SSC CHSL Previous Paper 60 (Held On: 28 March 2018 Shift 1) (Previous Year Paper)

SSC Combined Higher Secondary Level (CHSL) • 2018 • 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-previous-paper-60-held-on-28-march-2018-shift-1-pre…

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

YourMockTest.com — Free Study Material

ENGLISH LANGUAGE

Q1. In the following question, four words are given out of which one word is correctly spelt. Select the correctly spelt word.

(a) Frenatically
(b) Freneticalyy
(c) Frenetically
(d) Frenaticaly

Q2. The question below consists of a set of labelled sentences. Out of the four options given, select the most logical order of the sentences to form a coherent paragraph.

So we did get

A - to read a whole lot

B - dying

C - on how we can save a wounded sparrow from

(a) ABC
(b) CBA
(c) ACB
(d) CAB

Q3. In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement".

LPG quickly (gain) popularity as it was easy to use and did not tarnish vessels.

(a) gaining
(b) will gain
(c) gained
(d) no improvement

Q4. In the following question, out of the four alternatives, select the alternative which will improve the bracketed part of the sentence. In case no improvement is needed, select "no improvement".

You might be (to incline) to put the blame on infrastructure and officials, which is understandable.

(a) inclined
(b) incline
(c) inclines
(d) no improvement

Q5. In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.

Feeling or expressing pensive sadness

(a) Mirthful
(b) Exultant
(c) Apathetic

(d) Melancholic

Q6. In the following question, out of the four alternatives, select the alternative which is the best substitute of the words/sentence.

The study and classification of speech sounds

(a) Twang
(b) Resonance
(c) Oratory
(d) Phonetics

Q7. In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.

Your number is up

(a) When you win by betting on your lucky number
(b) Be the chosen one from a large group.
(c) Win a lottery or a lucky draw.
(d) The time has come when someone is doomed to suffer a disaster.

Q8. In the following question, out of the four alternatives, select the alternative which best expresses the meaning of the idiom/phrase.

A shot in the arm

(a) Get hit by something.
(b) Lose physical strength.
(c) Lose motivation to do a task.
(d) An encouraging stimulus.

Directions

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

It is this fact which makes it _____(1) necessary that our interests shall be broad and pure if our thoughts are to be of this type. It is _____(2) enough that we have the strength to drive from our minds a wrong or impure thought which seeks _____(3). To stand guard as a policeman over our thoughts to see that no unworthy one enters, requires ___(4) much time and energy. Our interests must be of such a nature as to lead us away from the field of unworthy thoughts _____(5) we are to be free from their tyranny.

Q9. unworthy thoughts _____(5) we are to be

(a) if
(b) when
(c) why
(d) then

Q10. enters, requires _____(4) much time and energy.

(a) to
(b) very
(c) of
(d) too

Q11. which seeks _____(3). To stand guard

(a) entrance
(b) enter
(c) entering
(d) enters

YourMockTest.com — Free Study Material

Q12. It is _____(2) enough that we have

(a) not
(b) no
(c) nor
(d) neither

Q13. which makes it _____(1) necessary that our interests

(a) vital
(b) vitality
(c) vitally
(d) vitalism

Q14. In the following question, a word has been written in four different ways out of which only one is correctly spelt. Select the correctly spelt word.

(a) Handkurchief
(b) Handkerchief
(c) Handkerchef
(d) Handkurchef

Q15. A sentence has been given in Direct/Indirect Speech. Out of the four given alternatives, select the one which best expresses the same sentence in Indirect/Direct Speech.

Sneha said, “I am buying a gaming console today.”

(a) Sneha said that she is buying a gaming console today.
(b) Sneha says she was buying a gaming console that day.
(c) Sneha say that she is buying a gaming console on today.
(d) Sneha said that she was buying a gaming console that day.

Q16. A sentence has been given in Active/Passive Voice. Out of the four given alternatives, select the one which best expresses the same sentence in Passive/Active Voice.

The boss made the assistant work late.

(a) The assistant was made to work late by the boss.
(b) The assistant is being urged to work late.
(c) The assistant was make to work late by the boss.
(d) The assistant is working late due to the boss.

Q17. Rearrange the parts of the sentence in correct order.

A serious critic

P : meaning of a work of art

Q : has to comprehend the particular

R : content, unique structure, and the special

(a) QRP
(b) RQP
(c) PQR
(d) QPR

Q18. In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.

Dogmatic

(a) Flexible
(b) Arrogant
(c) Formal
(d) Stubborn

YourMockTest.com — Free Study Material

Q19. In the following question, out of the given four alternatives, select the one which is opposite in meaning of the given word.

Exquisite

(a) Elaborate
(b) Consummate
(c) Sensitive
(d) Rough

Q20. In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.

Scrumptious

(a) Stale
(b) Crushable
(c) Devotedness
(d) Tasty

Q21. In the following question, out of the given four alternatives, select the one which best expresses the meaning of the given word.

Dour

(a) Cheery
(b) Pleasant
(c) Morose
(d) Approachable

Q22. In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.

The mechanic _____ the car according to his own liking.

(a) tweaking
(b) is tweaked
(c) will tweak
(d) have tweaked

Q23. In the following question, the sentence given with blank to be filled in with an appropriate word. Select the correct alternative out of the four and indicate it by selecting the appropriate option.

She was discharged _____ the hospital after treatment.

(a) From
(b) Of
(c) With
(d) As

Q24. In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

The Creole language is a (1)/ stable natural language develop from (2)/ a mixture of different languages. (3)/ No error (4)

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

Q25. In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

The 26th of January was chosen (1)/ to commemorate the Purna Swaraj (2)/ declaration for the complete independence, of 1930. (3)/ No error (4)

(a) 1

YourMockTest.com — Free Study Material

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

GENERAL INTELLIGENCE

Q26. In the following question, select the related word pair from the given alternatives.

Wine : Grapes : : ? : ?

(a) Curd : Milk
(b) Thread : Cloth
(c) Wood : Table
(d) Chair : Sit

Q27. In the following question, select the related number from the given alternatives.

36 : 9 : : 49 : ?

(a) 24
(b) 13
(c) 32
(d) 15

Q28. In the following question, select the related letter/letters from the given alternatives.

GHJ : JKM : : NOQ : ?

(a) QRT
(b) PQS
(c) RST
(d) OPR

Q29. In the following question, select the odd word pair from the given alternatives.

(a) Crop – Rice
(b) Crop – Rubber
(c) Crop – Wheat
(d) Crop – Bajra

Q30. In the following question, four number pairs are given. The number on left side of (–) is related to the number on the right side of (–) with some Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given options.

(a) 17 – 34
(b) 19 – 38
(c) 23 – 46
(d) 27 – 56

Q31. In the following question, select the odd letter/letters from the given alternatives.

(a) DHM
(b) GKO
(c) IMQ
(d) LPT

Q32. From the given alternatives, according to the dictionary, which word will come in the SECOND position?

1. Charity
2. Cardigan
3. Caravan
4. Carton
5. Challenge

(a) Charity

YourMockTest.com — Free Study Material

(b) Challenge
(c) Cardigan
(d) Caravan

Q33. In the following question, select the missing number from the given series.

1, 2, 6, 42, ?

(a) 1696
(b) 1036
(c) 1806
(d) 984

Q34. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

L, O, Q, T, V, ?

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

Q35. 'R + S' means 'R is mother of S', 'R – S' means 'R is wife of S', 'R × S' means 'R is son of S' and 'R ÷ S' means 'R is father of S'. Which of the following represents K as the grandson of T?

(a) K + T × J × R
(b) J + K × L × T
(c) R + T – S ÷ K
(d) K + L × R ÷ T

Q36. From the given alternatives, select the word which CANNOT be formed using the letters of the given word.

Recalcitrant

(a) Can
(b) Rent
(c) Recall
(d) Calcite

Q37. In a certain code language, "FRANK" is written as "GQBML". How is "MARCO" written in that code language?

(a) NYTPB
(b) MZSCQ
(c) NZSBP
(d) NQPBT

Q38. In a certain code language, '×' represents ' + ', '÷' represents '×', '-' represents '÷' and ' + ' represents '-'. Find out the answer to the following question.

20 + 16 × 6 ÷ 10 - 4 = ?

(a) 13
(b) 12
(c) 30
(d) 19

Q39. The following equation is incorrect. Which two signs should be interchanged to correct the equation?

13 × 8 + 25 - 6 ÷ 10 = 20

(a) ÷ and -
(b) × and -
(c) • and ÷
(d) • and +

YourMockTest.com — Free Study Material

Q40. If 30 % 3 = 100, 70 % 14 = 50 and 20 % 8 = 25, then find the value of 50 % 5 = ?

(a) 110
(b) 30
(c) 100
(d) 20

Q41. Which of the following terms follows the trend of the given list?

CBABABAB, BACBABAB, BABACBAB, BABABACB, BCABABAB, _____.

(a) BABABCAB
(b) CBABABAB
(c) BACBABAB
(d) BABCABAB

Q42. Two football players A and B from opposing teams start from the same corner. A runs 35 m East, then 15 m South, turns to his right and runs 60 m. Meanwhile, B runs 20 m North, then 25 m West, turns left and runs 20 m. What is the distance between B and A and what is the final position of B with respect to A?

(a) 15 m North
(b) 5 m North
(c) 15 m South
(d) 5 m South

Q43. In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

Statement I: All sticks are canes

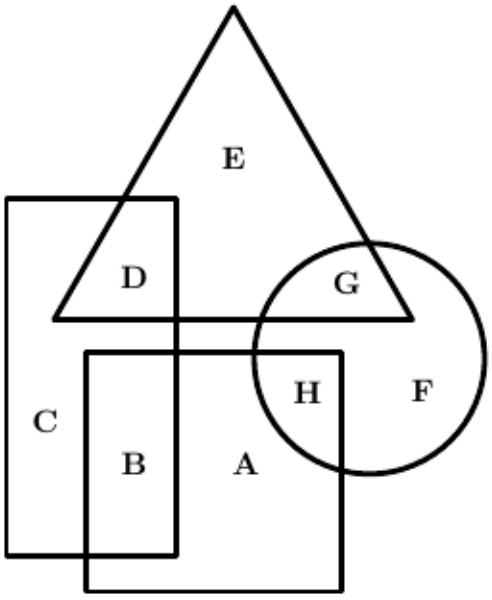
Statement II: Some wands are sticks

Conclusion I: Some canes are wands

Conclusion II: No wands are canes

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

Q44. In the following figure, rectangle represents Authors, circle represents Art critics, triangle represents Tattooists and square represents Joggers. Which set of letters represents Joggers who are either Art critics or Authors?



(a) BAH
(b) CBA

(c) AHF
(d) BH

Q45. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

FNG, KSL, PXQ, UCV, ?

(a) YIB
(b) ZHA
(c) AIB
(d) BJC

Q46. In the following question, select the missing number from the given series.

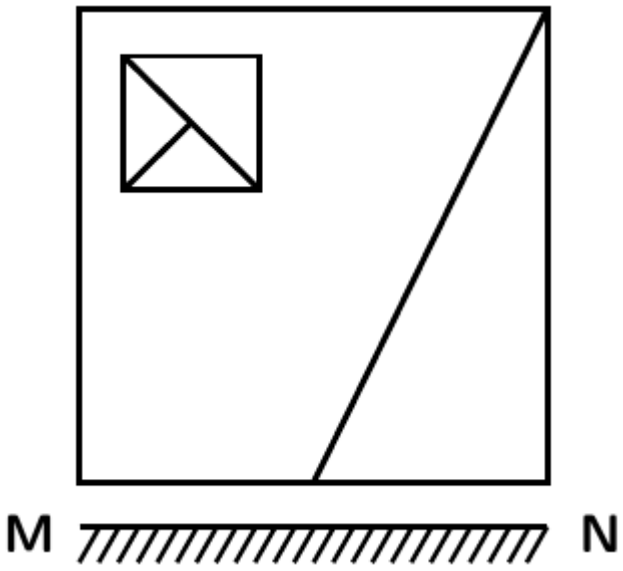
9, 11, 14, 18, 23, ?

(a) 31
(b) 27
(c) 29
(d) 33

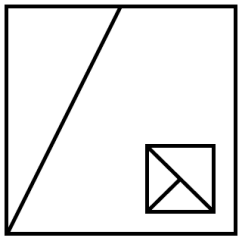
Q47. In the following question, four groups of three numbers are given. In each group the second and third number are related to the first number by a Logic/Rule/Relation. Three are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives.

(a) (8, 17, 33)
(b) (3, 7, 12)
(c) (9, 19, 37)
(d) (15, 31, 61)

Q48. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?

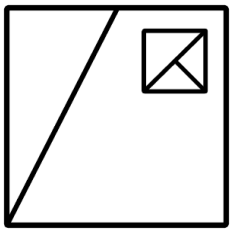


(a)

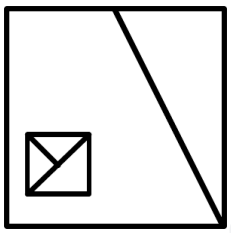


YourMockTest.com — Free Study Material

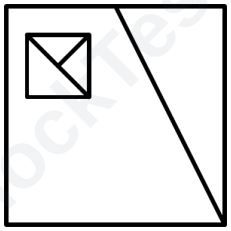
(b)



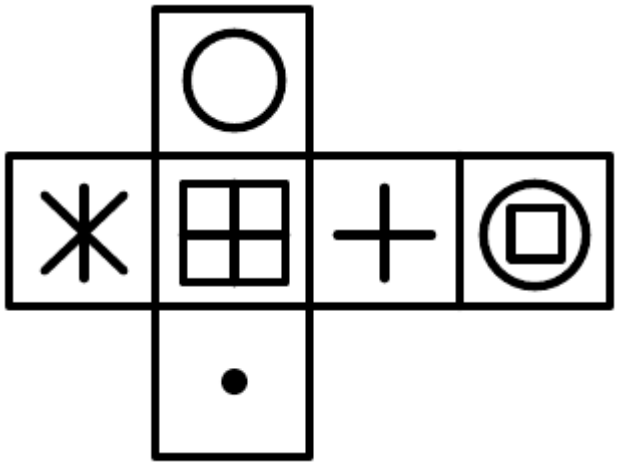
(c)



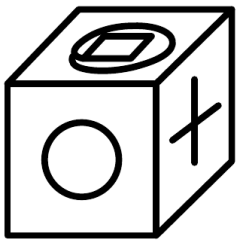
(d)



Q49. Which of the following cube in the answer figure cannot be made based on the unfolded cube in the question figure?

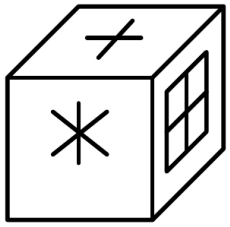


(a)

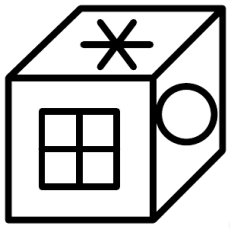


YourMockTest.com — Free Study Material

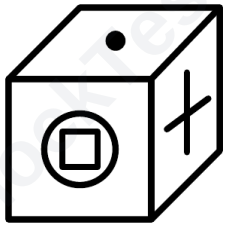
(b)



(c)



(d)



Q50. A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are resented by two classes of alphabets as shown in the given two matrices. The columns and rows of Matrix-I are numbered from 0 to 4 and that a Matrix-II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and row and next by its column, for example, 'F' can be represented by 13, 21 etc., and 'Y' can be represented by 97, 98 etc. Similarly, you have to identify the set for the word "TONE".

Matrix-I					
	0	1	2	3	4
0	K	C	E	B	H
1	B	G	C	F	C
2	D	F	G	D	F
3	M	L	D	H	E
4	G	J	A	L	M

Matrix-II					
	5	6	7	8	9
5	Q	S	U	X	Q
6	R	X	R	T	W
7	V	P	V	O	P
8	R	W	T	P	T
9	N	R	Y	Y	T

(a) 34, 75, 23, 75
(b) 30, 59, 43, 98
(c) 14, 75, 23, 69

YourMockTest.com — Free Study Material

(d) 68, 78, 95, 34

QUANTITATIVE APTITUDE

Q51. If the value of √3 = 1.732, then calculate the value of √243 - 1/2√108 - √147

(a) 1.732
(b) -1.464
(c) 3.464
(d) -1.732

Q52. Find the difference between place value and face value of 7 in 589573212.

(a) 693
(b) 6993
(c) 69993
(d) 699993

Q53. If √(1 + y/16) = 7/4, then find the value of 5y – 15.

(a) 110
(b) 130
(c) 150
(d) 160

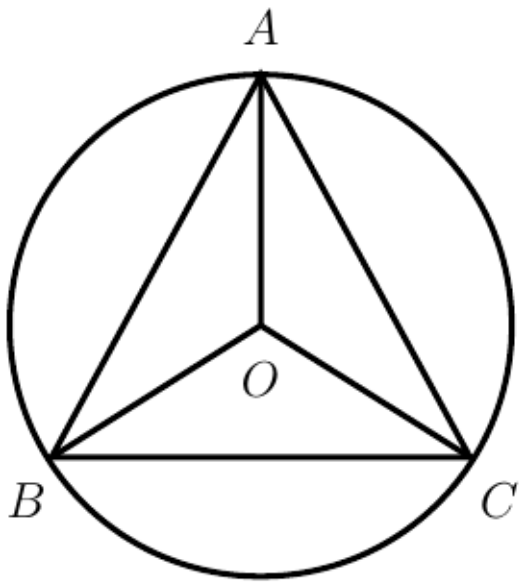
Q54. If $x^2 + 1/(x^2) = 6$, then find the value of $(2x(x - 1))/(x^3 - x^2 - x + 1)$

(a) 0
(b) 1
(c) 2
(d) 3

Q55. Calculate the distance (in cm) of the chord from the centre of the circle, if the chord of length 48 cm is drawn in the circle of radius 25 cm.

(a) 7
(b) 14
(c) 49
(d) 56

Q56. If the angle subtended by the radius of a circle (OB) and the side BC of the triangle ABC at vertex B is 40° then calculate the value of angle BAC.



(a) 35°
(b) 45°
(c) 50°
(d) 65°

Q57. Weights of two friends A and B are in the ratio of 7 : 8. A's weight increases by 10% and the total weight of A and B increase by 20%. What is the percentage increase in the B's weight?

(a) 28.75
(b) 11.55
(c) 32.85
(d) 24.25

Q58. The income of X, Y and Z are in the ratio of 3 : 4 : 2 and their expenses in the ratio of 5 : 5 : 2. If X saves Rs. 3000 out of an income of Rs. 18000, then what will be the saving (in Rs.) of Y?

(a) 4500
(b) 9000
(c) 6000
(d) 7500

Q59. P and Q are two alloys which are prepared by mixing tin and lead in the ratio of 12 : 5 and 4 : 3 respectively. If equal quantities of alloys are melted to form a third alloy R, then what is the ratio of tin and lead in alloy R?

(a) 84 : 65
(b) 57 : 35
(c) 76 : 43
(d) 78 : 47

Q60. What will be the average of the first 5 positive even numbers divisible by 9?

(a) 50
(b) 54
(c) 48
(d) 62

Q61. The simple interest on a sum for 20 years is 5/4 of the principal. What is the per annum rate (in percentage) of interest?

(a) 6.25
(b) 12.5
(c) 2.5
(d) 5

Q62. If Mohan purchase 13 articles for Rs. 12 and sells all the articles at the rate of 12 articles for Rs. 13, then what will be the profit percentage?

(a) 19.47
(b) 17.36
(c) 11.11
(d) 12.5

Q63. A tyre is sold at three successive discounts of 20%, 30% and 20%. What is the net discount (in percentage)?

(a) 62.8
(b) 59.6
(c) 55.2
(d) 51.4

Q64. What is the value of (√36 + cbrt729)/(√81 × cbrt64)?

(a) 5/12
(b) 5/9
(c) 4/9

YourMockTest.com – Free Study Material

(d) 4/15

Q65. Robin can do a work alone in 9 days. Amit can do the same work alone in 6 days. Both of them finish the work together and they get a total Rs. 2500. What is the share (in Rs.) of Robin?

(a) 1700
(b) 1200
(c) 1500
(d) 1000

Q66. A boat covers 63 km upstream in 9 hours and covers the same distance downstream in 7 hours. What is the speed (in km/hr) of the boat in still water?

(a) 8.7
(b) 8.5
(c) 7
(d) 8

Directions

Direction: The line graph shows the Sales per employee of a certain company. Study the diagram and answer the following equations.



Q67. In which year were the Sales per employee greater than that of the previous year?

(a) 2014
(b) 2015
(c) 2017
(d) 2016

Q68. What was the difference in the Sales per employee (in Rs. lakhs) between the years 2011 and 2015?

(a) 15
(b) 10
(c) 20
(d) 5

Q69. The Sales per employee in 2012 were greater than that in 2015 by _____.

(a) 16.7%
(b) 20%
(c) 40%
(d) 28.5%

Q70. If the number of employees of the company was 80 in the year 2015 then what was the sales (in Rs. crore) of the company in the year 2015?

(a) 30
(b) 40
(c) 20
(d) 50

Q71. The lengths of the two diagonals of a rhombus are 5 cm and 12 cm. Find its area (in cm²).

(a) 30
(b) 15
(c) 60
(d) 45

Q72. What is the sum of the measures of all the interior angles of a regular polygon of 9 sides?

(a) 1260
(b) 1440
(c) 1800
(d) 2340

Q73. The surface area of a sphere is 1386 cm². Find its diameter (in cm).

(a) 10.5
(b) 42
(c) 21
(d) 31.5

Q74. ΔPQR is right angled at Q. If angle R = 60°, then find the value of (sec P - 1/√3).

(a) (√6 - 6)/3√3
(b) (1 - 3√2)/3
(c) 1/√3
(d) 2/√3

Q75. ΔPQR is right angled at Q. If cosec P = 25/24, then what is the value of cot R?

(a) 25/7
(b) 24/25
(c) 7/24
(d) 24/7

GENERAL AWARENESS

Q76. National Income refers to _____.

(a) Money value of goods and services produced in a country during a year
(b) Money value of stocks and shares of a country during a year
(c) Money value of capital goods produced by a country during a year
(d) Money value of consumer goods produced by a country during a year

Q77. State Land Reform is under which schedule of the Indian Constitution?

(a) 7^(th) Schedule
(b) 8^(th) schedule
(c) 9^(th) Schedule
(d) 10^(th) schedule

Q78. The remains of the resistant rocks found in the river eroded plain or peneplain are called _____.

(a) Monadnock
(b) Jukenberg
(c) Hum
(d) No option is correct

Q79. Which of the following rivers does not make an estuary?

(a) Narmada
(b) Tapi
(c) Mandovi
(d) Mahanadi

YourMockTest.com — Free Study Material

Q80. Which ruler of Bengal had relations with China?

(a) Ghiyasuddin Azamshah
(b) Sikandar Shah
(c) Nusrat Shah
(d) Hussein Shah

Q81. When was the Arya Samaj divided on principles of vegetarianism?

(a) 1893
(b) 1895
(c) 1903
(d) 1913

Q82. Ustad Mansur was a famous painter during the rule of which among the following Mughal Emperors?

(a) Akbar
(b) Jahangir
(c) Shah Jahan
(d) Aurangzeb

Q83. Which country on 23 October 2017 signed the Paris agreement on climate change, leaving the United States and Syria as the only two countries holding out to sign this global climate pact?

(a) Nicaragua
(b) Colombia
(c) Peru
(d) Uganda

Q84. Which singer was in January 2018, chosen for the 5^(th) Edition of the Yash Chopra Memorial Award 2018 for her outstanding contribution to the Hindi film industry?

(a) Alka Yagnik
(b) Asha Bhosle
(c) Sunidhi Chauhan
(d) Kavita Krishnamurthy

Q85. Where is the tomb of the Mughal Emperor Jahangir in Pakistan?

(a) Islamabad
(b) Hyderabad
(c) Lahore
(d) Karachi

Q86. What is the number of groups and periods in the modern periodic table?

(a) 18, 7
(b) 18, 8
(c) 16, 7
(d) 16, 8

Q87. Which among the following is an example of a mixture?

(a) Milk
(b) Gasoline
(c) Liquefied petroleum gas
(d) All options are correct.

Q88. Which Schedule of the Indian Constitution was added by the 74^(th) Constitutional Amendment Act?

(a) Ninth Schedule
(b) Tenth Schedule
(c) Eleventh Schedule
(d) Twelfth Schedule

YourMockTest.com — Free Study Material

Q89. Which among the following comes under the elements of Basic Structure of Indian Constitution?

I. Supremacy of Constitution

II. Free and Fair Election

III. Judicial Review

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

Q90. The plasma of the blood contains which among the following constituents?

I. Proteins

II. Salts

III. Hormones

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

Q91. What is the basis of first level of classification among plants?

(a) Differentiated plant body
(b) Specialised tissues
(c) Ability to bear seeds
(d) No option is correct.

Q92. On 5 September 2017, which among the following launched an online quiz competition named ‘PrakritiKhoj’?

(a) Health Ministry
(b) Commerce Ministry
(c) Environment Ministry
(d) Home Ministry

Q93. Researchers at the University of Illinois have discovered new form of matter called Excitonium which was coined by _____ in the 1960’s.

(a) Bertrand Halperin
(b) Eugene Wigner
(c) Paul Dirac
(d) Felix Bloch

Q94. On 24 October 2017, the Government of India announced a massive package of _____ to boost economy.

(a) Rs. 7 lakh crore
(b) Rs. 9 lakh crore
(c) Rs. 15 lakh crore
(d) Rs. 5 lakh crore

Q95. On 22 November 2017, the Union cabinet approved expansion of which mission for a Pan India coverage in all the 640 districts of the country?

(a) Make in India
(b) Swatchh Bharat
(c) Beti Bachao Beti padhao
(d) Skill India

Q96. A body is initially moving with a velocity of 5 m/s. It undergoes an acceleration of 2 m/s^2 for 4 seconds. Find the displacement (in m) of this body in these 4 seconds.

(a) 4
(b) 72

(c) 36
(d) 8

Q97. If the velocity of a body is halved its kinetic energy _____.
(a) become 4 times
(b) becomes 1/4^(th)
(c) is also doubled
(d) becomes half

Q98. Plants utilise _____ from the atmosphere for photosynthesis.
(a) Oxygen
(b) Nitrogen
(c) Carbon dioxide
(d) Hydrogen

Q99. Which of the statements given below is/are correct?
A) Russia hosted the Golf 2017 Players Championship.
B) Elina Svitolina won the Tennis 2017 Italian Open Women's Singles.
C) Henri Kontinen and John Peers won the Tennis 2017 ATP World Tour Finals Men's Doubles.
(a) Only A
(b) Only B
(c) Both A and B
(d) Both B and C

Q100. In Microsoft Excel, left arrow key stroke leads to _____ movement on a spreadsheet.
(a) One cell up
(b) One cell down
(c) One cell Left
(d) One cell right

ANSWER KEY

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

SOLUTIONS

Q1. Answer: (c) Frenetically

The solution is in Hindi. Read it online.

Q2. Answer: (c) ACB

The correct answer is ACB.

Key Points

• The first part of the sequence is part A. It suitably follows the given phrase. ‘ So we did get to read a whole lot…’ seems logical.
• This can be appropriately be followed by part C as it tells us the reading is related to what.
• Part B can suitably form the ending of the sentence.
So we did get to read a whole lot on how we can save a wounded sparrow from dying.
Thus, the correct sequence is ACB, making option 3 the correct answer.

Q3. Answer: (c) gained

The correct answer is gained.
Key Points
Reading the sentence we find that:
• The sentence is talking about something that happened in the near past.
• Thus the sentence is in the simple past tense and should use an appropriate verb.
• The verb gain should be used in the simple past tense in order to fit into the grammatical structure of the sentence.
• The past tense of the verb gain is gained.
• Other given options are incorrect as option 1 is a continuous verb and option 2 is a verb denoting the future.
• Thus the correct answer is gained.
LPG quickly gained popularity as it was easy to use and did not tarnish vessels.
Thus, the correct answer is option 3.

Q4. Answer: (a) inclined

The correct answer is Inclined.
Key Points
Reading the above sentence we find that:
• The modal verb might is used in the sentence.
• As a rule, the verb that follows might be should be in the past participle form
• Example : She might be interested in this.
• The verb in the given sentence is incline.
• Thus the correct form to be used here is inclined*,* as it is the past participle of incline.
• Thus, the correct answer is option 1.
Correct Sentence : You might be inclined to put the blame on infrastructure and officials, which is understandable.

Q5. Answer: (d) Melancholic

Let us look into the meaning of the given words:
Mirthful - full of laughter or humour
Exultant - joyful and proud (because of triumph or success)
Apathetic - having or showing little or no emotion
Melancholic – affected by sadness or depression
Thus, the correct answer is option 4.

Q6. Answer: (d) Phonetics

Let us look into the meaning of the given words:
Twang - the sharp, tinny sound of a plucked string or banged metal object
Resonance – the production of a sound as a result of vibration of another object
Oratory - skillful and effective public speaking
Phonetics - the study and systematic classification of speech sounds
Thus, the correct answer is option 4 as phonetics expresses the meaning.

Q7. Answer: (d) The time has come when someone is doomed to suffer a disaster.

The correct answer is The time has come when someone is doomed to suffer a disaster.
Key Points
• When someone’s number is up, it means that the time has come when he\she is doomed to die or suffer some other disaster or setback.
• I have suffered so many crises. I think my number is up.
• Thus, the correct answer is option 4.

YourMockTest.com – Free Study Material

Q8. Answer: (d) An encouraging stimulus.

The correct answer is An encouraging stimulus.

Key Points

• The phrase a shot in the arm refers to something that has a sudden and positive effect on something.

• Winning this tournament has been a shot in the arm for me.

• Stimulus refers to a thing that arouses energy in someone.

• So, option 4 expresses the best meaning of the given phrase.

Q9. Answer: (a) if

If is used to introduce a conditional clause. It is used to say that a thing can happen only after something else happens.

So, in the given sentence, if fits the blank. The last sentence conveys that we can be free from tyranny if (condition) we lead ourselves away from the field of unworthy thoughts.

Thus, the correct answer is option 1.

Q10. Answer: (d) too

We need to understand the difference between to and too.

To is a preposition used to show the relationship between the subject and the other elements of the sentence.

I cannot deliver this package to the owner.

Too is used to indicate the idea of something in excess. It refers to the excessive or extra amount of something. It can also mean also.

I am too tired to go to the mall.

You are worried too. (Here, too means also)

In the given sentence, we are looking for the word that will emphasize the excessive (extra) amount of time and energy involved.

...enters, requires too much time and energy...

Thus, the correct answer is option 4.

Q11. Answer: (a) entrance

The correct answer is 'entrance'

Key Points

• The blank needs to be filled with a noun.

• Verbs will not fit into the context and the structure of the sentence. (…which seeks entering… is incorrect.)

• Entrance seems a proper fit - ...which seeks entrance. To stand guard...

The correct answer is option 1.

Q12. Answer: (a) not

The correct answer is 'not'.

Key Points

• The word not will fit into the given context. Other words are not grammatically correct.

• ...It is not enough that we have...

• Thus, the correct answer is option 1.

Important Points

• We use neither to mean not the one or the other of two.

• Example : Neither of my parents likes the movie (The mother and the father do not like the movie)

Q13. Answer: (c) vitally

Given the structure of the sentence, we need to use an adverb (that will describe how necessary it is). The meaning of the word vitally is ‘in an important way’.

...which makes it vitally necessary that our interests...

Thus, the correct answer is option 3.

Q14. Answer: (b) Handkerchief

The correctly spelt word is handkerchief. It refers to a piece of clothing / fabric which we use to blow our nose or tears.

Example : She took out her handkerchief and used it to wipe his tears.

Thus, the correct answer is option 2.

Q15. Answer: (d) Sneha said that she was buying a gaming console that day.

The correct sentence in indirect speech is 'Sneha said that she was buying a gaming console that day.'

Key Points

• In Direct speech, the actual words of the speaker are quoted within quotation marks.

• In Indirect speech, we report someone else's statement in our own words.

• When we change the speech from Direct to Indirect, we drop the quotation marks and use the conjunction 'that' before the Indirect statement. We make suitable changes in tenses as well.

• A simple present becomes a simple past:

• Drinks --> drank

• A present continuous becomes a past continuous:

• Is drinking --> was drinking

• A present perfect becomes a past perfect:

• Has eaten --> had eaten

• A simple past becomes a past perfect:

• Ate --> had eaten

Additional Information

• Also, am changes to was, today changes to that day, now changes to then, tomorrow changes to the next day, etc.

• So, keeping these points in mind, the sentence in the question, when changed from Direct to Indirect speech, becomes: Sneha said that she was buying a gaming console that day.

Therefore, the correct answer is option 4.

Q16. Answer: (a) The assistant was made to work late by the boss.

The correct sentence in passive voice is 'The assistant was made to work late by the boss.'

Key Points

• In the given sentence, the subject is someone that works on the object.

• A sentence is said to be in Active Voice when the subject performs the action.

• When the subject is being acted upon by the verb – it is Passive Voice.

• The sequence in Active voice – Subject + verb + object

• The sequence in Passive voice – Object + verb + Subject

Additional Information

• The meaning conveyed by the sentence in both voices will remain the same, only the sequence of the subject and the object (or the action) changes.

• Let us understand this through an example

• Active Voice: She kept the book in the cupboard.

• Passive Voice: The book was kept in the cupboard by her.

• Note that 'kept' changes to 'was kept'.

• The given sentence is in Active Voice as somebody is the subject performing an action.

• The sentence when converted in Passive voice becomes:

• The assistant was made to work late by the boss.

Therefore, the correct answer is option 1.

Q17. Answer: (a) QRP

The correct answer is QRP

Key Points

• The sentence starts with 'A serious critic'

• Hence the next part should refer to or talk about this critic in one way or another

• Out of P, Q and R, only 'Q' talks about to the critic who 'has to comprehend...'

• Logically, the next part should talk about that which the critic should comprehend. Thus R, which talks about the 'content, unique structure...' is the logical successor.

• The adjectives used in R should refer to something (noun) which is provided by P - 'meaning of a work of art'

Thus the correct sentence is: A serious critic has to comprehend the particular content, unique structure, and the special meaning of a work of art

Q18. Answer: (a) Flexible

The correct answer is Flexible

Key Points

• Let's look at the meaning of each word given:

Dogmatic	**strong belief in a set of principles/ beliefs while thinking that other beliefs are untrue and wrong.**
Flexible	capable to change according to the circumstances in order to adapt easily.
Arrogant	behaving in a proud and unpleasant manner.
Formal	public or official.
Stubborn	unwilling to change one's mind.

Q19. Answer: (d) Rough

The solution is in Hindi. Read it online.

Q20. Answer: (d) Tasty

Scrumptious means extremely delicious / tasting good. Let us look into the meaning of the difficult words:

Stale – no longer fresh or new

Crushable – that can be crushed

Devotedness – the quality of being extremely loyal

Thus, among all the options, the word tasty best expresses the meaning of the given word. This makes option 4 the correct answer.

Q21. Answer: (c) Morose

Dour means unfriendly, unhappy and serious in manner or appearance. Let us look into the meaning of the difficult words:

Cheery – in a positive mood giving comfort or encouragement to someone

Morose – unhappy and annoyed

Approachable – friendly and easy to talk to.

Thus, the word morose best expresses the meaning of the given word, making option 3 the correct answer.

Q22. Answer: (c) will tweak

The word tweak means to pull and twist something with a small sudden movement. Here, the sentence should use will tweak in the blank to make a sensible and a grammatically correct sentence.

Complete sentence - The mechanic will tweak the car according to his own liking.

Thus, the correct answer is option 3.

Q23. Answer: (a) From

The correct phrase is discharge from the hospital. It means to leave the hospital after treatment.

Complete sentence - She was discharged from the hospital after treatment.

Thus, the correct answer is option 1.

Q24. Answer: (b) 2

The correct answer is 2

Key Points

• Let's look at each part:

• The Creole language is a:

• **To refer to a specific noun (here Creole language), article 'the' is used correctly since superlative is used to refer to specific things, e.g., The Brahmaputra, The Himalayas, etc.

• stable natural language develop from:

• **Here, the adjectives stable and natural qualify the noun language

• Since the part is talking about the Creole language's development and since this developed in the past from a mixture of different languages, the past tense form of the root verb 'develop', i.e., 'developed' should be used

• a mixture of different languages:

YourMockTest.com — Free Study Material

• This conveys that Creole developed from a mixture of varied languages and this part is grammatically correct

Thus the correct sentence is: The Creole language is a stable natural language developed from a mixture of different languages.

Q25. Answer: (c) 3

The correct answer is 3

Key Points

• Let's look at each part of the sentence:

• The 26th of January was chosen:

• This part is grammatically correct since the superlative article 'the' is used to refer to a very special date in our country's history

• to commemorate the Purna Swaraj:

• **Here, the usage of the superlative article 'the' to refer to Purna Swaraj is correct as it refers to a specific historical declaration

• declaration for the complete independence, of 1930:

• **The word declaration means a formal statement of something

• It is followed by the preposition of. Example: Declaration of freedom, declaration of love etc

• The part '..., of 1930' is used to convey that the declaration was made in the year 1930 and is grammatically correct

The correct sentence is: The 26th of January was chosen to commemorate the Purna Swaraj declaration of the complete independence, of 1930.

Q26. Answer: (a) Curd : Milk

Wine is made from grapes by the process of fermentation.

Similarly, Curd is made from Milk by the process of fermentation.

Hence, the correct answer is "Curd : Milk".

Additional Information

Thread : Cloth	Weaving
Wood : Table	Carpentry

Q27. Answer: (b) 13

The pattern followed here is as follows,

36 : 9 → 3 + 6 = 9

Similarly,

49 → 4 + 9 = 13

Hence, the correct answer is '13'.

Q28. Answer: (a) QRT

The pattern followed here is:

In GHJ : JKM

Similarly, for NOQ

Hence, the correct answer is "QRT".

Q29. Answer: (b) Crop – Rubber

Table showing the crop and their nature/usage.

Crop	Type
Rice	Food Crop
Rubber	Cash/Commercial crop
Wheat	Food crop
Bajra	Food crop.

Rubber is a cash/commercial crop while the rest are food crops. Thus it is the odd one out.

Hence, the correct answer is 'Crop – Rubber'.

Q30. Answer: (d) 27 – 56

The logic followed here is:

Logic: First number × 2 = Second number

1) 17 × 2 = 34

2) 19 × 2 = 38

3) 23 × 2 = 46

4) 27 × 2 = 54 ≠ 56

Hence the correct answer is "27 – 56".

Q31. Answer: (a) DHM

The table shows the place value of the alphabet.

The pattern followed here is:

1) DHM →

2) GKO →

3) IMQ →

4) LPT →

Hence, the correct answer is "DHM".

Q32. Answer: (c) Cardigan

The words are arranged as per the dictionary order shown below,

(3) Caravan

(2) Cardigan

(4) Carton

(5) Challenge

(1) Charity

Hence, the correct answer is “Cardigan”.

Q33. Answer: (c) 1806

Here, the logic followed is:

Hence, the correct answer is "1806".

Q34. Answer: (c) Y

The logic followed here is,

L + 3 = O

O + 2 = Q

Q + 3 = T

T + 2 = V

V + 3 = Y

Hence, the correct answer is “Y”.

Q35. Answer: (b) J + K × L × T

Let us first decode the given symbols and then draw a family tree.

R is				
Symbol	•	•	×	÷
Meaning	Mother	Wife	Son	Father
of S				

1) K + T × J × R → K is the mother of T, T is the some of J and J is the son of R.

Here K is the mother of T.

2) J + K × L × T → J is the mother of K, K is the son of L and L is the son of T.

Here K is the grandson of T.

3) R + T – S ÷ K → R is the mother of T, T is the wife of S and S is the father of K.

Here the gender of K cannot be determined.

YourMockTest.com — Free Study Material

4) K + L × R ÷ T → K is the mother of L, L is the son of R and R is the father of T

Here K is the mother of T.

Hence, the correct answer is “J + K × L × T”.

Q36. Answer: (c) Recall

1) Can → Recalcitrant

2) Rent → Recalcitrant

3) Recall → Recalcitrant, this word cannot be formed as there is a single L in the word Recalcitrant.

4) Calcite → Recalcitrant

Hence, the correct answer is “Recall”.

Q37. Answer: (c) NZSBP

FRANK is written as GQBML. The pattern followed here is,

Similarly, MARCO can be coded as,

Hence, the correct answer is, “NZSBP”.

Q38. Answer: (d) 19

As per the information given in the question,

Symbol	Meaning
×	•
÷	×
•	÷
•	•

Interchanging the symbols as per the above table we get,

20 - 16 + 6 × 10 ÷ 4

Applying the BODMAS rule,

20 - 16 + 6 × 10 ÷ 4

= 20 – 16 + 15

= 35 - 16

= 19

Hence, the correct answer is, "19".

Q39. Answer: (b) × and -

Given expression: 13 × 8 + 25 - 6 ÷ 10 = 20

1) ÷ and - → 13 × 8 + 25 ÷ 6 - 10

13 × 8 + 25 ÷ 6 - 10

= 13 × 8 + 4.16 - 10

= 104 + 4.16 - 10

= 108.16 - 10

=> 98.16 ≠ 20. LHS ≠ RHS

2) × and - → 13 - 8 + 25 × 6 ÷ 10

= 13 - 8 + 25 × 6 ÷ 10

= 13 - 8 + 25 × 0.6

= 13 - 8 + 15

= 28 - 20

=> 20 = 20. LHS = RHS

3) + and ÷ → 13 × 8 ÷ 25 - 6 + 10

= 13 × 8 ÷ 25 - 6 + 10

= 13 × 0.32 - 6 + 10

= 4.16 - 6 + 10

= 14.16 - 6

YourMockTest.com — Free Study Material

=> 8.16 ≠ 20. LHS ≠ RHS

4) - and + → 13 × 8 - 25 + 6 ÷ 10

13 × 8 - 25 + 6 ÷ 10

13 × 8 - 25 + 0.6

104 - 25 + 0.6

104.6 - 25

=> 79.6 ≠ 20. LHS ≠ RHS

Hence, the correct answer is, '× and -'

Q40. Answer: (c) 100

The logic followed here is,

30 % 3 = 100 → 30 ÷ 3 × 10 = 100

Similarly,

70 % 14 = 50 → 70 ÷ 14 × 10 = 50

and,

20 % 8 = 25 → 20 ÷ 8 × 10 = 25

Thus, applying the above logic we get,

50 % 5 → 50 ÷ 5 × 10 = 100

Hence, The correct answer is '100'.

Q41. Answer: (d) BABCABAB

Given series,

CBABABAB, BACBABAB, BABACBAB, BABABACB, BCABABAB, _____

The logic followed here is shown in the table given below.

C	**B**	**A**	**B**	**A**	**B**	**A**	**B**
B	A	C	B	A	B	A	B
B	A	B	A	C	B	A	B
B	A	B	A	B	A	C	B
B	C	A	B	A	B	A	B
B	A	B	C	A	B	A	B

The position of C is shifting by two places ahead in a cyclic manner.

So, the next term in the series will be BABCABAB.

Hence, the correct answer is, “BABCABAB”.

Q42. Answer: (a) 15 m North

The movement of the footballer A is shown below,

A runs 35 m East, then 15 m South, turns to his right and runs 60 m

The movement of footballer B is shown below,

B runs 20 m North, then 25 m West, turns left and runs 20 m

Combining the movement of both the footballers having the common starting point, we get

From the above figure, we can conclude that B is 15 meters away from A in the north direction.

Hence, the correct answer is "15 m North".

Q43. Answer: (a) Only conclusion I follows

Statement I: All sticks are canes

Statement II: Some wands are sticks

The least possible Venn diagram of the above statements is,

Conclusion I: Some canes are wands → Follows (All sticks are canes, and some wands are sticks, thus some wands being canes is definite).

Conclusion II: No wands are canes → Does not follow (As those wands which are sticks are also canes)

Hence, the correct answer is, 'Only conclusion I follow'.

YourMockTest.com — Free Study Material

Q44. Answer: (d) BH

Given that the rectangle represents Authors, Circle represents Art critics, Triangle represents Tattooists, Square represents Joggers.

Letters B and H represent Joggers who are either Art critics or Authors i.e. the part of the square that is common with the circle or with the rectangle.

Hence, the correct answer is “BH”.

Q45. Answer: (b) ZHA

The logic followed here is each letter of the word is shifted by five places ahead as per the English alphabetical order.

Hence, the correct answer is, “ZHA”.

Q46. Answer: (c) 29

The pattern followed here is,

Consecutive numbers (i.e. 2, 3, 4, 5 and 6) are added respectively to get the next term of the series.

Hence, the correct answer is “29”.

Q47. Answer: (b) (3, 7, 12)

The logic followed here is,

(First Number) × 2 + 1 = Second Number;

(Second Number) × 2 - 1 = Third Number.

Applying the above logic to each option, we get

1) (8, 17, 33) → 8 × 2 + 1 = 17; 17 × 2 - 1 = 33

2) (3, 7, 12) → 3 × 2 + 1 = 7; 7 × 2 - 1 = 13 ≠ 12

3) (9, 19, 37) → 9 × 2 + 1 = 19; 19 × 2 - 1 = 37

4) (15, 31, 61) → 15 × 2 + 1 = 31; 31 × 2 - 1 = 61

We can see that except option 3, all other options follow the given logic, thus option 3 is the odd one out.

Hence, the correct answer. is “(3, 7, 12)”.

Q48. Answer: (c) [figure]

When a mirror is placed at the bottom of the object, the mirror image of the object is the same as the water image of that object. Thus The image is vertically inverted or flipped vertically.

Thus, the possible mirror image of the object is shown below.

Hence, the correct answer is "Option 3".

Q49. Answer: (b) [figure]

Given unfolded cube,

From the above figure, we can conclude that,

1) The face of dice having * will be opposite +.

2) The side with a dot will be opposite to the circle.

3) The side with 4 squares will be opposite to that of the circle and square.

Now, in option 2

The top side has

and is adjacent to

which is not possible. Thus the above cube can not be formed.

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

Q50. Answer: (d) 68, 78, 95, 34

As per the information given in the question, the first digit of the number represents Rows while the second digit of the number represents the columns.

Thus, each option is decoded as below,

1) 34, 75, 23, 75 → EVDV

2) 30, 59, 43, 98 → MQLY

3) 14, 75, 23, 69 → CVDW

4) 68, 78, 95, 34 → TONE

Hence, the correct answer is "68, 78, 95, 34".

YourMockTest.com — Free Study Material

Q51. Answer: (d) -1.732

Given:-

√243 - 1/2√108 - √147

Detailed solution:-

We can write,

=> √243 = √(81 × 3) = 9√3

=> √108 = √(36 × 3) = 6√3

=> √147 = √(49 × 3) = 7√3

Therefore √243 - 1/2 × (√108) - √147 = 9√3 - 3√3 - 7√3 = -√3 = -1.732

Therefore The required answer is -1.732

Q52. Answer: (c) 69993

Given:-

589573212.

Concept used:-

(1)Place value is the value of the digit with reference to its position in the number

(2) While, face value is the actual value of the digit

Calculation:-

=> Place value of 7 in given number = 70000

=> Face value of 7 = 7

Therefore Required difference = 70000 - 7 = 69993

Q53. Answer: (c) 150

Given:-

√(1 + y/16) = 7/4

Detalied solution:-

√(1 + y/16) = 7/4

Squaring both sides,

=> 1 + y/16 = 49/16

=> 16 + y = 49

=> y = 49 – 16 = 33

Therefore 5y – 15 = 5(33) – 15 = 165 – 15 = 150

Therefore The required answer is 150

Q54. Answer: (b) 1

Given:

x2 + (1/x2) = 6

Formula:

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

Calculation:-

=> $(2x(x - 1))/(x^3 - x^2 - x + 1)$

As we know, $(x - 1/x)^2 = x^2 + 1/x^2 - 2$ (Put the value x2 + (1/x2) = 6)

=> $(x - 1/x)^2 = 6 - 2 = 4$

=> $(x - 1/x) = \sqrt{4} = 2$

Now, we can write,

=> $x^3 - x^2 - x + 1 = x3 - x - x2 + 1 = x(x^2 - 1) - 1(x^2 - 1)$

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

Hence,

Therefore $(2x(x - 1))/(x^3 - x^2 - x + 1)$

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

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

$= 2x/\{(x(x - 1/x)\}$

$= 2/(x - 1/x)$

YourMockTest.com — Free Study Material

= 2/2 = 1

Q55. Answer: (a) 7

Detailed solution:-

The given figure can be drawn as,

Let O be the centre of the circle, AB be the chord and P is the centre point of chord AB, such that OP is the distance of the chord from the centre of the circle

Now, OA = OB = radius of circle = 25 cm

Length of chord = AB = 48 cm

=> PB = AB/2 = 48/2 = 24 cm

Applying Pythagoras theorem in ΔOPB,

=> $OB^2 = OP^2 + PB^2$

=> $25^2 = OP^2 + 24^2$

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

=> $OP = \sqrt{49} = 7$ cm

Therefore Distance of chord from centre of circle = 7 cm

Q56. Answer: (c) 50°

Shortcut Trick

In ΔOBC, OB = OC (radii of the circle), so angle OCB = angle OBC = 40°.

Angle at the center: angle BOC = 180° − (40° + 40°) = 100°.

Angle at the circumference: angle BAC = angle BOC ÷ 2 = 100° ÷ 2 = 50°.

Therefore The correct answer is 50°.

Alternate Method

Given:

angle OBC = 40°

OB is the radius of the circle with center O.

Formula Used:

1. In an isosceles triangle, angles opposite to equal sides are equal.

2. The angle subtended by an arc at the center of a circle is twice the angle subtended by it at any point on the remaining part of the circle.

Calculations:

In ΔOBC:

=> OB = OC (since both are radii of the same circle)

=> angle OCB = angle OBC = 40° (angles opposite to equal sides are equal)

We know that the sum of angles in a triangle is 180°:

=> angle BOC + angle OBC + angle OCB = 180°

=> angle BOC + 40° + 40° = 180°

=> angle BOC + 80° = 180°

=> angle BOC = 180° − 80° = 100°

By the circle theorem, the angle subtended by arc BC at the center O is twice the angle subtended at the circumference at A:

=> angle BOC = 2 × angle BAC

=> 100° = 2 × angle BAC

=> angle BAC = 100° ÷ 2

=> angle BAC = 50°

Option Verification:

=> Option (1) 35°: Incorrect, as this would imply angle BOC = 70°, which means angle OBC + angle OCB = 110°, making each 55° instead of the given 40°.

=> Option (2) 45°: Incorrect, as this would imply angle BOC = 90°, which means angle OBC + angle OCB = 90°, making each 45° instead of the given 40°.

=> Option (3) 50°: Correct, as it perfectly satisfies angle BOC = 100° and angle OBC = angle OCB = 40°.

=> Option (4) 65°: Incorrect, as this would imply angle BOC = 130°, which means angle OBC + angle OCB = 50°, making each 25° instead of the given 40°.

YourMockTest.com — Free Study Material

Therefore The correct answer is 50°.

Additional Information

Angle in a Semicircle

The angle subtended by a diameter at any point on the circumference of the circle is always a right angle (90°).

Angles in the Same Segment

Angles subtended by the same arc or chord at any points on the remaining part of the circle are equal to each other.

Cyclic Quadrilateral Property

The sum of the opposite angles of a cyclic quadrilateral is always 180°.

Q57. Answer: (a) 28.75

Let the initial weight of A and B be '7x' and '8x' units respectively

Total weight of A & B = 7x + 8x = 15x

When A's weight increases by 10% & total weight increases by 20%,

=> A's increased weight = 110% of 7x = 1.1 × 7x = 7.7x

=> Total increased weight = 120% of 15x = 1.2 × 15x = 18x

Hence,

B's increased weight = 18x - 7.7x = 10.3x

=> Increase in B's weight = 10.3x - 8x = 2.3x

Therefore Percentage increase in B's weight = 2.3x/8x × 100 = 28.75%

Q58. Answer: (b) 9000

Given, X's income = Rs. 18000

But, X's income : Y's income = 3 : 4

=> 18000/Y's income = 3/4

=> Y's income = 18000 × 4/3 = Rs. 24000

Now, X's savings = Rs. 3000

Because Expenses = Income - Savings

=> X's expenses = 18000 - 3000 = Rs. 15000

But, X's expenses : Y's expenses = 5 : 5

=> 15000/Y's expenses = 1

=> Y's expenses = Rs. 15000

Therefore Y's savings = 24000 - 15000 = Rs. 9000

Q59. Answer: (c) 76 : 43

Let 'x' units of P and Q alloys are melted to form third alloy

Tin-lead ratio in P alloy = 12 : 5

=> Quantity of Tin in 'x' units of P alloy = (12/17)x

=> Quantity of Lead in 'x' units of P alloy = (5/17)x

Similarly,

Tin-lead ratio in Q alloy = 4 : 3

=> Quantity of Tin in 'x' units of Q alloy = (4/7)x

=> Quantity of Lead in 'x' units of Q alloy = (3/7)x

Hence,

Total quantity of Tin in R alloy = (12/17)x + (4/7)x = (152/119)x

Total quantity of Lead in R alloy = (5/17)x + (3/7)x = (86/119)x

Therefore Tin-lead ratio in R alloy = (152x/119) : (86x/119) = 152 : 86 = 76 : 43

Q60. Answer: (b) 54

Given:-

The first 5 positive even numbers divisible by 9 are the first 5 even

multiples of 9, these even number are18,36,54,72,90

Formula used:-

Average = (Sum of Observations) ÷ (Total Numbers of Observations)

Calculation:-

=> Sum of first 5 even multiples of 9

=> 9(2 + 4 + 6 + 8 + 10)

=> 9 × 30 = 270

Therefore Required average = 270/5 = 54

Q61. Answer: (a) 6.25

Given:

The simple interest on a sum for 20 years is 5/4 of the principal.

Concept used:

Simple interest = PRT/100

Calculation:

Given, time = 20 years

=> (5/4)P = (P × R × 20)/100

=> R = 5/4 × 5 = 25/4

Therefore The rate of interest is 6.25% p.a.

Q62. Answer: (b) 17.36

Detailed solution:-

Cost price of 13 articles = Rs. 12

=> Cost price of 1 article = Rs. 12/13

Similarly,

Selling price of 12 articles = Rs. 13

=> Selling price of 1 article = Rs. 13/12

Because Profit = Selling price - Cost price

=> Profit on 1 article = 13/12 - 12/13 = Rs. 25/156

Therefore Profit percentage = (25/156)/(12/13) × 100 = 25/144 × 100 = 17.36%

Q63. Answer: (c) 55.2

Given:

The successive discount are 20%, 30% and 20%.

Formula:

Successive discount = X + Y - (XY)/100

Where,

X = First discount

Y = Second discount

Calculation:

Successive discount = X + Y - (XY)/100

=> 20 + 30 - 600/100

=> 44%

Now, again

Successive discount = X + Y - (XY)/100

X = 44%, Y = 20%

=> 44 + 20 - (44 × 20)/100

=> 64 - 8.8 = 55.2%

Therefore The single equivalent discount is 55.2%.

Let the marked price of the tyre be Rs. ‘x’

Price after first discount = x - 20% of x = x - 0.2x = 0.8x

Price after second discount = 0.8x - 30% of 0.8x = 0.8x - 0.24x = 0.56x

Price after third discount = 0.56x - 20% of 0.56x = 0.56x - 0.112x = 0.448x

=> Total discounted price = x - 0.448x = 0.552x

Therefore Net discount percentage = 0.552x/x × 100 = 55.2%

YourMockTest.com — Free Study Material

Q64. Answer: (a) 5/12

As we know, $36 = 6^2 \Rightarrow \sqrt{36} = 6$

Also, $729 = 9^3 \Rightarrow \text{cbrt}729 = 9$

Also, $81 = 9^2 \Rightarrow \sqrt{81} = 9$

Also, $64 = 4^3 \Rightarrow \text{cbrt}64 = 4$

Therefore $(\sqrt{36} + \text{cbrt}729)/(\sqrt{81} \times \text{cbrt}64) = (6 + 9)/(9 \times 4) = 15/36 = 5/12$

Q65. Answer: (d) 1000

Given:-

(1) Robin can do work alone in 9 days

(2) Amit can do the same work alone in 6 days.

Detailed solution:-

Robin's 1-day work = 1/9

Amit's 1-day work = 1/6

When they work together, they received Rs. 2500

Because The ratio of wages = Ratio of work efficiencies

=> Robin's share: Amit's share = (1/9) : (1/6) = 6 : 9 = 2 : 3

Sum of ratios = 2 + 3 = 5

Therefore Robin's share = 2/5 × 2500 = Rs. 1000

Q66. Answer: (d) 8

Given:-

(1) A boat covers 63 km upstream in 9 hours

(2) covers the same distance downstream in 7 hours

Formula used:-

Speed = Distance/time

Calculation:-

Upstream speed = Distance/time = 63/9 = 7 km/hr

Downstream speed = Distance/time = 63/7 = 9 km/hr

Because Speed in still water = 1/2 × (Upstream speed + Downstream speed)

Therefore Speed of boat in still water = (9 + 7)/2 = 8 km/hr

Q67. Answer: (d) 2016

The sales per employee increases in the year 2016 as compared to the previous year

Therefore Sales per employee in 2016 is greater than that of the previous year

Q68. Answer: (c) 20

Sales per employee in 2011 = Rs. 70 lakhs

Sales per employee in 2015 = Rs. 50 lakhs

Therefore Required difference = 70 - 50 = Rs. 20 lakhs

Q69. Answer: (c) 40%

Sales per employee in 2012 = Rs. 70 lakhs

Sales per employee in 2015 = Rs. 50 lakhs

Difference = 70 - 50 = Rs. 20 lakhs

Therefore The Sales per employee in 2012 were greater than that in 2015 by = 20/50 × 100 = 40%

Q70. Answer: (b) 40

Sales per employee in 2015 = Rs. 50 lakhs

No. of employees in 2015 = 80

Therefore Sales of company in 2015 = 50 × 80 = Rs. 4000 lakhs = Rs. 40 crores

YourMockTest.com — Free Study Material

Q71. Answer: (a) 30

Given:-

Diagonals = 5 cm & 12 cm

Formula used:-

Area of rhombus = 1/2 × Product of its diagonals

Calculation:-

As we know,

Area of rhombus = 1/2 × Product of its diagonals

Therefore Area of rhombus = (5 × 12)/2 = 30 cm²

Q72. Answer: (a) 1260

Given:-

The sum of the measures of all the interior angles of a regular polygon of 9 sides

Formula used:-

The sum of interior angles = (n - 2) 180°

Calculation:-

For a regular polygon with n sides,

The sum of interior angles = (n - 2) 180°

Therefore Sum of interior angles of a regular polygon with 9 sides = (9 - 2) × 180° = 1260°

Therefore The required answer is 1260°.

Q73. Answer: (c) 21

Given:-

The surface area of a sphere is 1386 cm2

Formula used:-

Surface area = 4πr2

Calculation:-

For a sphere with radius ‘r’,

Surface area = 4πr²

=> 1386 = 4 × (22/7) × r²

=> r² = 441/4

=> Radius of sphere = √(441/4) = 21/2 = 10.5 cm

Therefore Diameter of sphere = 2(10.5) = 21 cm

Q74. Answer: (c) 1/√3

Detailed solution:-

Given, in ΔPQR, angle Q = 90° and angle R = 60°

The sum of angles of a triangle = 180°

=> angle P + angle Q + angle R = 180°

=> angle P + 90° + 60° = 180°

=> angle P = 180° - 150° = 30°

Therefore (sec P - 1/√3) = sec 30° - 1/√3 = 2/√3 - 1/√3 = 1/√3

Q75. Answer: (d) 24/7

In the given ΔPQR,

Given, cosec P = 25/24

As we know, cot P = √(cosec²P - 1)

=> cot P = √(625/576 - 1) = √(49/576) = 7/24

But, cot P = base/Perpendicular

=> PQ/QR = 7/24

Now, cot R = base/Perpendicular = QR/PQ

Therefore cot R = 1/cot P = 24/7

YourMockTest.com — Free Study Material

Q76. Answer: (a) Money value of goods and services produced in a country during a year

• National Income is defined as the total value of all the final goods and services produced by a country in a certain year.

• It includes all the payments made to all the resources in the forms of wages, interests, rent and profits.

Q77. Answer: (c) 9^(th) Schedule

The correct answer is 9th Schedule

Key Points

• Ninth Schedule:-

• The Ninth Schedule contains a list of central and state laws generally which cannot be challenged in court.

• Currently, 284 such laws are shielded from judicial review.

• Most of the laws protected under the Schedule concern agriculture/land issues.

• The Schedule became a part of the Constitution in 1951 when the document was amended for the first time.

• It was created by the new Article 31B, which along with 31A was brought in by the government to protect laws related to agrarian reform and for abolishing the Zamindari system.

• While Article 31A extends protection to 'classes' of laws, Article 31B shields specific laws or enactments.

• The First Amendment added 13 laws to the Schedule.

• Subsequent amendments in 1955, 1964, 1971, 1974, 1975, 1976, 1984, 1990, 1994, and 1999 have taken the number of protected laws to 284.

• The first amendment to the Indian Constitution added the Ninth Schedule to it in 1951.

• It ensured that the laws related to land reforms were not challenged in courts for violation of fundamental rights.

Additional Information

• 7th Schedule:-

• The Seventh Schedule of the Indian Constitution deals with the division of powers between the union and the states in terms of the list.

• The Seventh Schedule to the Constitution of India defines and specifies the allocation of powers and functions between the Union & States.

• It contains three lists:

• Union List,

• State List and

• Concurrent List

• 8th schedule:-

• The Eighth Schedule to the Constitution consists of the following 22 languages: Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi, Sanskrit, Sindhi, Tamil, Telugu, Urdu, Bodo, Santhali, Maithili, and Dogri.

• Of these languages, 14 were initially included in the Constitution.

• 10th schedule:-

• The 10th Schedule of the Indian Constitution is about Anti-defection.

• Anti-defection law acts as a deterrent for those who hop parties from one to other.

• It is a type of control system against the members of any political party leaving the original party for another.

Q78. Answer: (a) Monadnock

The correct answer is Monadnock.

Key Points

• Monadnock:-

• It is an isolated rock hill or small mountain that rises abruptly from a gently sloping or virtually level surrounding plain.

• They are left as erosional remnants because of their resistant rock composition.

Q79. Answer: (d) Mahanadi

The correct answer is Mahanadi.

Key Points

• Estuary

• An estuary is an area where a freshwater river or stream meets the ocean. When freshwater and seawater combine, the water becomes brackish, or slightly salty.

• Estuaries are home to unique plant and animal communities.

YourMockTest.com — Free Study Material

• Estuaries are among the most productive ecosystems in the world. Many animals rely on estuaries for food, places to breed, and migration stopovers.

• Congress created the National Estuarine Research Reserve System to protect more than one million acres of estuarine land and water.

• Western flowing rivers widen their mouth into the sea, so these rivers form Estuaries whereas Eastern rivers flow through broken hills and mountain ranges

• The river that forms the estuary is Narmada, Tapi and Mandovi.

• Mahanadi does not form an estuary as it forms a delta.

Additional Information

• Mahanadi

• The Mahanadi river originates at a height of 422 meters above mean sea level near Pharsiya village, Nagri town in the Raipur district of Chhattisgarh.

• Mahanadi river of peninsular India is one of the major interstate east-flowing rivers.

• The length of the Mahanadi river from its source of origin to its confluence in the Bay of Bengal is nearly 851km, of which 357 km lies in Chhattisgarh and the remaining 494 km in Odisha.

• In Water Potential the Mahanadi river ranks second to the Godavari river among the peninsular rivers.

• Narmada

• Narmada is the longest river in Madhya Pradesh, followed by the Tapti.

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

• Its total length from its source in Amarkantak Amarkantak to its estuary in the Gulf of Khambhat is 1,310 km.

• The Source of the Narmada is Narmada Kund which is located at Amarkantak in Anuppur District, Madhya Pradesh.

• The Narmada is also known as the Rewa.

• Tapi

• The Tapti River (aka Tapi river)is a river in central India located to the south of the Narmada river which flows westwards before draining into the Arabian Sea.

• The river has a length of around 724 km and flows through the states of Maharashtra, Gujarat, and Madhya Pradesh.

• Tapti river originates from Multai Betul district Madhya Pradesh. And also from the Satpura range.

Q80. Answer: (a) Ghiyasuddin Azamshah

The correct answer is Ghiyasuddin Azamshah.

Key Points

• GhiyasuddinAzamshah established a diplomatic relationship with the Ming Empire in China.

• He was the third ruler of the Ilyas Shahi Dynasty in Bengal.

Q81. Answer: (a) 1893

The correct answer is 1893.

Key Points

• The AryaSamaj was divided in 1893 over the question of vegetarianism.

• The group that continued consumption of meat was known as ‘the Cultured Party’ whereas the other group that refrained from eating meat was known as ‘Mahatma’.

• Arya Samaj was founded by Swami Dayanand Saraswati in 1875 in Bombay.

Important Points Arya Samaj

• Arya Samaj was founded by Swami Dayanand Saraswati in 1875.

• Initially, the headquarters of Arya Samaj was in Bombay. Later shifted to Lahore, at present it is in New Delhi.

• The main aim of Arya Samaj is to make a casteless society, to abolish sati and encourage widow remarriages, and to provide education for all.

• Dayanand Saraswathi propagated the infallibility of the Vedas.

• He also encouraged inter-caste marriages.

• Arya Samaj strongly criticized the beliefs of Maya and Moksha.

• Dayanand attacked puranas, polytheism, idolatry and domination of the priestly class.

• He adopted Hindi for reaching out to the masses.

Q82. Answer: (b) Jahangir

The correct answer is Jahangir.

Key Points

• Ustad Mansur:-

• He was a painter and court artist during the reign of the Mughal Ruler Jahangir (1605-1627).

• He was one of the earliest painters to depict a dodo in color apart from the depiction of the Siberian Crane.

• Jahangir (1605-1627):

• Jahangir was the eldest son of Akbar.

• Jahangir executed the fifth Sikh Guru, Arjun Dev.

• Under Jahangir, Mughal paintings reached their zenith.

Additional Information

• Shah Jahan (1627-1658):-

• He was the son of Jahangir.

• A French traveler, Tavernier visited during his reign

• Diwan-i-Khas and Diwan-i-Am, a hall for private and public audiences are built by Shahjahan.

• Akbar (1556-1605):-

• Emperor Akbar founded the city by the name of “ILLAHABAS” which later became ALLAHABAD.

• He introduced the new religion as Din Ilahi.

• He introduced the Mansabdari system.

• Akbar defeated Hemu in the second battle of Panipat.

• He built Ibadat Khana in Fatehpur Sikri.

• He followed the policy of Sulh-i-kul.

• Aurangzeb (1658-1707):-

• Mughal intervention in the succession and internal politics of the Rathor Rajputs of Marwar led to their rebellion.

• Campaigns against the Maratha chieftain Shivaji were initially successful. However, escaped from Aurangzeb’s prison Shivaji declared himself an independent king and resumed his campaigns against the Mughals.

• Prince Akbar[II] rebelled against Aurangzeb and received support from the Marathas and Deccan Sultanate.

• After Akbar’s rebellion, Aurangzeb sent armies against the Deccan Sultanates.

Important Points

• Mughals:

• The Mughals were descendants of two great lineages of rulers.

• From their mother’s side, they were descendants of Genghis Khan (died in 1227), the Mongol ruler who ruled over parts of China and Central Asia.

• From their father’s side, they were the successors of Timur (died 1404), the ruler of Iran, Iraq, and modern-day Turkey.

• However, the Mughals did not like to be called Mughal or Mongol. This was because Genghis Khan’s memory was associated with the massacre of innumerable people.

• It was also linked with the Uzbeks, their Mongol competitors.

• On the other hand, the Mughals were proud of their Timurid ancestry, not least of all because their great ancestor had captured Delhi in 1398.

Q83. Answer: (a) Nicaragua

The correct answer is Nicaragua.

Key Points

• Paris Agreement on Climate Change

• It is an environmental agreement to address climate change and its negative impacts.

• Parties to the UNFCCC reached a landmark agreement at COP 21 in Paris, on 12 December 2015, to combat climate change.

• The main aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius.

• The agreement went into effect on 4 November 2016.

• As of now, the agreement has been signed by 197 countries.

• The Paris Agreement which was signed in 2015 by US and 187 other countries was joined by Nicaragua on 23 October 2017.

• This leaves only United States and war-torn Syria against the global climate agreement.

Q84. Answer: (b) Asha Bhosle

The correct answer is Asha Bhosle.

Key Points

• Yash Chopra Memorial Award:-

• The TSR Foundation of T. Subbarami Reddy established the Yash Chopra Memorial Award ceremonies in memory of noted filmmaker, Yash Chopra, who died in 2012, in association with AnuRanjan and Shashi Ranjan.

• It comes with a citation and Rs 10,000,000.

• These award shows were established in 2013, the night before Yash Chopra passed away, and are held in his honor.

• The 5^(th)Yash Chopra Memorial Award was given to Asha Bhosle by Rekha for her outstanding contribution to the world of music over her six decades as a singer.

• Asha Bhosle:-

• She is a playback singer and entrepreneur from India. Asha Bhosle claimed in 2006 that she had sung over 12,000 songs, a number that has been verified by several other outlets.

• She was officially recognized as the most registered artist in music history by the Guinness Book of World Records in 2011.

• In 2000, the Indian government awarded her the Dadasaheb Phalke Award, and in 2008, the Padma Vibhushan.

• Bhosle is the younger sister of playback singer Lata Mangeshkar and is a member of the Mangeshkar family, which is well-known in Bollywood.

Additional Information

• Alka Yagnik:-

• Indian playback vocalist Alka Yagnik, who was born on March 20, 1966, specializes in Hindi cinema.

• Numerous awards, including two National Film Awards for Best Female Playback Singer, have been given to Yagnik.

• The Lata Mangeshkar Award was given to Yagnik in 2017 for her work in the music industry.

• Kavita Krishnamurthy:-

• Sharada is an Indian playback and classical vocalist also known by the name Kavita Krishnamurthy or Kavita Subramaniam.

• She has recorded more than 50,000 Songs recorded in 46 different languages.

• She won the Padma Shri in 2005 and four Filmfare Best Female Playback Singer Awards, which she won consecutively from 1995 to 1997.

• Sunidhi Chauhan:-

• She is an Indian playback singer.

• She has won the 'RD Burman Award for New Music Talent and 'Best Female Playback'.

Q85. Answer: (c) Lahore

The correct answer is Lahore.

Key Points

• Jahangir (1605-1627):

• Jahangir was the eldest son of Akbar.

• Jahangir executed the fifth Sikh Guru, Arjun Dev.

• Under Jahangir, Mughal paintings reached their zenith.

• The tomb of the Mughal Emperor Jahangir is situated in Lahore

• It dates back to the year 1637.

• It is at Shahdara Baghin Lahore, Punjab, and is located on the banks of the Ravi River.

Important Points

• Mughals:

• The Mughals were descendants of two great lineages of rulers.

• From their mother’s side, they were descendants of Genghis Khan (who died in 1227), the Mongol ruler who ruled over parts of China and Central Asia.

• From their father’s side, they were the successors of Timur (died 1404), the ruler of Iran, Iraq, and modern-day Turkey.

• However, the Mughals did not like to be called Mughal or Mongol. This was because Genghis Khan’s memory was associated with the massacre of innumerable people.

• It was also linked with the Uzbeks, their Mongol competitors.

• On the other hand, the Mughals were proud of their Timurid ancestry, not least of all because their great ancestor had captured Delhi in 1398.

Q86. Answer: (a) 18, 7

The Correct answer is 18,7.

Explanation:

• There are 18 groups and 7 periods in the modern periodic table.

• A period is a horizontal row of the periodic table. There are seven periods in the periodic table, with each one beginning at the far left.

• A group is a vertical column of the periodic table, based on the organization of the outer shell electrons. There are a total of 18 groups.

Q87. Answer: (d) All options are correct.

Solution: A mixture contains two or more substances that are not chemically combined.

Mixture	Constituents
Milk	Fats, Proteins and Lactose
Gasoline	Lightweight hydrocarbons with between 4 and 12 carbon atoms per molecule (commonly referred to as C4-C12).
Liquefied Petroleum Gas	Propane, propylene, butane, and butylene in various mixtures

Q88. Answer: (d) Twelfth Schedule

The correct answer is the Twelfth Schedule.

Key Points

• The Twelfth schedule:-

• It was added by the 74^(th) amendment to the constitution.

• It is associated with the municipalities in the country as the mechanism of local self-governance.

• The twelfth Schedule of the Indian constitution contains the powers, authority, and responsibilities of Municipalities.

• This schedule has 18 items.

• This was passed in the year 1992 and it came into effect on June 01, 1993.

• Constitution (Seventy Fourth Amendment) Act, 1992:-

• It has introduced a new Part IXA in the Constitution, which deals with Municipalities in an article 243 P to 243 ZG.

• This amendment, also known as Nagarpalika Act.

Additional Information

• Ninth Schedule:-

• The Ninth Schedule contains a list of central and state laws generally which cannot be challenged in court.

• Currently, 284 such laws are shielded from judicial review.

• Most of the laws protected under the Schedule concern agriculture/land issues.

• The Schedule became a part of the Constitution in 1951 when the document was amended for the first time.

• Tenth Schedule:-

• The 10th Schedule of the Indian Constitution is about Anti-defection.

• Anti-defection law acts as a deterrent for those who hop parties from one to other.

• It is a type of control system against the members of any political party leaving the original party for another.

• Eleventh Schedule:-

• The Eleventh Schedule of the Indian Constitution was added in 1992 by the 73rd Constitution Amendment Act.

• This Schedule contains 29 subjects.

• This schedule covers important topics such as Panchayat's powers, rural development, poverty alleviation, market, roads and drinking water, etc.

Q89. Answer: (d) All I, II and III

The correct answer is All I, II and III

Key Points

• Supremacy of the Constitution:-

• It is a doctrine where the Constitution is the supreme law of the country and all have to obey it.

• Free and fair elections:-

• It refers to the elections that take place without any application of force.

YourMockTest.com — Free Study Material

• Judicial Review:-

• It refers to the power of the judiciary to review the functions of the central government and state governments.

Additional Information

• From the various judgments, the following have emerged as 'basic features of the Constitution or elements of the 'basic structure of the constitution:

• Supremacy of the Constitution

• Sovereign, democratic, and republican nature of the Indian polity

• Secular character of the Constitution

• Separation of powers between the legislature, the executive, and the judiciary

• Federal character of the Constitution

• Unity and integrity of the nation

• Welfare state (socio-economic justice)

• Judicial review

• Freedom and dignity of the individual

• Parliamentary system

• Rule of law

• Harmony and balance between Fundamental Rights and Directive Principles

• Principle of equality

• Free and fair elections

• Independence of Judiciary

• Limited power of Parliament to amend the Constitution (not the sovereignty of the Parliament).

• Effective access to justice 18. Principles (or essence) underlying fundamental rights

• Powers of the Supreme Court under Articles 32, 136, 141 and 142

• Powers of the High Courts under Articles 226 and 227

Q90. Answer: (d) All I, II and III

The Correct answer is All I, II and III

Explanation:

• Plasma is the largest component of blood, comprising about 55% of its overall content.

• Along with water, plasma carries salts, hormones and enzymes.

• The main purpose of plasma is to transport nutrients, hormones, and proteins to the parts of the body that need them.

• Plasma is the largest part of the blood. It makes up more than half (about 55%) of its total content. When separated from the rest of the blood, plasma is a pale yellow liquid that contains water, salts, and enzymes.

Important Points

• Plasma is called the matrix of blood. It is composed of clotting factors, protein compounds, and serum.

• It consists of 92% water with proteins, salts, lipids, and glucose.

• Plasma is the main mode of excretory product transport.

• The main role of plasma is to transport nutrients, hormones, and proteins to the parts of the body that need them.

• Cells also dump their waste products into the plasma.

• The plasma then helps to remove this waste from the body.

• Blood plasma also carries all parts of the blood through the body's circulatory system.

• Proteins and antibodies in plasma are also used in the treatment of rare chronic conditions such as autoimmune disorders and haemophilia.

Q91. Answer: (a) Differentiated plant body

The correct answer is Differentiated plant body.

Explanation:

• The first level of classification among plants depends on whether the plant body has well- differentiated, distinct components.

• Depending upon these criteria plants are classified as Thallophyta, Bryophyta, and Pteridophyta.

Additional Information

• Thallophyta

• The plant body is not differentiated from roots, stems, and leaves.

• They are commonly called algae.

• Bryophyta
• These are small terrestrial plants.
• They show differentiation in the body design, with stem, leaf-like structures, and root-like structures.
• Pteridophyta
• The plant body is differentiated into roots, stems, and leaves, apart from having a specialized tissue for conduction.
• Gymnosperms
• Gymnosperms are plants with naked seeds.
• Angiosperms
• Angiosperms are seed-bearing plants. Seeds develop inside tissues that get modified to form the fruit of the plant.

Q92. Answer: (c) Environment Ministry

The correct answer is Environment Ministry.

Key Points

• 'Prakriti Khoj' was the undertaking of the Environment Ministry to generate interest among school children about the science related to the environment, interactions within it, and the problems therein.
• In an attempt to spread awareness about the environment, the government launched a national-level online quiz competition, "Prakriti Khoj
• This will help in sensitizing the children/youth to issues related to environment and development and motivate children towards environment conservation-oriented lifestyles.

Important PointsEnvironment Ministry-

• The Ministry of Environment, Forest and Climate Change (MoEFCC) is an Indian government ministry.
• Bhupendra Yadav is the current (February, 20223) minister of this ministry.
• The broad objectives of the Ministry are:
• Conservation and survey of flora, fauna, forests and wildlife
• Prevention and control of pollution
• Afforestation and regeneration of degraded areas
• Protection of the environment and
• Ensuring the welfare of animals

Q93. Answer: (a) Bertrand Halperin

The correct answer is Bertrand Halperin.

Key Points

• The term 'Excitonium' was coined by Bertrand Halperin who was a theoretical physicist at Harvard.
• Researchers at the University of Illinois discovered this new state of matter in 2017.
• Excitonium is a state of matter that is a condensate made up of excitons and exhibits macroscopic quantum phenomena just like a superconductor.
• Bertrand I. Halperin is an American physicist and former holder of the Hollis Chair of Mathematics and Natural Philosophy at the physics department of Harvard University.

Q94. Answer: (b) Rs. 9 lakh crore

The correct answer is Rs. 9 lakh crore.

Key Points

• The government had revealed plans to invest Rs. 9 lakh crores in 2017 to boost the country's economy.
• Out of the Rs. 9 lakh crores, a sum of Rs. 6.92 lakh crore is earmarked for infrastructure spending.
• Another Rs. 2.11 lakh crore was announced for bank recapitalization to revive investments as well as growth.

Q95. Answer: (c) Beti Bachao Beti padhao

The correct answer is Beti Bachao Beti padhao.

Key Points

• The Cabinet Committee on Economic Affairs chaired by Prime Minister Shri Narendra Modi has given its approval for the expansion of Beti Bachao Beti Padhao for a Pan India reach covering all the 640 districts (as per census 2011) of the Country to have a deeper positive impact on Child Sex Ratio.
• The Scheme was launched by the Prime Minister on 22nd January 2015 at Panipat, Haryana.
• The phrase "Save the girl child, educate the girl kid" is the meaning behind the name of this initiative Beti Bachao, Beti Padhao.

YourMockTest.com — Free Study Material

• The following objectives are intended to be attained by the Beti Bachao Beti Padhao Yojana

• Improve the child-sex ratio.

• Ensure women's empowerment and gender equality.

• Prevent sex-selective and gender-biased exclusion.

• Ensure the girl child's survival and safety.

• Encourage girls of the country to attend school and participate in society.

Additional InformationMake in India-

• The ‘Make in India’ initiative was launched globally on 25th September 2014 by PM Narendra Modi as a part of India’s renewed focus on Manufacturing.

• The objective of the Initiative is to promote India as the most preferred global manufacturing destination.

• India has vigorously opened up its economy – Defence, Railways, Construction, Insurance, Pension Funds, and Medical Devices have all been rapidly opened up for Foreign Direct Investment. India today is one of the most open economies in the world.

• The Make in India logo is a lion.

Swatch Bharat-

• This campaign was introduced by Prime Minister, Narendra Modi, and was launched on 2nd October 2014 to honour Mahatma Gandhi’s vision of a Clean country.

• The major objective of the Swachh Bharat Abhiyan is to spread awareness of cleanliness and its importance of it.

• Initially, this Swachh Bharat Abhiyan campaign was run on a national level in all the towns, rural and urban areas.

Skill India-

• In 2015 the flagship scheme of the Skill India Mission was launched in India.

• Skill India is an initiative launched by the government in 2015 to train over 40 crore Indians in different industry-related jobs.

• The vision is to create an empowered workforce by 2022 with the help of various schemes and training courses.

• The Pradhan Mantri Kaushal Vikas Yojana is deemed Skill India's flagship skill development scheme. Its objective is to enable youth to take up training to secure a better livelihood.

Q96. Answer: (c) 36

To solve this problem we will use the following equation,

$s = ut + 1/2at^2$

Substitute u = 5, a = 2 and t = 4

$s = 5 \times 4 + 1/2 \times 2 \times 4^2$

s = 36 m

Hence, displacement is 36 m.

Q97. Answer: (b) becomes 1/4^(th)

CONCEPT:

• Velocity: The rate of change of displacement is called velocity.

• It is denoted by V and SI unit is m/s.

• Kinetic energy: The energy of a particle due to its motion is called kinetic energy.

• It is denoted by KE, and the SI unit is the joule (J).

• Kinetic energy is given by:

$K.E = 1/2mv^2$

Where m is the mass of the body.

CALCULATION:

• Kinetic energy is given by:

$\Rightarrow K.E = 1/2mv^2$

• So, if we substitute 1/2v instead of v, then we will obtain

$\Rightarrow K.E1=1/2m\times(1/2v)^2=1/2m\times1/4v^2 = 1/4(K.E)$

• Hence the kinetic energy becomes a quarter of the original. So option 2 is correct.

Q98. Answer: (c) Carbon dioxide

The correct answer is Carbon dioxide.

Explanation:

• Plants use the carbon dioxide in the atmosphere to synthesize sugar which acts as their food source.

• This process can only take place in the presence of sunlight which is why the process is known as ‘photosynthesis.

Additional Information

• Photosynthesis is the process through which green plants synthesize or prepare carbohydrates or food from sunlight, carbon dioxide (CO2), and water.

• Photosynthesis is a reduction process that involves the reduction of carbon dioxide to carbohydrates.

• In the presence of light, green plants fix carbon dioxide to complex molecules like carbohydrates.

• Photosynthesis occurs in the chloroplast of the cell.

• Chlorophyll is a green pigment that is found in the leaves of plants.

• It helps plants to absorb sunlight energy.

• This energy is used to prepare food by combining carbon dioxide and water.

• Plants with chlorophyll pigments may perform photosynthesis by absorbing light energy.

• The conversion of light energy to chemical energy occurs during the photosynthesis process.

• The splitting of water molecules into hydrogen and oxygen is known as photooxidation.

Q99. Answer: (d) Both B and C

The correct answer is Both B and C.

Key Points

• Ukraine's Elina Svitolina won the Italian Open tennis title by defeating Simona Halep in the finals. Hence option B is correct.

• Henri Kontinen and John Peers defeated Lukasz Kubot and Marcelo Melo in the finals by, 6-4, 6-2, to win the 2017 ATP World Tour Finals Men’s Doubles. Hence option C is correct.

• Florida, United States hosted the Golf 2017 Players Championship. Thus, statement A is wrong.

Additional Information

• Italian Open 2022:-

• Novak Djokovic won the Italian Open 2022 final after defeating Stefanos Tsistsipas.

• In women’s singles, Iga Swiatek won the Italian Open title after defeating Ons Jabeur.

Q100. Answer: (c) One cell Left

The correct answer is One cell Left.

Key Points

• MS-Excel:-

• It is a spreadsheet program for data analysis and documentation.

• It contains a number of rows and columns, where the intersection of a column and cell and a row is a "cell".

• Each cell contains one point of data.

• It is developed by Microsoft.

• It features calculation, graphing tools, pivot tables.

• Pressing the left arrow keystroke leads to the selection of a cell which is one cell to the left of the previously selected cell.

• The arrow keys can be further used to navigate through cells using up, down, left and right directions.

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

YourMockTest.com — Free Study Material