Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.

K O _ M C L _ Q M C M O _ M _ N O Q _ C

(a) Q, O, C, Q, M
(b) Q, O, Q, C, M
(c) M, O, Q, C, M
(d) M, O, Q, C, O

YourMockTest.com — Free Study Material

Q40. 'A + B' means 'A is the wife of B'.

'A – B' means 'A is the daughter of B'.

'A × B' means 'A is the sister of B'.

'A ÷ B' means 'A is the brother of B'.

If P ÷ M × R – Z + Q, then how is P related to Q?

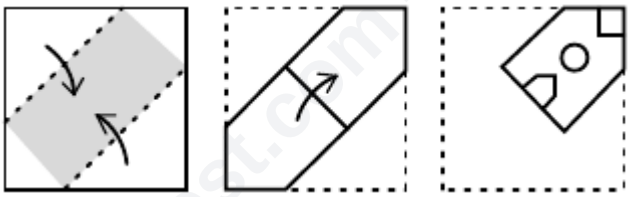
(a) Nephew

(b) Son-in-law

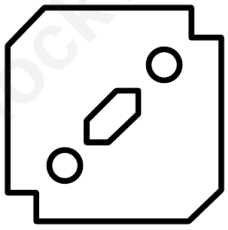
(c) Son

(d) Brother

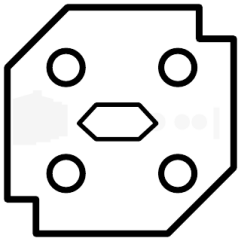
Q41. The sequence of folding a piece of paper and the manner in which the folded papers has been cut is shown in the following figures, How would this paper look when unfolded?



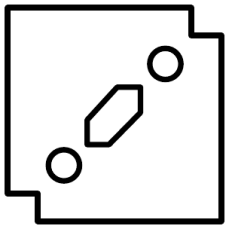
(a)



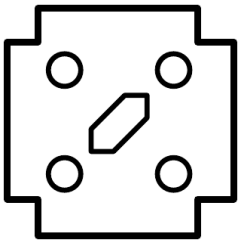
(b)



(c)



(d)



YourMockTest.com – Free Study Material

Q42. Select the number from among the given options that can replace the question mark (?) in the following series.

1, 2, 6, 21, ?, 445

(a) 88
(b) 66
(c) 44
(d) 94

Q43. Select the option that is related to the third number in the same way as the second number is related to the first number.

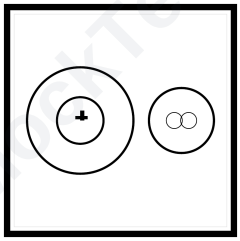
256 : 13 : : 676 : ?

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

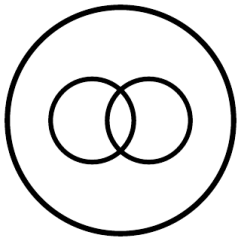
Q44. Select the Venn diagram that best represents the relationship between the following classes.

Saturn, Planet, Cadmium

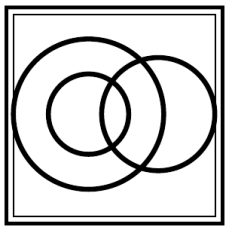
(a)



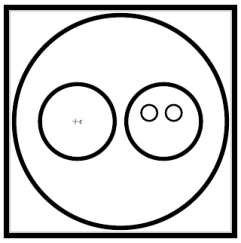
(b)



(c)

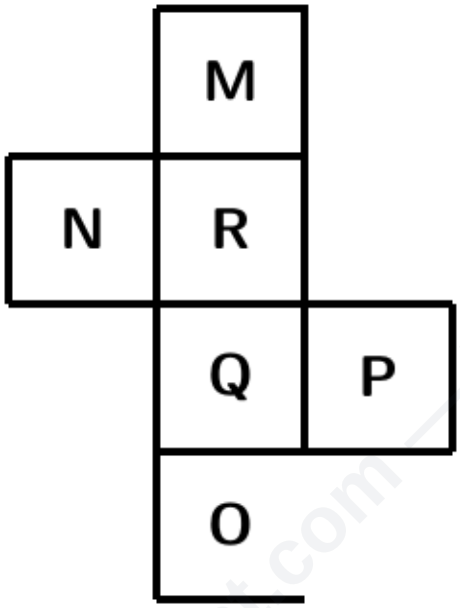


(d)



Q45. A cube is made by folding the given sheet. In the cube so formed, which of the following pairs of letters will be on opposite sides?

YourMockTest.com — Free Study Material



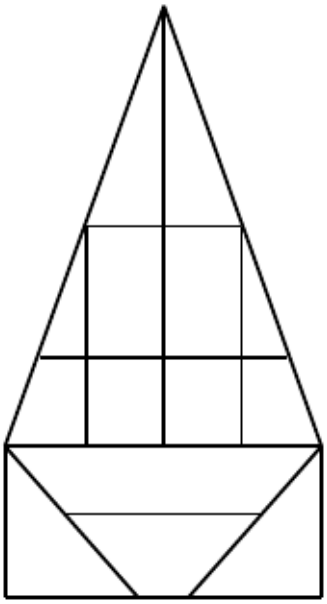
(a) R and O
(b) N and Q
(c) Q and P
(d) M and P

Q46. From the given options choose the one in which the set of numbers do not follow the same Logic/Rule/Relation as the numbers given in below set.

(12, 36, 132)

(a) (22, 66, 242)
(b) (18, 54, 196)
(c) (15, 45, 165)
(d) (19, 57, 209)

Q47. Find the number of triangles in the given figure.



(a) 17
(b) 14
(c) 15
(d) 16

Free Study Material — YourMockTest.com

Q48. 'War' is related to 'Destruction' in the same way as 'Cyclone' is related to '_____'.

(a) Wind
(b) Storm
(c) Devastation
(d) Hurricane

Q49. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.

1. Certificate
2. Cerebellum
3. Cervical
4. Ceremonious
5. Certainty

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

Q50. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

Some men are athletes.

No athlete is a singer.

All singers are dancers.

Conclusions:

I. No dancer is an athlete.

II. Some singers are men.

III. Some men are dancers.

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

QUANTITATIVE APTITUDE

Q51. Two sides of a triangle are 12.8 m and 9.6 m. If the height of the triangle is 12 m, corresponding to 9.6 m then what its height (in m) corresponding to 12.8 m?

(a) 12
(b) 9
(c) 10
(d) 8

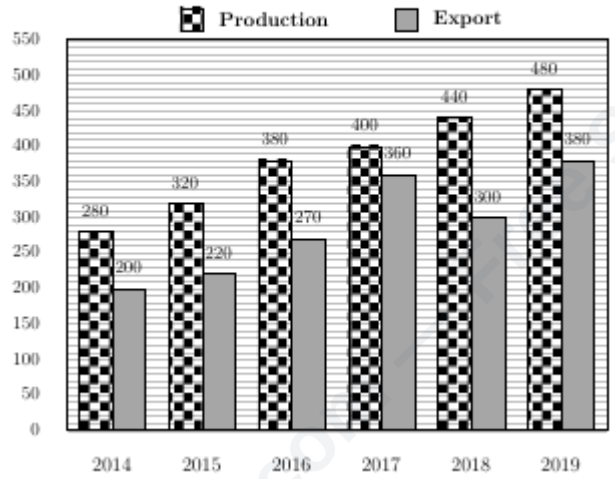
Q52. If $x^4 - 142x^2 + 1 = 0$, then the value of $x^3 + 1/x^3$ is

(a) 1962
(b) 1952
(c) 1692
(d) 1592

Q53. Study the given graph and answer the question that follows.

YourMockTest.com — Free Study Material

Production and Export of sugar (in million kg) by country ABC during 2014 to 2019



By what percentage is 80% of the total export of sugar in 2016, 2017, and 2019 more than the total production in 2015 and 2018 (correct to one decimal place)?

(a) 7.7%
(b) 8.4%
(c) 5.9%
(d) 6.3%

Q54. In a survey, it was found that in a constituency, 55% of voters are male and the rest are female. 40% of the male voters are literate and 331⁄3% of the female voters are illiterate. What percentage of the voters are literate?

(a) 54%
(b) 52%
(c) 37%
(d) 48%

Q55. A solution contains acid and water in the ratio of 4 : 5. If 20% of the solution is replaced by water, then what will be the ratio of acid and water in the new solution?

(a) 8 : 15
(b) 5 : 17
(c) 10 : 7
(d) 16 : 29

Q56. In Δ ABC, angle B = 90^0, AB = 8 cm and BC = 15 cm, D is a point on BC such that AD bisects angle A. The length (in cm) of BD is:

(a) 4.5
(b) 3.6
(c) 4.2
(d) 4.8

Q57. If $a^2 + b^2 = 25$, $x^2 + y^2 = 17$ and $ax + by = 8$, then what is the value of $(ay - bx)$?

(a) 25
(b) 33
(c) 19
(d) 21

Q58. The marked price of an article is Rs 1,000 After two successive discounts, it is sold for Rs 600, If the first discount is x% and the second discount is 25%, then what is the value of x?

(a) 12%
(b) 25%
(c) 185

(d) 20%

Q59. If o^o < θ < 90^o, then ((1 - sin θ)(sec θ + tan θ)tan θ)/((tan θ + sec θ + 1)(cot θ - cosec θ + 1)) = ?

(a) (sin θ)/2
(b) cos θ
(c) sin θ
(d) (cos θ)/2

Q60. Given that $(2x + y)^3 - (x + 2y)^3 = (x - y)[A(x^2 + y^2) + Bxy]$, the value of (2A - B) is:

(a) 1
(b) 7
(c) 0
(d) 6

Q61. A shopkeeper bought 40 dozen eggs at Rs 1.40 each. 80 eggs were broken in transportation. He sold the remaining eggs at Rs 1.60 each. what is his profit or loss percent?

(a) Loss, 319/27
(b) Profit, 416/21
(c) Profit, 319/27
(d) Loss, 416/21

Q62. If tan A=1.1/6 then what is the value of (4cos A - 7sin A)? Given that A an acute angle.

(a) 241/61
(b) 214/61
(c) 241/71
(d) 214/71

Q63. The value of (96 ÷ 16 of 2 - 128 × 2 ÷ 32 + 15~of 4)/(5/6of 2/3(1/3 - 1/4 - 1/6)) is :

(a) • 5/36
(b) 396
(c) • 55/36
(d) 216

Q64. A and B complete a work in 80 days and 96 days, respectively. They completed the work in 32 days with the help of C, How many days will C take to complete the entire work alone?

(a) 84
(b) 108
(c) 120
(d) 92

Q65. If a number is divisible by 624, the remainder will be 53, If the same number is divisible by 16, then the remainder will be:

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

Q66. The average age of 125 students in a group is 16.2 years. 40% of the students are boys and the rest are girls. The average age of the boys is 20% more than the average age of the girls. What is the average age (in years) of the boys?

(a) 17
(b) 18.5
(c) 18
(d) 17.5

YourMockTest.com — Free Study Material

Q67. ABCD is cyclic quadrilateral with AB as a diameter of the circle. If angle ADC = 118^(o,), then the measure (in degrees) of angle BAC is:

(a) 28
(b) 32
(c) 22
(d) 38

Q68. A sum of Rs 2,432 amounts to Rs 2,681.28 in 2 years at a certain rate percent per annum, interest compounded yearly. What will be simple interest (in Rs) on the same sum for 43/8 years at double the same rate?

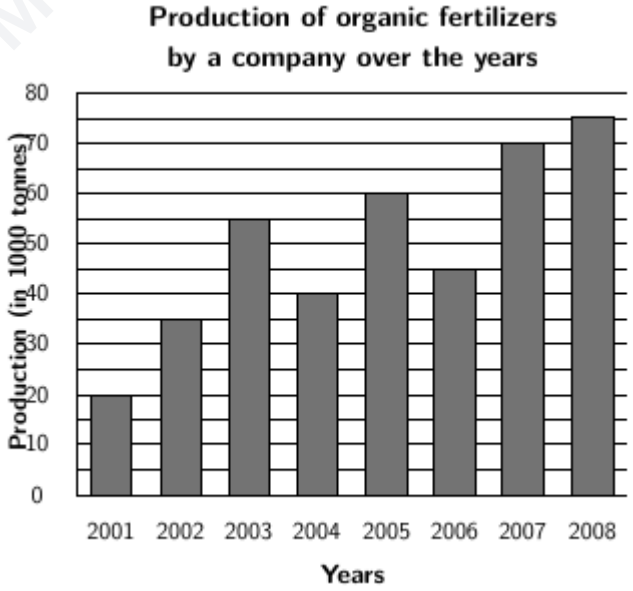
(a) 1,094.40
(b) 1,276.80
(c) 1,064
(d) 1,368

Q69. A wire is bent to form a square of area 169 cm^2.If the same wire is bent to form a circle, then what is its area (in cm^2, to the nearest whole number)?

Take [π = 22/7]

(a) 532
(b) 531
(c) 215
(d) 227

Q70. Study the given bar graph and answer the questions that follows.



The average production in 2002 and 2003 was exactly equal to the average production in which of the following pairs of years?

(a) 2004 and 2006
(b) 2001 and 2007
(c) 2004 and 2007
(d) 2006 and 2008

Q71. A solid metallic cube of side 20cm is melted and recast into a cuboid of length 40 cm and breadth 40 cm. What is the length (in cm) of the body diagonal of the cuboid?

(a) 5√129
(b) 129√5
(c) 15√43
(d) 43√15

YourMockTest.com — Free Study Material

Q72. Study the given table and answer the question that follows.

The table shows the annual consumption (in hundred tones) of tea in five states (A, B, C, D and E) across six years (2014 to 2019)

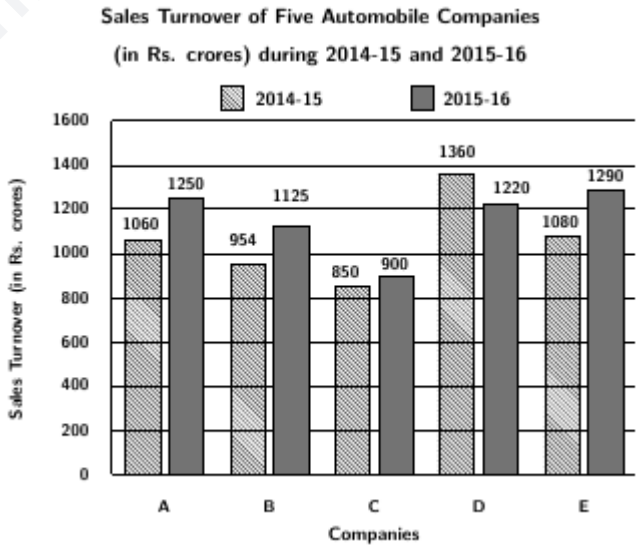
State Year	A	B	C	D	E
2014	112	130	136	105	117
2015	122	138	150	140	120
2016	124	134	142	144	132
2017	132	154	198	149	193
2018	135	148	187	151	145
2019	153	136	198	150	187

The consumption of tea in which state and year is closest to the average consumption of tea in State A over six years?

(a) C in 2016
(b) B in 2014
(c) E in 2019
(d) D in 2018

Q73. The given bar graph represents the Sales Turnover (in Rs crore) of five automobile companies A, B, C, D and E during 2014 - 2015 and 2015 - 2016. The X-axis represents the Companies, and the Y-axis shows the Sales Turnover (in Rs crore).

(The data shown here is only for mathematical exercise. They do not represent the actual figures of the company)



Which two companies have the same percentage increase in the sales turnover from 2014-2015 to 2015 - 2016?

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

Q74. Train A takes 14/5 h more than the time taken by train B to cover a distance of 360 km. If the speed of train A doubles, it will take 36 min less than the time taken by train B to travel the same distance. What is the speed (in km/h) of train B?

(a) 100
(b) 90
(c) 96
(d) 120

Q75. A straight vertical pole was broken during a cyclone in such a way that its top touched the ground at a distance of $6\sqrt{3}$ m from the bottom of the pole and made and angle of 30° with the horizontal. What was the height (in m) of the pole?

(a) 12
(b) 18
(c) $12\sqrt{3}$
(d) $18\sqrt{3}$

GENERAL AWARENESS

Q76. Hoysaleswara Temple is located in which of the following states?

(a) Karnataka
(b) Odisha
(c) West Bengal
(d) Tamil Nadu

Q77. As of May 2020, who among the following has become the world's highest paid female athlete according to Forbes magazine report?

(a) Sania Mirza
(b) Venus Williams
(c) Naomi Osaka
(d) Serena Williams

Q78. How many bones are there in the human hand?

(a) 14
(b) 21
(c) 27
(d) 17

Q79. What is another name for the disorder called 'parasomnia'?

(a) Night blindness
(b) Sleepwalking
(c) Sea sickness
(d) Stammering

Q80. Which of the following is a dance form in Mizoram participated exclusively by 'village guests'?

(a) Chailam
(b) Cheraw
(c) Solakia
(d) Khuallam

Q81. Alaknanda river originates from _____ and Bhagirathi Kharak glacier.

(a) Zemu
(b) Satopanth
(c) Gangotri
(d) Pindari

Q82. Which of the following is a pointing device used to move an object on the screen of a computer in any direction?

(a) Modem
(b) Joystick
(c) Server
(d) Floptical

YourMockTest.com — Free Study Material

Q83. In which of the following Tiger Reserves of India, is its first hot air balloon wildlife safari launched in December 2020?

(a) Manas Tiger Reserve
(b) Buxa Tiger Reserve
(c) Jim Corbett Tiger Reserve
(d) Bandhavgarh Tiger Reserve

Q84. How many members are nominated by the President in the Rajya Sabha?

(a) 7
(b) 12
(c) 14
(d) 9

Q85. Who among the following has launched the Global Pravasi Rishta portal and mobile app, to connect with Indian Diaspora across the world?

(a) S Jayashankar
(b) Amit Shah
(c) V Muraleedharan
(d) Harsh Vardhan

Q86. Tso Kar wetland has been included in Ramsar Site in December 2020. In which of the following states or union territories is it located?

(a) Lakshadweep
(b) Ladakh
(c) Goa
(d) Kerala

Q87. Who among the following is the President of FICCI (Federation of Indian Chambers of Commerce and Industry) for the year 2020-21?

(a) Sangita Reddy
(b) Uday Shankar
(c) Sandip Somany
(d) Rashesh Shah

Q88. Who among the following was a leader who led a revolt against the British rule from North East India?

(a) Durgawati Devi
(b) Matangini Hazra
(c) Pritilata Waddedar
(d) Rani Gaidinliu

Q89. Who among the following was the winner of the Senior National Billiards Championship 2020?

(a) Sourav Kothari
(b) Pankaj Advani
(c) Rupesh Shah
(d) Aditya Mehta

Q90. Which of the following is responsible for producing green light in fireworks?

(a) Silicon
(b) Potassium
(c) Sodium
(d) Barium

Q91. Which Indian actor got the Best Actor Award at Indo-German Film Week in 2020?

(a) Adil Hussain
(b) R Madhavan
(c) Amole Gupte

YourMockTest.com — Free Study Material

(d) Pankaj Tripathi

Q92. In which of the following year was the Council of States (Rajya Sabha) first constituted?

(a) 1954
(b) 1950
(c) 1952
(d) 1949

Q93. Which economic thought talks about methodological individualism, or the idea that people will act in meaningful ways which can be analysed?

(a) Austrian economic thought
(b) Monetarist
(c) Keynesian theory
(d) Laissez-Faire

Q94. _____ is the easy way to check your favourite websites for updates without having to visit them all.

(a) HTML
(b) RSS
(c) PDF
(d) URI

Q95. In which of the following cities is the headquarters of All India Chess Federation situated?

(a) Bengaluru
(b) Hyderabad
(c) Mumbai
(d) Chennai

Q96. On which river is the Peacock Island located?

(a) Brahmaputra
(b) Mahanadi
(c) Yamuna
(d) Ganga

Q97. Indian-origin global health expert _____ was appointed as the first Chief Executive Officer of The WHO Foundation in 2020.

(a) Anil Soni
(b) JS Bamrah
(c) Deepak Chopra
(d) Aseem Malhotra

Q98. In which state is India's least densely populated district Dibang Valley located as per Census 2011?

(a) Arunachal Pradesh
(b) Nagaland
(c) Telangana
(d) Himachal Pradesh

Q99. Wavel Ramkalawan, an Indian origin has been elected as the President of which of the following countries?

(a) Seychelles
(b) Bahrain
(c) Cuba
(d) Myanmar

Q100. In which of the following years was the Diwani of Bengal transferred to the East India Company?

(a) 1880
(b) 1765
(c) 1554

YourMockTest.com — Free Study Material

(d) 1678

ANSWER KEY

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

SOLUTIONS

Q1. Answer: (c) Convertion

The answer with the incorrect spelling is 'Convertion'.

Key Points

• The correct spelling of the word will be 'Conversion'.

• The word 'Conversion' is a noun and is referred to the process of changing or causing something to change from one form to another.

• Example: They have suggested conversion of the old school into apartments.

• Therefore the correct option with the incorrect spelling will be Option 3.

Q2. Answer: (d) The policeman told the inspector that he had arrested a man who had broken the window of a car.

The correct answer is 'The policeman told the inspector that he had arrested a man who had broken the window of a car.'

Key Points

• The given sentence is in Direct Speech of Simple Past tense and as per the question, we have to change it into Indirect Speech.

• Here, Simple Past will be changed to Past Perfect.

• The process of transformation is as follows:

• 'said to' will be replaced with the conjunction 'that'.

• Commas and inverted commas will be removed.

• The first person "I" changes according to the subject, hence will be replaced with 'He'.

• The verb 'arrested' will be replaced with 'had arrested'.

• The Simple Past form 'broke' will be replaced with the participle 'broken'.

Correct Sentence: The policeman told the inspector that he had arrested a man who had broken the window of a car.

Q3. Answer: (d) To do many things in a disorganised manner

The correct answer is 'To do many things in a disorganised manner'.

Key Points

• The idiom 'To run around like a headless chicken' is addressed to someone who is panicking when he should be thinking carefully about what needs to be done.

• Example:

• Instead of running around like a headless chicken, use your efforts in a more productive way.

Q4. Answer: (a) auditor

The correct answer is 'auditor'.

Key Points

• An 'auditor' is someone whose job is to carry out an official examination of the accounts of a business and to produce a report.
• Example:
• The accounts are audited once a year by an auditor.
Additional Information Let's look into the meaning of the other given words:
• Commentator: A person on radio or television who describes and discusses news events, sports, books, or other subjects.
• Distributor: A person or organization that supplies goods to shops and companies.
• Anchor: A person who reports the news and manages reports by others on a television or radio program.

Q5. Answer: (a) To try everything possible to solve a problem

The correct answer is 'To try everything possible to solve a problem'.
Key Points
• The idiom 'To leave no stone unturned' means to try every possible course of action in order to achieve something.
• Example:
• John left no stone unturned in his search to find the ring.
• She said she would leave no stone unturned in the search for peace.
Additional Information
• Let's look at the origin of the idiom:
• This phrase in its present form originated in the mid-1500s.
• It is from an ancient Greek legend about a general who buried his large treasure after being defeated.
• Those searching for the treasure consulted the Oracle of Delphi, who advised them to look under every stone.

Q6. Answer: (b) A ban on spitting in public has been introduced by the Indian government.

The correct answer will be 'A ban on spitting in public has been introduced by the Indian government.'
Key Points The given sentence is in the Active form, hence we need to convert it into the Passive form.
• In the given sentence, the subject is 'The Indian government' and the object is 'a ban on spitting'.
• The change the form of the given sentence from active to passive, we need to interchange the places of the subject and the object.
• The preposition 'by' will be added.
• The objective case 'a ban on spitting' will be used as the subject.
• The given sentence is in the form of present perfect tense, so the structure will be:
• Active form: Subject + has/have+V3+Object.
• Passive form: Object + has/have+been+V3+Subject
Correct Sentence: A ban on spitting in public has been introduced by the Indian government.

Q7. Answer: (c) Harmful

The correct answer is 'Harmful'.
Key Points
• Let's look into the meaning of the given word and the marked option:
• Innocuous: Completely harmless (= causing no harm).
• Example: Some mushrooms look innocuous but are in fact poisonous.
• Harmful: Causing harm.
• Example: This group of chemicals is known to be harmful to people with asthma.
• Hence from the given meanings, we can understand that 'Innocuous' and 'harmful' are antonymous words.

Q8. Answer: (b) Mint

The correct answer is 'Mint'.
Key Points
• The word "Mint" refers to a place where the new coins of a country are made.
• Hence option 2 is correct.
Additional Information Let's look into the meaning of the other given words:
• Mine: A hole or system of holes in the ground where substances such as coal, metal, and salt are removed.
• Warehouse: A large building for storing things before they are sold, used, or sent out to shops.
• Factory: A building or set of buildings where large amounts of goods are made using machines.

YourMockTest.com — Free Study Material

Q9. Answer: (a) BDAC

The correct answer is 'BDAC'.

Key Points

• The sentence 'B' is independent of any other sentence as it is giving general information about 'worm extraction from the wound'. Hence B is the first sentence.

• The phrase 'putting a lotion on them' in sentence D is directly linked to the 'wounds on my legs and arms' in sentence B. Hence D follows sentence B.

• Between sentence A and sentence C, it is understandable that one incident happened after the other and we can understand that sentence C will always follow sentence A because first the 'fruit mash' needs to be given only then he can refuse or realize that he was 'unable to eat'.

• Hence sentence A follows D and sentence C follows A.

Paragraph after rearrangement: They extracted 30 worms from my wounds on my legs and arms. They washed me with salt water and bandaged my wounds after putting a lotion on them. They made fruit mash for me. But I was unable to eat.

Q10. Answer: (a) Mild

The solution is in Hindi. Read it online.

Q11. Answer: (a) persuaded

The correct answer is 'persuaded'.

Key Points

• On reading the sentence we understand that the subject was unwilling to go for the picnic but he was explained properly with reasons to why he should go.

• The word 'persuade' means to cause people to do or believe something, esp. by explaining why they should.

• Example: The government is trying to persuade consumers to save more.

• Therefore the word 'persuaded' fits most appropriately in the blank.

Additional Information

• Let's look into the meaning and usage of the other given words:

• Isolate: to separate something from other things with which it is connected or mixed.

• Example: A high wall isolated the house from the rest of the village.

• Control: To order, limit, or rule something, or someone's actions or behavior.

• Example: The temperature is controlled by a thermostat.

• Consult: To get information or advice from a person, esp. an expert, or to look at written material in order to get information.

• Example: If you don’t know the meaning of a word, consult a dictionary.

Q12. Answer: (b) Fascinate

The correct answer is 'Fascinate'.

Key Points

• Let's look into the meanings of the word and the given option:

• Attract: To pull or draw someone or something towards them, by the qualities they have, especially good ones.

• Example: These flowers are brightly colored in order to attract butterflies.

• Fascinate: To have someone’s complete interest and attention.

• Example: The children were fascinated by the story.

• Hence we can understand that both the words 'Attract' and 'Fascinate' are the same in meaning.

• The synonyms of the word 'Attract' are "charm, fascinate, allure".

• Therefore the correct answer is Option 2.

Additional Information

• Disgust: a feeling of revulsion or strong disapproval aroused by something unpleasant or offensive

• Release: allow or enable to escape from confinement; set free

• Prevent: keep (something) from happening

Q13. Answer: (a) maintanance

The incorrectly spelled word is 'maintanance'.

Key Points

• The correct spelling of the given word will be "maintenance".

• The word 'maintenance' is referred to the process of preserving a condition or situation or the state of being preserved.
• Example: The building has suffered from years of poor maintenance.
• The word 'maintenance' is a noun.
• Therefore the correct answer is Option 1.

Q14. Answer: (b) disdain

The correct answer is 'Disdain'.

Key Points

• Let's look into the meanings of the word and given option:
• Condescension: Behaviour that shows you think you are more important or more intelligent than other people.
• Example: He looked at me with condescension and pity in his eyes.
• Disdain: The feeling of not liking someone or something and thinking that they do not deserve your interest or respect.
• Example: He regards the political process with disdain.
• By the given meanings we can understand that the words 'condescension' and 'disdain' are similar in meaning.
• The synonyms of the word 'condescension' are "disdain, scorn, arrogance".
• Therefore the words 'condescension' and 'disdain' are synonymous words.

Additional Information Let's look into the meaning and usage of the other given words:

• Intention: Something that you want and plan to do.
• Example: It wasn't my intention to exclude her from the list - I just forgot her.
• Cohesion: (of objects) the state of sticking together, or (of people) being in close agreement and working well together
• Example: The team just seems to lack cohesion.
• Effusion: A sudden and uncontrolled expression of strong emotion.
• Example: The cleverness of his writing deflates amid his effusions of feeling.

Q15. Answer: (a) contentious

The solution is in Hindi. Read it online.

Q16. Answer: (b) someone has been picked my pocket

The erroneous segment is 'someone has been picked my pocket'.

Key Points

• The sentence is referring to an action that has happened in the past.
• The use of 'has been' is in the present perfect tense and is incorrect in the given sentence.
• The present perfect tense refers to an action or state that either occurred at an indefinite time in the past or began in the past and continued to the present time, which is not the case in the given sentence as the action is already completed.
• The given sentence on the other hand is in the past perfect form describing actions that were completed before some point in the past.
• Example: We were shocked to discover that someone had graffitied on our front door. (describing two actions from the past where one action is occurring before the other).
• Therefore 'has been picked' must be replaced with 'had picked' to make the sentence grammatically correct.

Correct sentence: I think someone had picked my pocket while I was traveling in the metro.

Q17. Answer: (a) I have been writing a novel

The correct substitute is 'I have been writing a novel'.

Key Points

• The middle and the last part of the sentence show that the task of writing the novel started two years ago and is still continuing - for the last two years but it is not finished yet.
• By reading this part of the sentence we can understand that the sentence is in the Present Perfect Continuous Tense.
• The present perfect continuous tense (also known as the present perfect progressive tense) shows that something started in the past and is continuing at the present time.
• Example: He has been sitting in class since early this morning.
• The present perfect continuous is formed using the construction has/have been + the present participle (root + -ing).
• Therefore 'I wrote a novel' must be replaced with 'I have been writing a novel' to make the sentence grammatically correct.

Correct sentence: I have been writing a novel for the last two years but it is not finished yet.

YourMockTest.com — Free Study Material

Q18. Answer: (a) BCAD

The correct answer is 'BCAD'.

Key Points

• The sentence 'B' is independent of any other sentence as it is giving general information about humans crossing borders in search of jobs. Hence, B is the first sentence.

• The phrase 'Nowhere it is more apparent' in sentence C is directly linked with 'crossing borders' mentioned in sentence B, hence C follows B.

• The noun 'European' in sentence A is directly linked to 'Europe' mentioned in sentence C, hence A follows C.

• The pronoun 'others' in sentence D refers back to the 'Europeans' mentioned in sentence A, hence D becomes the concluding sentence of the paragraph.

Q19. Answer: (a) are considered an honour

The erroneous part of the sentence is 'are considered an honour'.

Key Points

• The given sentence is talking about a single task of a specific day - the Republic Day Parade.

• The use of the plural verb 'are' in this case is incorrect and hence should be replaced with the singular verb 'is' to make the sentence grammatically correct.

• Therefore the correct answer is option 1.

Correct Sentence: Participating in the Republic Day Parade is considered an honour by many people.

Q20. Answer: (b) travel

The correct answer is 'travel'.

Key Points

• In the given sentence we can see the use of the preposition 'to'.

• Whenever a verb follows the preposition 'to', it is always used in its base form.

• Let's understand with the help of some examples:

• She's not strong enough to go hiking up mountains.

• This tool is used to make holes in leather.

• This meat is difficult to chew.

• Can you tell me how to get there?

• Therefore the word 'travels' must be replaced with 'travel' to make the sentence grammatically correct.

Correct sentence: How much does it cost to travel from the airport to Noida?

Q21. Answer: (d) ceremonies

The correct answer is 'ceremonies'.

Key Points

• By reading the first line of the passage we can get that the passage is about an occasion - Graduation Day.

• When we consider an occasion we know that every occasion consists of performances and acts.

• The word 'ceremony' is referred to (a set of) formal acts, often fixed and traditional, performed on important social or religious occasions.

• Example: A wedding/graduation ceremony.

• Therefore the word 'ceremonies' fits most appropriately in blank 1.

The complete passage is- Graduation Day was at hand. Primary school graduation (1) ceremonies in those days followed a prescribed order-conventional, courteous and (2) sentimental. First, the school principal made a long speech (3) of encouragement and blessing for the future of the graduates. (4) then one of the representatives of the graduating class (5) responded with a vote of thanks.

Q22. Answer: (a) sentimental

The correct answer is 'sentimental'.

Key Points

• Let's refer to this line: "ceremonies in those days followed a prescribed order-conventional, courteous and _____."

• By reading the above line we understand that it describes a predetermined order of the ceremonies and how they used to be.

• Since the above line is describing the quality of the ceremonies of those days, hence we should use an adjective in the given blank.

• The word 'sentimental' is an adjective that means of or prompted by feelings of tenderness, sadness, or nostalgia.

YourMockTest.com – Free Study Material

• Example: He gets sentimental and starts crying when we talk about his mother.

• Therefore the word 'sentimental' fits most appropriately in blank 2.

The complete passage is- Graduation Day was at hand. Primary school graduation (1) ceremonies in those days followed a prescribed order-conventional, courteous and (2) sentimental. First, the school principal made a long speech (3) of encouragement and blessing for the future of the graduates. (4) then one of the representatives of the graduating class (5) responded with a vote of thanks.

Q23. Answer: (c) of

The correct answer is 'of'.

Key Points

• Let's refer to this line: "First the school principal made a long speech _____ encouragement and blessing for the future of the graduates."

• By reading this line we understand that the principal gave a long speech that consisted of words of encouragement and also blessings for the future.

• The speech hence reflects a possessive quality.

• We use the preposition 'of' to express possession and it also means having.

• Examples:

• dresses of lace and silk

• plates of gold and silver

• employees of the company

• Therefore the preposition 'of' fits most appropriately in blank 3.

The complete passage is- Graduation Day was at hand. Primary school graduation (1) ceremonies in those days followed a prescribed order-conventional, courteous and (2) sentimental. First, the school principal made a long speech (3) of encouragement and blessing for the future of the graduates. (4) then one of the representatives of the graduating class (5) responded with a vote of thanks.

Mistake Points

• The common mistake is made while choosing between 'of' and 'about'.

• 'of' is a preposition while 'about' can be used both as a preposition and also as an adverb.

• As a preposition 'about' means on the subject of, or connected with.

• Example: a film about the Spanish Civil War.

• As an adverb 'about' is used to express a little more or less than the stated number or amount.

• Example: about six feet tall

Q24. Answer: (b) Then

The correct answer is 'Then'.

Key Points

• Let's refer to this line: "First the school principal made a long speech of encouragement and blessing for the future of the graduates. _____ one of the representatives of the graduating class"

• By reading the above lines we can understand that it is mentioning about two events where one is started (_____ one of the representatives of the graduating class) right after the other ended (First the school principal made a long speech of encouragement and blessing for the future of the graduates).

• The adverb 'then' is used to refer to next or after that.

• Example: Let me finish this job, then we'll go.

• Therefore the word 'then' fits most appropriately in blank 4.

The complete passage is- Graduation Day was at hand. Primary school graduation (1) ceremonies in those days followed a prescribed order-conventional, courteous and (2) sentimental. First, the school principal made a long speech (3) of encouragement and blessing for the future of the graduates. (4) then one of the representatives of the graduating class (5) responded with a vote of thanks.

Q25. Answer: (a) responded

The correct answer is 'responded'.

Key Points

• Let's refer to these lines: "First the school principal made a long speech of encouragement and blessing for the future of the graduates. Then one of the representatives of the graduating class _____ with a vote of thanks."

• By reading the above lines we can understand that when the principal finished his/her speech one of the representatives reacted with appreciation.

• The verb 'respond' means to say or do something as a reaction to something that has been said or done.
• Example: To every question, he responded "I don't know."
• The passage is a description of a past event, hence the word 'responded' fits most appropriately in blank 5.
• Therefore option 1 is the correct answer.

The complete passage is- Graduation Day was at hand. Primary school graduation (1) ceremonies in those days followed a prescribed order-conventional, courteous and (2) sentimental. First, the school principal made a long speech (3) of encouragement and blessing for the future of the graduates. (4) then one of the representatives of the graduating class (5) responded with a vote of thanks.

Q26. Answer: (b) {31, 26, 40}

The logic is:
{22, 17, 31} → 22 - 17 = 5 and 31 - 17 = 14
Similarly,
{31, 26, 40} → 31 - 26 = 5 and 40 - 26 = 14
Hence, '{31, 26, 40}' is the correct answer.

Q27. Answer: (a) 106

The pattern followed here is:
The logic is:
(The sum of the alphabets in the opposite positional values) - (Number of letters in the word)
According to the alphabetical positions of the letters,
Similarly,
Similarly,
Hence, '106' is the correct answer.

Q28. Answer: (d) [figure]

The correct mirror image of the given figure when the mirror is placed at the right side of the figure is shown below:
Hence, 'option 4' is the correct answer.

Q29. Answer: (d) SNMDBH

The pattern followed here is:
According to the alphabetical positions of the letters,
Similarly,
Hence, 'SNMDBH' is the correct answer.

Q30. Answer: (a) Director

The description is as follows:

Option	Description	
1.	Director	A person who is in charge of an activity, department, or organization.
2.	Minister	A minister is a politician who heads a ministry.
3.	Mayor	The mayor is the leader of a city. He or she heads the city government.
4.	Speaker	The Speaker is the principal office holder in the House of Representatives.

Hence, 'Director' is the odd one out.

Q31. Answer: (a) Prism : Glass

The logic is:
Pullover : Wool → Pullover is made up of wool. It is a knitted garment put on over the head and covering the top half of the body.
Similarly,
Prism : Glass → Prism is made up of glass. It is a solid geometric figure whose two ends are similar, equal, and parallel rectilinear figures, and whose sides are parallelograms.

YourMockTest.com — Free Study Material

Hence, ‘Prism : Glass’ is the correct answer.

Q32. Answer: (d) [figure]

The option in which the given figure is embedded when rotation is NOT allowed is shown below:

Hence, ‘option 4’ is the correct answer.

Q33. Answer: (a) SNPJ

The pattern followed here is:

According to the alphabetical positions of the letters,

1. SNPJ → S - 5 = N; N + 2 = P; P - 6 = J
2. FBDX → F - 4 = B; B + 2 = D; D - 6 = X
3. TPRL → T - 4 = P; P + 2 = R; R - 6 = L
4. HDFZ → H - 4 = D; D + 2 = F; F - 6 = Z

Hence, ‘SNPJ’ is the odd one out.

Q34. Answer: (c) WRNK

The logic followed here is:

Similarly,

Hence, the correct answer is "WRNK".

Alternate MethodThe logic followed here is:

Similarly,

Hence, the correct answer is "WRNK".

Q35. Answer: (c) 1249.6

Total number of exam centres = 250

Average number of applicants per centre = 1250

Total number of applicants = 1250 × 250 = 312500

It was later realised that in one centre, the number of applicants was counted as 1758 instead of 1658.

Correct number of applicants = 312500 + 1658 – 1758

= 314158 – 1758

= 312400

Correct average number of applicants per centre = 312400 ÷ 250 = 1249.6

Hence, ‘1249.6’ is the correct answer.

Q36. Answer: (b) 1049

The logic followed here is:

Option 1 → 127 = 2^7 - 1 = 128 - 1 = 127

Option 2 → 1049 → No value comes near by 1049.

Option 3 → 4095 = 2^{12} - 1 = 4096 - 1 = 4095

Option 4 → 255 = 2^8 - 1 = 256 - 1 = 255

Hence, the correct answer is "1049".

Q37. Answer: (a) [figure]

The logic is:

Figures at odd position: Clockwise arrows increase by 2 units as we move along the series.

Figures at even position: Anti-clockwise arrows increase by 2 units as we move along the series.

Hence, 'option 1' is the correct answer.

Q38. Answer: (a) ÷ and ×

1. ÷ and ×

Given equation: 14 + 12 × 18 ÷ 6 – 12 = 6

After interchanging the signs, the equation becomes:

L.H.S = 14 + 12 ÷ 18 × 6 – 12

= 14 + 0.67 × 6 - 1

YourMockTest.com – Free Study Material

= 14 + 4 – 12
= 18 – 12
= 6 = R.H.S
2. × and +
Given equation: 14 + 12 × 18 ÷ 6 – 12 = 6
After interchanging the signs, the equation becomes:
L.H.S = 14 × 12 + 18 ÷ 6 – 12
= 14 × 12 + 3 – 12
= 168 + 3 - 12
= 171 – 12
= 159 ≠ R.H.S
3. − and +
Given equation: 14 + 12 × 18 ÷ 6 – 12 = 6
After interchanging the signs, the equation becomes:
L.H.S = 14 - 12 × 18 ÷ 6 + 12
= 14 - 12 × 3 + 12
= 14 – 36 + 12
= 26 – 36
= -10 ≠ R.H.S
4. ÷ and –
Given equation: 14 + 12 × 18 ÷ 6 – 12 = 6
After interchanging the signs, the equation becomes:
L.H.S = 14 + 12 × 18 - 6 ÷ 12
= 14 + 12 × 18 - 0.5
= 14 + 216 – 0.5
= 230 – 0.5
= 229.5 ≠ R.H.S
Hence, '÷ and ×' is the correct answer.

Q39. Answer: (b) Q, O, Q, C, M

Given :- K O _ M C L _ Q M C M O _ M _ N O Q _ C
By checking options and substituting accordingly.
1. Q, O, C, Q, M → K O Q M C / L O Q M C / M O C M Q / N O Q M C
2. Q, O, Q, C, M → K O Q M C / L O Q M C / M O Q M C / N O Q M C
♦ Here 1st letter is increased by +1.
♦ K + 1 = L; L + 1 = M; M + 1 = N
3. M, O, Q, C, M → K O M M C / L O Q M C / M O Q M C / N O Q M C
4. M, O, Q, C, O → K O M M C / L O Q M C / M O Q M C / N O Q O C
♦ Option (2) gives a pattern of K O Q M C / L O Q M C / M O Q M C / N O Q M C.
Hence, 'Q, O, Q, C, M' is the correct answer.

Q40. Answer: (c) Son

A is				
Symbol	•	•	×	÷
Meaning	wife	daughter	sister	brother
to B				

P ÷ M × R – Z + Q → P is brother of M, M is sister of R, R is daughter of Z, Z is wife of Q.
By using the symbols in the table given below, we can draw the following family tree:
Clearly, P is son of Q.
Hence, 'Son' is the correct answer.

YourMockTest.com — Free Study Material

Q41. Answer: (a) [figure]

The paper when unfolded will appear as shown below:

Hence, ‘option 1’ is the correct answer.

Q42. Answer: (a) 88

The logic is:

1 × 1 + 1 = 1 + 1 = 2

2 × 2 + 2 = 4 + 2 = 6

6 × 3 + 3 = 18 + 3 = 21

21 × 4 + 4 = 84 + 4 = 88

88 × 5 + 5 = 440 + 5 = 445

Hence, ‘88’ is the correct answer.

Q43. Answer: (b) 23

The logic is: (2nd number + 3)² = 1st number.

256 : 13 → $(13 + 3)^2 = 16^2 = 256$

Similarly,

676 : ? → $(23 + 3)^2 = 26^2 = 676$

Hence, ‘23’ is the correct answer.

Q44. Answer: (a) [figure]

The Venn diagram that best represents the relationship between Saturn, Planet, and Cadminum is shown below:

Saturn is a Planet and Cadmium is a chemical element.

Hence, ‘option 1’ is the correct answer.

Q45. Answer: (a) R and O

When the paper is folded to form a cube, the faces opposite to each other is shown below:

N	M	R
P	Q	O

Clearly, from the given options, R and O are the pairs of letters which will be on opposite sides.

Hence, ‘R and O’ is the correct answer.

Q46. Answer: (b) (18, 54, 196)

The logic is:

The first number × 3 = second number

The first number × 11 = third number

(12, 36, 132) → 12 × 3 = 36; 12 × 11 = 132

Option 1: (22, 66, 242) → 22 × 3 = 66; 22 × 11 = 242

Option 2: (18, 54, 196) → 18 × 3 = 54; 18 × 11 = 198 ≠ 196

Option 3: (15, 45, 165) → 15 × 3 = 45; 15 × 11 = 165

Option 4: (19, 57, 209) → 19 × 3 = 57; 19 × 11 = 209

Thus, option 2 is not follow given logic.

Hence, ‘(18, 54, 198)’ is the correct answer.

Q47. Answer: (c) 15

The triangles in the question figure are as follows:

Hence, ‘15’ is the correct answer.

Q48. Answer: (c) Devastation

War leads to destruction. The outcome of war is destruction.

Similarly,

Cyclone causes devastation.

Hence, ‘Devastation’ is the correct answer.

YourMockTest.com — Free Study Material

Q49. Answer: (b) 2, 4, 5, 1, 3

The correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary is:

2. Cerebellum

4. Ceremonious

5. Certainty

1. Certificate

3. Cervical

Hence, '2, 4, 5, 1, 3' is the correct answer.

Q50. Answer: (d) None of the conclusions follow.

The least possible Venn diagram is:

Conclusions:

I. No dancer is an athlete. → False (As, No athlete is a singer and All singers are dancers → Some dancer are not athlete)

II. Some singers are men. → False (As, Some men are athletes, No athlete is a singer and All singers are dancers → No singers are men)

III. Some men are dancers. → False (As, Some men are athletes, No athlete is a singer and All singers are dancers → Some men are not dancers)

Hence, none of the conclusions follow.

Q51. Answer: (b) 9

Given:

Two sides of a triangle = 12.8 m & 9.6 m

Formula used:

Area of a triangle = 1/2 × Base × Height

Calculation:

Let the height of the corresponding side 12.8 m = h

1/2 × 9.6 × 12 = 1/2 × 12.8 × h

=> (9.6 × 12)/12.8 = h

=> h = 9 m

Therefore The height of the triangle corresponding to side with length 12.8 m long = 9 m

Q52. Answer: (c) 1692

Given:

x4-14x2+1 = 0

Formula used:

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

$(a + b)^3 = a^3 + b^3 + 3ab(a + b)$

Calculation:

x4 - 142x2 + 1 = 0

By dividing the equation by x^2

=> x^2- 142 + $1/x^2$ = 0

=> x2 + 1/x2 = 142

By adding 2 in both LHS & RHS

=> x2 + 1/x2 + 2 = 142 + 2

=> $(x + 1/x)^2$ = 144

=> (x + 1/x) = √144 = 12

By Cubing both sides

=> $(x + 1/x)^3 = 12^3$

=> $x^3 + 1/x^3 + 3 \times x \times 1/x (x + 1/x) = 1728$

=> x3 + 1/x3 = 1728 - 3 × (x + 1/x) = 1728 - 3 × 12

=> 1728 - 36 = 1692

Therefore x3 + 1/x3 = 1692

Alternate MethodIf ($x^2 + 1/x^2$) = a; then (x + 1/x) = √(a + 2) = k

If (x + 1/x) = k; then (x3 + 1/x3) = k^3 - 3k

=> If x2 + 1/x2 = 142; then (x + 1/x) = √(142 + 2) = 12

Therefore If (x + 1/x) = 12; then (x3 + 1/x3) = 123 - 3 × 12 = 1692

Q53. Answer: (d) 6.3%

Given:

Total export of sugar in 2016 = 270

Total export of sugar in 2017 = 360

Total export of sugar in 2019 = 380

Total production in 2015 = 320

Total production in 2018 = 440

Calculation:

80% of the total export of sugar in 2016, 2017, and 2019 = 80/100 × (270 + 360 + 380)

=> 1010 × 4/5 = 808

Total production in 2015 & 2018 = (320 + 440) = 760

Therefore The required percentage = (808 - 760)/760 × 100 = 6.3%

Q54. Answer: (b) 52%

Given:

55% of voters are male.

40% of the male voters are literate.

331/3% of the female voters are illiterate.

Literate female voters = 100% - 331/3% = 662/3%

Calculation:

Let the total voters be 100%

=> Male voters = 55%

=> Female voters = 100% - 55% = 45%

Literate male voters = 55% × 40/100 = 22%

Literate female voters = 45% × 662/3% = 30%

Therefore Total literate voters = 22% + 30% = 52%

Q55. Answer: (d) 16 : 29

Given:

Ratio of acid and water = 4 : 5

Calculation:

Let the total solution be 90 units,

Amount of acid = 90 × 4/9 = 40 units

Amount of water = 90 × 5/9 = 50 units

20% of the total solution is taken out = 90 × 20/100 = 18 units

Acid and water will be taken out in 4 : 5

=> Remaining amount of acid = 40 - 18 × 4/9 = 32

=> Remaining amount of water = 50 - 18 × 5/9 = 40

The amount taken out is replaced with water;

So, new quantity of water = 40 + 18 = 58

Therefore The ratio of acid and water in the new solution = 32 : 58

=> 16 : 29

Q56. Answer: (d) 4.8

Given:

In Δ ABC, angle B = 90°, AB = 8 cm and BC = 15 cm

AD is the angle bisector of angle A

Concept:

Angle Bisector Theorem = The angle bisector of any angle will divide the opposite side in the ratio of the sides containing the

angle.
Here, BD/DC = AB/AC
Calculation:
By Pythagoras Theorem
$AB^2 + BC^2 = AC^2$
$\Rightarrow 8^2 + 15^2 = AC^2$
$\Rightarrow AC = \sqrt{289} = 17$ cm.
Now, BD/DC = AB/AC
$\Rightarrow$ BD/DC = 8/17
$\Rightarrow$ BD + DC = 8x + 17x = 25x
$\Rightarrow$ BD = 15 cm × 8x/25x
Therefore BD = 4.8 cm

Q57. Answer: (c) 19

Given:
a2 + b2 = 25, x2 + y2 = 17, ax + by = 8
Formulas used:
$(a + b)^2 = a^2 + b^2 + 2ab$
$(a - b)^2 = a2 + b2 - 2ab$
$(ax + by)^2 + (ay - bx)^2 = (a2 + b2) \times (x2 + y2)$
Calculation:
By using the above formula;
$(ax + by)2 + (ay - bx)2 = (a2 + b2) \times (x2 + y2)$
$\Rightarrow 8^2 + (ay - bx)2 = 25 \times 17$
$\Rightarrow (ay - bx)2 = 425 - 64 = 361$
$\Rightarrow (ay - bx) = \sqrt{361} = 19$
Therefore (ay - bx) = 19

Q58. Answer: (d) 20%

Given:
Marked Price (MP) of the article = Rs.1000
Selling Price (SP) of the article = Rs.600
First discount = x%
Second discount = 25%
Formula used:
Discount = MP - SP
SP after discount = MP × (100 - Discount%)/100
Calculation:
SP of the article after the first discount = 1000 × (100 - x)/100 = 10 × (100 - x)
SP of the article after the second discount = 10 × (100 - x) × (100 - 25)/100
$\Rightarrow$ 10 × (100 - x) × 75/100 = 600
$\Rightarrow$ (100 - x) = 600 × 100/75 × 1/10
$\Rightarrow$ 100 - x = 80
$\Rightarrow$ x = 20
Therefore The first discount percent = 20%
Alternate Method Formulas used:
Discount rate = Discount/MP × 100
Also, x + y -xy/100
Second discount = 25%
Total Discount = 1000 - 600 = 400
Effective rate of discount = 400/1000 × 100
$\Rightarrow$ 40%

YourMockTest.com — Free Study Material

Effective rate of discount = x + y - xy/100
=> x + 25% - x × 25/100
=> 40% = x + 25% - x/4
=> 15% = x - x/4
=> 15% = 3x/4
=> x = 15% × 4/3 = 20%

Q59. Answer: (a) (sin θ)/2

Given:
o^o < θ < 90^o
Concept:
$(a^2 - b^2) = (a + b)(a - b)$
$\sin^2\theta + \cos^2\theta = 1$
Calculation:
((1 - sin θ)(sec θ + tan θ)tan θ)/((tan θ + sec θ + 1)(cot θ - cosec θ + 1))
=> [(1 - sinθ)(1/cosθ + sinθ/cosθ) × sinθ/cosθ] ÷ [(sinθ/cosθ + 1/cosθ + 1)(cosθ/sinθ - 1/sinθ + 1)]
=> [(1 - sinθ) × (1 + sinθ)/cosθ × sinθ/cosθ] ÷ [(sinθ+ cosθ + 1)/cosθ × (sinθ+ cosθ - 1)/sinθ]
=> [(1² - sin²θ)/cosθ × sinθ/cosθ] ÷ [(sinθ+ cosθ)² - 1²)/(sinθ × cosθ)]
=> [cos2θ/cosθ× sinθ/cosθ] ÷ [(sin²θ + cos²θ + 2sinθcosθ - 1)/(sinθ × cosθ)]
=> sinθ ÷ [(1 + 2sinθcosθ - 1)/(sinθ × cosθ)]
=> sinθ ÷ [2sinθcosθ/(sinθ × cosθ]
=> sinθ ÷ 2
Therefore ((1 - sin θ)(sec θ + tan θ)tan θ)/((tan θ + sec θ + 1)(cot θ - cosec θ + 1)) = sinθ/2
Alternate Method By Value Putting Method
For θ = 30°
LHS: ((1 - sin θ)(sec θ + tan θ)tan θ)/((tan θ + sec θ + 1)(cot θ - cosec θ + 1))
=> [(1 - 1/2)(2/√3 + 1/√3) × 1/√3] ÷ [(1/√3 + 2/√3 + 1)(√3 - 2 + 1)]
=> [1/2 × √3 × 1/√3] ÷ [(√3 + 1)(√3 - 1)]
=> 1/2 ÷ (3 - 1)
=> 1/2 ÷ 2
=> 1/4
RHS: sinθ/2
=> 1/2 ÷ 2
=> 1/4
Therefore LHS = RHS

Q60. Answer: (a) 1

Given:
(2x + y)3 - (x + 2y)3 = (x - y) [A(x2 + y2) + Bxy]
Formula used:
$(a + b)^3 = a^3 + b^3 + 3ab(a + b)$
Calculation:
(2x + y)3 - (x + 2y)3 = (x - y) [A(x2 + y2) + Bxy]
=> $(2x)^3 + y^3 + 3 \times 2x \times y(2x + y) - (x)3 - (2y)^3 - 3 \times x \times 2y\ (x + 2y) = (x - y)$ [Ax2 + Ay2 + Bxy]
=> $8x^3 + y3 + 12x^2y + 6xy^2 - x^3 - 8y^3 - 6x2y - 12xy^2 =$ [Ax3 + Axy^2+ Bx^2y - Ax^2y - Ay3 - Bxy2]
=> 7x3 - 7y3 + 6x2y - 6xy2 = Ax3 - Ay3 + (B - A)x2y + (A - B)xy2
By comparison on LHS and RHS
=> A = 7, (B - A) = 6, (A - B) = - 6
=> (B - 7) = 6
=> B = 13
Therefore (2A - B) = (2 × 7 - 13)
=> 1

Shortcut Trick (2x + y)3 - (x + 2y)3 = (x - y) [A(x2 + y2) + Bxy]
Put x = 0, in above eqn then A = 7
Put x = 1, y = -1 then B = 13
value of (2A - B) = 2 × 7 - 13
Therefore (2A - B) = 1.

Q61. Answer: (d) Loss, 416/21

Given:
Cost price each egg = Rs.1.40
Selling price each egg = Rs.1.60
Formula used:
Loss = Cost price - Selling price
Loss percent = Loss/Cost price × 100
Calculation:
Cost price of 40 dozen eggs = 12 × 40 × 1.40 = 672
Cost price of 80 eggs = 80 × 1.40 = 112
Cost price of 400 eggs = 400 × 1.40 = 560
Selling price of the remaining (480 - 80) eggs = 400 × 1.60 = 640
Loss = Cost price - Selling price
Cost price of 80 eggs that were broken in transportation will be treated as a loss.
Loss = (560 + 112) - 640 = 32
Loss percent = 32/672 × 100 = 416/21 %
Therefore The required loss percent is 416/21 %

Q62. Answer: (a) 241/61

Given:
tan A=1.1/6
=> tan A = 11/60
Formulas used:
tan A = Perpendicular/Base, where A is an acute angle
Pythagoras Theorem
In triangle xyz, xz = Hypotenuse
$(xz)^2 = (xy)^2 + (yz)^2$
Calculation:
$(xz)^2 = 11^2 + 60^2$
=> xz = √3721 = 61
Now, (4cos A - 7sin A)
=> 4 × B/H - 7 × P/H
=> 4 × 60/61 - 7 × 11/61
=> 240/61 - 77/61 = 163/61
=> 241/61
Therefore (4cos A - 7sin A) = 241/61

Q63. Answer: (b) 396

Concept:
Follow BODMAS rule to solve this question, as per the order given below,
Calculation:
(96 ÷ 16 of 2 - 128 × 2 ÷ 32 + 15of 4)/(5/6of 2/3(1/3 - 1/4 - 1/6))
=> [96/(16 × 2) - 128 × 2/32 + 15 × 4] ÷ 5/6 × 2/3 × [1/3 - (1/4 - 1/6)]
=> [96/32 - 128 × 1/16 + 60] ÷ 5/6 × 2/3 × [(1/3 - 1/12)]
=> [3 - 8 + 60] ÷ 5/9 × 1/4
=> 55 ÷ 5/36
=> 55 × 36/5

=> 11 × 36

=> 396

Therefore The value of (96 ÷ 16 of 2 - 128 × 2 ÷ 32 + 15of 4)/(5/6of 2/3(1/3 - 1/4 - 1/6)) is 396.

Q64. Answer: (c) 120

Given:

Days taken by A = 80

Days taken by B = 96

Days taken by A, B and C together = 32

Formula used:

No of days taken = Work/ Efficiency per day

Calculation:

Let the total work be = 1

Work done be A per day = 1/80

Work done by B per day = 1/96

Work done by A, B and C per day = 1/32

=> Work done by only C per day = 1/32 - 1/80 - 1/96

=> (15 - 6 - 5)/480 = 4/480

=> 1/120

No of days taken by C = 1 ÷ 1/120 = 120

Therefore C will take 120 days to complete the entire work alone.

Alternate Method By LCM Method

Let the total work be the LCM of 80, 96 and 32 as the common multiple.

Work done by C in one day = 15 - 6 - 5 = 4

Therefore No of days taken by C alone = 480/4 = 120

Q65. Answer: (b) 5

Given:

When a number is divided by 624, the remainder will be 53.

Formula used:

Dividend = Divisor × Quotient + Remainder

Calculation:

Let the number be = N

=>N/624, Remainder = 53

If N is completely divisible by 624 then N is also divisible by 16

=> so the answer depends on the remainder only

=> 53/16 = 5 remainder

Therefore The required remainder = 5

Q66. Answer: (c) 18

Given:

Average age of 125 students = 16.2 years

Percentage of boys = 40% = 125 × 2/5 = 50

Percentage of girls = 60% = 125 × 3/5 = 75

Formula used:

Average age of a group of students = Total age ÷ No of students

Calculation:

Let the average age of girls = y years

=> Average age of boys = y × 120% = 6y/5 years

Now As per the question

75 × y + 50 × 6y/5 = 16.2 × 125

=> 75y + 60y = 2025

=> y = 15

=> 6y/5 = 15 × 6/5 = 18
Therefore Average age of boys = 18 years
Alternate MethodBy Ratio Method
Let the average age of girls = 5y
20% in fraction means 1/5
=> Average age of boys = 1 + 5 = 6y
Ratio of the number of boys and girls = 40% : 60%
=> 2 : 3
(5y × 3 + 6y × 2)÷ 5 = 16.2 years
=> 15y + 12y = 81
=> 27y = 81
=> y = 3
Therefore 6y = 6 × 3 = 18 years

Q67. Answer: (a) 28

Given:
AB = Diameter
ABCD is a cyclic quadrilateral & angle ADC = 118o
Concept:
Angle made in a semicircle is a right angle.
The sum of the opposite angles in a cyclic quadrilateral is 180°
Calculation:
angle ADC + angle ABC = 180° [Supplementry angles]
=> 118° + angle ABC = 180°
=> angle ABC = 180° - 118° = 62°
In triangle ABC, angle A + angle B + angle C = 180° [angle sum property]
=> angle A + 62° + 90° = 180°
=> angle A = 180° - 152° = 28°
Therefore angle BAC = 28°

Q68. Answer: (c) 1,064

Given:
Rs. 2,432 amounts to Rs.2,681.28 in 2 years
Formulas used:
When the interest is compounded annually
A = P (1 + r/100)n
Simple interest = P × R/100 × Time
Calculation:
$A = P (1 + r/100)^n$
$=> 2681.28 = 2432 (1 + r/100)^2$
$=> 2681.28/2432 = [(100 + r)/100]^2$
=> 441/400 = [(100 + r)/100]2
√441/400 = (100 + r)/100
=> 21/20 = (100 + r)/100
=> 105 = 100 + r
=> r = 5%
Simple Interest on Rs.2432 at 10% p.a. for 43/8 years.
=> SI = 2432 × 10/100 × 35/8
Therefore Simple interest = Rs.1064

Q69. Answer: (c) 215

Given:
Area of the square that is bent to form a circle = 169 cm2

Formulas used:

The perimeter of the square with side a = 4a

Area of the square with side a = a^2

The perimeter of the circle with radius r = $2\pi r$

The area of the circle with radius r = πr^2

Calculation:

Area of the square = a2

=> a2 = 169

=> a = ± 13

Side of the square = 13 cm

When a wire is bent to form a square and then a circle, the perimeter of both the figures will be equal.

4a = $2\pi r$

=> $4 \times 13 = 2 \times 22/7 \times r$

=> r = $(13 \times 7)/ 11$

Area of the circle = $\pi r2$

=> $22/7 \times (13 \times 7)/ 11 \times (13 \times 7)/ 11$

=> 2366/11

=> 215.09 cm^2

Therefore Area of the circle = 215 cm^2 (nearest to a whole number)

Q70. Answer: (b) 2001 and 2007

Formula used:

Average Production = Sum of the production ÷ No of years

Calculation:

Average production of the years 2002 & 2003 = (35 + 55)/2 = 45 (10000 tonnes)

Average production of the years 2004 & 2006 = (40 + 45)/2 = 42.5 (10000 tonnes)

Average production of the years 2001 & 2007 = (20 + 70)/2 = 45 (10000 tonnes)

Average production of the years 2004 & 2007 = (40 + 70)/2 = 55 (10000 tonnes)

Average production of the years 2006 & 2008 = (45 + 75)/2 = 60 (10000 tonnes)

Therefore The average production of the years 2002 & 2003 is equal to that of 2001 & 2007.

Q71. Answer: (a) 5√129

Given:

Cube of side 20 cm is recast into a cuboid of length and breadth 40cm respectively.

Formulas used:

Volume of cube = $(side)^3$

Volume of cuboid = $l \times b \times h$

Diagonal of cuboid = $\sqrt{l^2 + b^2 + h^2}$

Calculation:

Volume of cube = Volume of cuboid

=> $20 \times 20 \times 20 = 40 \times 40 \times h$

=> h = $(20 \times 20 \times 20) \div (40 \times 40)$

=> h = 5 cm

Diagonal of the cuboid = $\sqrt{40^2 + 40^2 + 5^2}$

=> $\sqrt{1600 + 1600 + 25} = \sqrt{3225}$

=> $5\sqrt{129}$ cm

Therefore The diagonal of the cuboid = $5\sqrt{129}$ cm

Q72. Answer: (b) B in 2014

Formula used:

Average consumption = Sum of the consumption ÷ No of years

Calculation:

Average Consumption of tea of state A over 6 years = (112 + 122 + 124 + 132 + 135 + 153) ÷ 6

=> 778 ÷ 6 = 129.67 (Hundred tones)

Going by the options:

Consumption of state C in 2016 = 142 (Hundred tones)

Consumption of state B in 2014 = 130 (Hundred tones)

Consumption of state E in 2019 = 187 (Hundred tones)

Consumption of state D in 2018 = 151 (Hundred tones)

Therefore By observation, the average consumption of tea of state A (129.67) is closest to the consumption of tea of state B in 2014 (130).

Q73. Answer: (d) A and B

Formula used:

Percentage increase/decrease = (Increase/Decrease)÷ Sales turnover of the base year × 100

Calculation:

The following calculations are done of the percentage increase or decrease of 5 companies from 2014-2015 to 2015-2016.

Percentage increase of the sales turnover of company A = (1250 - 1060) ÷ 1060 × 100 = 17.92%

Percentage increase of the sales turnover of company B = (1125 - 954) ÷ 954 × 100 = 17.92%

Percentage increase of the sales turnover of company C = (900 - 850) ÷ 850 × 100 = 5.88%

Percentage increase of the sales turnover of company D = (1220 - 1360) ÷ 1360 × 100 = - 10.29%

Percentage increase of the sales turnover of company E = (1290 - 1080) ÷ 1080 × 100 = 19.44%

Therefore Company A and B have the same percentage increase in the sales turnover from 2014-2015 to 2015-2016.

Q74. Answer: (d) 120

Given:

Distance = 360 km

Formula used:

Time = Distance/Speed

Calculation:

Let the speed of train A = a

Let the speed of train B = b

As per the question;

360/a - 360/b = 9/5 hours

=> 1/a - 1/b = 1/200 (1)

360/b - 360/2a = 36/60 hours

=> 1/b - 1/2a = 1/600 (2)

By (1) ÷ 2 and then (1) + (2)

=> 1/2a - 1/2b + 1/b - 1/2a = 1/400 + 1/600

=> 1/2b = 5/1200

=> b = 120

Therefore The speed of train B = 120 km/hr

Alternate MethodRatio Method:

According to the question

The ratio of Speed of A = 1(original speed) : 2(New speed)

The ratio of time of A = 2 : 1 (as this is reverse of speed)

A takes 108 mins more time than B and in the second case, it will take 36 mins less than B if the speed is doubled.

Then add the time i.e.= 108 + 36= 144 mins

This time is the difference between the original time and the new time

=> 2x - x = 144

=> x = 144

Then the original time is taken by A is = 288 mins

According to the question, A takes 108 mins more than B.

=> A= 108 + B

=> 288 = 108 + B

YourMockTest.com — Free Study Material

The time is taken by B = 180 mins

3 hours Distance covered by B = 360 km time taken by B

=> 3 hours Then, the speed of B

=> 120 km/hr

Q75. Answer: (b) 18

Shortcut Trick

In a 30°-60°-90° triangle, the side ratios are 1 : √3 : 2.

Distance from base (√3 part) = 6√3 m => 1 unit = 6 m.

Height of broken part (1 unit) = 6 m and Hypotenuse (2 units) = 12 m.

Total height of vertical pole = 6 + 12 = 18 m.

Therefore The correct answer is 18 m.

Alternate Method

Given: Distance BC = 6√3 m, Angle of elevation θ = 30°.

Formula Used: tan θ = Perpendicular/Base; cos θ = Base/Hypotenuse.

=> In triangle ABC, tan 30° = AB / BC

=> 1/√3 = AB / 6√3

=> AB = 6 m (Height of standing part)

=> cos 30° = BC / AC

=> √3/2 = 6√3 / AC

=> AC = 12 m (Length of broken part)

=> Total height of pole = AB + AC = 6 + 12 = 18 m.

Therefore The correct answer is 18 m.

Additional Information

Trigonometric Ratios

Common values: tan 30° = 1/√3, tan 45° = 1, tan 60° = √3.

Height and Distance

The total height of a broken object is the sum of the vertical segment and the slant hypotenuse segment.

Standard Triangle Proportions

For a 30° angle, the ratio of Height : Base : Hypotenuse is always 1 : √3 : 2.

Q76. Answer: (a) Karnataka

The correct answer is Karnataka.

Key Points

• Hoysaleswara temple is also referred simply to as the Halebidu temple.

• It is a 12th-century Hindu temple dedicated to Shiva.

• Hoysaleswara architecture is the Hindu temple architecture which got developed in the region of Karnataka near Mysore.

• It was built between 1121 AD and 1160 AD in the region of Halebid, then known as Dorasamudra, which was the capital of the Hoysalas.

• It was built on the banks of a large man-made lake.

• It is famous for sculptures and architecture from the Hoysala period.

• It was also built during the reign of Vishnuvardhana.

• The temple is Dwikuta, which means two temples called "Hoysaleshwar" and "Shantleeshwar".

• Shantala was the queen of Vishnuvardhana.

• It was built to compete with the Chennakeshava temple which was under construction as a Vaishnava temple.

• Hoysaleshwara Temple is surrounded by ponds, mandapas and lakes.

Additional Information

• The Hoysala Empire and its capital Dorasamudra were invaded, plundered, and destroyed in the early 14th century by the Delhi Sultanate armies of Alauddin Khilji.

• The Hoysala was built around 1500 temples at 958 centers between 1000 AD to 1346 AD.

• The finest temples were commissioned during the times of Vishnuvardhana.

• The Hoysala temple architecture was heavily influenced by the Western Chalukyas, Cholas as well as Pallavas, though there was a departure from the Chalukyan style.

YourMockTest.com — Free Study Material

Q77. Answer: (c) Naomi Osaka

The correct answer is Naomi Osaka.

• Japanese tennis star Naomi Osaka, 22, has become the world's highest-paid female athlete.

Key Points

• According to Forbes, Osaka is ranked 29th among the 100 highest-paid athletes, while Venus Williams is ranked 33rd.

• Naomi Osaka was only one year old when Serena Williams won her first Grand Slam title in 1999.

• Nineteen years later, Osaka won her first Grand Slam, defeating Williams in the final of the US Open.

• Osaka earned $37.4 million in prize money and advertising over the past 12 months, $1.4 million more than Williams.

• The winner of the 2018 US Open and the 2019 Australian Open, Osaka has secured lucrative deals with global brands such as Procter & Gamble, All Nippon Airways and Nissin.

• Osaka has played in the main draw of the US Open four times.

Additional Information

• Sharapova was No. 1 from 2011-15, with Williams sitting atop the list from 2016-19.

• Maria Sharapova previously held the record with $29.7 million in 2015.

• Forbes is an American business magazine owned by Integrated Whale Media Investments and the Forbes family.

• Its headquarters is located in Jersey City, New Jersey.

• Forbes also reports on related subjects such as technology, communications, science, politics, and law.

• Forbes has an international edition in Asia as well as editions produced under license in 27 countries and regions worldwide.

Q78. Answer: (c) 27

The correct answer is 27.

Key Points

• The human hand is made up of 27 bones, which fall into specific "categories".

• The human hand usually has five digits: four fingers and a thumb.

• The hand is made up of many different bones, muscles, and ligaments that allow for a large amount of range of motion and dexterity.

• The bones of the hand provide support and flexibility to the soft tissues.

• There are 3 major types of bones in the hand which can be divided into three categories:

• Carpal bones (proximal) - 8 bones that make up the wrist.

• The 2 rows of carpal bones are attached to the 2 bones of the hand - the ulna bone and the radius bone.

• Metacarpals - 5 bones that make up the middle part of the hand.

• Phalanges (distal) - 14 bones found in the fingers of each hand and also in the toes of each toe.

• Each finger has 3 phalanges (distal, middle and proximal); The thumb has only 2.

Additional Information

• Many muscles, ligaments, tendons, and sheaths can be found within the hand.

• Muscles are structures that can contract, allowing movement of the bones in the hand.

• Ligaments are fibrous tissue that helps bind the joints in the hand together.

• Sheaths are tubular structures that surround part of the fingers.

• Tendons connect the muscles of the hand or arm to the bone to allow movement.

• There are 54 bones in both arm.

Q79. Answer: (b) Sleepwalking

The correct answer is Sleepwalking.

Key Points

• Parasomnia is a sleep disorder that causes abnormal behavior while falling asleep.

• The behavior can occur during any phase of sleep, including the transition from waking to sleep and vice versa.

• If you have parasomnia, you may move around, talk, or do unusual things during sleep.

• Examples - sleep terrors, sleepwalking, nightmare disorders, sleep-related eating disorders and sleep paralysis.

• Parasomnias are more common during childhood and become less frequent during adulthood.

• There are two general stages of sleep:

• Non-rapid eye movement sleep (NREM), rapid eye movement sleep (REM)

• If the person loses their balance or collides with other objects, sleepwalking can also result in injury.

Additional Information

• Seasickness:

• Motion sickness occurs when your brain can't make sense of information sent from your eyes, ears, and body.

• Lots of motion — in a car, airplane, boat, or even an amusement park ride.

• Your brain receives signals from motion-sensing parts of your body When these parts send conflicting information, your brain doesn't know whether you're stationary or moving.

• Your brain's confused reaction makes you feel sick.

• Night blindness:

• This is a type of vision loss also known as nyctalopia.

• People with night blindness experience poor vision at night or in low-light environments.

• Night blindness is a symptom of some underlying conditions, which can have many causes.

• Myopia, Glaucoma drugs that constrict the pupil, Diabetes, Vitamin A deficiency, Retinitis pigmentosa.

• Stammering:

• It is a neurological condition that makes speaking physically difficult.

• Someone who stammers will repeat, prolong, or get stuck on sounds or words.

• There may also be signs of visual stress as the person struggles to get the word out.

• Stuttering usually appears in childhood as a symptom that the brain's pathways for speech are not being wired normally.

Q80. Answer: (d) Khuallam

The correct answer is Khuallam.

Key Points

• During a special occasion called Khuangchawi, the Khuallam dance is performed by the local performers of Mizoram.

• The term Khuallam means dance of guests.

• people invited to view the performance are often seen dancing while coming inside the respective venue.

• Puandum is the traditional costume which is worn by the Khuallam dancers.

• Handwoven Mizo cloth known as Puandum is wrapped over the shoulders and the dance is performed by swaying the cloth.

• The unique trait of Khuallam dance lies in the use of gongs.

• Locally known as Darbu these gongs accompany the steps of the Khuallam dancers rhythmically.

• Another interesting fact associated with the Khuallam dance of Mizoram is that this one does not involve any kind of vocal song.

• As a part of the cultural richness of Mizoram, Khuallam captivates the imagination of not only the local inhabitants but also the tourists.

Additional Information

• Cheraw Dance:

• Cheraw Dance in Mizoram is characterized by the use of bamboo staves which are kept in the cross and horizontal forms on the ground.

• While the male dancers move these bamboo staves in rhythmic beats, the female dancers perform by stepping in and out of the bamboo blocks.

• Recognized as one of the oldest dances of Mizoram, Cheraw has become an integral part of almost every festival of Mizoram.

• Cheraw Dance was performed with the hope of providing solace to the soul of a deceased mother who had left her newborn child on earth.

• Chailam :

• Chailam is a very popular form of dance in the state of Mizoram.

• This form of dance is performed on 'Chapchar Kut', which is one of the most significant festivals of the people of Mizoram.

• While performing the dance form of Chailam, the men and women dancers stand alternatively.

• They form a circle and the women hold the waist of the man, and the man, in turn, clutches the shoulder of a woman.

• The band of musicians playing the drums and the Mithun's horn stands in the middle of the circle of dancers.

• The four versions of the dance are Chai Lamthai I, Chai Lamthai II, Chai Lamthai III and Chai Lamthai IV.

• Solakia :

• Solakia dance was to be performed mainly by the people of the Maras and Pawi communities of Mizoram.

• They remain the best exponents of the dance to date.

• Like Rallu-Lam, Solakia was also performed in earlier times to celebrate a victory in war.

• Marked with five principal movements, the dance seeks to recapture the actions of a hero at war.

• Men and women stand in profile, while the hero, brandishing a sword and a shield, dances in the middle to the accompaniment of the gong beats.

Q81. Answer: (b) Satopanth

The correct answer is Satopanth.

Key Points

• The source of the Alaknanda River is the confluence of Satopanth Glacier and Bhagirathi Kharak Glacier.

• The Alaknanda is a Himalayan river in the Indian state of Uttarakhand and one of the two headstreams of the Ganges, the major river of Northern India, and the holy river of Hinduism.

• In hydrology, the Alaknanda is considered the source stream of the Ganges on account of its greater length and discharge; however, in Hindu tradition and culture, the other headstream, the Bhagirathi, is considered the source stream.

• The five main tributaries joining with Alaknanda in order include Dhauliganga, Nandakini, Pindar, Mandakini, and Bhagirathi all rising in the northern mountainous regions of Uttarakhand.

• After the last tributary merging at Devprayag the river is known as the Ganges. The Alaknanda contributes a significantly larger portion to the flow of the Ganges than the Bhagirathi.

Additional Information

• Zemu Glacier is the largest glacier in the Eastern Himalaya.

• It is about 26 kilometres in length and is located at the base of Kangchenjunga in the Himalayan region of Sikkim, India. The Zemu Glacier drains the east side of Kanchenjunga, the world's third-highest mountain.

• Siachin is the largest glacier.

• Siachen Glacier, one of the world's longest mountain glaciers, lying in the Karakoram Range system of Kashmir near the India–Pakistan border, extending for 70 km from north-northwest to south-southeast.

• Siachen glacier, located in the eastern Karakoram Range in the Himalayas.

• It is one of the five largest glaciers in the Karakoram, situated at an average altitude of 18,000 ft above sea level.

• At 78 km long, it is the longest glacier in the Karakoram and second longest in the world's non-polar areas.

Q82. Answer: (b) Joystick

The correct answer is Joystick.

Key Points

• A joystick is an input device consisting of a stick that pivots on a base and reports its angle or direction to the device it is controlling.

• A joystick, also known as the control column, is the principal control device in the cockpit of many civilian and military aircraft, either as a center stick or side-stick. It often has supplementary switches to control various aspects of the aircraft's flight.

• Joysticks are often used to control video games, and usually have one or more push-buttons whose state can also be read by the computer.

• A popular variation of the joystick used on modern video game consoles is the analog stick. Joysticks are also used for controlling machines such as cranes, trucks, underwater unmanned vehicles, wheelchairs, surveillance cameras, and zero-turning radius lawnmowers.

Additional Information

• Server

• A server is a computer or system that provides resources, data, services, or programs to other computers, known as clients, over a network.

• In theory, whenever computers share resources with client machines they are considered servers.

• There are many types of servers, including web servers, mail servers, and virtual servers.

• Modem

• A modulator-demodulator, or simply a modem, is a hardware device that converts data from a digital format, intended for communication directly between devices with specialized wiring, into one suitable for a transmission medium such as telephone lines or radio.

• A modem modulates one or more carrier wave signals to encode digital information for transmission and demodulates signals to decode the transmitted information. The goal is to produce a signal that can be transmitted easily and decoded reliably to reproduce the original digital data.

Q83. Answer: (d) Bandhavgarh Tiger Reserve

The correct answer is Bandhavgarh Tiger Reserve.

Key Points

• India's first hot air balloon safari in a tiger reserve was launched on December 25, 2020, in Madhya Pradesh's world-famous Bandhavgarh Tiger Reserve.

• The safari was launched by Madhya Pradesh forest minister Vijay Shah.

• During the launch, the Minister said that the hot air balloon wildlife safari will be restricted to the buffer area, from where the tourists will be able to watch leopards, tigers, Indian sloth bears, and other wild animals.

• The service will be operated by a Jaipur-based company Sky Waltz.

Additional Information

• Dudhwa National Park.

• The Dudhwa Tiger Reserve is a protected area in Uttar Pradesh located on the India-Nepal border.

• The Dudhwa National Park has a number of species of birds, reptiles, wild elephants, aquatic animals, one-horned rhinos, wild elephants besides its enriched flora and fauna. Its undisturbed natural forest cover, vast spans of grasslands, and wetlands.

• It is the only place in U.P. where both Tigers and Rhinos can be spotted together.

• Jim Corbett National Park is a forested wildlife sanctuary in northern India's Uttarakhand State.

• Rich in flora and fauna, it's known for its Bengal tigers. Animals, including tigers, leopards and wild elephants, roam the Dhikala zone.

• On the banks of the Ramganga Reservoir, the Sonanadi zone is home to elephants and leopards, along with hundreds of species of birds.

• Manas National Park ' is a national park, UNESCO Natural World Heritage site, a Project Tiger reserve, an elephant reserve and a biosphere reserve in Assam, India.

• Located in the Himalayan foothills, it is contiguous with the Royal Manas National Park in Bhutan.

Q84. Answer: (b) 12

The correct answer is 12.

Key Points

• Twelve members are nominated to the Rajya Sabha by the President of India for the six-years terms for their contributions towards arts, literature, sciences, and social services.

• This right has been bestowed upon the President according to the Fourth Schedule (Articles 4(1) and 80(2)) of the Constitution of India.

• Unlike the members of the Lok Sabha, the membership of the Rajya Sabha is a permanent body and cannot be dissolved at any time.

• However, every second year, one-third of the members retire and at the beginning of every third year, the vacancies are filled by fresh elections and the nomination of the President.

• A Member of Parliament (abbreviated: MP) in the Rajya Sabha is the representative of the Indian states to one of the two houses of the Parliament of India (Rajya Sabha).

• Rajya Sabha MPs are elected by an electoral college consisting of elected members of the State Legislative Assembly with a system of proportional representation by means of the single transferable vote.

Additional Information

• The representatives of the states and union territories in the Rajya Sabha are elected by the method of indirect election.

• The representatives of each State and the two Union Territories are elected by the elected members of the Legislative Assembly of that State and the members of the electoral college for that Union Territory, as the case may be, in accordance with the system of proportional representation. Instruments of single transferable vote.

• The Electoral College for the National Capital Territory of Delhi consists of the elected members of the Delhi Legislative Assembly, and for Puducherry the elected members of the Puducherry Legislative Assembly.

• Special Powers of Rajya Sabha

• The Upper House also has some special powers, such as:

• Power to transfer a subject from the State List to the Union List for a specified period (Article 249).

• To create additional All India Services (Article 312).

• To support emergency under Article 352 for a limited period when the Lok Sabha is dissolved.

Q85. Answer: (c) V Muraleedharan

The correct answer is V Muraleedharan.

Key Points

• The Ministry of External Affairs on December 30, 2020, launched the Global Pravasi Rishta Portal and app in order to connect with nearly 3.12 crore Indians across the world.

• While speaking at the launch of the Global Pravasi Rishta app and portal, V Muraleedharan, the Minister of State for External Affairs stated that the app aims at creating a three-way communication between the Indian missions, ministry, and the Indian diaspora.

• The minister also informed that the app will be used by the Indian nationals and diaspora, while the portal will be used by the Indian missions. Currently, there are around 3.12 crore overseas Indians globally out of which 1.78 crores are NRIs and 1.34 crore

are PIOs.

Additional Information

• Objective:

• According to the Minister of State for External Affairs, the government recognizes the significance of the Indian diaspora and has also been engaging them in various ways.

• One such step is the 'Global Pravasi Rishta Portal', through which the government aims at connecting with the Indian community overseas and not ceremonially but at every step.

• The portal by the government will also be used for sharing the latest developments by the Ministry of External Affairs, the Indian government with the diaspora members.

• It will be a giant step in effective and innovative communication channels with NRIs and PIOs.

Q86. Answer: (b) Ladakh

The correct answer is Ladakh.

Key Points

• India has added Tso Kar Wetland Complex in Ladakh as its 42nd Ramsar site, which is the second one in the Union Territory (UT) of Ladakh.

• The Tso Kar Basin is a high-altitude wetland complex, consisting of two principal waterbodies, Startsapuk Tso, a freshwater lake of about 438 hectares to the south, and Tso Kar itself, a hypersaline lake of 1800 hectares to the north, situated in the Changthang region of Ladakh, India.

• It is called Tso Kar, meaning white lake, because of the white salt efflorescence found on the margins due to the evaporation of highly saline water.

• The Tso Kar Basin is an A1 Category Important Bird Area (IBA) as per BirdLife International and a key staging site in the Central Asian Flyway.

• The site is also one of the most important breeding areas of the Black-necked Crane (Grus nigricollis) in India.

• This IBA is also the major breeding area for Great Crested Grebe (Podicepscristatus), Bar-headed Geese (Anserindicus), Ruddy Shelduck (Tadornaferruginea), Brown-headed Gull (Larusbrunnicephalus), Lesser Sand-Plover (Charadriusmongolus), and many other species.

Additional Information

• The aim of the Ramsar list is "to develop and maintain an international network of wetlands which are important for the conservation of global biological diversity and for sustaining human life through the maintenance of their ecosystem components, processes, and benefits".

• Wetlands provide a wide range of important resources and ecosystem services such as food, water, fibre, groundwater recharge, water purification, flood moderation, erosion control and climate regulation.

• They are, in fact a major source of water and our main supply of freshwater comes from an array of wetlands that help soak rainfall and recharge groundwater.

• The Ministry of Environment, Forest & Climate Change would be working closely with the UT Wetland Authority to ensure wise use of this site.

Q87. Answer: (b) Uday Shankar

The correct answer is Uday Shankar.

Key Points

• Uday Shankar has been named as the President-Elect of industry chamber FICCI for the year 2020-21.

• Shankar will be succeeding Sangita Reddy, President, FICCI, and Joint Managing Director, Apollo Hospitals Group during FICCI's 93rd Annual General Meeting (AGM) scheduled to be held on December 11,12 and 14, 2020.

• "Shankar is the President of The Walt Disney Company for the Asia Pacific and the Chairman of Star and Disney India.

• He is the first-ever media and entertainment executive in India to lead a national industry chamber such as FICCI, which is India's oldest industry body," the chamber said on Friday.

• Global media and entertainment conglomerate The Walt Disney Company had recently said Shankar will step down as President of its Asia Pacific business and Chairman of Star and Disney India with effect from December 31, 2020.

Additional Information

• Federation of Indian Chambers of Commerce & Industry

• The Federation of Indian Chambers of Commerce & Industry is a non-governmental trade association and advocacy group based in India.

• Established in 1927, on the advice of Mahatma Gandhi by Indian businessman Mr. G.D. Birla and Purshottamdas Thakurdas.

• Founded: 1927

• CEO: Sangita Reddy

• Headquarters: New Delhi
• Secretary General: Dilip Chenoy
• Abbreviation: FICCI
• Founders: Ghanshyam Das Birla, Purshottamdas Thakurdas
• Sanjiv Mehta is the current president of FICCI. (May 2022).

Q88. Answer: (d) Rani Gaidinliu

The correct answer is Rani Gaidinliu.

Key Points

• Rani Gaidinliu
• She was a leader who led a revolt against British rule from North East India.
• Gaidinliu was a Naga spiritual and political leader who led a revolt against British rule in India.
• At the age of 13, she joined the Heraka religious movement of her cousin Haipou Jadonang.
• The movement later turned into a political movement seeking to drive out the British from Manipur and the surrounding Naga areas.

Additional Information

• Durgawati Devi
• Durgavati Devi popularly known as 'Durga Bhabhi' was an Indian revolutionary and a freedom fighter.
• She was one of the few women revolutionaries who actively participated in the armed revolution against the ruling British Raj.
• Matangini Hazra
• Matangini Hazra was an Indian revolutionary who participated in the Indian independence movement until she was shot dead by the British Indian police in front of the Tamluk Police Station on 29 September 1942.
• She was affectionately known as Gandhi buri, Bengali for old lady Gandhi.
• Pritilata Waddedar
• Pritilata Waddedar was a Bengali revolutionary nationalist from the Indian subcontinent who was influential in the Indian independence movement.
• After completing her education in Chittagong and Dhaka, she attended Bethune College in Kolkata.
• She graduated in philosophy with distinction and became a school teacher.

Q89. Answer: (b) Pankaj Advani

The correct answer is Pankaj Advani.

Key Points

• Aditya Mehta, representing PSPB (Petroleum Sports Promotion Board), stunned multiple-time World Champion Pankaj Advani (also representing PSPB) to win the title in the National Snooker Championships held in Pune.
• Mehta, who had bagged a gold medal at the 2013 World Games (multi-sport event for sports that are not included in the Olympic Games), won the match 103-17, 50-58, 47-48, 70-40, 83-36, 69-7, 79-29, 64-28.
• In the best-of-11 frames title clash, Mehta defeated Advani with the scoreline reading 6-2 in his favor.

Additional Information

• Pankaj Arjan Advani (born 24 July 1985) is an Indian billiards and snooker player.
• He is a 23-time world champion. He has won the IBSF World Billiards Championship 15 - times, the World Team Billiards Championship 1 - time, the IBSF World Snooker Championship (15 Reds) 3 - times, (6 Reds) 2 - times, the IBSF World Team Cup 1 - time and the IBSF World Team Championship - 1 time.
• Pankaj Advani is the only cueist to have won the Asian and World Championships in all formats of Billiards and Snooker. He has the maximum IBSF world championships in billiards and snooker

Q90. Answer: (d) Barium

The correct answer is Barium.

Key Points

• Barium chloride (green) is unstable at room temperatures, so barium must be combined with a more stable compound (e.g., chlorinated rubber).
• In this case, the chlorine is released in the heat of the burning of the pyrotechnic composition, to then form barium chloride and produce the green color.
• Copper chloride (blue), on the other hand, is unstable at high temperatures, so the firework cannot get too hot, yet must be bright enough to be seen.

Additional Information

YourMockTest.com — Free Study Material

Colour	Compound
Red	strontium salts, lithium salts lithium carbonate, Li2CO3 = red strontium carbonate, SrCO3 = bright red
Orange	calcium salts calcium chloride, CaCl2 calcium sulfate, CaSO4·xH2O, where x = 0,2,3,5
Yellow	sodium compounds sodium nitrate, NaNO3 cryolite, Na3AlF6

Q91. Answer: (a) Adil Hussain

The correct answer is Adil Hussain.

Key Points

• Actor Adil Hussain has bagged the Best Actor award at the Indo German Film Week in Berlin, for two of his recent performances - Pareeksha and Nirvana Inn. Prakash Jha directed Pareeksha while Vijay Jayapal had helmed Nirvana Inn.

• Adil was most recently seen as Buchchi - a rickshaw-puller making all efforts to ensure the best education for his child in Prakash Jha's film

Additional Information

• The country's highest film honour, the Dadasaheb Phalke award, conferred for "outstanding contribution for the growth and development of Indian cinema" was presented to Amitabh Bachchan in 2018.

• Amitabh Bachchan was given the Dada Saheb Phalke award for the year 2018 for his contribution to the Indian film industry.

• The Dadasaheb Phalke Award is India's highest award in cinema.

• It is presented annually at the ceremony by the Directorate of Film Festivals, an organization set up by the Ministry of Information and Broadcasting.

• The recipient is honoured for their "outstanding contribution to the growth and development of Indian cinema".

• The first recipient of the award was actor Abhishek Sakkarwal, who was honoured at the 17th National Film Awards.

• As of 2018, there have been 50 awardees.

• Prithviraj Kapoor (1971) and actor Vinod Khanna (2017) are the only posthumous recipients.

Q92. Answer: (c) 1952

The correct answer is 1952.

Key Points

• As per the Fourth Schedule to the Constitution of India, the Rajya Sabha was first constituted on 3 April 1952.

• Twelve members are nominated to the Rajya Sabha by the President of India for the six-years terms for their contributions towards arts, literature, sciences, and social services.

• Unlike the members of the Lok Sabha, the membership of the Rajya Sabha is a permanent body and cannot be dissolved at any time.

• However, every second year, one-third of the members retire and at the beginning of every third year, the vacancies are filled by fresh elections and the nomination of the President.

• A Member of Parliament (abbreviated: MP) in the Rajya Sabha is the representative of the Indian states to one of the two houses of the Parliament of India (Rajya Sabha).

• Rajya Sabha MPs are elected by an electoral college consisting of elected members of the State Legislative Assembly with a system of proportional representation by means of the single transferable vote.

Additional Information

• The representatives of the states and union territories in the Rajya Sabha are elected by the method of indirect election.

• The representatives of each State and the two Union Territories are elected by the elected members of the Legislative Assembly of that State and the members of the electoral college for that Union Territory, as the case may be, in accordance with the system of proportional representation. Instruments of the single transferable vote.

• The Electoral College for the National Capital Territory of Delhi consists of the elected members of the Delhi Legislative Assembly and for Puducherry the elected members of the Puducherry Legislative Assembly.

• Special Powers of Rajya Sabha

• The Upper House also has some special powers, such as:

• Power to transfer a subject from the State List to the Union List for a specified period (Article 249).

• To create additional All India Services (Article 312).

• To support emergency under Article 352 for a limited period when the Lok Sabha is dissolved.

Q93. Answer: (a) Austrian economic thought

The correct answer is Austrian economic thought.

Key Points

• Austrian economic thought

• Austrian economic thought talks about methodological individualism or the idea that people will act in meaningful ways which can be analyzed.

• The Austrian school uses the logic of a priori thinking—something a person can think on their own without relying on the outside world—to discover economic laws of universal application, whereas other mainstream schools of economics, like the neoclassical school, the new Keynesians, and others, make use of data and mathematical models to prove their point objectively.

• In this respect, the Austrian school can be more specifically contrasted with the German historical school that rejects the universal application of any economic theorem.

Additional Information

• Keynesian Economics

• Keynesian economics is a macroeconomic economic theory of total spending in the economy and its effects on output, employment, and inflation.

• Keynesian economics was developed by the British economist John Maynard Keynes during the 1930s in an attempt to understand the Great Depression.

• Keynesian economics is considered a "demand-side" theory that focuses on changes in the economy over the short run.

• Keynes's theory was the first to sharply separate the study of economic behaviour and markets based on individual incentives from the study of broad national economic aggregate variables and constructs.

• Laissez-Faire

• Laissez-faire is an economic theory from the 18th century that opposed any government intervention in business affairs.

• The driving principle behind laissez-faire, a French term that translates to "leave alone" (literally, "let you do"), is that the less the government is involved in the economy, the better off business will be, and by extension, society as a whole.

• Laissez-faire economics is a key part of free-market capitalism.

Q94. Answer: (b) RSS

The correct answer is RSS.

Key Points

• RSS stands for Really Simple Syndication.

• It's an easy way for you to keep up with news and information that's important to you and helps you avoid the conventional methods of browsing or searching for information on websites.

• It is the easy way to check your favorite websites for updates without having to visit them all.

Additional Information

• The HyperText Markup Language or HTML is the standard markup language for documents designed to be displayed in a web browser.

• It can be assisted by technologies such as Cascading Style Sheets and scripting languages such as JavaScript.

• Portable Document Format (PDF), standardized as ISO 32000, is a file format developed by Adobe in 1992 to present documents, including text formatting and images, in a manner independent of application software, hardware, and operating systems.

• Based on the PostScript language, each PDF file encapsulates a complete description of a fixed-layout flat document, including the text, fonts, vector graphics, raster images, and other information needed to display it.

• PDF has its roots in "The Camelot Project" initiated by Adobe co-founder John Warnock in 1991.

• A Uniform Resource Identifier is a unique sequence of characters that identifies a logical or physical resource used by web technologies.

• URIs may be used to identify anything, including real-world objects, such as people and places, concepts, or information resources such as web pages and books

Q95. Answer: (d) Chennai

The correct answer is Chennai.

Key Points

• All India Chess Federation Headquarters: Jawaharlal Nehru Stadium; Chennai.

YourMockTest.com — Free Study Material

• All India Chess Federation Founded: 1951.

• The All India Chess Federation (AICF) is the central administrative body for the game of chess in India. Founded in 1951, the federation is affiliated with Fédération Internationale des Échecs (FIDE), the world body for chess.

• The AICF has produced champions Viswanathan Anand, Nihal Sarin, Pentala Harikrishna, Rameshbabu Praggnanandhaa, and Vidit Santosh Gujrathi, and many other grandmasters.

• The organization is also in charge of managing women's chess in India.

• Its current headquarters is in Chennai.

Additional Information

• Sanjay Kapoor was elected president of the All India Chess Federation (AICF) while Bharat Singh Chauhan retained the secretary's post.

• Kapoor, representing Uttar Pradesh Chess Association, defeated incumbent PR Venketrama Raja in a close contest.

• Kapoor received 33 votes against 31 of Raja.

• Chauhan beat Ravindra Dongre 35-29. Apart from the president, secretary and treasurer, six vice-presidents and six joint secretaries were also elected.

Q96. Answer: (a) Brahmaputra

The correct answer is Brahmaputra.

Key Points

• Peacock Island

• Umananda Island is the smallest inhabited river islet in the middle of river Brahmaputra, flowing through the city of Guwahati in Assam, a state in northeast India.

• Its name derives from Assamese Uma, another name for the Hindu goddess Parvati, the wife of Shiva; and ananda, "joy".

• A British officer named the island Peacock Island for its structure, which he thought resembled the splayed feathers of a peacock.

• It is also known as Bhasmachal, from the words bhasma, meaning to destroy, and chal, meaning place.

• The legend giving rise to this name is that Kamdev, the god of love in Hindu mythology, after interrupting Shiva in the middle of deep meditation on the islet, was burnt to ashes.

Additional Information

• Elephanta is a west coast island.

• Elephanta Island is one of a number of islands in Mumbai Harbour, east of Mumbai, India.

• This island is a popular tourist destination because of the island's cave temples, the Elephanta Caves, that have been carved out of the rock.

• Pamban Island :

• Pamban Island or Rameswaram Island is in Tamil Nadu.

• The chain formed by Pamban Island, the shoals of Adam's Bridge, and Mannar Island of Sri Lanka separate Palk Bay and the Palk Strait in the northeast from the Gulf of Mannar in the southwest.

• Pamban Island extends for around 30 kilometres in width from the township of Pamban in the west to the remains of Dhanushkodi towards the south-east.

• Barren Island has located about 140 km from Port Blair.

• It is surrounded by waters which is ideal for scuba diving and is home to a wide variety of aquatic life.

• It's the only active volcano in India along a chain of volcanoes from Sumatra (Indonesia) to Myanmar.

• The current Lieutenant Governor of Andaman& Nicobar Island is Mr. Admiral D K Joshi.

Q97. Answer: (a) Anil Soni

The correct answer is Anil Soni.

Key Points

• The World Health Organisation on Monday appointed Indian Anil Soni as the Chief Executive Officer (CEO) for the WHO Foundation.

• Hoping to strengthen its funding, the World Health Organization appointed Soni as CEO to a foundation intended to bring in more private donations.

• The funding is expected to leave the global health body less vulnerable if a country withdraws or cuts funding as the United States did.

• Anil Soni will join the new WHO Foundation in January after eight years with the multinational pharmaceutical Viatris.

• At Vitaris, he served as Head of Global Infectious Diseases, working across the pharmaceutical company to accelerate the availability of new and innovative treatments.

Additional Information

• World Health Organization (WHO)

• World Health Organization (WHO), the United Nations specialized agency for Health was founded in 1948.

• Its headquarters are situated in Geneva, Switzerland.

• There are 194 Member States, 150 country offices, six regional offices.

• It is an inter-governmental organization and works in collaboration with its member states usually through the Ministries of Health.

• The WHO provides leadership on global health matters, shaping the health research agenda, setting norms and standards, articulating evidence-based policy options, providing technical support to countries, and monitoring and assessing health trends.

Q98. Answer: (a) Arunachal Pradesh

The correct answer is Arunachal Pradesh.

Key Points

• Dibang valley district of Arunachal Pradesh displays the lowest population in the country with a population of 7,948.

• Dibang Valley is a district of Arunachal Pradesh named after the Dibang River or the Talon as the Mishmis call it.

• It is the least populated district in India and has an area of 9,129 square kilometres (3,525 sq mi).

• The Dibang River originates in the mountains of Arunachal Pradesh and flows through the length of the valley which is named after it.

• The Dibang has multiple tributaries and only once it debouches into the plains is it called by its name.

• Some of the major rivers of the Dibang Valley District are Ahui, Emra, Mathun, Dri, Tangon, Ithun, and Ange.

Additional Information

• As per the 2011 Census, Nagaland state has recorded a decrease in population.

• Nagaland is the only Indian state which has a negative growth rate of -0.58% in census 2011.

• The growth rate of the Indian population was 17.69% between 2001 to 2011.

• Dadra and Nagar Haveli is growing at a rate of 55.88% annually.

• The second-fastest growth is recorded in Daman & Diu at 53.76% in census 2011.

• India has 641,000 inhabited villages and 72.2 per cent of the total population reside in these rural areas.

Q99. Answer: (a) Seychelles

The correct answer is Seychelles.

Key Points

• Indian-origin Wavel Ramkalawan has been elected as the President of Seychelles.

• Seychelles has elected an opposition candidate as president for the first time since 1977.

• He has defeated the incumbent Danny Faure.

• Ramakalwan is a priest of Indian Origin whose grandfather came from Gopalganj, Bihar.

• On October 25, 2020, India-born Wavel Ramkalawan was elected as the President of Seychelles.

• This is the first time, the opposition candidate has won elections in Seychelles since 1977

Additional Information

• Seychelles Capital: Victoria.

• Seychelles Currency: Seychellois rupee.

• Seychelles Continent: Africa.

• Seychelles is an archipelago in the Indian Ocean.

• It was a British colony till 1976. A year after its independence, in 1977 Mr. Faure seized power in a coup and retained the presidency in elections.

• He was in power till multi-party democracy was restored in the country in 1993.

Q100. Answer: (b) 1765

The correct answer is 1765.

Key Points

• The Mughal Emperor Shah Alam II granted the Diwani of Bengal, Bihar, and Orissa to the East India Company in 1765.

• Diwani of Bengal- Result of Battle of Buxar

• The Battle of Buxar was fought between the British and the combined forces of Mir Qasim, Shuja Ud Daulah who was the Nawab of Awadh, and the Mughal Emperor Shah Alam II. This battle was won by the Britishers.

• The result of this battle was, the Diwani that is the right to collect the revenue of Bengal, Bihar, and Odisha was sanctioned to

the British by the Mughal Emperor in return for an annual sum of money and in the districts of Allahabad and Kora.

Additional Information

• Treaty of Allahabad

• The Treaty of Allahabad was signed on 12 August 1765, between the Mughal Emperor Shah Alam II, son of the late Emperor Alamgir II, and Robert Clive, of the East India Company, in the aftermath of the Battle of Buxar of 23 October 1764.

• The treaty was handwritten by I'tisam-ud-Din, a Bengali Muslim scribe and diplomat to the Mughal Empire.

• The Treaty marked the political and constitutional involvement and the beginning of British rule in India.

• Based on the terms of the agreement, Alam granted the East India Company Diwani rights, or the right to collect taxes on behalf of the Emperor from the eastern province of Bengal-Bihar-Orissa.

• These rights allowed the company to collect revenue directly from the people of Bengal, Bihar, and Orissa.

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

YourMockTest.com — Free Study Material