SSC CHSL Tier-1 2024: Official Paper (Held On: 05 Jul, 2024 Shift 3) (Previous Year Paper)

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

Take this paper as a timed mock test

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

yourmocktest.com/pyq/ssc-chsl/ssc-chsl-tier-1-2024-official-paper-held-on-05-jul-2024-shift-3-p…

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

ENGLISH LANGUAGE

Q1. The following sentence has been split into four segments. Identify the segment that contains an error.

If she exercises daily, / she would / remain energetic / and fit forever.

(a) she would
(b) and fit forever
(c) remain energetic
(d) If she exercises daily

Q2. Parts of the following sentence have been given as options. Select the option that contains an error.

A owl is a bird which has wide eyes, asymmetrical ears and is found mostly in forests.

(a) asymmetrical ears
(b) which has wide eyes,
(c) and is found mostly in forests.
(d) A owl is a bird

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

The teacher will never / give you punishment / if you will / come on time.

(a) if you will
(b) the teacher will never
(c) come on time
(d) give you punishment

Q4. The following sentence has been split into four segments. Identify the segment that contains a grammatical error.

With hard work, commitment / and proper guidance, / Sivaram has become / a IPS officer.

(a) With hard work, commitment
(b) and proper guidance,
(c) a IPS officer
(d) Sivaram has become

Directions

In the following passage, some words have been deleted. Read the passage carefully and select the most appropriate option to fill in each blank.

Romantic poetry is a literary movement that emerged in the late 18th century and continued through the mid-19th century. It is (1)_____ by an emphasis on emotion, imagination and individualism. Romantic poets sought to express their innermost thoughts and feelings through their poetry, often exploring (2)___ such as love, beauty and mortality. One of the defining features of Romantic poetry is its use of language and imagery to evoke powerful emotions in the reader. Many Romantic poets, such as William Wordsworth and Samuel Taylor Coleridge (3)____ that poetry should be written in the language of common people, rather than in the lofty, formal language of the past. They also incorporated vivid descriptions of nature and the natural world into their poetry, using it as a source of inspiration and spiritual renewal. (4)__ important aspect of Romantic poetry is its focus on the individual and the subjective experience. Romantic poets believed that each persons experience of the world was unique and valuable, and sought to capture this individuality in their writing. This led to a greater emphasis on personal expression and

introspection in poetry, (5)_____ a rejection of the traditional poetic forms and structures of the past.

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

(a) characterising
(b) characterised
(c) characteristic
(d) characterises

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

(a) themes
(b) problems
(c) arguments
(d) concerns

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

(a) believes
(b) believed
(c) will believe
(d) could believe

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

(a) Farther
(b) Additional
(c) Another
(d) Mostly

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

(a) whereas
(b) therefore
(c) but
(d) as well as

Q10. Select the most appropriate option to fill in the blank.

The bride had a big villa in comparison to the bridegroom's _____ house.

(a) small
(b) different
(c) distinct
(d) large

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

The professor did an objective evaluation.

(a) unbiased
(b) unfair
(c) unjust
(d) prejudiced

Q12. Identify the incorrectly spelt word and select its correct spelling.

It is his previlage to present all the candidates for ordination to the bishop of the diocese.

(a) odination
(b) deocease
(c) privilege
(d) prevalage

YourMockTest.com — Free Study Material

Q13. Select the most appropriate option that can substitute the underlined segment in the given sentence.

Planets in our solar system close and big for them to twinkle.

(a) very close and big
(b) are quite close and big
(c) are too close and big
(d) is close and big

Q14. Select the most appropriate connotation to fill in the blank.

Raju is such a _____ always prying into other people's business!

(a) nosy
(b) cheeky
(c) perky
(d) stingy

Q15. Select the most appropriate idiomatic expression that can substitute the underlined segment in the given sentence.

Last year art critics praised Animesh as if he were a master, but he turned out to be a pleasure for a short time.

(a) a house of cards
(b) a bull in a china shop
(c) a dish fit for Gods
(d) a nine days' wonder

Q16. Select the most appropriate meaning of the given idiom.

bread and butter

(a) An activity you do with determination
(b) An activity you do to improve your culinary skills
(c) An activity you do to get help others
(d) An activity you do to get money for basic needs

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

Although I have a lot of work to do, I am determined to finish it all by the end of the day so that I can enjoy my weekend not having any imminent due dates.

(a) with no pending reservations
(b) without any looming deadlines
(c) not leaving any work incomplete
(d) not with any pressure of due date

Q18. Select the most appropriate ANTONYM of the word given in brackets to fill in the blank.

Her voice, soft and _____, (shrill) flowed effortlessly through the room.

(a) mellow
(b) croaky
(c) piercing
(d) nasal

Q19. Select the INCORRECTLY spelt word.

(a) Aquarium
(b) Accurate
(c) Mantain
(d) Excellence

Q20. Select the most appropriate option that can substitute the underlined segment in the given sentence. If there is no need to substitute it, select 'No substitution required'.

He asked his father when would come the next letter.

(a) No substitution required
(b) would the next letter come

YourMockTest.com — Free Study Material

(c) the next letter would come
(d) come the next letter

Q21. Select the most appropriate ANTONYM of the given word.
Comical
(a) Remedial
(b) Tragic
(c) Rebellious
(d) Farcical

Q22. Select the most appropriate ANTONYM of the given word.
Skeptic
(a) Infidel
(b) Careful
(c) Believer
(d) Atheist

Q23. Select the most appropriate option that can substitute the underlined words in the following sentence.
If you do hard work, you will have the expected results.
(a) required results
(b) desired results
(c) good results
(d) bad results

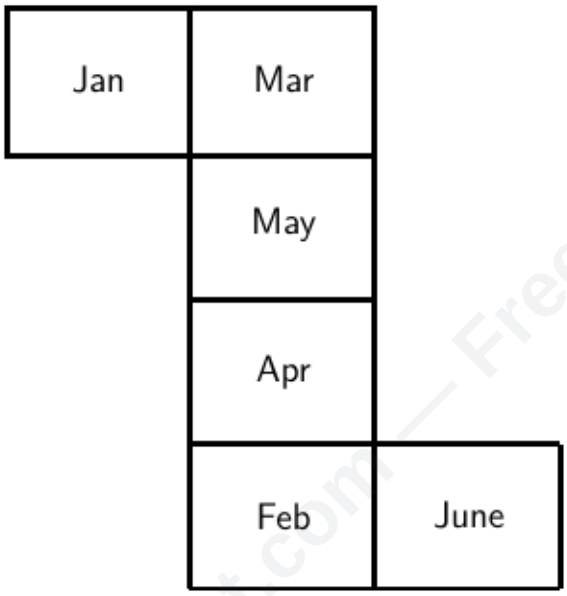
Q24. Which of the following sentences contains the ANTONYM of the word ‘ignore’ ?
(a) Avoid foods which make you sick.
(b) He did not succeed in gaining custody of his daughter.
(c) To keep a tidy kitchen, do not neglect washing your dishes.
(d) Ritika recognised Kavita in the gathering.

Q25. Select the most appropriate ANTONYM for the underlined word in the given sentence.
As a punishment for his betrayal to his country, the spy who sold secrets was sent to prison.
(a) Nasty
(b) Loyalty
(c) Perilous
(d) Infidelity

GENERAL INTELLIGENCE

Q26. What would be the word on the opposite side of 'Feb' if the given sheet is folded to form a cube?

YourMockTest.com — Free Study Material



(a) June
(b) Jan
(c) Mar
(d) May

Q27. 'A ÷ B' means 'A is B's son'.
'A × B' means 'A is B's sister'.
'A + B' means 'A is B's brother'.
'A – B' means 'A is B's mother'.
Using the mathematical operators meaning the same as given above, which of the following means that 'S is T's husband'?

(a) T – R + V ÷ S
(b) T × R – V + S
(c) T – R ÷ V × S
(d) T ÷ R × V + S

Q28. 14 is related to 126 following a certain logic. Following the same logic, 21 is related to 189. To which of the following is 32 related following the same logic?
(NOTE : Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding /deleting /multiplying etc., to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

(a) 288
(b) 318
(c) 286
(d) 320

Q29. If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+' and 'D' stands for '-', what will come in place of the question mark (?) in the following equation?
28 B 7 D 176 A 8 C 13 = ?

(a) 187
(b) 185
(c) 186
(d) 184

YourMockTest.com — Free Study Material

Q30. Which two numbers should be interchanged to make the given equation correct?

136 − (176 ÷ 11) × 8 + 22 × 3 = 105

(NOTE : Numbers must be interchanged and not the constituent digits e.g. if 2 and 3 are to be interchanged in the equation 43 × 3 + 4 ÷ 2, then interchanged equation is 43 × 2 + 4 ÷ 3)

(a) 11 and 22
(b) 22 and 176
(c) 8 and 11
(d) 8 and 3

Q31. In a certain code language, ‘AUDIO’ is coded as ‘59416’ and ‘BEND’ is coded as ‘6238’.

How is ‘D’ coded in that language?

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

Q32. ZBRL is related to UWMG in a certain way based on the English alphabetical order. In the same way, IDSQ is related to DYNL. To which of the following is EVNA related, following the same logic?

(a) ZIQV
(b) ZQIV
(c) ZQVI
(d) ZIVQ

Q33. In this question, three statements are given, followed by three conclusions numbered I, II and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusion(s) logically follows/follow from the statements.

Statements :

Some lions are panthers.

No panther is a tiger.

Some lions are cats.

Conclusions :

I. No tiger is a cat.

II. Some lions are tiger.

III. No cat is a panther.

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

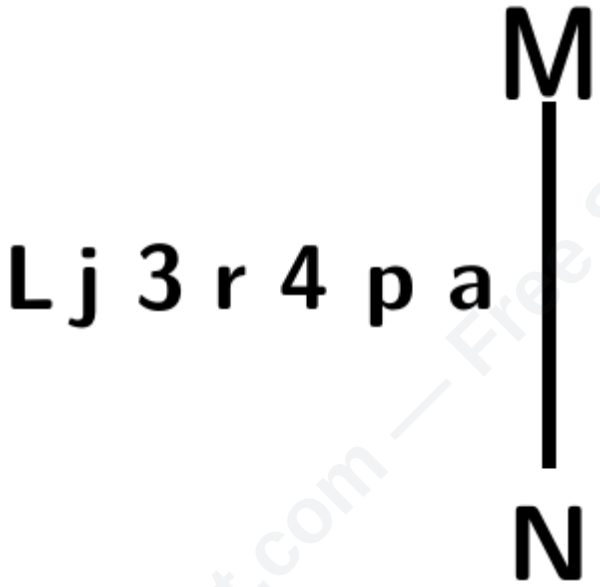
Q34. What should come in place of the question mark (?) in the given series based on the English alphabetical order?

CPW, HRA, MTE, RVI, ?

(a) VYN
(b) XXM
(c) WXM
(d) VXN

Q35. Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.

YourMockTest.com — Free Study Material



(a)



(b)



(c)



(d)



Q36. Select the word - pair that best represents a similar relationship to the one expressed in the pair of words given below.

(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word.)

Light : Blind

(a) Tongue : Sound

(b) Voice : Vibration

(c) Language : Deaf

(d) Speech : Dumb

Q37. What should come in place of ? in the given series based on the English alphabetical order?

TMF UNE VOD ? XQB

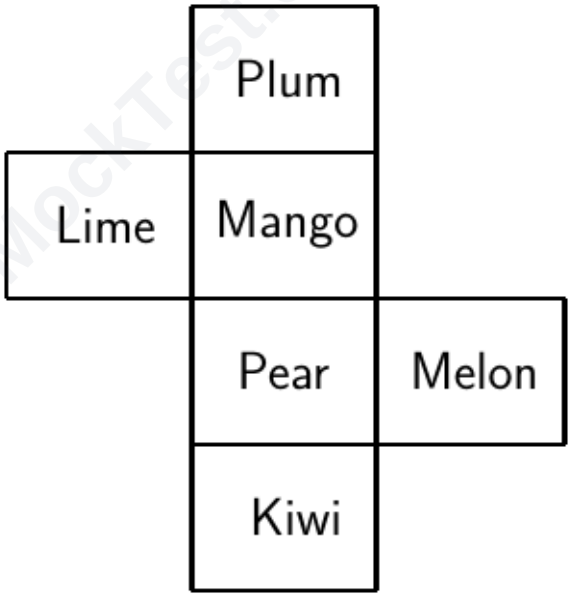
(a) KOT
(b) ACE
(c) WPI
(d) WPC

Q38. Three of the following four are alike in a certain way and thus form a group. Which is the one that does NOT belong to that group?

(Note : The odd one out is not based on the number of consonants/vowels or their position in the letter cluster.)

(a) PSU
(b) HKN
(c) DGJ
(d) TWZ

Q39. What would be the word on the opposite side of 'Kiwi' if the given sheet is folded to form a cube?



(a) Plum
(b) Melon
(c) Lime
(d) Mango

Q40. In a certain code language. 'RUIN' is coded as '3098' and 'TURN' is coded as '9630'. How is 'I' coded in the given language?

(a) 3
(b) 9
(c) 6
(d) 8

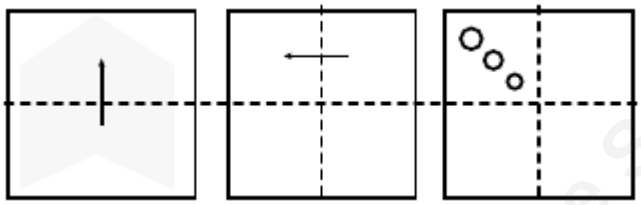
Q41. What will come in the place of the question mark (?) in the following equation if '+' and '÷' are interchanged and '×' and '-' are interchanged?

39 + 13 × 12 ÷ 5 - 4 = ?

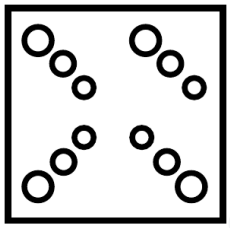
(a) 7
(b) 9
(c) 11
(d) 13

YourMockTest.com — Free Study Material

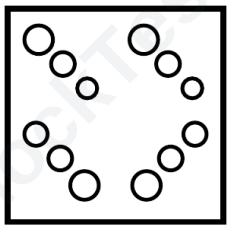
Q42. A square sheet of paper is folded along the dotted line successively along the directions shown and is then punched in the last. How would the paper look when unfolded?



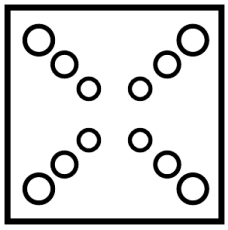
(a)



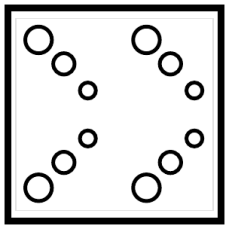
(b)



(c)



(d)



Q43. If 15 August 2006 is a Tuesday, then what will the day of the week on 7 September 2017 ?

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

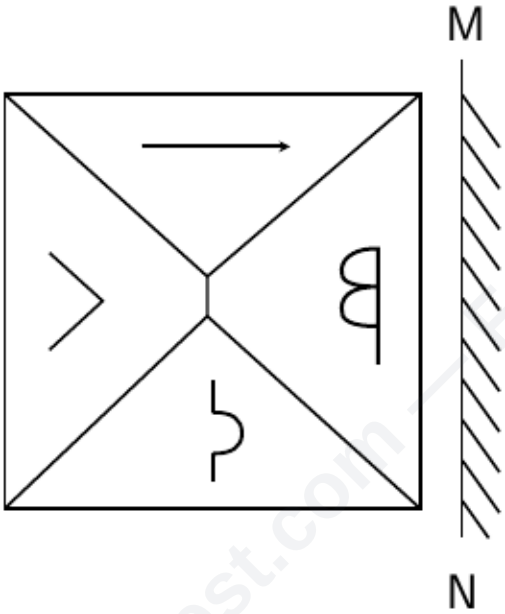
Q44. What should come in place of the question mark (?) in the given series?

23, 27, 35, 47, 63, ?

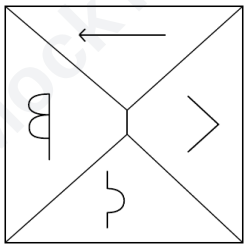
(a) 83
(b) 84
(c) 82
(d) 85

YourMockTest.com — Free Study Material

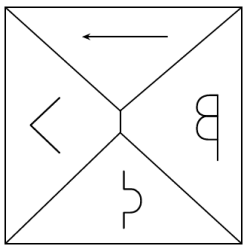
Q45. Select the correct mirror image of the given figure when the mirror is placed at MN.



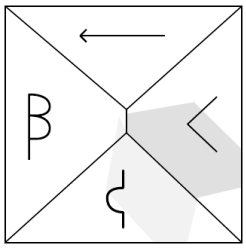
(a)



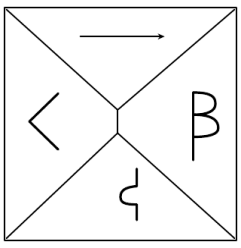
(b)



(c)

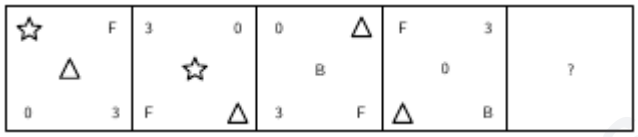


(d)

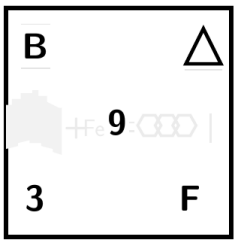


YourMockTest.com — Free Study Material

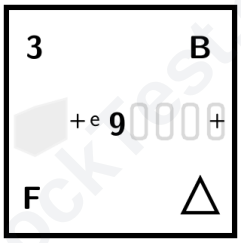
Q46. Identify the figure given in the options that when put in place of the question mark (?) will logically complete the series.



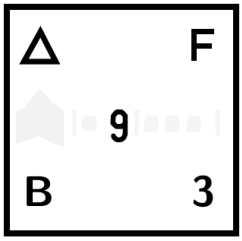
(a)



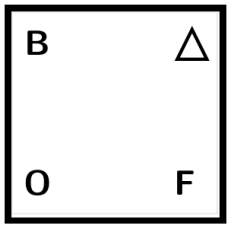
(b)



(c)



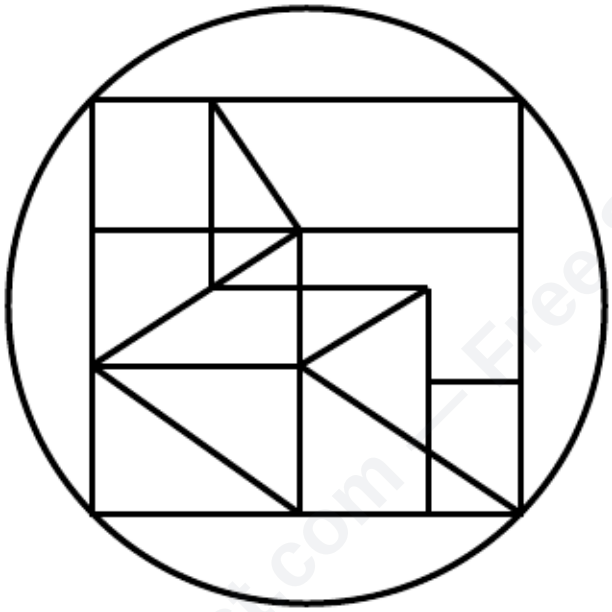
(d)



Q47. YZWT is related to DEAX in a certain way based on the English alphabetical order. In the same way, QROL is related to VWSP. To which of the following is RSPM related, following the same logic?

(a) WYUQ
(b) WTXQ
(c) WXUQ
(d) WXTQ

Q48. How many triangles are there in the given figure?



(a) 16
(b) 14
(c) 15
(d) 13

Q49. What will come in the place of the question mark (?) in the following equation, if '+' and '-' are interchanged and '×' and '÷' are interchanged?

13 ÷ 3 + 2 × 2 - 11 = ?

(a) 29
(b) 39
(c) 49
(d) 59

Q50. Select the set in which the numbers are related in the same way as are the numbers of the following sets.

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

(12, 132, 11)

(13, 104, 8)

(a) (16, 146, 9)
(b) (18, 132, 7)
(c) (7, 105, 15)
(d) (9, 128, 14)

QUANTITATIVE APTITUDE

Q51. Find the percentage increase in surface area of a cube by triple each side.

(a) 650%
(b) 500%
(c) 700%
(d) 800%

Q52. R gives 3/8 of the toffees he has with him to S. If now R has k% of the toffies with S, then find the value of k.

(a) 200/3
(b) 500/3
(c) 200

(d) 140

Q53. A motorcyclist rides his motorcycle at a speed of 90 km/hr in the first one hour and the next two hours at a speed of 120 km/hr. Find the average speed of the rider.

(a) 115 km/hr
(b) 110 km/hr
(c) 105 km/hr
(d) 120 km/hr

Q54. If the length, breadth and total surface area of a cuboid are 30 cm, 20 cm and 2600 cm^2, respectively, then find its height.

(a) 30 cm
(b) 50 cm
(c) 14 cm
(d) 15 cm

Q55. In a triangle ABC, BD is perpendicular to AC. E is a point on BC such that angle BEA = x^o. If angle EAC = 38^o and angle EBD = 40^o, then the value of x is:

(a) 82
(b) 48
(c) 88
(d) 96

Q56. A quantity 4/5 is changed to 5/6. How much percentage change is given to the quantity?

(a) 4.73%
(b) 4.37%
(c) 4.71%
(d) 4.17%

Q57. Study the given table and answer that question that follows. The given table shows the loan disbursed by five banks (in crores) over four years.

Banks	2016	2017	2018	2019
A	15	20	10	12
B	15	20	15	20
C	20	25	15	20
D	15	20	35	10
E	10	20	25	30

Which two banks have disbursed the same sum of loan over all four years?

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

Q58. What is the area (in cm^2) of an equilateral triangle whose perimeter is 24 cm? Note : Round off to the nearest two decimal places.

(a) 27.14
(b) 28.14
(c) 13.86
(d) 27.71

YourMockTest.com — Free Study Material

Q59. If the angle of the sector with radius 7 cm is 120° then find the length of the arc (in cm). (Use π = 22/7)

(a) 44/3
(b) 22/3
(c) 47/3
(d) 67/3

Q60. A mobile phone dealer buys a phone for Rs. 10,000 and sells it for Rs. 12,000. Later, he realizes that he could have sold it for Rs. 13,000. What is the percentage loss that he incurs?

(a) 15%
(b) 10%
(c) 20%
(d) 25%

Q61. Two parallel chords are drawn in a circle of radius 25 cm. The distance between the two chords is 27 cm. If the length of one chord is 48 cm, then length of the other chord is equal to:

(a) 36 cm
(b) 48 cm
(c) 42 cm
(d) 30 cm

Q62. In an assembly election, a candidate got 60% of the total valid votes. 3% of the total votes were declared invalid. If the total number of voters is 2,40,000, then find the number of valid votes polled in favour of the candidate.

(a) 139680
(b) 193680
(c) 139860
(d) 139608

Q63. If three spheres of radius 75 cm, 60 cm and 45 cm are melted into one big sphere, then the radius of the big sphere is:

(a) 85 cm
(b) 95 cm
(c) 80 cm
(d) 90 cm

Q64. A retailer gets a discount of 40% on the printed price of an article. If the retailer sells it at the printed price, then his gain percentage is:

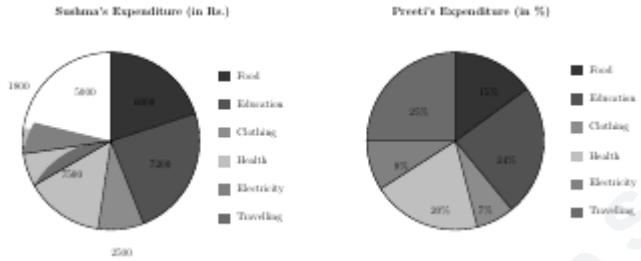
(a) 37 2/3 %
(b) 66 2/3 %
(c) 66 1/3 %
(d) 33 1/3 %

Q65. A train 550 metres long is running at a speed of 78 km/h. How many seconds will it take to cross a 350 metres long train running in the opposite direction at a speed of 30 km/h?

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

Q66. Following Pie chart presents monthly expenditure by Sushma and Preeti in different heads. Sushma and Preeti make equal expenditure every month.

YourMockTest.com — Free Study Material



What is the difference between the central angle corresponding to the expenditure incurred on Health by Sushma and Preeti?

(a) 102°
(b) 12°
(c) 112°
(d) 18°

Q67. The perpendicular length from the origin to the line 6x + 8y - 48 = 0 is:

(a) 2.6 unit
(b) 8.3 unit
(c) 5.2 unit
(d) 4.8 unit

Q68. The following table represents the number of computers (in thousands) manufactured by four companies during the period from 2010 to 2014:

Year	A	B	C	D
2010	240	120	270	280
2011	300	530	490	650
2012	1250	650	430	710
2013	470	320	1180	890
2014	320	1070	550	480

What is the difference (in thousands) between the number of computers manufactured by company A and C during the period from 2010 to 2014?

(a) 320
(b) 340
(c) 230
(d) 430

Q69. The mean proportion of 0.14 and 2.24 is:

(a) 1.12
(b) 0.56
(c) 1.02
(d) • 2.39

Q70. If the ratio of principal and simple interest for 5 years is 10 : 7, then the rate of interest per annum is:

(a) 14%
(b) 15%
(c) 10%
(d) 11%

Q71. Evaluate the given expression.

[7+9-2{(3 ÷ 1/3)-3}+27 ÷ 3+(27 ÷ 9+3)-6]+2

(a) 19
(b) 15

YourMockTest.com — Free Study Material

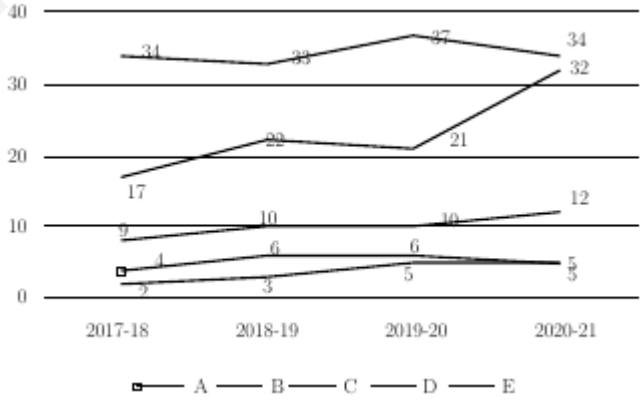
(c) 20
(d) 22

Q72. A work can be done by a man and a woman in 12 days and 8 days, respectively. In how many days will the work be done by 6 men and 4 women?
(a) (1)/(2)
(b) 1
(c) (3)/(4)
(d) 2

Q73. After the division of a number successively by 2,3 and 5, the remainders are 1,2 and 3, respectively. What will be the remainder, if 13 divides the same number (if the last quotient is 1)?
(a) 1
(b) 3
(c) 2
(d) 0

Q74. If θ be acute angle and cos θ = 24/25, then the value of cot(90 - θ) is equal to:
(a) 6/25
(b) 7/25
(c) 7/24
(d) 5/24

Q75. Study the given graph and answer the question that follows.
The graph shows the number of projects completed by five companies



which company has the highest growth in percentage in completed projects from 2017 - 18 to 2020 - 21?
(a) E
(b) B
(c) C
(d) D

GENERAL AWARENESS

Q76. The Ayush Ministry has collaborated with the UK's London School of Hygiene and Tropical Medicine (LSHTM) to conduct a study on _____ for promoting recovery from COVID - 19.
(a) Boswellia
(b) Gotu Kola
(c) Ashwagandha
(d) Brahmi

Q77. According to the Census of India - 2011, which state has the lowest sex ratio?

(a) Maharashtra
(b) Rajasthan
(c) Haryana
(d) Bihar

Q78. Sangeeta Shankar was awarded Sangeet Natak Akademi Award 2021 for her contribution in playing which musical instrument?

(a) Veena
(b) Santoor
(c) Flute
(d) Violin

Q79. Which was the first dynasty of the Delhi Sultanate ?

(a) Mamluk dynasty
(b) Tughlaq dynasty
(c) Khilji dynasty
(d) Lodi dynasty

Q80. Which of the following is one of the largest spiral galaxies?

(a) Cygnus
(b) Maffei 1
(c) NGC 6872
(d) Milky Way

Q81. As per the Census of India - 2011, the density of population per km^2 was _____ persons.

(a) 382
(b) 345
(c) 394
(d) 320

Q82. Which device is used to measure the current flow using needle deflection caused by a magnetic field force acting upon a current - carrying wire?

(a) Ammeter
(b) Psophometer
(c) Galvanometer
(d) Potentiometer

Q83. Community tradition is related to which of the following music streams?

(a) Karnataka Classical Music
(b) Hindustani Lokgeet
(c) Karnataka Lokgeet
(d) Hindustani Classical Music

Q84. As on 31 March 2024, apart from the Ministry of Home Affairs, which of the following ministries is headed by Shri Amit Shah?

(a) Ministry of Corporate Affairs
(b) Ministry of Cooperation
(c) Ministry of Coal
(d) Ministry of Minority Affairs

Q85. 'Ujjwala', a _____, was the official mascot of Khelo India – Para Games 2023.

(a) duck
(b) hen
(c) sparrow

YourMockTest.com — Free Study Material

(d) goose

Q86. Which of the following Articles in the Constitution of India provides protection to President and Governors and Rajpramukhs?

(a) Article 356
(b) Article 370
(c) Article 361
(d) Article 352

Q87. Former Karnataka CM _____ received the Padma Vibhushan at Rashtrapati Bhavan in New Delhi for his contribution in the field of Public Affairs in 2023.

(a) D Devaraj Urs
(b) HD Deve Gowda
(c) SM Krishna
(d) S Nijalingappa

Q88. The Central Office of the Reserve Bank of India was initially established in which present city in 1935 ?

(a) Delhi
(b) Mumbai
(c) Chennai
(d) Kolkata

Q89. Which city hosted the Asian Champions Trophy hockey tournament in 2023 ?

(a) Chennai
(b) Ahmedabad
(c) Delhi
(d) Surat

Q90. The district of Shivamogga that is famous for its Iron - Ore and Manganese mineral is located in which state of India?

(a) Karnataka
(b) Rajasthan
(c) Jharkhand
(d) Maharashtra

Q91. Of which of the following states / UTS is Rauf a folk dance?

(a) Jammu and Kashmir
(b) Kerala
(c) Lakshadweep
(d) Karnataka

Q92. Which view in MS PowerPoint is useful for editing or formatting a single slide at a time?

(a) Normal view
(b) Reading view
(c) Slide Sorter view
(d) Outline view

Q93. During 2015, in, _____ sector, Government of India had allowed about 49% of FDI.

(a) defence
(b) manufacture of medical devices
(c) education
(d) food products

Q94. In kabaddi, when a raider touches any body part of any defender or any part of their clothing, it is called :

(a) pursuit
(b) catch
(c) raid

YourMockTest.com — Free Study Material

(d) tag

Q95. When was air transport nationalised in India?

(a) 1950
(b) 1952
(c) 1953
(d) 1951

Q96. With which of the following communities is the word 'Langar' (community kitchen) mainly associated?

(a) Jainism
(b) Buddhism
(c) Sikhism
(d) Hinduism

Q97. Which of the following represents the Two - Factor Authentication (2FA)?

(a) The use of two different credentials to verify identity
(b) A technique for organising files and folders on a PC
(c) A tool for optimising system resources
(d) A security measure to prevent physical damage to a PC

Q98. From which of the following Constitutions has the India Constitution adopted the system of ‘First Past the Post’?

(a) British Constitution
(b) Irish Constitution
(c) United States Constitution
(d) French Constitution

Q99. Which of the following exchange rates is determined by the market forces of demand and supply?

(a) Floating exchange rate
(b) Fixed exchange rate
(c) Soft pegged exchange rate
(d) Hard pegged exchange rate

Q100. Which of the following reactions leads to the formation of glucose pentaacetate from acetic anhydride?

(a) Reduction
(b) Addition of ketone
(c) Oxidation
(d) Acetylation of glucose

ANSWER KEY

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

YourMockTest.com — Free Study Material

SOLUTIONS

Q1. Answer: (a) she would

The correct answer is Option 1)

Key Points

• In the second part of the given sentence, the verb form 'would' is incorrect.

• The sentence structure suggests a conditional relationship.

• In conditional sentences, the present simple tense is used in the 'if' clause and the future simple tense is used in the main clause.

• Example: If she exercises daily, she will remain energetic and fit forever.

• Therefore, the correct form should be 'will' instead of 'would'.

Hence, the correct statement is: If she exercises daily, she will remain energetic and fit forever.

Additional Information

• If the sentence is a conditional statement, the correct structure is important.

• Example: If it rains, we will stay indoors.

• Use the simple present tense in the 'if' clause and the simple future tense in the main clause for most real conditional statements.

• Example: If you study hard, you will pass the exam.

Q2. Answer: (d) A owl is a bird

The correct answer is Option 4)

Key Points

• In the first part of the given sentence, the article 'A' is incorrect.

• In the given sentence, the correct article should be 'An' because the noun 'owl' begins with a vowel sound.

• Thus, the correct form should be 'An owl is a bird, which has wide eyes, asymmetrical ears and is found mostly in forests.'

Hence, the correct statement is: An owl is a bird which has wide eyes, asymmetrical ears and is found mostly in forests.

Additional Information

• When a noun starts with a vowel sound, the article 'An' is used before it.

• Example: An apple a day keeps the doctor away.

• When a noun starts with a consonant sound, the article 'A' is used before it.

• Example: A cat is sitting on the wall.

Q3. Answer: (a) if you will

The correct answer is Option 1)

Key Points

• In the given sentence, the phrase 'if you will' is incorrect.

• In conditional sentences, the simple present tense is used in the condition clause (after 'if').

• The correct construction should be 'if you come'.

• Example: If you come on time, the teacher will never give you punishment.

Hence, the correct statement is: The teacher will never give you punishment if you come on time.

Additional Information

• In conditional sentences, when the condition clause (if-clause) is in the simple present tense, the result clause (main clause) is usually in the simple future tense.

• Example: If it rains, we will stay indoors.

• Do not use the future tense in the if-clause.

• Incorrect: If you will come on time, we will start the meeting.

• Correct: If you come on time, we will start the meeting.

Q4. Answer: (c) a IPS officer

The correct answer is Option 3)

Key Points

• In the third part of the given sentence, the indefinite article 'a' is incorrect.

• The correct usage is the indefinite article 'an' before a word starting with a vowel sound like 'IPS'.

• Therefore, the correct form should be 'an IPS officer'.

Hence, the correct statement is: With hard work, commitment, and proper guidance, Sivaram has become an IPS officer.

Additional Information

• The indefinite article 'a' is used before words that begin with a consonant sound.

• The indefinite article 'an' is used before words that begin with a vowel sound.

• Examples:

• An apple in a day keeps the doctor away.

• A car is parked outside.

Q5. Answer: (b) characterised

The correct answer is Option 2)

Key Points

• The context of the passage suggests a completed action or state, which requires the past participle form of the verb.

• "Characterised" fits well in the blank as it indicates something that has been described or distinguished by certain features.

• Other options like "characterising", "characteristic", and "characterises" do not fit the grammatical structure needed in the sentence.

• Hence, the correct word for fill in the blanks no. 1 is: Characterised.

Therefore, the correct answer is 'characterised'.

Additional Information

• Characterising: This form indicates an ongoing action, which does not fit the context.

• Characteristic: This form is a noun or adjective, not a verb, which is needed in the blank.

• Characterises: This present tense form does not fit the past context of the sentence.

Q6. Answer: (a) themes

The solution is in Hindi. Read it online.

Q7. Answer: (b) believed

The solution is in Hindi. Read it online.

Q8. Answer: (c) Another

The solution is in Hindi. Read it online.

Q9. Answer: (d) as well as

The solution is in Hindi. Read it online.

Q10. Answer: (a) small

The correct answer is Option 1)

Key Points

• The adjective "small" is appropriate because it directly contrasts with the adjective "big."

• The sentence compares the sizes of the bride's villa and the bridegroom's house, thus the size difference "small" is relevant.

• Options 2, 3, and 4 do not appropriately convey the comparative context based on size.

Therefore, the correct statemeent is: "The bride had a big villa in comparison to the bridegroom’s small house."

Additional Information

• Option 2: "different" is incorrect because the sentence focuses on size rather than distinction or type.

• Option 3: "distinct" is incorrect as it implies uniqueness rather than size difference.

• Option 4: "large" is incorrect; a large house would not explain a comparative size difference with the bride’s villa.

Q11. Answer: (a) unbiased

The solution is in Hindi. Read it online.

Q12. Answer: (c) privilege

The solution is in Hindi. Read it online.

Q13. Answer: (c) are too close and big

The correct answer is Option 3)

Key Points

• In the given sentence, the phrase "are too close and big" is the correct substitution.
• The original sentence lacks the verb "are," which is necessary for grammatical correctness.
• The phrase "too close and big" correctly describes why planets in our solar system do not twinkle like stars.

Hence, the correct statement is: Planets in our solar system are too close and big for them to twinkle.

Additional Information

• The phrase "too close and big" indicates that the proximity and size of the planets prevent them from twinkling, which is a phenomenon typically observed in distant stars.
• Twinkling occurs due to atmospheric disturbances affecting the light from distant stars, but planets are close enough that their light doesn't get affected in the same way.

Q14. Answer: (a) nosy

The correct answer is Option 1)

Key Points

• The adjective "nosy" is appropriate because it means inquisitive in an intrusive or prying manner, which fits the context of the sentence.
• The sentence describes Raju as someone who pries into other people's business, thus "nosy" has the correct connotation.
• Options 2, 3, and 4 do not appropriately convey the sense of prying.

Therefore, the correct sentece is: "Raju is such a nosy always prying into other people's business!"

Additional Information

• Option 2: "cheeky" is incorrect because it means impudently bold or disrespectful, which does not fit the context.
• Option 3: "perky" is incorrect; it means cheerful and lively, which is not relevant here.
• Option 4: "stingy" is incorrect as it implies unwillingness to spend money, which is unrelated to the context of being intrusive.

Q15. Answer: (d) a nine days' wonder

The solution is in Hindi. Read it online.

Q16. Answer: (d) An activity you do to get money for basic needs

The solution is in Hindi. Read it online.

Q17. Answer: (b) without any looming deadlines

The solution is in Hindi. Read it online.

Q18. Answer: (a) mellow

The solution is in Hindi. Read it online.

Q19. Answer: (c) Mantain

The solution is in Hindi. Read it online.

Q20. Answer: (c) the next letter would come

The correct answer is Option 3)

Key Points

• In the given sentence, the verb phrase should follow the correct word order for indirect questions.
• The correct structure for indirect questions is: subject + verb.
• Therefore, "when would come the next letter" should be corrected to "when the next letter would come".

Hence, the correct statement is: He asked his father when the next letter would come.

Additional Information

• In direct questions, the structure is: question word + auxiliary verb + subject + main verb.
• Example: When will the next letter come?
• In indirect questions, the structure changes to: question word + subject + auxiliary verb + main verb.
• Example: He asked when the next letter would come.

Q21. Answer: (b) Tragic

The solution is in Hindi. Read it online.

Q22. Answer: (c) Believer

The solution is in Hindi. Read it online.

Q23. Answer: (b) desired results

The correct answer is Option 2)

Key Points

• The phrase "desired results" means the outcomes or results that one wants or wishes for.

• In the context of hard work, the results that one aims to achieve are typically the "desired results."

• The other options: "required results," "good results," and "bad results" do not appropriately convey the connotation of having goals or aspirations.

Therefore, the correct statement is: If you do hard work, you will have the desired results.

Additional Information

• Required results: This implies results that are necessary, but not necessarily what one hopes for or desires.

• Good results: This is a general positive outcome but does not specify that it is what one aims for.

• Bad results: This is a negative outcome and opposite of what one would want from hard work.

Q24. Answer: (d) Ritika recognised Kavita in the gathering.

The solution is in Hindi. Read it online.

Q25. Answer: (b) Loyalty

The solution is in Hindi. Read it online.

Q26. Answer: (d) May

The faces opposite to each other are shown below:

=> As the alternate positions become opposite to each other, the remaining two faces become opposite to each other.

So, opposite pairs are:

Mar → Apr

May → Feb

Jan → June

Therefore, 'May' is the opposite of 'Feb'.

Hence, Option 4: May is the correct answer.

Q27. Answer: (a) T – R + V ÷ S

Decoding the Symbols:

A is				
Symbol	÷	×	•	–
Meaning	Son	Sister	Brother	Mother
to B				

So, Checking the options one by one

Option - (1): T – R + V ÷ S → T is the mother of R who is the brother of V who is the son of S.

Here, S is the husband of T.

Option - (2): T × R – V + S → T is the sister of R who is the mother of V who is the brother of S.

Here, S is either the nephew or niece of T.

Option - (3): T – R ÷ V × S → T is the mother of R who is the son of V who is the sister of S.

Here, S is either the brother-in-law or sister-in-law of T.

Option - (4): T ÷ R × V + S → T is the son of R who is the sister of V who is the brother of S.

Here, S is either the maternal aunt or maternal uncle of T.

Thus, out of all options 'T – R + V ÷ S' shows that S is the husband of T.

Hence, the correct answer is "Option - (1)".

Q28. Answer: (a) 288

The logic followed here is:

Logic: 1st number × 9 = 2nd number.

Now,

For, 14 : 126
=> 14 × 9 = 126.
For, 21 : 189
=> 21 × 9 = 189.
Similarly, for 32 : ?
=> 32 × 9 = 288.
Hence, the correct answer is "Option 1".

Q29. Answer: (a) 187

Given Equation: 28 B 7 D 176 A 8 C 13 = ?
BODMAS Rule:
Decoding the given information:

Alphabet	A	B	C	D
Meaning	÷	×	•	•

Now replacing the sign from left to right using BODMAS Rule, we get:
=> 28 × 7 - 176 ÷ 8 + 13 = ?
=> 28 × 7 - 22 + 13 = ?
=> 196 - 22 + 13 = ?
=> 209 - 22 = 187.
Hence, the correct option is "Option 1".

Q30. Answer: (a) 11 and 22

Given : 136 − (176 ÷ 11) × 8 + 22 × 3 = 105
According to the question, after replacing the numbers :
Option - (1): 11 and 22
136 − (176 ÷ 11) × 8 + 22 × 3 = 105 => 136 − (176 ÷ 22) × 8 + 11 × 3 = 105
136 − (176 ÷ 22) × 8 + 11 × 3 = 105
136 − 8 × 8 + 11 × 3 = 105
136 + 33 - 64 = 105
169 - 64 = 105
105 = 105 (LHS = RHS)
Option - (2): 22 and 176
136 − (176 ÷ 11) × 8 + 22 × 3 = 105 => 136 − (22 ÷ 11) × 8 + 176 × 3 = 105
136 − (22 ÷ 11) × 8 + 176 × 3 = 105
136 − 2 × 8 + 176 × 3 = 105
136 + 528 - 16 = 105
664 - 16 = 105
648 ≠ 105 (LHS ≠ RHS)
Option - (3): 8 and 11
136 − (176 ÷ 11) × 8 + 22 × 3 = 105 => 136 − (176 ÷ 8) × 11 + 22 × 3 = 105
136 − (176 ÷ 8) × 11 + 22 × 3 = 105
136 - 22 × 11 + 22 × 3 = 105
136 + 66 - 242 = 105
202 - 242 = 105
-40 ≠ 105 (LHS ≠ RHS)
Option - (4): 8 and 3
136 − (176 ÷ 11) × 8 + 22 × 3 = 105 => 136 − (176 ÷ 11) × 3 + 22 × 8 = 105
136 − (176 ÷ 11) × 3 + 22 × 8 = 105
136 - 16 × 3 + 22 × 8 = 105
136 + 176 - 48 = 105
312 - 48 = 105

YourMockTest.com — Free Study Material

264 ≠ 105 (LHS ≠ RHS)

Hence, "Option - (1)" is the correct answer.

Q31. Answer: (d) 6

The logic followed here is: No specific pattern is followed here, random digits are assigned to each letter of the word.

'AUDIO' is coded as '59416'

Letters	A / U / I / O	D
Codes	5 / 9 / 4 / 1	6

And,

'BEND' is coded as '6238'

Letters	B / E / N	D
Codes	2 / 3 / 8	6

As 'D' is common, therefore it can be concluded that :

D is coded as → 6

So, the code for 'D' is '6'.

Hence, "Option - (4)" is the correct answer.

Q32. Answer: (b) ZQIV

Logic: (5) is subtracted from the position values according to the English alphabetic series.

So,

ZBRL is related to UWMG

And,

IDSQ is related to DYNL

Similarly,

EVNA is related to

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

Q33. Answer: (a) Neither conclusions I, II nor III follows.

The least possible Venn diagram for the given statements is as shown below :

Conclusions:

I. No tiger is a cat → Does not follow (As some lions are panthers, no panther is a tiger and some lions are cats. As no direct relation is given between tiger and cat, therefore it is false.)

II. Some lions are tiger → Does not follow (As some lions are panthers and no panther is a tiger. So, It is possible but not definitely true)

III No cat is a panther → Does not follow (As some lions are panthers and some lions are cats. As no direct relation is given between tiger and cat, therefore it is false.)

Therefore Here, Neither conclusions I, II nor III follow.

Hence, the correct answer is "Neither conclusions I, II nor III follows"

Q34. Answer: (c) WXM

Logic: (5), (2), and (4) are added to the first, second, and third letters position values according to the English alphabetic series respectively.

So,

Hence, "Option - (3)" is the correct answer.

Q35. Answer: (a) [figure]

The correct mirror image of the given figure is:

YourMockTest.com — Free Study Material

Hence, the correct answer is "Option 1".

Q36. Answer: (d) Speech : Dumb

The logic followed here is:
Logic: Disability caused by the absence of a sensory function.
Here,
Light : Blind → Blind is a disability caused by the absence of light perception.
Similarly,
Speech : Dumb → Dumb is a disability caused by the absence of the ability to produce speech.
Hence, the correct answer is "Option 4".

Q37. Answer: (d) WPC

Logic:
1. First and second letter → (1) is added to the position values according to the English alphabetic series.
2. Third letter → (1) is subtracted from the position values according to the English alphabetic series.
So,

Hence, "Option 4" is the correct answer.

Q38. Answer: (a) PSU

Logic:
Option (1): PSU
Option (2): HKN
Option (3): DGJ
Option (4): TWZ
Thus, out of all the options "PSU" is the odd one out.
Hence, "Option 1" is the correct answer.

Q39. Answer: (d) Mango

The faces opposite to each other are shown below:
=> As the alternate positions become opposite to each other, the remaining two faces become opposite to each other.
So, opposite pairs are:
Plum → Pear
Mango → Kiwi
Lime → Mango
Therefore, 'Mango' is the opposite of 'Kiwi'.
Hence, "Mango" is the correct answer.

Q40. Answer: (d) 8

The logic followed here is: No specific pattern is followed here, random digits are assigned to each letter of the word.
'RUIN' is coded as '3098'

Letters	**R / U / N**	**I**
Codes	3 / 0 / 9	8

And,
'TURN' is coded as '9630'

Letters	**R / U / N**	**T**
Codes	3 / 0 / 9	6

As, 'R', 'U', and 'N' are common, therefore it can be concluded that :
T is coded as → 6
I is coded as → 8
So, the code for 'I' is '8'.

YourMockTest.com — Free Study Material

Hence, "Option - (1)" is the correct answer.

Q41. Answer: (c) 11

Given : 35 × 96 - 8 + 3 ÷ 11 = ?

According to the question, after replacing the signs :

'+' and '÷' are interchanged

'×' and '-' are interchanged

So,

39 ÷ 13 - 12 + 5 × 4 = ?

39 ÷ 13 - 12 + 5 × 4 = ?

3 - 12 + 5 × 4 = ?

3 + 20 - 12 = ?

23 - 12 = ?

11 = ?

Hence, "11" is the correct answer.

Q42. Answer: (c) [figure]

According to the given figure:

The figure will appear when it is opened as follows:

Hence, "Option - (3)" is the correct answer.

Q43. Answer: (c) Thursday

Given: 15 August 2006 was Tuesday.

Now,

2006 to 2017 = 11 Years (8 Ordinary Year and 3 Leap Year).

And, In 11 Years = 3 Leap years and 8 Ordinary Year.

So, 3 Leap Year has 6 odd days,

And, 8 Ordinary Year has 8 odd days.

Total odd days = 6 + 8 = 14.

14 odd days → 14/7 = 2 weeks and 0 odd days.

then, 15 August 2017 will be Tuesday + 0 = Tuesday.

Now, the number of days between 15 August 2017 to 7 September 2017

= 16(August) + 7(September) = 23 days.

= 23 days → 23/7 = 3 weeks and 2 odd days.

So, 7 September 2017 will be Tuesday + 2 = Thursday.

Hence, the correct answer is "Option 3".

Q44. Answer: (a) 83

Logic: Consecutive multiplies of (4) are added subsequently.

Hence, "83" is the correct answer.

Q45. Answer: (c) [figure]

The correct mirror image of the given figure is:

Hence, the correct answer is "Option 3".

Q46. Answer: (b) [figure]

The logic followed here is :

1) First box alternate series → Elements shift in the downward clockwise direction diagonally.

2) Second box alternate series → Elements shift in the anticlockwise direction at the corners and the center element is replaced by new element.

Thus, the final series is :

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

YourMockTest.com — Free Study Material

Q47. Answer: (d) WXTQ

Logic: (5) and (4) are added to the first two and last two letter position values according to the English alphabetic series respectively.

So,

YZWT is related to DEAX

And,

QROL is related to VWSP

Similarly,

RSPM is related to

Hence, "Option - (4)" is the correct answer.

Q48. Answer: (c) 15

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

Here, as marked there are a total of 15 triangles.

Hence, "15" is the correct answer.

Q49. Answer: (c) 49

Given : 13 ÷ 3 + 2 × 2 - 11 = ?

According to the question, after replacing the signs :

'+' and '-' are interchanged

'×' and '÷' are interchanged

So,

13 × 3 - 2 ÷ 2 + 11 = ?

13 × 3 - 2 ÷ 2 + 11 = ?

13 × 3 - 1 + 11 = ?

39 + 11 - 1 = ?

50 - 1 = ?

49 = ?

Hence, "49" is the correct answer.

Q50. Answer: (c) (7, 105, 15)

The logic followed here is:

Logic: 1st number × 3rd number = 2nd number.

Now,

For, (12, 132, 11)

=> (12 × 11) = 132.

For, (13, 104, 8)

=> (13 × 8) = 104.

Similarly, for (7, 105, 15)

=> 7 × 15 = 105.

Hence, the correct answer is "Option 3".

Q51. Answer: (d) 800%

Given:

Initial side length of the cube = a

New side length of the cube = 3a

Formula Used:

Surface area of a cube = $6a^2$

Percentage Increase = New Surface Area−Initial Surface AreaInitial Surface Area×100New Surface Area−Initial Surface AreaInitial Surface Area×100New Surface Area−Initial Surface AreaInitial Surface Area×100New Surface Area−Initial Surface AreaInitial Surface Area×100

YourMockTest.com — Free Study Material

Calculation:
Initial Surface Area = $6a^2$
New Surface Area = $6(3a)^2$
New Surface Area = $6 \times 9a^2$
New Surface Area = $54a^2$
Percentage Increase = $(54a^2 - 6a^2)/(6a^2) \times 100$
Percentage Increase = $(48a^2)/(6a^2) \times 100$
Percentage Increase = 8×100
Percentage Increase = 800%
The percentage increase in surface area of the cube is 800%.

Q52. Answer: (b) 500/3

Shortcut Trick
Let the initial toffees with R be 8 units (denominator of 3/8).
Toffees given to S = 3 units.
Remaining toffees with R = 8 − 3 = 5 units.
Current toffees with S = 3 units.
According to the question: 5 = k% of 3 => 5 = (k/100) × 3 => k = 500/3.
Therefore The correct answer is 500/3.
Alternate Method
Given:
Fraction of toffees given by R to S = 3/8
Current condition: R = k% of S
Let the total toffees with R initially be 8x.
=> Toffees given to S = 3/8 × 8x = 3x
=> Remaining toffees with R = 8x − 3x = 5x
=> Toffees currently with S = 3x
=> As per the question, R = (k / 100) × S
=> 5x = (k / 100) × 3x
=> 5 = 3k / 100
=> 3k = 500
=> k = 500/3
Therefore The correct answer is 500/3.
Additional Information
Percentage Base Rule
When calculating x is k% of y, the value y (following the word 'of') is always the base or denominator: k = (x / y) × 100.
Fraction to Percentage
To convert any fraction a/b to a percentage, multiply the fraction by 100 and add the % symbol.
Ratio Relation
If R and S are in the ratio a : b, then R is (a/b) × 100 percent of S, and S is (b/a) × 100 percent of R.

Q53. Answer: (b) 110 km/hr

Given:
Speed in the first hour = 90 km/hr
Speed in the next two hours = 120 km/hr
Formula Used:
Average speed = Total distance travelled / Total time
Calculation:
Distance travelled in the first hour = Speed × Time
Distance travelled in the first hour = 90 km/hr × 1 hr
Distance travelled in the first hour = 90 km
Distance travelled in the next two hours = Speed × Time

YourMockTest.com — Free Study Material

Distance travelled in the next two hours = 120 km/hr × 2 hr
Distance travelled in the next two hours = 240 km
Total distance travelled = Distance in the first hour + Distance in the next two hours
Total distance travelled = 90 km + 240 km
Total distance travelled = 330 km
Total time = 1 hr + 2 hr
Total time = 3 hr
Average speed = Total distance travelled / Total time
Average speed = 330 km / 3 hr
Average speed = 110 km/hr
The average speed of the rider is 110 km/hr.

Q54. Answer: (c) 14 cm

Given:
Length (l) = 30 cm
Breadth (b) = 20 cm
Total surface area (TSA) = 2600 cm²
Formula Used:
Total Surface Area of a cuboid = 2(lb + bh + hl)
Calculation:
Using the formula for total surface area:
TSA = 2(lb + bh + hl)
Substitute the given values:
2600 = 2(30 × 20 + 20 × h + h × 30)
Simplify inside the parentheses:
2600 = 2(600 + 20h + 30h)
2600 = 2(600 + 50h)
2600 = 1200 + 100h
Subtract 1200 from both sides:
1400 = 100h
Divide by 100:
=> h = 14 cm
The height of the cuboid is 14 cm.

Q55. Answer: (c) 88

Shortcut Trick
In right-angled ΔBDC, angle C = 90° − angle EBD = 90° − 40° = 50°.
In ΔAEC, the exterior angle at vertex E is angle AEB (which is x).
By the Exterior Angle Theorem, x = angle EAC + angle ACE.
=> x = 38° + 50° = 88°.
Therefore The correct answer is 88.
Alternate Method
Given: BD perpendicular to AC, angle EAC = 38°, angle EBD = 40°, and E lies on BC.
Formula Used: Sum of angles in a triangle = 180°; Exterior angle of a triangle = Sum of two opposite interior angles.
In ΔBDC, since BD perpendicular to AC, angle BDC = 90°.
=> angle BCD + angle CBD + angle BDC = 180°
=> angle BCD + 40° + 90° = 180°
=> angle BCD = 180° − 130° = 50°
Now, consider ΔAEC. The angle angle ACE is the same as angle BCD.
=> angle ACE = 50°
In ΔAEC, the sum of interior angles is 180°:
=> angle EAC + angle ACE + angle AEC = 180°

YourMockTest.com — Free Study Material

=> 38° + 50° + angle AEC = 180°

=> angle AEC = 180° − 88° = 92°

Since B, E, C are collinear points on a straight line:

=> angle AEB + angle AEC = 180°

=> x + 92° = 180°

=> x = 180° − 92° = 88°

Therefore The correct answer is 88.

Additional Information

Exterior Angle Theorem

The measure of an exterior angle of a triangle is equal to the sum of the measures of its two remote interior angles.

Angle Sum Property

The sum of all interior angles in any triangle is always 180°.

Linear Pair Postulate

If two angles form a linear pair (lie on a straight line), then the sum of their measures is 180°.

Q56. Answer: (d) 4.17%

Given:

A quantity 4/5 is changed to 5/6.

Calculation:

Change in percentage

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

=> 0.04166

In percentage

=> 4.17%

Therefore The change in given to the quantity in 4.17%.

Q57. Answer: (a) C and D

Given:

The table shows the loan disbursed by five banks (in crores) over four years.

Banks	2016	2017	2018	2019
A	15	20	10	12
B	15	20	15	20
C	20	25	15	20
D	15	20	35	10
E	10	20	25	30

Formula Used:

Sum of loans disbursed by each bank over all four years = Sum of loans in 2016 + Sum of loans in 2017 + Sum of loans in 2018 + Sum of loans in 2019

Calculation:

Sum of loans disbursed by Bank A:

=> 15 + 20 + 10 + 12

=> 57

Sum of loans disbursed by Bank B:

=> 15 + 20 + 15 + 20

=> 70

Sum of loans disbursed by Bank C:

=> 20 + 25 + 15 + 20

=> 80

Sum of loans disbursed by Bank D:

=> 15 + 20 + 35 + 10

=> 80

Sum of loans disbursed by Bank E:

=> 10 + 20 + 25 + 30

=> 85

Solution:

The two banks that have disbursed the same sum of loan over all four years are:

Bank C and Bank D

Q58. Answer: (d) 27.71

Given:

Perimeter of the equilateral triangle = 24 cm.

Formula Used:

1. Side length of an equilateral triangle = Perimeter / 3

2. Area of an equilateral triangle = (√3 / 4) × side²

Calculation:

Side length of the equilateral triangle = 24 / 3

=> Side length = 8 cm

Area = (√3 / 4) × 8²

=> Area = (√3 / 4) × 64

=> Area = 16√3

Approximating √3 ≈ 1.732

Area ≈ 16 × 1.732

Area ≈ 27.712

Rounded off to the nearest two decimal places, Area ≈ 27.71 cm²

The area of the equilateral triangle is 27.71 cm².

Q59. Answer: (a) 44/3

Given:

If the angle of the sector with radius 7 cm is 120°

Formula Used:

Length of sector = θ/360 × 2π r

Calculation:

Length of sector = θ/360 × 2π r

=> (120/360) × 2 (22/7) 7

=> 44/3

Therefore The length of the sector (in cm) is 44/3 cm.

Q60. Answer: (b) 10%

Given:

Cost Price (CP) = Rs. 10,000

Selling Price (SP) = Rs. 12,000

Potential Selling Price = Rs. 13,000

Calculation:

Potential Profit = Potential Selling Price - Cost Price

Potential Profit = Rs. 13,000 - Rs. 10,000

Potential Profit = Rs. 3,000

Actual Profit = Selling Price - Cost Price

Actual Profit = Rs. 12,000 - Rs. 10,000

Actual Profit = Rs. 2,000

Loss = 3000 - 2000 = 1000

In percentage = (1000/10000)× 100

=> 10% loss

Therefore The percentage loss that he incurs is 10%.

YourMockTest.com — Free Study Material

Q61. Answer: (d) 30 cm

Given:

Radius of the circle = 25 cm.

Distance between the two chords = 27 cm.

Length of one chord = 48 cm.

Formula Used:

For a chord of length 2l at a distance d from the center in a circle of radius R :

$l = \sqrt{(R^2 - d^2)}$

Calculation:

Let the two chords be AB and CD with AB = 48 cm and CD = x cm.

Distance of AB from the center OM = d1

Distance of CD from the center ON = d2

Given, d1 + d2 = 27 cm

Half of AB = 24 cm

Half of CD = x/2 cm

Using the formula for chord length:

$24 = \sqrt{(25^2 - d1^2)}$

$x/2 = \sqrt{(25^2 - d2^2)}$

Solving for d1 :

$24 = \sqrt{(625 - d1^2)}$

Squaring both sides:

$\Rightarrow 24^2 = 625 - d1^2$

$\Rightarrow 576 = 625 - d1^2$

$\Rightarrow d1^2 = 625 - 576$

$\Rightarrow d1^2 = 49$

$\Rightarrow d1 = 7$ cm

Since d1 + d2 = 27 :

$\Rightarrow d2 = 27 - 7$

$\Rightarrow d2 = 20$ cm

Using d2 to find x:

$x/2 = \sqrt{(625 - 20^2)}$

$\Rightarrow x/2 = \sqrt{(625 - 400)}$

$\Rightarrow x/2 = \sqrt{225}$

$\Rightarrow x/2 = 15$

$\Rightarrow x = 30$ cm

The length of the other chord is 30 cm.

Q62. Answer: (a) 139680

Given:

Total number of voters = 2,40,000

Percentage of invalid votes = 3%

Percentage of valid votes in favour of the candidate = 60%

Formula Used:

Valid votes = Total votes - Invalid votes

Votes in favour of the candidate = (Valid votes) × (Percentage of valid votes in favour)

Calculation:

Total votes = 2,40,000

Invalid votes = 3% of 2,40,000

Invalid votes = 0.03 × 2,40,000

Invalid votes = 7,200

Valid votes = Total votes - Invalid votes

Valid votes = 2,40,000 - 7,200

Valid votes = 2,32,800
Votes in favour of the candidate = 60% of valid votes
Votes in favour of the candidate = 0.60 × 2,32,800
Votes in favour of the candidate = 1,39,680
The number of valid votes polled in favour of the candidate is 1,39,680.

Q63. Answer: (d) 90 cm

Given:
radius of there sphere are 75cm, 60cm and 45 cm
Formula used:
Volume of sphere = 4/3 πr^3
$a^3 + b^3 + c^3 = 1/2\ (a + b + c)[(a - b)^2 + (b - c)^2 + (c - a)^2] + 3abc$
Calculation:
Volume of new sphere = Sum of volume of all three sphere
=> 4/3 πR^3 = 4/3 $\pi(75)^3$ + 4/3 $\pi(60)^3$ + 4/3 $\pi(45)^3$
=> 4/3 πR3 = 4/3 π [$75^3 + 60^3 + 45^3$]
=> R^3 = [753 + 603 + 453]
=> R3 = 1/2 × (75 + 60 + 45) [$(75 - 60)^2 + (60 - 45)^2 + (45 - 75)^2$] + 3 × 75 × 60 × 45
=> R3 = 1/2 × 180 [$15^2 + 15^2 + 30^2$] + 3 × 75 × 60 × 45
=> R3 = 90 × (225 + 225 + 900) + 3 × 75 × 60 × 45
=> R3 = 90 [1350 + 6750]
=> R3 = 90 × 8100
=> R3 = 90 × 90 × 90
=> R = 90 cm
Hence, the radius of the big sphere is 90 cm.

Q64. Answer: (b) 66 2/3 %

Given:
A retailer gets a discount of 40% on the printed price of an article.
Calculation:
Let assume marked price of an article = 100
After 40% discount on the marked price,
Cost price for the retailer = 40% of Marked price
= 60% of 100
= 60
So, cost price = Rs. 60
Now the retailer is selling at the marked price,
So, profit of the retailer = (100-60)/60 × 100
= 40/60 × 100
= 66 2/3 %
So, the percentage of profit of the retailer is 66 2/3 %.

Q65. Answer: (d) 30 seconds

Given:
Length of the first train = 550 metres.
Speed of the first train = 78 km/h.
Length of the second train = 350 metres.
Speed of the second train = 30 km/h.
Formula Used:
Time = Total distance / Relative speed
Calculation:
Convert speeds from km/h to m/s:
Speed of the first train = 78 × (1000/3600) = 21.67 m/s

YourMockTest.com — Free Study Material

Speed of the second train = 30 × (1000/3600) = 8.33 m/s

Since the trains are running in opposite directions, their relative speed is the sum of their speeds:

Relative speed = 21.67 + 8.33 = 30 m/s

Total distance to be covered = Length of the first train + Length of the second train

Total distance = 550 + 350 = 900 metres

Time = Total distance / Relative speed

=> Time = 900 / 30

=> Time = 30 seconds

The correct answer is option 4.

Q66. Answer: (d) 18°

Calculation:

Total expenditure each Sushma and Preeti = (1800 + 5000 + 6000 + 7200 + 2500 + 7500)

=> 30000

Expenditure incurred on health by Sushma

=> 7500

Angle of health expenditure = (7500/30000) × 360

=> 90

Expenditure incurred on health by Preeti

=> 20% of 30000

=> 6000

Angle of health expenditure

=> (6000/30000)× 360

=> 72

Therefore The difference between the central angle corresponding to the expenditure incurred on Health by Sushma and Preeti = 90 - 72

=> 18°

Therefore The difference between the central angle corresponding to the expenditure incurred on Health by Sushma and Preeti is 18°

Q67. Answer: (d) 4.8 unit

Given:

Equation of the line: 6x + 8y - 48 = 0

Formula Used:

Perpendicular distance from a point (x1, y1) to a line Ax + By + C = 0 is given by:

Distance = (|Ax1 + By1 + C|)/(√(A² + B²))

Calculation:

Given point (0, 0) and line 6x + 8y - 48 = 0

Here, A = 6, B = 8, C = -48, x1 = 0, y1 = 0

Substitute values into the formula:

Distance = (|6(0) + 8(0) - 48|)/(√(6² + 8²))

=> Distance = (|0 + 0 - 48|)/(√(36 + 64))

=> Distance = 48/√100

=> Distance = 48/10

=> Distance = 4.8 units

The perpendicular length from the origin to the line 6x + 8y - 48 = 0 is 4.8 units.

Q68. Answer: (b) 340

Given:

The number of computers manufactured by company A during the period from 2010 to 2014:

240, 300, 1250, 470, 320 (in thousands)

The number of computers manufactured by company C during the period from 2010 to 2014:

270, 490, 430, 1180, 550 (in thousands)

YourMockTest.com — Free Study Material

Formula Used:

Difference = Total number of computers manufactured by A - Total number of computers manufactured by C

Calculation:

Total number of computers manufactured by company A:

240 + 300 + 1250 + 470 + 320

=> 240 + 300 = 540

=> 540 + 1250 = 1790

=> 1790 + 470 = 2260

=> 2260 + 320 = 2580 (in thousands)

Total number of computers manufactured by company C:

270 + 490 + 430 + 1180 + 550

=> 270 + 490 = 760

=> 760 + 430 = 1190

=> 1190 + 1180 = 2370

=> 2370 + 550 = 2920 (in thousands)

Difference = 2920 - 2580

=> 340

The difference between the number of computers manufactured by company A and C during the period from 2010 to 2014 is 340 thousand.

Q69. Answer: (b) 0.56

Given:

Numbers = 0.14 and 2.24

Formula used:

Mean proportion = √(a × b)

Calculations:

=> Mean proportion = √(0.14 × 2.24)

=> Mean proportion = √0.3136

=> Mean proportion = 0.56

Therefore The mean proportion of 0.14 and 2.24 is 0.56.

Q70. Answer: (a) 14%

Shortcut Trick

Ratio of Principal (P) to Simple Interest (SI) = 10 : 7 for 5 years.

SI per year = 7 ÷ 5 = 1.4 units.

Rate % = (SI per year ÷ Principal) × 100

Rate % = (1.4 ÷ 10) × 100 = 14%.

Therefore The correct answer is 14%.

Alternate Method

Given:

Ratio of Principal (P) : Simple Interest (SI) = 10 : 7

Time (T) = 5 years

Formula Used:

Simple Interest (SI) = (P × R × T) ÷ 100

Calculations:

=> Let the Principal (P) = 10x and Simple Interest (SI) = 7x.

=> We know that, Rate (R) = (SI × 100) ÷ (P × T)

=> R = (7x × 100) ÷ (10x × 5)

=> R = 700x ÷ 50x

=> R = 14

Therefore The correct answer is 14%.

Additional Information

Simple Interest (SI)

It is the interest calculated only on the initial principal amount. SI = (P × R × T) ÷ 100.

Total Amount (A)

The sum of the principal and the interest earned. Amount (A) = Principal (P) + Simple Interest (SI).

Annual Rate Calculation

The percentage of the principal charged as interest for one year. R = (SI × 100) ÷ (P × T).

Q71. Answer: (b) 15

Calculation:

[7+9-2{(3 ÷ 1/3)-3}+27 ÷ 3+(27 ÷ 9+3)-6]+2

=> [7 + 9 - 2 (9 - 3) + 27 ÷ 3 + (3 + 3) - 6] + 2

=> [7 + 9 - 2 × 6 + 27 ÷ 3 + 6 - 6] + 2

=> [7 + 9 - 12 + 9] + 2

=> [25 - 12] + 2

=> 15

Therefore The correct answer is 15.

Q72. Answer: (b) 1

Given:

A man can complete the work in 12 days.

A woman can complete the work in 8 days.

Formula Used:

Work done by 1 man in 1 day = 1/12

Work done by 1 woman in 1 day = 1/8

Total work done by 6 men and 4 women in 1 day = 6 × (Work done by 1 man in 1 day) + 4 × (Work done by 1 woman in 1 day)

Time taken to complete the work = 1 / (Total work done by 6 men and 4 women in 1 day)

Calculation:

Work done by 1 man in 1 day = 1/12

Work done by 1 woman in 1 day = 1/8

Total work done by 6 men and 4 women in 1 day:

=> 6 × (1/12) + 4 × (1/8)

=> 6/12 + 4/8

=> 1/2 + 1/2

=> 1

Time taken to complete the work:

=> 1 / 1

=> 1 day

The work will be completed in 1 day by 6 men and 4 women.

Q73. Answer: (a) 1

Formula used:

Dividend = Divisor × Quotient + Remainder

Calculation:

The number X in this case will be determined as follows:

We know that, Dividend = Divisor × Quotient + Remainder

Z = (5 × 1) + 3 = 8

Y = (3 × Z) + 2 = (3 × 8) + 2 = 26

X = (2 × Y) + 1 = (2 × 26) + 1 = 53

Therefore X = 53

According to question,

When (X) is divided by 13 i.e. 53/13, then the remainder will be 1.

Therefore Remainder of 53/13 = 1.

YourMockTest.com — Free Study Material

Q74. Answer: (c) 7/24

Given:

If θ be acute angle and cos θ = 24/25

Concept Used:

cot(90 - θ) = tanθ

Calculation:

cosθ = B/H

Perpendicular = √(H² - P²)

=> √(625 - 576)

=> √49

=> 7

tanθ = P/B

=> 7/24

Therefore The value of cot(90 - θ) is equal to 7/24.

Q75. Answer: (a) E

Given:

Number of projects completed by companies from 2017-18 to 2020-21:

Company A: 34 to 34

Company B: 17 to 32

Company C: 9 to 12

Company D: 4 to 5

Company E: 2 to 5

Formula used:

Growth Percentage = ((New Value - Old Value) / Old Value) * 100

Calculation:

Company A: Growth = ((34 - 34) / 34) * 100

=> Growth = 0%

Company B: Growth = ((32 - 17) / 17) * 100

=> Growth ≈ 88.24%

Company C: Growth = ((12 - 9) / 9) * 100

=> Growth ≈ 33.33%

Company D: Growth = ((5 - 4) / 4) * 100

=> Growth = 25%

Company E: Growth = ((5 - 2) / 2) * 100

=> Growth = 150%

Therefore Company E has the highest growth in percentage with 150%.

Q76. Answer: (c) Ashwagandha

The correct answer is Ashwagandha

Key Points

• The Ayush Ministry has collaborated with the UK's London School of Hygiene and Tropical Medicine (LSHTM) to conduct a study on Ashwagandha for promoting recovery from COVID-19.

• Ashwagandha is a traditional herb known for its potential health benefits, including stress reduction, improved energy levels, and enhanced immunity.

• This study aims to scientifically validate the efficacy of Ashwagandha in aiding the recovery process of COVID-19 patients.

• Ashwagandha is widely used in Ayurvedic medicine and is considered an adaptogen, helping the body to manage stress.

Additional Information

• Ashwagandha (Withania somnifera) is also known as Indian ginseng or winter cherry.

• It has been used in traditional Indian medicine for over 3,000 years.

• The herb is believed to offer numerous benefits, such as reducing anxiety and stress, boosting brain function, and combating depression.

• Clinical trials and research are ongoing to explore its full potential and therapeutic uses.

YourMockTest.com — Free Study Material

Q77. Answer: (c) Haryana

The correct answer is Haryana

Key Points

• According to the Census of India - 2011, Haryana has the lowest sex ratio among all Indian states.

• The sex ratio is defined as the number of females per 1,000 males.

• Haryana had a sex ratio of 879 females per 1,000 males in the 2011 Census.

• This low sex ratio is a significant social issue and reflects gender disparities in the state.

• Efforts have been made by both the state and central governments to address this imbalance through various schemes and awareness programs.

Additional Information

• The Census of India is conducted every ten years and provides comprehensive data on various demographic parameters including the sex ratio.

• The sex ratio is an important indicator of gender equality in a society.

• Several factors contribute to the low sex ratio in Haryana, including societal preferences for male children, female foeticide, and other forms of gender discrimination.

• To combat these issues, initiatives like 'Beti Bachao, Beti Padhao' have been launched to promote the education and welfare of girl children.

• Improving the sex ratio requires a multifaceted approach involving education, legal measures, and changes in societal attitudes towards gender.

Q78. Answer: (d) Violin

The correct answer is Violin

Key Points

• Sangeeta Shankar was awarded the Sangeet Natak Akademi Award 2021 for her contribution to playing the Violin.

• The Sangeet Natak Akademi Award is a prestigious recognition given by the Sangeet Natak Akademi, India's National Academy for Music, Dance, and Drama.

• The award is given to individuals who have made significant contributions to the fields of music, dance, and drama in India.

• Sangeeta Shankar is renowned for her exceptional skills and dedication to the art of violin playing, making her a distinguished figure in Indian classical music.

Additional Information

• The Sangeet Natak Akademi was established by the Indian government in 1952 to promote and preserve India's vast cultural heritage of performing arts.

• The awards are one of the highest national recognitions given to practicing artists in the field of performing arts.

• The Akademi also supports research, documentation, and dissemination of Indian performing arts traditions.

• Recipients of the Sangeet Natak Akademi Award receive a citation, a plaque, and a cash prize.

Q79. Answer: (a) Mamluk dynasty

The correct answer is Mamluk dynasty

Key Points

• Mamluk dynasty was the first dynasty of the Delhi Sultanate.

• It was established by Qutb-ud-din Aibak in 1206 AD after the death of Muhammad Ghori.

• The dynasty is also known as the Slave dynasty because many of its rulers were former slaves.

• The Mamluk dynasty ruled from 1206 to 1290 AD and laid the foundation for subsequent dynasties in the Delhi Sultanate.

• Notable rulers include Qutb-ud-din Aibak, Iltutmish, and Razia Sultana.

Additional Information

• The Delhi Sultanate was a Muslim kingdom based mostly in Delhi that stretched over large parts of the Indian subcontinent for 320 years (1206–1526).

• The Delhi Sultanate is known for its significant contributions to the cultural and architectural landscape of India, including the construction of the Qutub Minar.

• The Sultanate period is marked by the introduction of new administrative practices and the integration of the Indian subcontinent into a larger Islamic world.

• Following the Mamluk dynasty, the Delhi Sultanate saw the rise of other dynasties such as the Khilji, Tughlaq, Sayyid, and Lodi dynasties.

YourMockTest.com — Free Study Material

Q80. Answer: (c) NGC 6872

The correct answer is NGC 6872

Key Points

• NGC 6872 is one of the largest spiral galaxies known to date.

• It is also known as the Condor Galaxy.

• NGC 6872 has an impressive wingspan of over 522,000 light-years, making it more than five times the size of the Milky Way.

• It is located approximately 212 million light-years away in the constellation Pavo.

• The galaxy's large size is attributed to interactions with a smaller galaxy, IC 4970, which has influenced its structure and star formation.

Additional Information

• Spiral galaxies are characterized by their spiral structures, which consist of a flat, rotating disk containing stars, gas, and dust, and a central concentration of stars known as the bulge.

• The arms of spiral galaxies are sites of active star formation and are often bright with young, hot stars.

• Interactions and mergers with other galaxies can significantly alter the structure and size of spiral galaxies.

• Understanding the dynamics and evolution of spiral galaxies like NGC 6872 helps astronomers learn more about galaxy formation and the role of gravitational interactions in the universe.

Q81. Answer: (a) 382

The correct answer is 382 persons

Key Points

• As per the Census of India - 2011, the density of population was 382 persons per km^2.

• The census data provides critical information on the population density, helping in the formulation of policies and allocation of resources.

• Population density is calculated as the number of people per unit area of land.

• It is an important demographic indicator that helps in understanding the population distribution of a country.

• The states with the highest population density are Bihar, West Bengal, and Kerala, while the states with the lowest population density are Arunachal Pradesh, Mizoram, and Sikkim.

Additional Information

• The Census of India is conducted every ten years and is one of the largest administrative exercises in the world.

• The first census in India was conducted in 1872, and the first complete census was conducted in 1881.

• The census provides comprehensive data on various demographic, social, and economic aspects of the population.

• This data is crucial for planning and policy-making at national, state, and local levels.

• The Census of India also collects information on housing, amenities, and assets possessed by households.

Q82. Answer: (c) Galvanometer

The correct answer is Galvanometer

Key Points

• A Galvanometer is an instrument for detecting and measuring electric current by needle deflection.

• The deflection is caused by a magnetic field force acting upon a current-carrying wire within the device.

• It is a type of sensitive ammeter and can measure small currents accurately.

• Galvanometers are widely used in various applications including in analog meters and in the calibration of other instruments.

Additional Information

• The Galvanometer was named after Luigi Galvani, who discovered the principle of the device.

• It operates on the principle of electromagnetism, where an electric current creates a magnetic field.

• There are different types of galvanometers, including the moving coil and moving magnet types.

• Modern digital multimeters have largely replaced galvanometers for many applications but they are still used in specific scientific experiments and educational settings.

Q83. Answer: (d) Hindustani Classical Music

The correct answer is Hindustani Classical Music

Key Points

• Hindustani Classical Music is deeply rooted in community traditions and has evolved over centuries.

• This genre of music is predominantly found in the northern regions of India and is characterized by its unique ragas and talas.

• It is one of the two main streams of Indian classical music, the other being Karnataka (Carnatic) Classical Music, which is more

prevalent in the southern regions.

• Hindustani Classical Music includes various forms such as Dhrupad, Khayal, Thumri, and Tappa, each with its distinct style and historical significance.

• The tradition of Guru-Shishya Parampara (teacher-disciple tradition) plays a crucial role in the transmission of this musical heritage.

Additional Information

• Karnataka Classical Music, also known as Carnatic Music, is another major stream of Indian classical music, primarily practiced in the southern part of India.

• Hindustani Lokgeet refers to the folk music of North India, which, while traditional, is distinct from classical music in its structure and performance.

• Karnataka Lokgeet refers to the folk music of Karnataka, which is different from Karnataka Classical Music.

• Both Hindustani and Karnataka Classical Music have rich traditions and have contributed significantly to the cultural heritage of India.

Q84. Answer: (b) Ministry of Cooperation

The correct answer is Ministry of Cooperation

Key Points

• Shri Amit Shah is the head of the Ministry of Home Affairs and the Ministry of Cooperation as of 31 March 2024.

• The Ministry of Cooperation was created to realize the vision of 'Sahkar se Samriddhi' (prosperity through cooperation).

• This ministry aims to provide a separate administrative, legal, and policy framework for strengthening the cooperative movement in the country.

• It is responsible for promoting cooperative-based economic development models, including the creation of appropriate policy, legal frameworks, and ease of doing business for cooperatives.

Additional Information

• The Ministry of Cooperation was established in July 2021 to provide a new impetus to the cooperative movement in India.

• It aims to streamline processes for the cooperative sector and enable the development of multi-state cooperatives.

• Shri Amit Shah, in addition to his role as the Minister of Home Affairs, has been entrusted with this ministry to leverage his experience in cooperative societies.

• The Ministry of Cooperation works closely with various stakeholders to ensure the growth and sustainability of cooperatives across the country.

Q85. Answer: (c) sparrow

The correct answer is sparrow

Key Points

• Ujjwala was the official mascot of Khelo India – Para Games 2023.

• Ujjwala is depicted as a sparrow.

• The choice of a sparrow as a mascot represents vitality, energy, and resilience, aligning with the spirit of the Para Games.

• The Khelo India – Para Games is an initiative to promote sports among differently-abled athletes and provide them with a platform to showcase their talents.

Additional Information

• Khelo India is a national program aimed at the development of sports in India, launched by the Ministry of Youth Affairs and Sports.

• It includes various initiatives to identify and nurture young talent, enhance sports infrastructure, and promote a strong sports culture in the country.

• The Khelo India – Para Games are a part of this broader initiative, focusing specifically on athletes with disabilities.

• The event features a wide range of sports, ensuring inclusivity and equal opportunities for all participants.

Q86. Answer: (c) Article 361

The correct answer is Article 361

Key Points

• Article 361 of the Constitution of India provides protection to the President and Governors and Rajpramukhs.

• Under this article, the President or the Governor of a state is not answerable to any court for the exercise and performance of the powers and duties of his office.

• No criminal proceedings can be initiated or continued against the President or a Governor in any court during their term of office.

• No process for the arrest or imprisonment of the President or a Governor can be issued from any court during their term of office.

YourMockTest.com — Free Study Material

• Article 361 aims to ensure the smooth functioning of the highest constitutional offices without undue legal impediments.

Additional Information

• Article 356 deals with the imposition of President's Rule in states under certain conditions.

• Article 370 granted special autonomy to the region of Jammu and Kashmir, which has since been abrogated.

• Article 352 pertains to the proclamation of emergency in the country due to war, external aggression, or armed rebellion.

• The Constitution of India, adopted on 26th November 1949 and effective from 26th January 1950, is the longest written constitution in the world.

• It establishes the fundamental political principles, the structure, procedures, powers, and duties of government institutions, and sets out fundamental rights, directive principles, and the duties of citizens.

Q87. Answer: (c) SM Krishna

The correct answer is SM Krishna

Key Points

• SM Krishna received the Padma Vibhushan at Rashtrapati Bhavan in New Delhi for his contribution in the field of Public Affairs in 2023.

• He is a former Chief Minister of Karnataka and has held various significant positions in the Indian government.

• The Padma Vibhushan is India's second-highest civilian award and is given for exceptional and distinguished service in any field including service rendered by Government servants.

• SM Krishna has been an influential figure in Indian politics, particularly in Karnataka, and has contributed significantly to public affairs.

• His contributions have been recognized at the national level, exemplifying his dedication and service to the nation.

Additional Information

• SM Krishna served as the Chief Minister of Karnataka from 1999 to 2004.

• He has also held the position of Minister of External Affairs of India from 2009 to 2012.

• The Padma Vibhushan was instituted in 1954 and is awarded for exceptional and distinguished service in any field including service rendered by Government servants.

• The award is part of the Padma Awards, which include Padma Vibhushan, Padma Bhushan, and Padma Shri, and are announced annually on the occasion of Republic Day.

• SM Krishna's receipt of the Padma Vibhushan highlights his long and distinguished career in public service and his contributions to Indian politics and governance.

Q88. Answer: (d) Kolkata

The correct answer is Kolkata

Key Points

• The Central Office of the Reserve Bank of India was initially established in Kolkata in 1935.

• It was later moved to Mumbai in 1937.

• The Reserve Bank of India (RBI) is India's central banking institution, which controls the issuance and supply of the Indian rupee.

• It commenced operations on 1st April 1935 during the British Rule in accordance with the provisions of the Reserve Bank of India Act, 1934.

Additional Information

• The Reserve Bank of India was conceptualized based on the recommendations of the Hilton Young Commission.

• It plays a crucial role in the development strategy of the government of India.

• The RBI is responsible for regulating the monetary policy of the Indian rupee and ensuring the country's financial stability.

• It also manages the country's main payment systems and works to promote its economic development.

• The headquarters of the RBI is currently located in Mumbai, Maharashtra.

Q89. Answer: (a) Chennai

The correct answer is Chennai

Key Points

• Chennai hosted the Asian Champions Trophy hockey tournament in 2023.

• This tournament is a prestigious event in the field of hockey, featuring top teams from Asia.

• The tournament aims to promote and develop the sport of hockey within the continent.

• Chennai, known for its rich sports culture, provided an excellent venue for the event.

Additional Information

• The Asian Champions Trophy is organized by the Asian Hockey Federation (AHF).
• It was first introduced in 2011, and since then, it has become a key event in the Asian hockey calendar.
• Teams like India, Pakistan, Malaysia, and South Korea are regular participants in the tournament.
• The event helps in improving the competitive standards of Asian teams on the global stage.
• Chennai last hosted a major international hockey event in 2007, making the 2023 tournament a significant occasion for the city.

Q90. Answer: (a) Karnataka

The correct answer is Karnataka

Key Points

• The district of Shivamogga is located in the state of Karnataka.
• Shivamogga is renowned for its rich deposits of Iron-Ore and Manganese minerals.
• Karnataka is one of the prominent states in India known for its mineral wealth.

Additional Information

• Karnataka has a diverse geography with the Western Ghats, coastal plains, and the Deccan Plateau.
• Besides minerals, the state is also known for its rich cultural heritage and history.
• Shivamogga, often referred to as the "Gateway of Malnad," is also famous for its scenic beauty and waterfalls.

Q91. Answer: (a) Jammu and Kashmir

The correct answer is Jammu and Kashmir

Key Points

• Rauf is a traditional folk dance of Jammu and Kashmir.
• It is performed mainly by women during the spring season and on various festive occasions.
• The dance is characterized by its rhythmic movements and is often accompanied by folk songs.
• Rauf is an integral part of the cultural heritage of Jammu and Kashmir and reflects the region's rich traditions and customs.

Additional Information

• The dance is usually performed in groups, with participants forming two rows and moving forward and backward in sync with the music.
• The costumes worn during the Rauf dance are often colorful and traditional, adding to the visual appeal of the performance.
• Rauf is also known as "Rouf" in some regions and continues to be a popular cultural expression in Jammu and Kashmir.

Q92. Answer: (a) Normal view

The correct answer is Normal view

Key Points

• Normal view in MS PowerPoint is particularly useful for editing or formatting a single slide at a time.
• This view displays the slide in the main window, allowing for detailed adjustments to text, images, and other elements.
• It also provides a thumbnail view of all the slides in the presentation, making it easier to navigate between slides.
• Normal view is the default view in PowerPoint and is ideal for creating and editing individual slides.

Additional Information

• Reading view is used to view the presentation as a slide show without switching to full-screen mode.
• Slide Sorter view allows you to see multiple slides at once, making it easy to organize and arrange them.
• Outline view shows the presentation in an outline format, useful for editing text content and organizing the structure of the presentation.

Q93. Answer: (a) defence

The correct answer is defence

Key Points

• During 2015, the Government of India allowed about 49% of FDI in the defence sector.
• This decision was part of a broader effort to boost the defense manufacturing capabilities in India, encouraging foreign companies to invest and form joint ventures with Indian firms.
• The aim was to modernize the defense sector and reduce dependency on imports by encouraging indigenous production.
• This policy change was expected to bring in advanced technology, foster innovation, and create employment opportunities in the defense manufacturing sector.

Additional Information

• The Foreign Direct Investment (FDI) policy in India is regulated by the Ministry of Commerce and Industry, Government of India.

• The policy framework for FDI is governed by the Foreign Exchange Management Act, 1999 (FEMA).

• The FDI policy aims to attract foreign investment, enhance technology transfer, and improve the overall competitiveness of the Indian economy.

• FDI in certain sectors is subject to sectoral caps and approval requirements, while in other sectors, it is allowed under the automatic route.

• Over the years, the Government of India has liberalized the FDI policy to make India an attractive destination for foreign investors.

Q94. Answer: (d) tag

The correct answer is tag

Key Points

• In kabaddi, when a raider touches any body part of any defender or any part of their clothing, it is called a tag.

• The raider's objective is to tag as many defenders as possible in a single raid and return to their half of the court without being caught.

• If the raider successfully tags a defender and returns to their half, the tagged defender is out.

• The game requires a combination of strength, strategy, and agility to tag defenders and evade being caught.

Additional Information

• Kabaddi is a contact team sport that originated in ancient India.

• The game is played between two teams of seven players each, with the objective of scoring points by raiding into the opponent's court and tagging out as many defenders as possible.

• The sport has gained international popularity and is played in various countries across the world.

• Kabaddi is included in major international sporting events like the Asian Games.

• The game is known for its fast pace and requires a high level of physical fitness and strategic thinking.

Q95. Answer: (c) 1953

The correct answer is 1953

Key Points

• Air transport was nationalized in India in the year 1953.

• The Government of India passed the Air Corporations Act, 1953, which led to the nationalization of the airline industry.

• Two new corporations, Air India International and Indian Airlines, were established to handle international and domestic air services, respectively.

• This move was aimed at ensuring better management, safety, and growth of the aviation sector in India.

Additional Information

• The Air Corporations Act, 1953, was repealed in 1994, paving the way for private airlines to operate in India.

• Before nationalization, there were several private airlines operating in India, including Tata Airlines, which later became Air India.

• Nationalization helped in standardizing operations and improving the safety record of Indian aviation.

• Today, the Indian aviation sector is a mix of public and private enterprises, with numerous domestic and international players.

Q96. Answer: (c) Sikhism

The correct answer is Sikhism

Key Points

• The concept of Langar is primarily associated with Sikhism.

• Langar, meaning community kitchen, is a practice in Sikhism where free meals are served to all visitors, regardless of their background, religion, or social status.

• This tradition was initiated by Guru Nanak Dev Ji, the founder of Sikhism, and has been continued by his followers to promote equality and service to humanity.

• Langar is typically found in Gurdwaras (Sikh temples) worldwide and is an essential aspect of Sikh community life.

• The food served in Langar is vegetarian to ensure that it is acceptable to people of all dietary preferences.

Additional Information

• Sikhism was founded in the 15th century in the Punjab region of India.

• The Gurdwara is a place of worship for Sikhs, where the Guru Granth Sahib (holy scripture) is read, and Langar is served.

• The principles of Sikhism emphasize selfless service, equality, and community welfare.

• Langar exemplifies these values by providing food to anyone in need, fostering a spirit of community and inclusiveness.

• Other religious traditions also have similar practices of community kitchens, but the term Langar is most closely linked with

YourMockTest.com — Free Study Material

Sikhism.

Q97. Answer: (a) The use of two different credentials to verify identity

The correct answer is The use of two different credentials to verify identity

Key Points

• Two-Factor Authentication (2FA) involves the use of two different credentials to verify a user's identity.

• These credentials typically include something the user knows (like a password) and something the user has (like a mobile device or hardware token).

• 2FA enhances security by adding an additional layer of verification, making it more difficult for unauthorized users to access an account or system.

• Common implementations of 2FA include SMS-based codes, authenticator apps, and biometric methods like fingerprint or facial recognition.

Additional Information

• Two-Factor Authentication (2FA) is a subset of multi-factor authentication (MFA), which can involve two or more verification methods.

• 2FA is widely used in online banking, email services, and corporate environments to enhance security.

• Implementing 2FA can significantly reduce the risk of identity theft, phishing attacks, and other forms of cyber threats.

• Some common 2FA methods include Google Authenticator, Authy, and hardware tokens like YubiKey.

Q98. Answer: (a) British Constitution

The correct answer is British Constitution

Key Points

• The system of 'First Past the Post' has been adopted by the Indian Constitution from the British Constitution.

• In this system, the candidate who gets the most votes in a constituency wins the election, regardless of whether they have a majority of the votes.

• It is a simple plurality system where the highest number of votes determines the winner.

• This system is used for the election of members of the Lok Sabha and the state legislative assemblies in India.

Additional Information

• The British Constitution is not a single written document but a collection of laws and conventions that have evolved over time.

• India, being a former British colony, inherited several features of the British political and legal system.

• The First Past the Post system is known for its simplicity and ease of understanding.

• However, it has been criticized for not always representing the proportional will of the people, as a candidate can win without a majority of the votes.

Q99. Answer: (a) Floating exchange rate

The correct answer is Floating exchange rate

Key Points

• Floating exchange rate is determined by the market forces of demand and supply.

• In a floating exchange rate system, the value of the currency is allowed to fluctuate according to the foreign exchange market.

• This system contrasts with a fixed exchange rate where the currency is pegged to another currency or basket of currencies.

• Floating exchange rates can provide automatic adjustment for countries experiencing economic shocks or imbalances.

Additional Information

• Fixed exchange rate involves a government or central bank tying the official exchange rate to another country's currency or the price of gold.

• Soft pegged exchange rate allows for more flexibility than a hard peg but still involves some level of intervention to stabilize or manage the currency's value.

• Hard pegged exchange rate is a strict form of currency pegging where the currency's value is firmly fixed to another currency.

• Exchange rate systems can impact international trade, investments, and economic stability.

Q100. Answer: (d) Acetylation of glucose

The correct answer is Acetylation of glucose

Key Points

• Acetylation of glucose refers to the chemical reaction where glucose reacts with acetic anhydride to form glucose pentaacetate.

• In this reaction, the hydroxyl groups (-OH) of glucose are replaced by acetyl groups (-COCH3).

• The process results in the formation of glucose pentaacetate, which is a derivative of glucose where all five hydroxyl groups are

acetylated.

• This reaction is an example of an esterification reaction, specifically known as acetylation.

Additional Information

• Glucose pentaacetate is an important compound in organic chemistry and biochemistry, often used in research and industry.

• The reaction can be represented by the equation:

Glucose + Acetic Anhydride → Glucose Pentaacetate + Acetic Acid

• This reaction is typically carried out in the presence of a catalyst such as pyridine to facilitate the acetylation process.

• Acetylation is a common method used to protect hydroxyl groups during chemical synthesis.

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

YourMockTest.com — Free Study Material