SSC MTS 2025 Official Paper (Held On: 09 Feb, 2026 Shift 3) (Previous Year Paper)

SSC Multi-Tasking Staff (MTS) • 2025 • 90 questions • 90 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-mts/ssc-mts-2025-official-paper-held-on-09-feb-2026-shift-3-previou…

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

SESSION 1

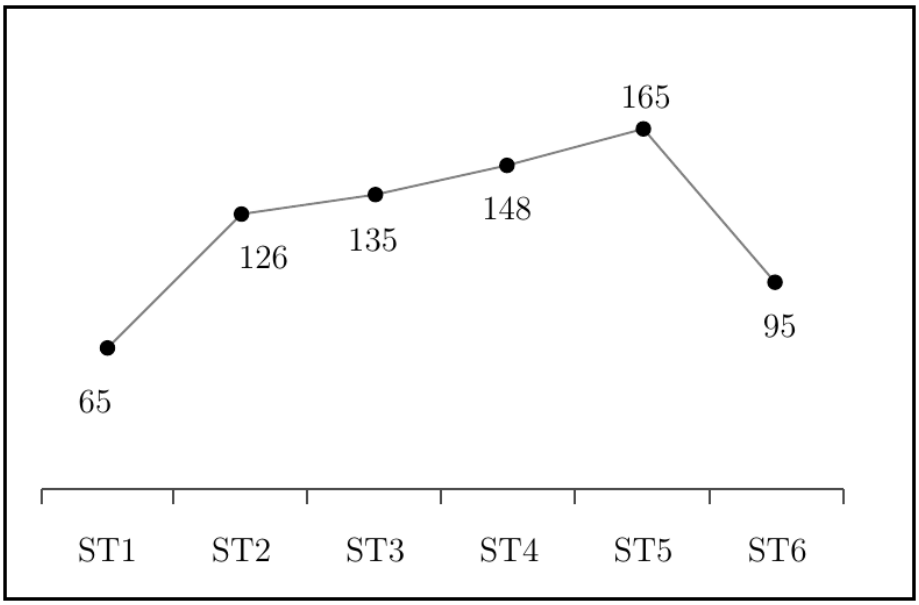
Q1. 96 + 58 - 63 + (35 + 17) × 2 - 89 = ?

(a) 102
(b) 106
(c) 108
(d) 128

Q2. 72 + 28 - (22 ÷ 2) + 33 × 1 + 19 of 1 - 16 = ?

(a) 130
(b) 135
(c) 125
(d) 139

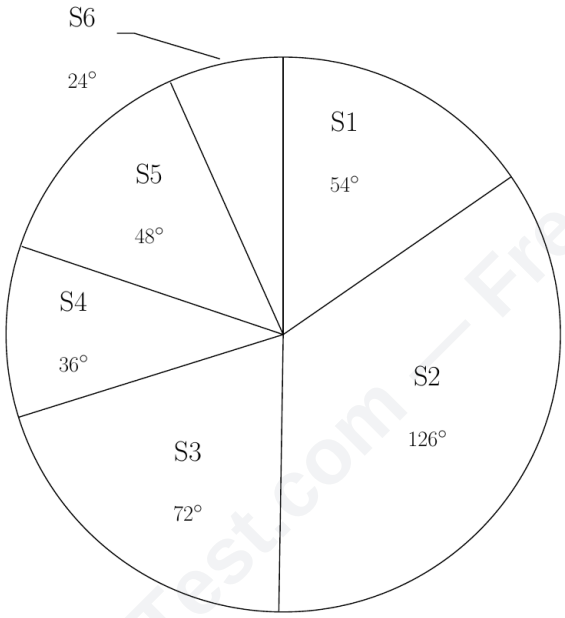
Q3. The line chart given below shows the number of hours for which the 6 students ST1, ST2, ST3, ST4, ST5 and ST6 study in a month.



Number of hours of ST5 is how much percent more than the number of hours of ST2?

(a) 25.47%
(b) 27.13%
(c) 33.43%
(d) 30.95%

Q4. The pie chart given below shows the number of books of 6 subjects in a bookstore. The data is presented in the terms of degrees.

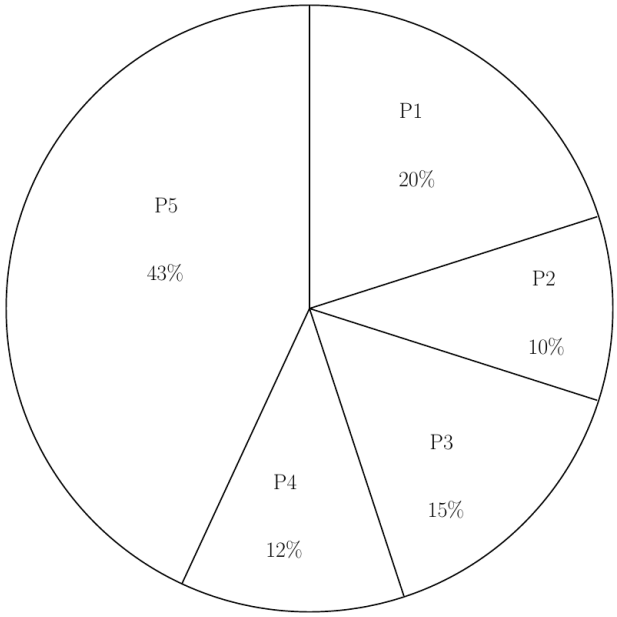


Total number of books of S3 and S5 are what percent of total number of books of the given 6 subjects?

(a) 16.67%
(b) 25%
(c) 30%
(d) 33.33%

Q5. The pie chart given below shows the production of 5 articles by a company. The data is presented in the terms of percent.

Total production of P1, P2 and P3 = 9000.

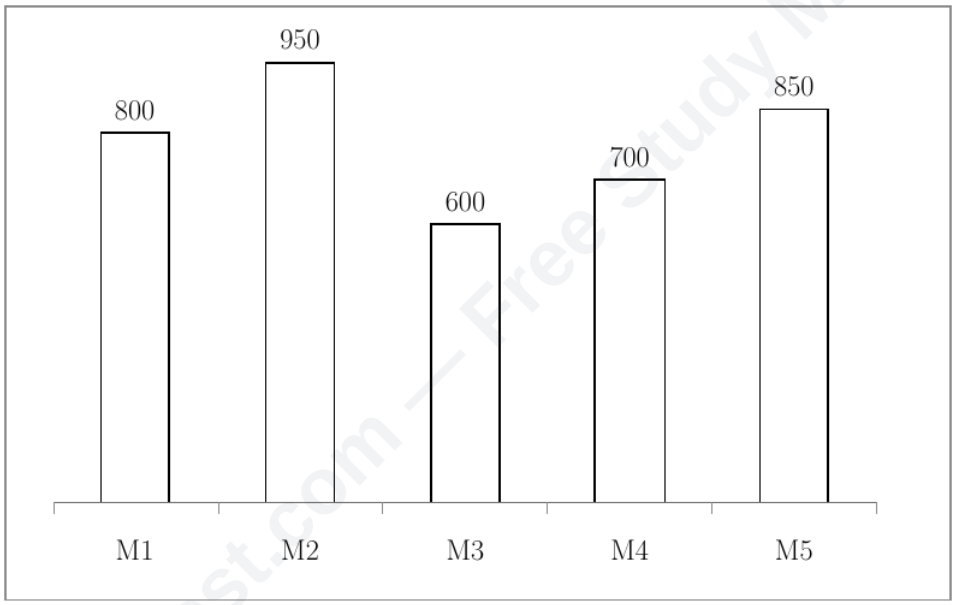


How much is the production of P5?

(a) 8600
(b) 7800
(c) 8200
(d) 7400

YourMockTest.com — Free Study Material

Q6. The bar graph given below shows the number of visitors to the given 5 museums.



Number of visitors to which museum are minimum?

(a) M2
(b) M3
(c) M4
(d) M1

Q7. The ratio of two numbers is 3:2, and their product is 726. Find the larger number and also find the difference between the two numbers.

(a) 33, 11
(b) 34, 12
(c) 35, 13
(d) 23, 12

Q8. A chord of length 20 cm makes an angle of 90° at the center of a circle. Find the radius of the circle and the distance of this chord from the center.

(a) 12√2 cm, 16 cm
(b) 10√2 cm, 8 cm
(c) 7√2 cm, 12 cm
(d) 10√2 cm, 10 cm

Q9. 73/5 + 62/5 - 31/5 - 54/5 = ?

(a) 8
(b) 6
(c) 5
(d) 7

Q10. Which of the following options will have sum as (7/8)?

(a) 1/8 + 1/2
(b) 1/2 + 3/8
(c) 1/2 + 1/4
(d) 3/4 + 1/4

Q11. The difference of squares of two consecutive odd numbers is 64. What is the smaller of the two numbers?

(a) 17
(b) 15
(c) 13

YourMockTest.com — Free Study Material

(d) 11

Q12. (√8 + √50)/√18 = ?

(a) 5/3
(b) 9/7
(c) 7/3
(d) 5/11

Q13. If a = 4 + √7, b = 4 - √7, then what is the value of $a^2 + b^2$?

(a) 48
(b) 46
(c) 50
(d) 44

Q14. Which of the following number is NOT divisible by 8?

(a) 2736
(b) 5237
(c) 4360
(d) 5536

Q15. Which of the following number is neither divisible by 3 nor by 11?

(a) 3234
(b) 2871
(c) 4567
(d) 3003

Q16. Average of consecutive natural numbers from 20 to N is 44. What is the value of N ? (where N is a natural number)

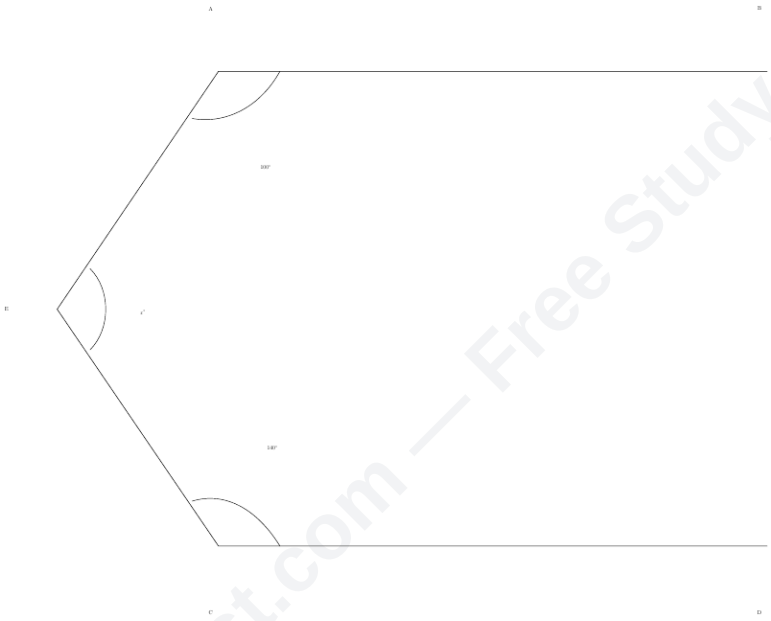
(a) 75
(b) 73
(c) 68
(d) 70

Q17. In a class, the average age of 28 boys is 23 years. Two boys whose ages are x years and 27 years leave the class. If the new average age of the class is 23 years, then what is the value of x ?

(a) 19
(b) 23
(c) 27
(d) 14

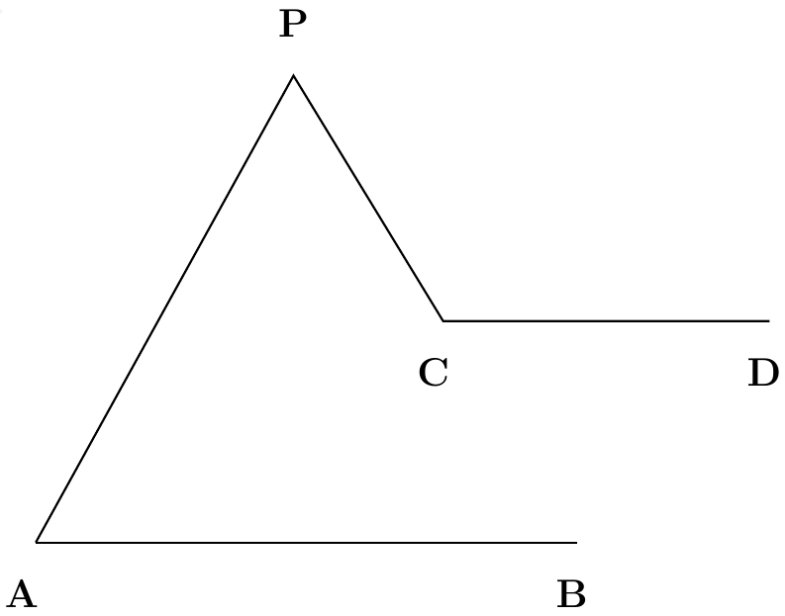
Q18. In the given figure, AB is parallel to CD. What is the value (in degrees) of x?

YourMockTest.com — Free Study Material



(a) 120
(b) 110
(c) 100
(d) 130

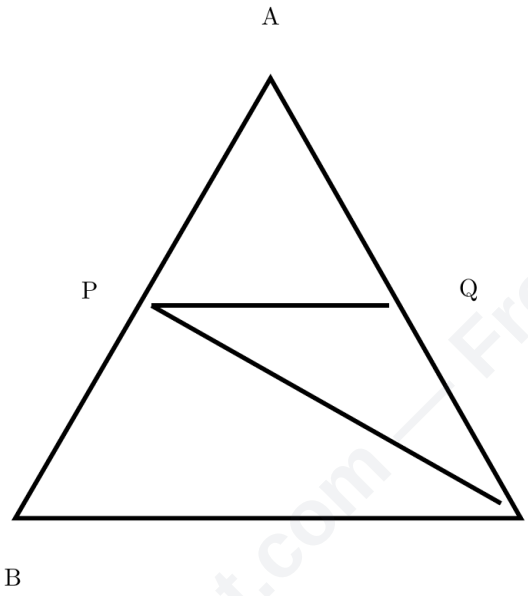
Q19. In the given figure, AB is parallel to CD. Angle PAB = 70 degrees and angle DCP = 110 degrees. What is the value (in degrees) of angle APC?



(a) 30
(b) 45
(c) 50
(d) 40

Q20. In the given figure, PQ is parallel to BC. Angle CPQ = 45 degrees and angle APQ = 75 degrees. What is the value (in degrees) of angle CPB ?

YourMockTest.com — Free Study Material



(a) 50
(b) 60
(c) 45
(d) 55

Q21. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

JW, ?, FK, DE, BY, ZS, XM, VG

(a) GO
(b) HQ
(c) HS
(d) EQ

Q22. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

BQ, XL, TG, PB, LW, HR, ?, ZH

(a) DK
(b) FN
(c) GM
(d) DM

Q23. Select the option that is related to the first letter cluster in the same way as the fourth letter cluster is related to the third letter cluster and sixth letter cluster is related to fifth letter cluster.

RM : ? :: DY : BB :: NO : LL

(a) ON
(b) PP
(c) OL
(d) PN

Q24. In the following question, set of letter clusters are given. The letter clusters of each set are related to the letter clusters of the same set by some Logic/Rule/Relation. From the given alternatives, select a group of letter clusters which follows the same Logic/Rule/Relation.

(TS, QM, NG)

(EQ, BK, YE)

(a) (YP, VM, SG)
(b) (AB, XV, UP)
(c) (GD, DA, YU)

YourMockTest.com — Free Study Material

(d) (JH, GE, XY)

Q25. What will be the sum of number of Thursdays, Saturdays and Sundays in September 2021?

(a) 12
(b) 14
(c) 13
(d) 15

Q26. If the month of February 2024 started on Thursday, then which date was the first Sunday of July 2024?

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

Q27. What was the last day of the year 1961?

(a) Tuesday
(b) Monday
(c) Saturday
(d) Sunday

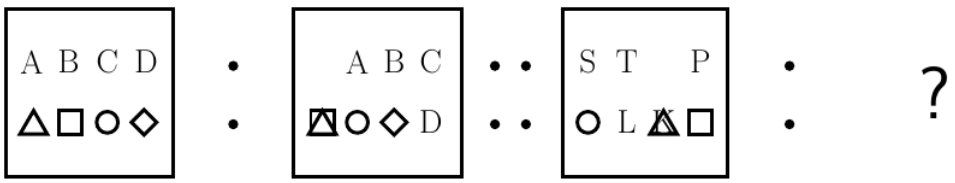
Q28. Runs scored by 5 boys R, B, C, L and Q are compared. Runs of no two boys are same. Runs of B are less than Q but more than C. Runs of L are more than R but less than C. How many boys scored runs more than L?

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

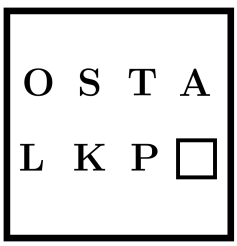
Q29. 7 friends A, B, C, D, E, F and G are sitting around a circular table facing towards the centre (not necessarily in the same order). F is the immediate neighbour of A, but is not to the immediate left of A. G is not the immediate neighbour of F or C. E is the immediate neighbour of A and D. Which two friends are immediate neighbour of each other?

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

Q30. Two figures given on the left side of (::) are related with some logic/rule/relation. Select the missing figure on the right side of (::) from the given alternatives based on the same logic/rule/relation.



(a)

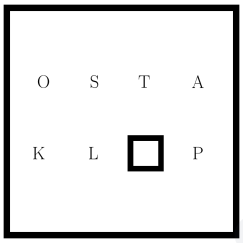


YourMockTest.com — Free Study Material

(b)



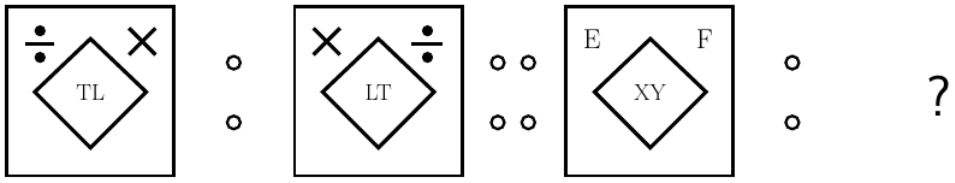
(c)



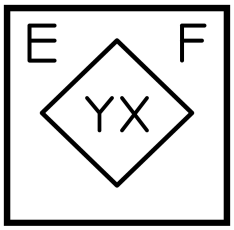
(d)



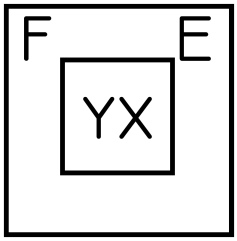
Q31. Two figures given on the left side of (::) are related with some logic/rule/relation. Select the missing figure on the right side of (::) from the given alternatives based on the same logic/rule/relation.



(a)

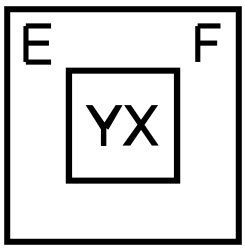


(b)

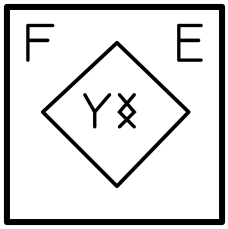


YourMockTest.com — Free Study Material

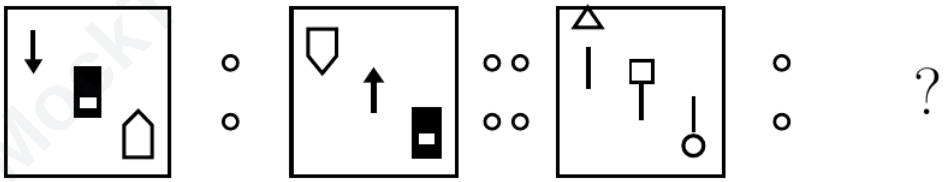
(c)



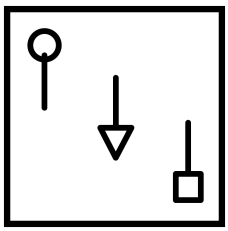
(d)



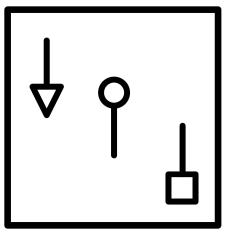
Q32. Two figures given on the left side of (::) are related with some logic/rule/relation. Select the missing figure on the right side of (::) from the given alternatives based on the same logic/rule/relation.



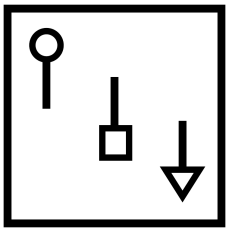
(a)



(b)

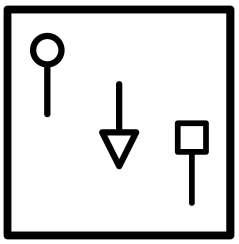


(c)



YourMockTest.com — Free Study Material

(d)



Q33. Select the option that is related to the fourth letter-number cluster in the same way as the first letter-number cluster is related to the second letter-number cluster and fifth letter-number cluster is related to sixth letter-number cluster.

(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)

HS777 : EO377 :: ? : KC267 :: LP987 : IL587

(a) NG567
(b) GN667
(c) GN167
(d) NG667

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

(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)

LPS120:MQT480 : ADW80 ::? : KRT110:LSU470

(a) CFX420
(b) BEX440
(c) BFY420
(d) CEX440

Q35. Select the option that is related to the second number in the same way as the third number is related to the fourth number and fifth number is related to sixth number.

(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)

? : 8492 :: 9940 : 9896 :: 3420 : 3376

(a) 8531
(b) 8530
(c) 8540
(d) 8536

Q36. Select the option that is related to the sixth number in the same way as the first number is related to the second number and third number is related to fourth number.

(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)

930 : 467 :: 1248 : 626 :: ? : 284

(a) 573
(b) 571
(c) 559
(d) 564

YourMockTest.com — Free Study Material

Q37. In a certain coded language 'PILED' is coded as 'RMQAY' and 'CYCLE' is coded as 'ECHHZ'. How will 'PLANS' be coded in the same code language?

(a) RPFJN
(b) TNEIO
(c) SQGJN
(d) TPGKO

Q38. In a certain code language, 'HEIGHT' is coded as '103' and 'ALLOW' is coded as '70'. How will 'FAME' be coded in that code language?

(a) 75
(b) 83
(c) 81
(d) 79

Q39. A series is given with one term wrong. Select that wrong term from the given alternatives.

RT203, WA205, BH207, GO209, MW211

(a) BH207
(b) MW211
(c) WA205
(d) RT203

Q40. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

PRI107, OQH221, ?, MOF449, LNE563

(a) GPN395
(b) PNG346
(c) NPG335
(d) GNP394

SESSION 2

Q41. What was the reign of Qutubuddin Aybak?

(a) 1188-1199
(b) 1199-1205
(c) 1206-1210
(d) 1210-1216

Q42. The Nizam State Railway was taken over by the centre in which of the following years?

(a) 1952
(b) 1950
(c) 1956
(d) 1954

Q43. In which region was the Khokhar tribe very influential during the thirteenth and fourteenth centuries?

(a) Assam
(b) Gujarat
(c) Bengal
(d) Punjab

Q44. In _____, the Life Insurance sector was nationalised and the Life Insurance Corporation came into existence in the same year.

(a) 1961
(b) 1949
(c) 1956

YourMockTest.com — Free Study Material

(d) 1951

Q45. Which of the following river is NOT the tributary of Ganga?

(a) Ghaghara
(b) Kosi
(c) Mahadayi
(d) Gandak

Q46. Tropic of cancer passes through which of the following state of India?

(a) Maharashtra
(b) Mizoram
(c) Andhra Pradesh
(d) Goa

Q47. What is the name of the food pipe which takes food from the mouth to the stomach in humans?

(a) Bladder
(b) Oesophagus
(c) Intestine
(d) Spleen

Q48. In which modern-day region of India was the 'Panchala' Mahajanapada located?

(a) Punjab
(b) Andhra Pradesh
(c) Eastern Uttar Pradesh
(d) Western Uttar Pradesh

Q49. As per provisions of the Inter-State River Water Disputes (ISRWD) Act, 1956, the Tribunal shall consist of a Chairman and two other Members nominated by the _____.

(a) President of India
(b) Chief Minister of concerned States
(c) Central Government after consultation with State Governments
(d) Chief Justice of India

Q50. 'Titodo' is a traditional folk dance performed by unmarried people in which Indian state?

(a) Gujarat
(b) Karnataka
(c) Meghalaya
(d) West Bengal

Q51. The 'Saptak Music Festival' in Gujarat is celebrated in which city?

(a) Surat
(b) Rajkot
(c) Vadodara
(d) Ahmedabad

Q52. Which of the following approach of human development is associated with Amartya Sen?

(a) Capability Approach
(b) Basic Needs Approach
(c) Welfare Approach
(d) Income Approach

Q53. The North-Eastern Space Applications Centre is in which of the following state?

(a) Meghalaya
(b) Assam
(c) Nagaland

YourMockTest.com — Free Study Material

(d) Arunachal Pradesh

Q54. As per Census 2011, which of the following states experienced a decline in rural population compared to 2001?

(a) Kerala
(b) Gujarat
(c) Karnataka
(d) Andhra Pradesh

Q55. In May 2025, which country launched the first AI satellites to build the world's first supercomputer in orbit?

(a) India
(b) China
(c) USA
(d) South Korea

Q56. What of the following is an example of object moving under uniform circular motion?

I. Motion of the Moon
II. Motion of the Earth

(a) Only I
(b) Only II
(c) Both I and II
(d) Neither I nor II

Q57. What is the total length (in km) of National Waterway-2?

(a) 451
(b) 891
(c) 1108
(d) 1720

Q58. The 7th Asia-Pacific Regional Committee of the International Solar Alliance was held at _____.

(a) Bangkok
(b) New Delhi
(c) Colombo
(d) Male

Q59. The National Green Hydrogen Mission in India aims to achieve a targeted production capacity of ____ million tonnes per annum green hydrogen by 2030.

(a) 2
(b) 3
(c) 5
(d) 7

Q60. Who is the author of the book 'India Divided'?

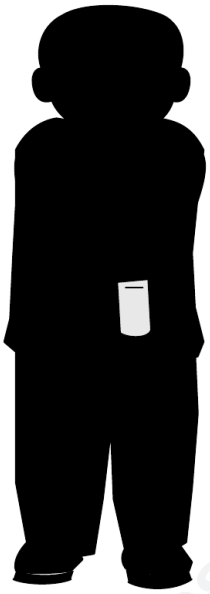
(a) Jawaharlal Nehru
(b) Rajendra Prasad
(c) B.R. Ambedkar
(d) Vallabhbhai Patel

Q61. In Gymnastics, women have ____ apparatus used during competitions.

(a) 2
(b) 4
(c) 6
(d) 8

YourMockTest.com — Free Study Material

Q62. The image represents one of the signs given by umpire in the game of cricket. What does it call?



(a) Decision change
(b) Four
(c) Dead ball
(d) Short run

Q63. Which Mughal emperor began the architectural development of Fatehpur Sikri?

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

Q64. In Haripala's "Sangeeta Sudhakara", written in the ____ century A.D., the terms Carnatic and Hindustani are found for the first time.

(a) 6
(b) 14
(c) 18
(d) 8

Q65. Who was the first Indian astronaut to travel into space?

(a) Rakesh Sharma
(b) Raja Chari
(c) Sirisha Bandla
(d) Ravish Malhotra

Q66. Which of the following idiom given in the alternatives has the meaning?
Slightly unwell or in low spirits.

(a) Keep a weather eye out
(b) Weather the storm
(c) Break in the weather
(d) Under the weather

Q67. From the alternatives given below, select the correct meaning of the idiom.
Wear out one's welcome.

(a) To greet someone very happily and eagerly; to give someone a very warm, enthusiastic welcome
(b) To remain a guest in a place, especially someone's home, for too long, to the point where the host no longer wishes one to stay

YourMockTest.com — Free Study Material

(c) To welcome one with an extensive or elaborate display of friendliness and hospitality
(d) An expression of glib commiseration used when one shares some unpleasant condition or situation with one or more other people

Q68. Choose the correctly spelt word from the given options.
(a) Existance
(b) Existense
(c) Existence
(d) Existanse

Q69. Select the option with the correct spelling that can replace the underlined word in the given sentence. If the spelling in the given sentence is already correct, choose Option “No replacement required”.
Her ostentateous jewellery drew attention at the party, though it lacked genuine elegance.
(a) ostentatius
(b) ostentatious
(c) ostentious
(d) No replacement required

Q70. There are four underlined words in the sentence given below. One of them is misspelt. Choose the option with the misspelt word.
The Royal Academy urges governerce for data centres to report energy, water use, and carbon emissions, ensuring accountable AI deployments.
(a) emissions
(b) accountable
(c) governerce
(d) deployments

Q71. Choose the misspelt word from the given options.
(a) Credible
(b) Inevitible
(c) Invisible
(d) Plausible

Q72. Choose the word that is most opposite in meaning to “delicious”.
(a) Tasty
(b) Delectable
(c) Distasteful
(d) Savory

Q73. Choose the word that is the antonym of Hardly ever.
(a) Occasionally
(b) Rarely
(c) Seldom
(d) Frequently

Q74. Choose the correct word to complete the sentence.
The deer ran swiftly across the open _____.
(a) plane
(b) plain
(c) plan
(d) plaid

YourMockTest.com — Free Study Material

Q75. Choose the most suitable one-word substitution for the following.

The person who cuts precious stones.

(a) Gemologist
(b) Polyglot
(c) Lapidist
(d) Drover

Q76. Choose the most suitable one-word substitution for the following.

The study of mountains.

(a) Mycology
(b) Entomology
(c) Virology
(d) Orology

Q77. Which of the following options is the most suitable conversion of the following sentence into Passive Voice?

Will the committee approve the new policy tomorrow?

(a) Has the new policy been approved by the committee tomorrow?
(b) Will the new policy be approved by the committee tomorrow?
(c) Will the new policy be approving by the committee tomorrow?
(d) Was the new policy approved by the committee tomorrow?

Q78. Which of the following options is the most suitable conversion of the following sentence into Passive Voice?

Did the Romans defeat the Greeks?

(a) Was the Greeks defeated by the Romans?
(b) Did the Greeks defeated by the Romans?
(c) Are the Greeks defeated by the Romans?
(d) Were the Greeks defeated by the Romans?

Q79. Which of the following options is the most suitable conversion of the following sentence into active voice?

Were the examination papers being checked by the teachers until late at night?

(a) Are the teachers checking the examination papers until late at night?
(b) Were the teachers checking the examination papers until late at night?
(c) Did the teachers check the examination papers until late at night?
(d) Have the teachers checked the examination papers until late at night?

Q80. Which of the following options is the most suitable conversion of the following sentence into active voice?

Couldn’t the cancer be stopped from spreading further by the doctors?

(a) Couldn’t the doctors stop the cancer from spreading further?
(b) Can’t the doctors stop the cancer from spreading further?
(c) Won’t the doctors stop the cancer from spreading further?
(d) Shouldn’t the doctors stop the cancer from spreading further?

Q81. In the given question, a sentence is divided into four parts and given in the alternatives (A), (B), (C), and (D). There is an error in one part. Choose the alternative containing that part of the sentence that has the error. Choosing the alternative with the error will be the answer.

Let’s move all the books kept on this shelf on the upper one and make space for the new books purchased from the market today.

(a) Let's move all the books kept on this
(b) shelf on the upper one and
(c) make space for the new books
(d) purchased from the market today.

YourMockTest.com — Free Study Material

Q82. Select the correct alternative to fill in the blank with the correct preposition in the following sentence.

Thousands of students consume drugs _____ violation of the law.

(a) for
(b) of
(c) in
(d) by

Q83. Given below are six sentences taken from a paragraph. The first and the last sentences are numbered S1 and S2 and are placed in the first and last positions respectively and are fixed in their positions. The other four sentences between the first and last sentences are jumbled up and are numbered A, B, C, and D. Rearrange the jumbled sentences in a logical sequence keeping the unity and coherence of the paragraph intact. Choose the correct alternative that best describes the sequence.

S1. Do you see that man with the scarlet cloak, the white plume in his hat, and the gold-embroidered vest?

A. Well, that is the Marquis of Mascoso, lover of the widow, the Countess of Villapineda.

B. They say that before he began paying court to her, he had sought the hand of a very wealthy man's daughter, but the girl's father, who they say is a trifle close-fisted—but hush! Speaking of the devil—do you see that man closely wrapped in his cloak coming on foot under the arch of San Felipet?

C. Well, he is the father in question.

D. I mean the one just getting out of his litter and going to greet that lady—the one coming along after those four pages who are carrying torches?

S2. Everybody in Seville knows him on account of his immense fortune.

(a) DBAC
(b) CBDA
(c) DCBA
(d) DABC

Q84. Given below are six sentences taken from a paragraph. The first and the last sentences are numbered S1 and S2 and are placed in the first and last positions respectively and are fixed in their positions. The other four sentences between the first and last sentences are jumbled up and are numbered A, B, C, and D. Rearrange the jumbled sentences in a logical sequence keeping the unity and coherence of the paragraph intact. Choose the correct alternative that best describes the sequence.

S1. But the voice of Sofia did not change as she said these words.

A. Even this evening, passed alone with this strange girl, seemed to him something predestined and long awaited.

B. Her face wore such a frank expression, her tone was so simple, so pure, so convinced, that Roberto felt no surprise at hearing her discuss love with such sureness.

C. When they separated they gazed directly into each other's faces, as though they wished to be sure of recognizing each other again.

D. Nothing now surprised him; everything seemed natural, to be expected.

S2. Sofia held out her hand, Roberto took it and bowed over it; a portière fell heavily behind him.

(a) ACDB
(b) BDCA
(c) DACB
(d) BDAC

Q85. A part of the following sentence is underlined. Choose the option that can replace the underlined part to improve the sentence. If you feel Options A, B, or C do not improve the sentence, then choose Option D: "No improvement required."

We must take the bull by the head and resolve all pending issues if we want progress.

(a) take the bull by the tail
(b) pull the bull by its ears
(c) take the bull by the horns
(d) No improvement required

Directions

In the annals of human achievement, the development of the spaceship stands as a monumental testament to the ingenuity and perseverance of scientists. Unlike any other invention, spaceships have revolutionized our understanding of the cosmos, allowing us to venture beyond Earth's atmosphere and unlock the mysteries of the universe. These vehicles are not merely mechanical constructs but intricate systems composed of advanced technology, engineering precision, and sheer human determination.

Spaceships require a confluence of various scientific disciplines. Aerospace engineers meticulously design the structure, ensuring the spacecraft can withstand the extreme conditions of space, including vacuum, radiation, and temperature fluctuations. Astrophysicists provide crucial insights into celestial bodies and cosmic phenomena, guiding mission trajectories and objectives. Meanwhile, biologists study how living organisms can survive and adapt to the hostile environment beyond our planet, which is crucial for manned missions.

Scientists who work on spaceship development often grapple with challenges that extend beyond terrestrial experiences. The absence of gravity affects both the mechanical operations of the spacecraft and the physiological well-being of astronauts. Communication delays, sometimes spanning minutes, complicate real-time decision-making. Despite these formidable obstacles, the collective efforts of multidisciplinary teams have repeatedly demonstrated triumph over adversity, pushing the very boundaries of human exploration.

As humanity stands on the cusp of deeper interstellar journeys, the collaboration between centers of research, innovation, and space agencies worldwide is more vital than ever. These centers not only foster technological advancements but also cultivate the next generation of scientists who will carry the beacon of space exploration forward.

Q86. Choose the option that correctly fills in the blank in the sentence below.

'Scientists who work on spaceship development often _____ with challenges that extend beyond terrestrial experiences.'

(a) grappled
(b) grappling
(c) grapple
(d) grapples

Q87. Choose the correct form of the verb to fill in the blank in the sentence from the passage.

'The absence of gravity _____ both the mechanical operations of the spacecraft and the physiological well-being of astronauts.'

(a) affects
(b) affect
(c) were affecting
(d) affected

Q88. What does the word "confluence" mean in the passage?

(a) Separation
(b) Gathering or coming together
(c) Conflict
(d) Expansion

Q89. In the context of the passage, what does the term "formidable" most nearly mean?

(a) Easy to overcome
(b) Inspiring wonder or respect
(c) Difficult to deal with
(d) Small or insignificant

Q90. Which of the following best summarizes the main idea of the passage?

(a) Spaceships are simple machines designed only by aerospace engineers.
(b) The challenges faced by spaceship scientists are minimal due to advanced tech.
(c) The development of spaceships is a complex, collaborative effort involving multiple scientific fields to overcome extraordinary challenges.
(d) Human space exploration is limited and has not progressed due to difficulties.

ANSWER KEY

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

SOLUTIONS

Q1. Answer: (b) 106

Shortcut Trick

Solve the bracket and multiplication first: (35 + 17) × 2 = 52 × 2 = 104.

Group positive and negative terms: (96 + 58 + 104) − (63 + 89).

Total Positives = 258 | Total Negatives = 152.

Final Result = 258 − 152 = 106.

Therefore The correct answer is 106.

Alternate Method

Given: 96 + 58 − 63 + (35 + 17) × 2 − 89

Formula: Apply BODMAS Rule (Brackets, Orders, Division, Multiplication, Addition, Subtraction).

=> 96 + 58 − 63 + (52) × 2 − 89

=> 96 + 58 − 63 + 104 − 89

=> 154 − 63 + 104 − 89

=> 91 + 104 − 89

=> 195 − 89

=> 106

Therefore The correct answer is 106.

Additional Information

BODMAS Rule

It defines the order of operations: Brackets (), Orders (powers/roots), Division (÷), Multiplication (×), Addition (+), and Subtraction (−).

Grouping Technique

To avoid errors in long addition/subtraction strings, sum all positive numbers and all negative numbers separately, then find their difference.

Multiplication Priority

Always complete multiplication operations following brackets before moving to addition or subtraction to ensure calculation accuracy.

Q2. Answer: (c) 125

Shortcut Trick

Solve the operations in order: (Bracket), (Of), (Division), (Multiplication), (Addition/Subtraction).

Evaluate terms: (22 ÷ 2) = 11, 33 × 1 = 33, and 19 of 1 = 19.

The expression becomes: 72 + 28 − 11 + 33 + 19 − 16.

Group positive and negative terms: (72 + 28 + 33 + 19) − (11 + 16) = 152 − 27 = 125.

Therefore The correct answer is 125.

Alternate Method

YourMockTest.com – Free Study Material

Given: 72 + 28 − (22 ÷ 2) + 33 × 1 + 19 of 1 − 16

Formula Used: BODMAS Rule (Bracket, Of, Division, Multiplication, Addition, Subtraction)

=> 72 + 28 − 11 + 33 × 1 + 19 of 1 − 16 (Solving Bracket)

=> 72 + 28 − 11 + 33 × 1 + 19 − 16 (Solving 'Of' → 19 × 1)

=> 72 + 28 − 11 + 33 + 19 − 16 (Solving Multiplication → 33 × 1)

=> 100 − 11 + 33 + 19 − 16 (Addition from left)

=> 89 + 33 + 19 − 16

=> 122 + 19 − 16

=> 141 − 16

=> 125

Therefore The correct answer is 125.

Additional Information

BODMAS Rule

It defines the sequence of operations: Brackets (), Of (Orders/powers), Division (÷), Multiplication (×), Addition (+), and Subtraction (−).

Priority of 'Of'

The 'Of' operation is essentially multiplication but must be performed before division and after brackets.

Left-to-Right Rule

When operations of the same priority level (like Addition and Subtraction or Multiplication and Division) appear, they are solved from left to right.

Q3. Answer: (d) 30.95%

Given:

The line chart provides the monthly study hours for 6 students as follows:

Student	Study Hours (in a month)
ST1	65
ST2	126
ST3	135
ST4	148
ST5	165
ST6	95

Formula Used:

Percentage more = [(Higher Value − Lower Value) ÷ Lower Value] × 100

Calculation:

According to the chart,

=> Study hours of ST5 = 165

=> Study hours of ST2 = 126

=> Difference in study hours = 165 − 126 = 39

=> Percentage more = (39 ÷ 126) × 100

=> Percentage more = (13 ÷ 42) × 100

=> Percentage more = 1300 ÷ 42

=> Percentage more ≈ 30.95238%

=> Percentage more ≈ 30.95%

Therefore The correct answer is 30.95%.

Q4. Answer: (d) 33.33%

Given:

Subject	Number of Books (in degrees)
S1	54°

S2	126°
S3	72°
S4	36°
S5	48°
S6	24°
Total	360°

Total number of subjects = 6
Formula Used:
Sum of degrees for S3 and S5 = Degree of S3 + Degree of S5
Percentage = (Sum of degrees of specific subjects ÷ Total degrees in pie chart) × 100
Total degrees in a circle/pie chart = 360°
Calculation:
According to the data extracted from the pie chart,
=> Degree of books of subject S3 = 72°
=> Degree of books of subject S5 = 48°
=> Sum of degrees for S3 and S5 = 72° + 48° = 120°
=> Total degree for all 6 subjects = 360°
=> Required percentage = (120° ÷ 360°) × 100
=> Required percentage = (1 ÷ 3) × 100
=> Required percentage = 33.333...% ≈ 33.33%
Therefore The correct answer is 33.33%.

Q5. Answer: (a) 8600

Given:

Article	Production Percentage (%)
P1	20%
P2	10%
P3	15%
P4	12%
P5	43%

Total production of P1, P2 and P3 = 9000
Formula Used:
Combined Percentage = Percentage of P1 + Percentage of P2 + Percentage of P3
Production of P5 = (Total production of given group ÷ Combined percentage of group) × Percentage of P5
Calculation:
According to the question,
=> Total percentage of P1, P2 and P3 = 20% + 10% + 15% = 45%
=> Since 45% of total production corresponds to 9000 units,
=> 1% of total production = 9000 ÷ 45
=> 1% of total production = 200
=> Production of P5 is given as 43%
=> Production of P5 = 43 × 200
=> Production of P5 = 8600
Therefore The correct answer is 8600.

Q6. Answer: (b) M3

Given:

Museum	Number of Visitors
M1	800
M2	950
M3	600
M4	700
M5	850

Formula Used:
Minimum Value = Smallest numerical value in the given dataset.
Calculation:
According to the bar graph, the number of visitors for each museum are:
=> Visitors to Museum M1 = 800
=> Visitors to Museum M2 = 950
=> Visitors to Museum M3 = 600
=> Visitors to Museum M4 = 700
=> Visitors to Museum M5 = 850
Now, compare the values to find the minimum:
=> 600 < 700 < 800 < 850 < 950
=> The smallest value is 600.
=> The museum with 600 visitors is M3.
Therefore The correct answer is M3.

Q7. Answer: (a) 33, 11

Shortcut Trick
Product of ratio parts = 3 × 2 = 6 units².
Given product = 726 => 6 units² = 726.
1 unit² = 726 ÷ 6 = 121 => 1 unit = √121 = 11.
Larger number = 3 units = 3 × 11 = 33.
Difference = (3 − 2) units = 1 unit = 11.
Therefore The correct answer is 33, 11.
Alternate Method
Given: Ratio of numbers = 3 : 2, Product = 726.
Formula: Let the numbers be 3x and 2x.
=> (3x) × (2x) = 726
=> $6x^2 = 726$
=> $x^2 = 726 \div 6$
=> $x^2 = 121$
=> x = √121 = 11
=> Larger number = 3x = 3 × 11 = 33
=> Smaller number = 2x = 2 × 11 = 22
=> Difference = 33 − 22 = 11
Therefore The correct answer is 33, 11.
Additional Information
Ratio Multiplier Property
When two numbers are in ratio a:b, they can be represented as ax and bx, where x is the highest common factor (HCF).
Product of Ratios
If the product of two numbers is P and the ratio is a:b, then x = √(P ÷ (a × b)).
Duplicate Ratio
The duplicate ratio of a:b is $a^2 : b^2$, which often appears in problems involving areas or products.

Q8. Answer: (d) 10√2 cm, 10 cm

Shortcut Trick

For a chord subtending 90° at the center, radius (r) = Chord / √2.

=> Radius (r) = 20 / √2 = 10√2 cm.

Distance (d) of the chord from center = Chord / 2 (property of right isosceles triangle altitude).

=> Distance (d) = 20 / 2 = 10 cm.

Therefore The correct answer is 10√2 cm, 10 cm.

Alternate Method

Given:

Length of chord (AB) = 20 cm

Angle at center (θ) = 90°

Formula Used:

Pythagoras Theorem: $r^2 + r^2 = AB^2$

Distance from center (d) = $\sqrt{(r^2 - (AB/2)^2)}$

Calculations:

In triangle OAB, OA = OB = r and angle AOB = 90°

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

=> $r^2 + r^2 = 20^2$

=> $2r^2 = 400$

=> $r^2 = 200$

=> $r = \sqrt{200} = 10\sqrt{2}$ cm

Let OM (d) be the distance from center to the chord AB.

=> $d = \sqrt{(r^2 - (AB/2)^2)}$

=> $d = \sqrt{(200 - (20/2)^2)}$

=> $d = \sqrt{(200 - 100)} = \sqrt{100}$

=> d = 10 cm

Therefore The correct answer is 10√2 cm, 10 cm.

Additional Information

Chord Length Formula

The length of a chord $L = 2r \times \sin(\theta/2)$, where r is the radius and θ is the angle subtended at the center.

Perpendicular Bisector

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

Right Isosceles Triangle Property

In a right-angled isosceles triangle, the altitude to the hypotenuse is exactly half the length of the hypotenuse.

Q9. Answer: (c) 5

Shortcut Trick

Group the integers and fractions separately: (7 + 6 − 3 − 5) + (3/5 + 2/5 − 1/5 − 4/5).

Sum of integers = 13 − 8 = 5.

Sum of fractions = 5/5 − 5/5 = 0.

Total value = 5 + 0 = 5.

Therefore The correct answer is 5.

Alternate Method

Given: 7 3/5 + 6 2/5 − 3 1/5 − 5 4/5

Method: Convert mixed fractions into improper fractions.

=> 7 3/5 = (7 × 5 + 3) ÷ 5 = 38/5

=> 6 2/5 = (6 × 5 + 2) ÷ 5 = 32/5

=> 3 1/5 = (3 × 5 + 1) ÷ 5 = 16/5

=> 5 4/5 = (5 × 5 + 4) ÷ 5 = 29/5

=> Result = (38/5) + (32/5) − (16/5) − (29/5)

=> Result = (38 + 32 − 16 − 29) ÷ 5

=> Result = (70 − 45) ÷ 5 = 25 ÷ 5 = 5

YourMockTest.com — Free Study Material

Therefore The correct answer is 5.

Additional Information

Mixed Fractions

A mixed fraction consists of an integer and a proper fraction, such as A b/c = (A × c + b) ÷ c.

Like Fractions

Fractions with the same denominator are called like fractions; their numerators can be added or subtracted directly.

BODMAS Rule

Simplification always follows the priority order: Brackets, Orders, Division, Multiplication, Addition, and Subtraction.

Q10. Answer: (b) 1/2 + 3/8

Shortcut Trick

To find the sum 7/8, convert all fractions to have a common denominator of 8.

Option 1: 1/8 + 4/8 = 5/8

Option 2: 4/8 + 3/8 = 7/8

Option 3: 4/8 + 2/8 = 6/8

Option 4: 6/8 + 2/8 = 8/8

Therefore The correct answer is 1/2 + 3/8.

Alternate Method

Given: Target sum = 7/8

Formula Used: Sum of fractions = (Numerator1 + Numerator2) ÷ Common Denominator

Checking Option (2): 1/2 + 3/8

=> To add unlike fractions, find the LCM of denominators (2 and 8).

=> LCM(2, 8) = 8

=> Convert 1/2 to an equivalent fraction with denominator 8: (1 × 4) ÷ (2 × 4) = 4/8

=> Now, add the like fractions: 4/8 + 3/8

=> Sum = (4 + 3) ÷ 8 = 7/8

Therefore The correct answer is 1/2 + 3/8.

Additional Information

Like and Unlike Fractions

Fractions with the same denominator are "Like Fractions" (e.g., 3/8, 5/8). Fractions with different denominators are "Unlike Fractions" (e.g., 1/2, 3/8).

Equivalent Fractions

Fractions that represent the same value even though they look different, found by multiplying/dividing numerator and denominator by the same number: a/b = (a × n)/(b × n).

LCM Method for Addition

To add unlike fractions, find the Least Common Multiple (LCM) of the denominators to convert them into like fractions before adding.

Q11. Answer: (b) 15

Shortcut Trick

For consecutive odd or even numbers, the difference of their squares is always 4 × (the middle number).

Middle Number = 64 ÷ 4 = 16

The numbers surrounding 16 are 15 and 17.

Smaller Number = 15

Therefore The correct answer is 15.

Alternate Method

Given:

Difference of squares of two consecutive odd numbers = 64

Formula Used:

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

Let the two consecutive odd numbers be n and n + 2.

=> $(n + 2)^2 - n^2 = 64$

=> $(n^2 + 4n + 4) - n^2 = 64$

=> 4n + 4 = 64
=> 4n = 64 − 4
=> 4n = 60
=> n = 60 ÷ 4
=> n = 15
Therefore The correct answer is 15.
Additional Information
Difference of Squares Property
For any two numbers a and b, $a^2 - b^2 = (a - b)(a + b)$. If the numbers are consecutive odd/even, (a − b) is always 2.
Sum of First n Odd Numbers
The sum of the first n consecutive odd numbers is given by the formula n^2.
Arithmetic Mean of Consecutive Odd Numbers
The arithmetic mean (average) of two consecutive odd numbers x and x + 2 is the even number (x + 1) lying between them.

Q12. Answer: (c) 7/3

Shortcut Trick
Simplify each term by factoring out the largest perfect square.
√8 = 2√2, √50 = 5√2, and √18 = 3√2.
The expression becomes: (2√2 + 5√2) ÷ 3√2.
Summing the numerator: 7√2 ÷ 3√2 = 7/3.
Therefore The correct answer is 7/3.
Alternate Method
Given expression: (√8 + √50) ÷ √18
=> (√(4 × 2) + √(25 × 2)) ÷ √(9 × 2)
=> (2√2 + 5√2) ÷ 3√2
=> (2 + 5) × √2 ÷ (3 × √2)
=> 7√2 ÷ 3√2
=> 7/3
Therefore The correct answer is 7/3.
Additional Information
Simplifying Radicals
A surd √x can be simplified if x has a perfect square factor 'a^2', such that $\sqrt{(a^2 \times b)} = a\sqrt{b}$.
Addition of Like Surds
Surds can be added or subtracted only if they have the same radicand (the number inside the root): $m\sqrt{x} + n\sqrt{x} = (m + n)\sqrt{x}$.
Product Property of Radicals
For any non-negative numbers a and b, the square root of their product is equal to the product of their square roots: $\sqrt{(a \times b)} = \sqrt{a} \times \sqrt{b}$.

Q13. Answer: (b) 46

Shortcut Trick
For conjugate surd pairs of the form $x + \sqrt{y}$ and $x - \sqrt{y}$, the sum of squares is $2(x^2 + y)$.
Here, x = 4 and y = 7.
$a^2 + b^2 = 2 \times (4^2 + 7) = 2 \times (16 + 7) = 2 \times 23 = 46$.
Therefore The correct answer is 46.
Alternate Method
Given: $a = 4 + \sqrt{7}$ and $b = 4 - \sqrt{7}$
Formula used: $a^2 + b^2 = (a + b)^2 - 2ab$
=> a + b = (4 + √7) + (4 − √7) = 4 + 4 = 8
=> ab = (4 + √7)(4 − √7)
=> $ab = 4^2 - (\sqrt{7})^2 = 16 - 7 = 9$
=> $a^2 + b^2 = (8)^2 - 2(9)$
=> $a^2 + b^2 = 64 - 18 = 46$

YourMockTest.com — Free Study Material

Therefore The correct answer is 46.

Additional Information

Sum of Squares Identity

For any two numbers x and y, the sum of their squares is $x^2 + y^2 = (x + y)^2 - 2xy$ or $x^2 + y^2 = (x - y)^2 + 2xy$.

Conjugate Surds Property

The product of two conjugate surds $(x + \sqrt{y})$ and $(x - \sqrt{y})$ is always a rational number given by $x^2 - y$.

Square of Binomial with Surds

The expression $(x + \sqrt{y})^2$ expands to $x^2 + y + 2x\sqrt{y}$, and $(x - \sqrt{y})^2$ expands to $x^2 + y - 2x\sqrt{y}$.

Q14. Answer: (b) 5237

Shortcut Trick

Any number divisible by 8 must be an even number because 8 is even.

Check the last digit of each option: 2736 (6), 5237 (7), 4360 (0), 5536 (6).

Since 5237 is an odd number, it cannot be divided by 8.

Therefore The correct answer is 5237.

Alternate Method

Given Numbers: 2736, 5237, 4360, 5536

Rule: A number is divisible by 8 if its last three digits are divisible by 8.

=> For 2736: Last three digits are 736. 736 ÷ 8 = 92 (Divisible)

=> For 5237: Last three digits are 237. 237 ÷ 8 = 29.625 (Not Divisible)

=> For 4360: Last three digits are 360. 360 ÷ 8 = 45 (Divisible)

=> For 5536: Last three digits are 536. 536 ÷ 8 = 67 (Divisible)

=> Only 5237 fails the divisibility test for 8.

Therefore The correct answer is 5237.

Additional Information

Divisibility by 2^n

A number is divisible by 2^n if its last n digits are divisible by 2^n (e.g., last 2 digits for 4, last 4 digits for 16).

Divisibility by 3 and 9

A number is divisible by 3 or 9 if the sum of its digits is divisible by 3 or 9 respectively.

Divisibility by 11

A number is divisible by 11 if the difference between the sum of digits at odd places and even places is 0 or a multiple of 11.

Q15. Answer: (c) 4567

Shortcut Trick

Divisibility by 3: Sum of digits must be divisible by 3.

Divisibility by 11: (Sum of odd-position digits) − (Sum of even-position digits) = 0 or multiple of 11.

Checking 4567: Sum = 4 + 5 + 6 + 7 = 22 (Not divisible by 3).

Checking 11 rule for 4567: (4 + 6) − (5 + 7) = 10 − 12 = −2 (Not divisible by 11).

Remaining options 3234, 2871, and 3003 are all divisible by both 3 and 11.

Therefore The correct answer is 4567.

Alternate Method

Given Numbers: 3234, 2871, 4567, 3003

Testing Divisibility for each option:

1) 3234:

=> Sum of digits = 3 + 2 + 3 + 4 = 12 (12 ÷ 3 = 4, so divisible by 3)

=> 11 rule: (3 + 3) − (2 + 4) = 6 − 6 = 0 (Divisible by 11)

2) 2871:

=> Sum of digits = 2 + 8 + 7 + 1 = 18 (18 ÷ 3 = 6, so divisible by 3)

=> 11 rule: (2 + 7) − (8 + 1) = 9 − 9 = 0 (Divisible by 11)

3) 4567:

=> Sum of digits = 4 + 5 + 6 + 7 = 22 (Not divisible by 3)

=> 11 rule: (4 + 6) − (5 + 7) = 10 − 12 = −2 (Not divisible by 11)

YourMockTest.com — Free Study Material

4) 3003:
=> Sum of digits = 3 + 0 + 0 + 3 = 6 (Divisible by 3)
=> 11 rule: (3 + 0) − (0 + 3) = 0 (Divisible by 11)
Therefore The correct answer is 4567.
Additional Information
Divisibility by 9
A number is divisible by 9 if the sum of its digits is divisible by 9.
Divisibility by 4
A number is divisible by 4 if the last two digits of the number are divisible by 4.
Divisibility by 6
A number is divisible by 6 if it is divisible by both 2 (ends in even digit) and 3 (sum of digits is divisible by 3).

Q16. Answer: (c) 68

Shortcut Trick
Average of any consecutive series = (First term + Last term) ÷ 2
Given: Average = 44, First term = 20, Last term = N
44 = (20 + N) ÷ 2
88 = 20 + N => N = 68
Therefore The correct answer is 68.
Alternate Method
Given:
First natural number (a) = 20
Last natural number (l) = N
Average of the series = 44
Formula:
Average of an Arithmetic Progression = (First term + Last term) ÷ 2
Consecutive natural numbers form an Arithmetic Progression with common difference 1.
=> Average = (20 + N) ÷ 2
=> 44 = (20 + N) ÷ 2
=> 44 × 2 = 20 + N
=> 88 = 20 + N
=> N = 88 − 20
=> N = 68
Therefore The correct answer is 68.
Additional Information
Average of First n Natural Numbers
The average of the first n natural numbers (starting from 1) is given by (n + 1) ÷ 2.
Sum of an Arithmetic Progression (AP)
The sum of n terms in an AP is S_n = (n ÷ 2) × (a + l), where a is the first term and l is the last term.
Number of terms in a Range
The number of consecutive natural numbers from 'a' to 'b' is calculated as (b − a + 1).

Q17. Answer: (a) 19

Shortcut Trick
If the average remains unchanged after some members leave, the average of those who left must equal the initial average.
Average of 28 boys = 23
New average of 26 boys = 23 (No change)
=> Sum of ages of 2 boys who left = 2 × 23 = 46 years
=> x + 27 = 46 => x = 46 − 27 = 19
Therefore The correct answer is 19.
Alternate Method
Given: Total boys = 28, Initial Average = 23 years, Ages of boys leaving = x and 27, Remaining boys = 26.

Formula: Total Sum = Average × Number of items

=> Total age of 28 boys = 28 × 23 = 644 years

=> Total age of 26 boys (after two leave) = 26 × 23 = 598 years

=> Sum of ages of the two boys who left = 644 − 598

=> x + 27 = 46

=> x = 46 − 27

=> x = 19

Therefore The correct answer is 19.

Additional Information

Average Change Rule

If the average remains constant after removal, the value of the removed item(s) must be equal to the average. Value = n × Average (where n is the number of items removed).

Effect of Departure on Average

If a person leaves and the average increases, the person's age < original average. If the average decreases, the person's age > original average.

Weighted Average Formula

Combined Average = (n1x1 + n2x2) ÷ (n1 + n2), where n represents counts and x represents individual averages.

Q18. Answer: (a) 120

Shortcut Trick

Draw a parallel line through point E to AB and CD.

The angle x is the sum of the supplements of the given angles.

Upper part of x = 180° − 100° = 80°

Lower part of x = 180° − 140° = 40°

x = 80° + 40° = 120°

Therefore The correct answer is 120°.

Alternate Method

Given: AB || CD, angle BAE = 100°, angle ECD = 140°

Formula Used: Sum of co-interior angles between two parallel lines = 180°.

=> Construct a line EF parallel to AB and CD passing through E.

=> AB || EF Therefore angle BAE + angle AEF = 180° (Co-interior angles)

=> 100° + angle AEF = 180° => angle AEF = 80°

=> CD || EF Therefore angle ECD + angle CEF = 180° (Co-interior angles)

=> 140° + angle CEF = 180° => angle CEF = 40°

=> x = angle AEF + angle CEF

=> x = 80° + 40° = 120°

Therefore The correct answer is 120°.

Additional Information

Co-interior Angles

When two parallel lines are cut by a transversal, the sum of the interior angles on the same side is always 180°.

Alternate Interior Angles

When a transversal intersects two parallel lines, the alternate interior angles formed are always equal.

Sum of Interior Angles

For a closed polygon with n sides, the sum of all interior angles is given by (n − 2) × 180°.

Q19. Answer: (d) 40

Shortcut Trick

Extend line CD to intersect segment AP at point E.

Since AB || CD, angle PEC = angle PAB = 70° (Corresponding angles).

Angle angle ECP = 180° − angle DCP = 180° − 110° = 70° (Linear pair).

In triangle PEC, angle APC = 180° − (angle PEC + angle ECP) = 180° − (70° + 70°) = 40°.

Therefore The correct answer is 40°.

Alternate Method

YourMockTest.com — Free Study Material

Given:

AB || CD

angle PAB = 70°

angle DCP = 110°

Formula Used:

1. Sum of angles in a triangle = 180°

2. Corresponding angles of parallel lines are equal.

3. Sum of angles on a straight line (linear pair) = 180°

Calculations:

=> Extend the line segment DC to the left to intersect AP at point E.

=> Since line AB is parallel to line DE, the corresponding angles must be equal.

=> angle PEC = angle PAB = 70°

=> Points E, C, and D lie on the same straight line.

=> angle ECP + angle DCP = 180°

=> angle ECP + 110° = 180°

=> angle ECP = 180° − 110° = 70°

=> In ΔPEC, the sum of all internal angles is 180°.

=> angle APC + angle PEC + angle ECP = 180°

=> angle APC + 70° + 70° = 180°

=> angle APC + 140° = 180°

=> angle APC = 180° − 140° = 40°

Therefore The correct answer is 40°.

Additional Information

Parallel Line Angles

When a transversal intersects two parallel lines, corresponding angles are equal, and consecutive interior angles are supplementary (sum = 180°).

Exterior Angle Theorem

The exterior angle of a triangle is equal to the sum of the two opposite interior angles. For ΔPEC, angle DCP would be equal to angle EPC + angle PEC if it were an exterior angle.

Angle Sum Property

In any Euclidean triangle, the sum of the three interior angles is always exactly 180°.

Q20. Answer: (b) 60

Shortcut Trick

Since PQ || BC, the corresponding angle angle ABC = angle APQ = 75°.

Also, the alternate interior angle angle PCB = angle CPQ = 45°.

In triangle PBC, the sum of all internal angles is 180°.

angle CPB = 180° − (angle ABC + angle PCB) = 180° − (75° + 45°) = 60°.

Therefore The correct answer is 60°.

Alternate Method

Given: PQ || BC, angle CPQ = 45°, angle APQ = 75°.

Formula Used: Linear pair axiom (Angles on a straight line sum to 180°).

=> In the figure, A, P, and B are points on a straight line segment AB.

=> The sum of angles at point P along the line AB is 180°.

=> angle APC = angle APQ + angle CPQ

=> angle APC = 75° + 45° = 120°

=> angle APC + angle CPB = 180° (Linear pair)

=> 120° + angle CPB = 180°

=> angle CPB = 180° − 120°

=> angle CPB = 60°

Therefore The correct answer is 60°.

Additional Information

Corresponding Angles

When two parallel lines are intersected by a transversal, the angles in matching corners are equal (angle APQ = angle ABC).

Alternate Interior Angles

When parallel lines are cut by a transversal, the angles on opposite sides of the transversal and inside the parallel lines are equal (angle CPQ = angle PCB).

Linear Pair Property

Angles that lie on a straight line always sum up to exactly 180°.

Q21. Answer: (b) HQ

The logic followed here is:

So, 'HQ' will replace the question mark in the given series.

Hence, the correct answer is "Option 2".

Q22. Answer: (d) DM

The logic followed here is:

So, 'DM' will replace the question mark in the given series.

Hence, the correct answer is "Option 4".

Q23. Answer: (d) PN

The Logic followed here is:

For, DY : BB

For, NO : LL

Now for, RM : ?

Therefore, the missing cluster is PN.

Hence, the correct answer is Option 4.

Q24. Answer: (b) (AB, XV, UP)

The Logic followed here is:

For, (TS, QM, NG)

For, (EQ, BK, YE)

Now checking the options:

Option 1: (YP, VM, SG)

Option 2: (AB, XV, UP)

Option 3: (GD, DA, YU)

Option 4: (JH, GE, XY)

Therefore, the set (AB, XV, UP) follows the same logic.

Hence, the correct answer is Option 2.

Q25. Answer: (c) 13

The logic followed here is:

Given: September 1, 2021 was Wednesday.

September 2021 had 30 days.

Thursdays
2
9
16
23
30

Total Thursdays = 5

Saturdays
4

11
18
25

Total Saturdays = 4

Sundays
5
12
19
26

Total Sundays = 4

Day	**Count**
Thursdays	5
Saturdays	4
Sundays	4

Total = 5 + 4 + 4 = 13

Hence, the correct answer is "Option 3".

Q26. Answer: (c) 7

The logic followed here is:

Given: February 1, 2024 was Thursday.

2024 is a leap year, so February has 29 days.

Month	**Days**	**Odd Days**
February	29	1
March	31	3
April	30	2
May	31	3
June	30	2

Total odd days = 1 + 3 + 2 + 3 + 2 = 11

11 ÷ 7 = 4 odd days

So, Thursday + 4 days = Monday

Therefore, July 1, 2024 was Monday.

Date	**Day**
July 1	Monday
July 2	Tuesday
July 3	Wednesday
July 4	Thursday
July 5	Friday
July 6	Saturday
July 7	Sunday

Therefore, the first Sunday of July 2024 was on 7th July.

Hence, the correct answer is "Option 3".

YourMockTest.com — Free Study Material

Q27. Answer: (d) Sunday

The logic followed here is:

Given: January 1, 1961 was Sunday.

1961 was an ordinary year.

Since, an ordinary year has 365 days:

365 ÷ 7 = 52 weeks and 1 odd day

So, the last day shifts by 1 day from Sunday.

Therefore, December 31, 1961 was Sunday.

Hence, the correct answer is "Option 4".

Q28. Answer: (b) 3

The logic followed here is:

Given:

Runs of B are less than Q but more than C.

So, the order is: Q > B > C

Runs of L are more than R but less than C.

So, C > L > R

Combining both conditions: Q > B > C > L > R

Position	1st	2nd	3rd	4th	5th
Boy	Q	B	C	L	R

Boys who scored more runs than L are: Q, B and C

Thus, Count = 3

Hence, the correct answer is Option 2.

Q29. Answer: (b) C and B

The logic followed here is:

Given: A, B, C, D, E, F and G are sitting around a circular table facing the centre.

F is the immediate neighbour of A, but is not to the immediate left of A.

G is not the immediate neighbour of F or C.

E is the immediate neighbour of A and D.

From the arrangement, the only pair that are immediate neighbours in all valid configurations is D and B.

Hence, the correct answer is Option 3.

Q30. Answer: (b) [figure]

The logic followed here is:

Logic: The elements from the first figure shift their structural positions to form the second figure by cycling through a specific layout pattern.

The first pair:

The first element of the bottom row moves to the first position of the top row.

The remaining elements of the top row shift one position to the right.

The last element of the top row moves to the last position of the bottom row.

The remaining elements of the bottom row shift one position to the left.

The second pair:

The first element of the bottom row (Circle) moves to the first position of the top row.

The remaining elements of the top row (S, T, Triangle) shift one position to the right.

The last element of the top row (P) moves to the last position of the bottom row.

The remaining elements of the bottom row (L, K, Square) shift one position to the left.

This gives the final arrangement as:

Top Row → Circle, S, T, Triangle

Bottom Row → L, K, Square, P

Hence, the correct answer is Option 2.

YourMockTest.com — Free Study Material

Q31. Answer: (d) [figure]

The logic followed here is:

Logic:

The symbol on the left side moves to the right side.

The symbol on the right side moves to the left side.

The letters inside the diamond are horizontally reversed.

The central diamond shape remains unchanged after reflection.

So,

Hence, the correct answer is Option 4.

Q32. Answer: (a) [figure]

The logic followed here is:

Logic: The diagonal elements shift cyclically in position and each element undergoes a specific vertical inversion or orientation change.

The first pair:

The Top-Left element moves to the Center and vertically inverts.

The Center element moves to the Bottom-Right with its shading/orientation changed.

The Bottom-Right element moves to the Top-Left and vertically inverts.

The second pair:

The Upward hollow arrow moves from Top-Left to Center and becomes downward.

The line with square head moves from Center to Bottom-Right and flips downward.

The line with circle head moves from Bottom-Right to Top-Left and flips upward.

Hence, the correct answer is Option 1.

Q33. Answer: (d) NG667

The Logic followed here is:

For, HS777 : EO377

For, LP987 : IL587

Now for, ? : KC267

Therefore, the missing cluster is NG667.

Hence, the correct answer is Option 4.

Q34. Answer: (b) BEX440

The Logic followed here is:

For, LPS120 : MQT480

For, KRT110 : LSU470

Now for, ADW80 ::?

Therefore, the intended answer is BEX440.

Hence, the correct answer is Option 2.

Q35. Answer: (d) 8536

The Logic followed here is:

Logic: The pattern observed is (First Number − 44) = Second Number

For, 9940 : 9896

9940 − 9896

= 44

9940 − 44

= 9896

For, 3420 : 3376

3420 − 3376

= 44

3420 − 44

= 3376

YourMockTest.com — Free Study Material

Now for, ? : 8492
Let the required number be X.
X − 44 = 8492
X = 8492 + 44
X = 8536
Therefore, the missing number is 8536.
Hence, the correct answer is Option 4.

Q36. Answer: (d) 564

The Logic followed here is:
Logic: The pattern observed is (First Number ÷ 2) + 2 = Second Number
For, 930 : 467
(930 ÷ 2) + 2
= 465 + 2
= 467
For, 1248 : 626
(1248 ÷ 2) + 2
= 624 + 2
= 626
Now for, ? : 284
Let the required number be X.
(X ÷ 2) + 2 = 284
X ÷ 2 = 284 − 2
X ÷ 2 = 282
X = 282 × 2
X = 564
Therefore, the missing number is 564.
Hence, the correct answer is Option 4.

Q37. Answer: (a) RPFJN

The logic followed here is:
Logic: The letters are shifted by the pattern +2, +4, +5, -4 and -5 respectively.
Here, PILED → RMQAY
Similarly, CYCLE → ECHHZ
Now, applying the same pattern to PLANS:
So, PLANS → RPFJN
Hence, the correct answer is "Option 1".

Q38. Answer: (c) 81

The logic followed here is:
Logic: Code = Sum of the positional values of the letters in the alphabet.
Given: HEIGHT →
H(8) + E(5) + I(9) + G(7) + H(8) + T(20) = 57
Since, the code is 103:
57 + 46 = 103
For, ALLOW →
A(1) + L(12) + L(12) + O(15) + W(23) = 63
63 + 7 = 70
Checking simple direct relation from options:
FAME →
F(6) + A(1) + M(13) + E(5) = 25
25 × 3 + 4 = 79
So, FAME → 79

YourMockTest.com — Free Study Material

Hence, the correct answer is Option 4.

Q39. Answer: (b) MW211

The term MW211 is the wrong term in the given series.

The correct answer is option 2.

Q40. Answer: (c) NPG335

The logic followed here is:

So, NPG335 will replace the question mark in the given series.

Hence, the correct answer is "Option 3".

Q41. Answer: (c) 1206-1210

The correct answer is 1206-1210.

Key Points

• Qutubuddin Aybak was the founder of the Slave Dynasty, also known as the Mamluk Dynasty, and he reigned as the first independent Sultan of Delhi from 1206 to 1210.

• Originally a slave of Muhammad Ghori, he rose through the ranks to become the Viceroy of Ghori's Indian territories following the Second Battle of Tarain in 1192.

• Upon the assassination of Muhammad Ghori in 1206, Aybak broke ties with the Ghurid Empire in Ghazni and was formally crowned in Lahore, marking the official beginning of the Delhi Sultanate.

• His brief four-year reign was primarily focused on administrative consolidation and establishing military control over Northern India to secure the new kingdom from external threats.

• His rule concluded abruptly in 1210 when he died from fatal injuries sustained during a fall from his horse while playing Chaugan, a medieval form of Polo, in Lahore.

Additional Information

• Architectural and Cultural Significance

• Qutub Minar: He laid the foundation of the Qutub Minar in Delhi in 1199 to honor the Sufi saint Qutubuddin Bakhtiyar Kaki, completing the first balcony.

• Early Mosques: He is credited with building the Quwat-ul-Islam mosque in Delhi and the Adhai Din Ka Jhonpra in Ajmer, which are among the earliest examples of Indo-Islamic architecture.

• Titles and Succession

• Lakh Baksh: Due to his immense generosity and the distribution of large sums of money in charity, he was popularly known by the title Lakh Baksh (Giver of Lakhs).

• Mamluk Legacy: The term Mamluk signifies a 'slave' who has attained high military status; his dynasty was continued by his son-in-law Shamsuddin Iltutmish, who is considered the greatest consolidator of the state.

Q42. Answer: (b) 1950

The correct answer is 1950.

Key Points

• The Nizam State Railway (NSR), which was previously known as the Nizam's Guaranteed State Railway (NGSR), was the railway company owned by the Princely State of Hyderabad under the Nizam.

• Following the integration of Hyderabad State into the Indian Union in September 1948 via Operation Polo, the administrative control of state assets gradually shifted to the central government.

• On April 1, 1950, the Nizam State Railway was officially taken over by the Government of India as part of the financial integration of princely states.

• This takeover facilitated the unification of various fragmented railway systems into a single national entity managed by the Ministry of Railways.

Additional Information

• Nizam's Guaranteed State Railway (NGSR):

• It was started in 1879 during the reign of Mir Mahbub Ali Khan, the 6th Nizam of Hyderabad.

• The railway network spanned across the Deccan region, connecting major cities like Hyderabad, Secunderabad, and Wadi to the rest of the Indian subcontinent.

• The Secunderabad Railway Station was established as the major hub and headquarters for this railway system.

• Formation of Railway Zones:

• Shortly after the takeover in 1950, the Nizam State Railway was merged with other lines to form the Central Railway zone on November 5, 1951.

YourMockTest.com — Free Study Material

• In 1966, the South Central Railway (SCR) zone was carved out, with Secunderabad as its headquarters, taking over much of the former NSR infrastructure.

Q43. Answer: (d) Punjab

The correct answer is Punjab.

Key Points

• The Khokhar tribe was an exceptionally influential and powerful ethnic group residing in the Punjab region during the 13th and 14th centuries.

• They were primarily located in the Salt Range and the areas between the Indus and Jhelum rivers, exerting significant control over the northwestern gateway to the Indian subcontinent.

• The tribe is historically noted for its fierce resistance against the Delhi Sultanate; they were involved in a major rebellion against Muhammad Ghori in 1205, which eventually led to his assassination in 1206.

• During the late 14th century, under the leadership of Sheikha Khokhar, the tribe became so dominant that they captured Lahore in 1394 and later confronted the invading forces of Amir Timur in 1398.

• Their political influence was characterized by their ability to challenge central authorities in Delhi and Multan, maintaining a degree of autonomy through their martial prowess and strategic geographic location.

Additional Information

• Succession of Tribal Power:

• Following the Khokhars, the Gakkhars emerged as the dominant tribe in the Punjab region.

• The Gakkhars established a closer relationship with the Mughal Empire; for instance, their chief Kamal Khan Gakkhar was honored with the rank of Mansabdar by Emperor Akbar.

• Strategic Importance of Punjab:

• As a frontier province, Punjab served as the primary buffer zone against Mongol and Central Asian invasions, making the local Khokhar and Gakkhar tribes vital to the defense and stability of the Delhi Sultanate and later the Mughal Empire.

• The region facilitated trade between Central Asia and the Indo-Gangetic Plain, which the Khokhar tribe often leveraged to consolidate their economic and military strength.

Q44. Answer: (c) 1956

The correct answer is 1956.

Key Points

• The Parliament of India passed the Life Insurance Corporation Act on 19 June 1956, which paved the way for the nationalization of the life insurance industry.

• The Life Insurance Corporation of India (LIC) was formally established on 1 September 1956, integrating the business of over 245 Indian and foreign insurers and provident societies.

• The nationalization was motivated by the need to protect the interests of policyholders from the mismanagement of private companies and to channel domestic savings into nation-building projects.

• The move ensured that life insurance services were extended to rural areas and the economically backward classes, fulfilling the social objective of providing financial security to the masses.

Additional Information

• Evolution of Insurance in India:

• 1949: This year is historically significant for the nationalization of the Reserve Bank of India (RBI), effective from 1 January 1949, transforming it from a private shareholders' bank to a state-owned institution.

• 1951: This year marked the launch of India's First Five-Year Plan, focusing on the development of the agricultural sector and price stability.

• 1961: The Income Tax Act, 1961 was enacted during this year, which continues to serve as the fundamental statute for tax administration in India.

• LIC Governance: LIC is headquartered in Mumbai and operates under the administrative control of the Ministry of Finance. Its motto, 'Yogakshemam Vahamyaham' (Your welfare is my responsibility), is derived from the Bhagavad Gita.

• General Insurance Nationalization: While life insurance was nationalized in 1956, the General Insurance business was later nationalized in 1972 through the General Insurance Business (Nationalisation) Act.

Q45. Answer: (c) Mahadayi

The correct answer is Mahadayi.

Key Points

• The Ganga River system is the largest in India, characterized by a vast network of both Himalayan (perennial) and Peninsular (non-perennial) tributaries.

• Ghaghara, Kosi, and Gandak are major left-bank tributaries of the Ganga. They originate in the Himalayas, specifically in the Tibet and Nepal regions, and flow southward to join the Ganga in the plains of Bihar.

• The Mahadayi River, also famously known as the Mandovi River, is not a part of the Ganga basin. It is a west-flowing river located in the Peninsular region of India.

• Originating in the Western Ghats of Karnataka, the Mahadayi flows through Goa and eventually empties into the Arabian Sea, whereas the Ganga and its tributaries drain into the Bay of Bengal.

Additional Information

• Ghaghara River:

• It is a trans-boundary river originating near Lake Mansarovar in Tibet.

• It is the largest tributary of the Ganga by volume and joins the main river at Chhapra, Bihar.

• Kosi River:

• Often termed the 'Sorrow of Bihar', it is known for its frequent course changes and heavy silt deposition.

• It is a major Himalayan tributary that meets the Ganga near Kursela.

• Gandak River:

• Formed by the confluence of the Kali and Trishuli rivers in Nepal, it is one of the important northern tributaries.

• It joins the Ganga at Sonepur, near Patna.

• Mahadayi River:

• It originates at Bhimgad in the Belagavi district of Karnataka.

• It is considered the lifeline of Goa and is famous for the Dudhsagar Falls located on its course.

Q46. Answer: (b) Mizoram

The correct answer is Mizoram.

Key Points

• The Tropic of Cancer is an imaginary line of latitude located at approximately 23°30′ N of the Equator.

• In India, the Tropic of Cancer passes through a total of eight states. Moving from West to East, these states are Gujarat, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal, Tripura, and Mizoram.

• The line divides the Indian subcontinent into almost two equal parts, significantly influencing the climatic patterns by separating the tropical zone in the south from the sub-tropical zone in the north.

• Among the given options, Mizoram is the only state situated on this latitude; specifically, the line passes through the southern part of the state near the capital, Aizawl.

Additional Information

• Geographical Exclusions:

• Maharashtra, Andhra Pradesh, and Goa are all located entirely to the south of the Tropic of Cancer and thus do not intersect with it.

• States like Odisha, Bihar, and Uttar Pradesh are also frequently confused in exams but do not lie on the 23.5° N latitude.

• Key Geographical Facts:

• The Mahi River is the only river in India that crosses the Tropic of Cancer twice, once in Madhya Pradesh and again in Gujarat.

• The city of Udaipur in Tripura is considered one of the closest cities to the Tropic of Cancer.

• Ranchi, the capital of Jharkhand, is the state capital located closest to this imaginary line.

Q47. Answer: (b) Oesophagus

The correct answer is Oesophagus.

Key Points

• The oesophagus, also known as the food pipe, is a fibromuscular tube approximately 25 centimetres long that connects the pharynx (throat) to the stomach.

• It is located posterior to the trachea (windpipe) and anterior to the vertebral column, passing through the diaphragm at the oesophageal hiatus.

• The movement of food through the oesophagus is achieved via peristalsis, which involves rhythmic, involuntary contractions and relaxations of the smooth muscles.

• The Lower Oesophageal Sphincter (LOS) is a specialized bundle of muscles at the bottom of the pipe that acts as a valve to prevent gastric acid and stomach contents from flowing backward.

• The primary function of this organ is transportation; it does not involve the chemical digestion of food, which primarily begins in the mouth and continues in the stomach.

Additional Information

• Bladder:

• A hollow, muscular sac in the pelvic cavity that serves as a reservoir for urine.

• It is part of the urinary system and is connected to the kidneys via ureters.

• Intestine:

• Consists of the Small Intestine, where most nutrient absorption occurs, and the Large Intestine, which absorbs water and forms feces.

• It represents the longest part of the alimentary canal, measuring several meters in length.

• Spleen:

• A vital organ of the lymphatic system located in the upper left quadrant of the abdomen.

• Its main roles include filtering the blood, recycling old red blood cells, and storing platelets and white blood cells.

Q48. Answer: (d) Western Uttar Pradesh

The correct answer is Western Uttar Pradesh.

Key Points

• The Panchala Mahajanapada was one of the sixteen great kingdoms (Mahajanapadas) of ancient India, flourishing between the 6th and 4th centuries BCE as documented in the Buddhist text Anguttara Nikaya.

• Geographically, it was situated in the Ganges-Yamuna Doab region, primarily covering the Rohilkhand division and parts of the Central Doab in modern-day Western Uttar Pradesh.

• The kingdom was divided into two distinct parts by the Ganges River: Uttara-Panchala (Northern Panchala) and Dakshina-Panchala (Southern Panchala).

• The capital of Northern Panchala was Ahichchhatra (located in the present-day Bareilly district), while the capital of Southern Panchala was Kampilya (located in the present-day Farrukhabad district).

• It was bordered by the Kuru Mahajanapada to the west, the Kosala Mahajanapada to the east, and the Ganges River to the south.

• In the ancient Indian epic Mahabharata, the character Draupadi is referred to as Panchali, signifying her origin as the princess of this kingdom.

Additional Information

• Mahajanapadas in Other Regions:

• Andhra Pradesh: The Assaka (or Asmaka) Mahajanapada was the only one located in South India (Dakshinapatha), situated on the banks of the Godavari River.

• Eastern Uttar Pradesh: This region was the heartland of the Kashi (capital Varanasi) and Kosala (capital Shravasti) Mahajanapadas.

• Punjab: The northwestern regions, including parts of modern Punjab and Afghanistan, were associated with the Gandhara (capital Taxila) and Kamboja Mahajanapadas.

• Political Transformation: While initially a monarchy, Panchala eventually transitioned into a Gana-Sangha (republican confederacy) form of government.

Q49. Answer: (d) Chief Justice of India

The correct answer is Chief Justice of India.

Key Points

• The Inter-State River Water Disputes (ISRWD) Act, 1956 is a specialized legislation enacted by the Parliament of India under the provisions of Article 262 of the Indian Constitution to resolve water-sharing conflicts.

• According to Section 4(2) of the Act, a Tribunal established for the adjudication of a water dispute must consist of a Chairman and two other members.

• The Chief Justice of India (CJI) is the sole authority empowered to nominate these three members. The nominees must be sitting Judges of the Supreme Court or a High Court at the time of their nomination.

• The Central Government is responsible for the formal constitution of the Tribunal via notification in the Official Gazette, but it does not have the power to select or nominate the judicial members itself.

• This mechanism ensures Judicial Independence and impartiality in the adjudication process, as the disputes involve sovereign claims of different State Governments over natural resources.

Additional Information

• Article 262 of the Constitution: This article provides that neither the Supreme Court nor any other court shall exercise jurisdiction in respect of any such dispute or complaint that is referred to a Tribunal under the ISRWD Act.

• Finality of Awards: The decision rendered by the Tribunal, once published in the Official Gazette by the Central Government, has the same force and effect as an order or decree of the Supreme Court.

• Entities in Options:

• President of India: While the President appoints judges to the Supreme Court and High Courts under Article 124 and Article 217, the specific nomination for this ad-hoc Tribunal is statutory and assigned to the CJI.

• Central Government: Its role is limited to forming the opinion that a dispute cannot be settled through negotiations and subsequently notifying the establishment of the Tribunal under Section 4(1).

• Chief Ministers: Represent the State Governments which are the litigants in the dispute; hence, they are excluded from the nomination process to prevent bias or Conflict of Interest.

Q50. Answer: (a) Gujarat

The correct answer is Gujarat.

Key Points

• Titodo is a traditional and energetic folk dance native to the state of Gujarat.

• It is specifically performed by unmarried youth, including both young men and women, often during social gatherings and festive celebrations.

• The dance is a variant of the broader Raas-Garba tradition and is characterized by synchronized rhythmic clapping and circular footwork.

• The performance typically takes place during the Navratri festival or local community fairs, serving as a medium for cultural expression and social interaction among the youth.

• Music for the Titodo is traditionally provided by instruments like the Dhol (drum) and Manjira (cymbals), accompanied by folk songs that celebrate the spirit of Saurashtra and Kutch regions.

Additional Information

• Gujarat:

• Garba: A devotional dance performed in a circle around a Garbha Deep or an image of Goddess Durga.

• Tippani: Originates from the Chorwad region, traditionally performed by women using long sticks to beat the floor.

• Padhar: A unique dance of the Padhar community reflecting the lifestyle of fishermen and the movement of boats.

• Karnataka:

• Yakshagana: A grand traditional theater form involving dance, music, dialogue, and elaborate costumes depicting epic stories.

• Dollu Kunitha: A popular drum dance performed by the men of the Kuruba shepherd community.

• Meghalaya:

• Wangala: Known as the Hundred Drums Festival, it is a harvest dance of the Garo tribe.

• Nongkrem: A major religious festival of the Khasi people involving traditional dances to ensure a bountiful harvest.

• West Bengal:

• Chhau: A martial folk dance featuring masks and acrobatic movements, depicting themes from the Ramayana and Mahabharata.

• Brita: Also known as Vrita, it is a devotional dance performed by women seeking blessings for children or health.

Q51. Answer: (d) Ahmedabad

The correct answer is Ahmedabad.

Key Points

• The Saptak Annual Festival of Music is a prestigious Hindustani classical music festival held annually in Ahmedabad, Gujarat.

• Established in 1980, the festival was inaugurated by the legendary sitar maestro Pandit Ravi Shankar and founded by Pandit Nandan Mehta along with his wife Manju Mehta.

• It is traditionally organized by the Saptak School of Music and spans the first eleven to thirteen days of January, making it one of the longest music festivals in the world.

• The festival serves as a cultural platform where legendary maestros and emerging artists perform various forms of classical music, including vocal, instrumental, and Kathak dance.

• The event is dedicated to the memory of Pandit Kishan Maharaj, the renowned Tabla maestro of the Banaras Gharana, who was a mentor to the founders.

Additional Information

• Ahmedabad (The Venue):

• It is recognized as a UNESCO World Heritage City and is a major center for arts and commerce in Western India.

• The city also hosts the International Kite Festival (Uttarayan) every year in January.

• Other Musical Traditions in Gujarat:

• Tana-Riri Festival: Held in Vadnagar, it honors the 16th-century sisters Tana and Riri who excelled in the Malhar Raga.

• Modhera Dance Festival: An annual festival of classical dance performed at the historic Sun Temple in Modhera.

• Significance of Saptak:

• Unlike many commercial events, Saptak maintains a purely classical focus, often featuring rare instruments like the Sarangi and Vichitra Veena.

• It has hosted world-renowned artists such as Ustad Zakir Hussain, Pandit Hariprasad Chaurasia, and Pandit Shivkumar Sharma.

Q52. Answer: (a) Capability Approach

The correct answer is Capability Approach.

Key Points

• The Capability Approach is a theoretical framework for human development pioneered by the Nobel Laureate Amartya Sen during the 1980s.

• It shifts the focus of development from economic growth and income levels to the actual freedoms and opportunities individuals have to lead the lives they value.

• According to Amartya Sen, development should be seen as the expansion of human capabilities, which refers to the various combinations of 'functionings' (beings and doings) that a person can achieve.

• This approach was instrumental in the creation of the Human Development Index (HDI), as it provided the philosophical backbone for moving beyond GDP as a measure of progress.

• It emphasizes that poverty is not just a lack of income but a capability deprivation, such as the inability to be healthy, well-nourished, or educated.

Additional Information

• Basic Needs Approach:

• Initially proposed by the International Labour Organization (ILO).

• Focuses on providing six essential requirements: health, education, food, water supply, sanitation, and housing.

• Welfare Approach:

• Treats humans as passive beneficiaries of development rather than active participants.

• It advocates for high government expenditure on social sectors like healthcare and education to improve living standards.

• Income Approach:

• The most traditional and oldest approach to human development.

• It links the level of development directly to the level of income, assuming higher income allows for greater freedom.

Q53. Answer: (a) Meghalaya

The correct answer is Meghalaya.

Key Points

• The North-Eastern Space Applications Centre (NESAC) is a specialized autonomous institution located in Umiam, near Shillong, in the state of Meghalaya.

• It was established on September 5, 2000, as a joint initiative of the Department of Space (DOS) and the North Eastern Council (NEC).

• The centre is dedicated to providing space technology support for the developmental activities across the North Eastern Region (NER) of India.

• It utilizes Satellite Remote Sensing and Geographic Information Systems (GIS) to assist in natural resource management, infrastructure planning, and health services.

• A primary objective of the centre is to offer Disaster Management Support for regional issues like floods, landslides, and forest fires.

Additional Information

• Department of Space (DOS):

• It is the government body responsible for India's space program and manages the Indian Space Research Organisation (ISRO).

• Headquartered in Bengaluru, it reports directly to the Prime Minister of India.

• North Eastern Council (NEC):

• Established under the North Eastern Council Act, 1971, it is the nodal agency for economic and social development in the eight states of the region.

• It consists of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura.

• Geographical Context:

• While Assam, Nagaland, and Arunachal Pradesh are integral parts of the North Eastern Region and utilize the data generated by NESAC, the physical infrastructure of the centre remains situated in Meghalaya due to its central accessibility in the hills.

YourMockTest.com - Free Study Material

Q54. Answer: (a) Kerala

The correct answer is Kerala.

Key Points

• According to the Census 2011, Kerala is the only state in India that recorded a significant absolute decline in its rural population compared to the 2001 Census.

• The rural population of Kerala decreased from 23,574,449 in 2001 to 17,471,135 in 2011, representing a negative growth rate of approximately −25.96 percent.

• This phenomenon was primarily driven by rapid urbanization and the reclassification of a large number of Gram Panchayats and villages into Census Towns or urban agglomerations.

• While most Indian states experienced a growth in rural numbers, Kerala underwent a demographic shift where the urban population grew by nearly 92.8 percent during the same decade.

• The state also maintains the highest literacy rate and a unique sex ratio, which further influences its migration and settlement patterns toward urban centers.

Additional Information

• Demographic Trends in Other States:

• Gujarat: Registered a growth in rural population, rising from 31.7 million in 2001 to 34.6 million in 2011.

• Karnataka: Experienced an increase in the rural sector, moving from 34.8 million to approximately 37.4 million inhabitants.

• Andhra Pradesh: The rural population (undivided) saw a marginal increase from 55.4 million to 56.3 million during the decadal period.

• Census 2011 Overview:

• National Rural Population: Approximately 68.84 percent of India's total population resides in rural areas.

• Highest Rural Population: Uttar Pradesh accounts for the largest number of rural residents in the country.

• Lowest Rural Population: Sikkim has the smallest rural population among all Indian states.

• Urbanization Rate: The 2011 data marked the first time since independence that the absolute increase in urban population was higher than the absolute increase in rural population.

Q55. Answer: (b) China

The correct answer is China.

Key Points

• In May 2025, China successfully deployed a series of advanced AI satellites designed to function as the foundation for the world's first supercomputer in orbit.

• This technological breakthrough utilizes distributed computing across a satellite constellation, allowing for high-speed data processing directly in Low Earth Orbit (LEO) without the need for constant ground-station relay.

• The primary objective of this orbital supercomputer is to enable real-time Artificial Intelligence analysis for complex tasks such as global climate modeling, autonomous satellite navigation, and rapid disaster response.

• By integrating high-performance computing (HPC) hardware into space-grade modules, China has addressed significant challenges regarding heat dissipation and radiation hardening in a vacuum environment.

• This initiative represents a strategic shift in the New Space Race, moving from simple data collection to active on-orbit intelligence, thereby reducing latency and bandwidth requirements for terrestrial users.

Additional Information

• India:

• The Indian Space Research Organisation (ISRO) is globally recognized for its cost-effective missions such as Mangalyaan and Chandrayaan-3.

• India is currently focusing on the Gaganyaan mission for human spaceflight and expanding its NavIC navigation system, though it has yet to launch a dedicated orbital supercomputer constellation.

• USA:

• The United States, through NASA and private companies like SpaceX and Amazon Blue Origin, leads in reusable rocket technology and mega-constellations like Starlink.

• While the US integrates edge computing in space, this specific 2025 milestone for a comprehensive AI-driven orbital supercomputer was achieved by China.

• South Korea:

• The Korea Aerospace Research Institute (KARI) has recently joined the elite club of nations with independent launch capabilities via the Nuri (KSLV-II) rocket.

• South Korea focuses heavily on indigenous satellite technology and lunar exploration through the Danuri orbiter to bolster its national security and scientific research.

Q56. Answer: (c) Both I and II

The correct answer is Both I and II.

Key Points

• Uniform circular motion is defined as the motion of an object traveling at a constant speed along a circular path. While the speed remains the same, the velocity changes because the direction of the object is constantly changing.

• Statement I: Motion of the Moon: The Moon revolves around the Earth in a nearly circular orbit. Because it maintains a relatively constant orbital speed while constantly changing its direction to follow the curve of the orbit, it is a primary example of uniform circular motion. Hence, statement I is correct.

• Statement II: Motion of the Earth: The Earth revolves around the Sun in an elliptical orbit that is very close to being a perfect circle. In many physical models and calculations, this planetary motion is considered an example of uniform circular motion because the Earth travels at a nearly uniform speed throughout its 365.25-day journey. Hence, statement II is correct.

• In both cases, the gravitational force acts as the centripetal force required to keep the celestial bodies moving in their respective circular paths.

• Hence, the correct answer is Both I and II.

Additional Information

• Characteristics of Uniform Circular Motion:

• The speed of the object remains constant throughout the motion.

• The velocity is variable because the direction of motion changes at every point on the circular path.

• The motion is accelerated, and this acceleration is called centripetal acceleration, which always points toward the center of the circle.

• Centripetal Force:

• This is the external force required to maintain circular motion. Its magnitude is given by the formula F = (m * v^2) / r, where m is mass, v is velocity, and r is the radius.

• In the case of the Moon and Earth, the Universal Law of Gravitation provides this force.

• Common Examples:

• The motion of the tips of the hands of a clock (seconds, minutes, and hours hands).

• An artificial satellite orbiting the Earth at a constant altitude.

• A cyclist moving on a circular track at a steady pace.

• A stone tied to a string and whirled in a horizontal circle.

• Key Formulae:

• Angular Velocity (omega): The rate of change of angular displacement, measured in radians per second.

• Linear Speed (v): Calculated as the distance (circumference) divided by the Time Period (T), represented as v = (2 pi r) / T.

Important Points

• Direction of Velocity: In uniform circular motion, the direction of the velocity vector at any point is along the tangent to the circular path at that point.

• Work Done: In perfect uniform circular motion, the work done by the centripetal force is zero because the force is always perpendicular to the direction of displacement.

• Non-Uniform Circular Motion: If the speed of the object also changes along with the direction, the motion is called non-uniform circular motion (e.g., a roller coaster looping).

Q57. Answer: (b) 891

The correct answer is 891.

Key Points

• National Waterway-2 (NW-2) is a significant inland water transport route in India, specifically located on the Brahmaputra River in the state of Assam.

• The total length of this waterway is 891 km, stretching between Sadiya in the east and Dhubri in the west, near the international border with Bangladesh.

• It was officially declared as a National Waterway by the Government of India in the year 1988 to promote freight and passenger movement in the North-Eastern Region.

• This waterway provides essential connectivity for trade and commerce, linking major towns like Dibrugarh, Neamati, Tezpur, and Guwahati (Pandu port).

• The management and development of National Waterway-2 are handled by the Inland Waterways Authority of India (IWAI), which maintains a navigable channel for vessels throughout the year.

• It is an integral part of the Indo-Bangladesh Protocol Route, allowing transit of goods between mainland India and the Northeast through Bangladesh.

Additional Information

• National Waterway-1 (NW-1):

• This is the longest waterway in India with a total length of 1620 km.

• It covers the Ganga-Bhagirathi-Hooghly river system and connects Prayagraj in Uttar Pradesh to Haldia in West Bengal.

• It passes through the states of Uttar Pradesh, Bihar, Jharkhand, and West Bengal.

• National Waterway-3 (NW-3):

• Commonly known as the West Coast Canal, it spans 205 km in the state of Kerala.

• It connects Kottapuram to Kollam and includes the Udyogmandal and Champakara canals.

• It was declared as a National Waterway in the year 1993.

• National Waterway-4 (NW-4):

• This waterway covers a length of approximately 1095 km, involving the Krishna and Godavari rivers along with the Buckingham Canal.

• It traverses the states of Andhra Pradesh, Tamil Nadu, and the Union Territory of Puducherry.

• National Waterway-5 (NW-5):

• With a length of about 623 km, it includes the Brahmani River, East Coast Canal, and the Matair River.

• It primarily serves the industrial belts of Odisha and parts of West Bengal.

• Inland Waterways Authority of India (IWAI):

• The IWAI was established on 27 October 1986 under the Ministry of Ports, Shipping and Waterways.

• Its headquarters are located in Noida, Uttar Pradesh, with regional offices in places like Patna, Kolkata, Guwahati, and Kochi.

Important Points

• National Waterways Act, 2016: The Government of India enacted this law to declare 106 new National Waterways in addition to the existing 5, bringing the total number of National Waterways to 111.

• The development of these waterways is part of the Sagarmala Project, which aims to modernize India's ports and utilize its 7,500 km coastline and 14,500 km of potentially navigable waterways.

• Water transport is considered the most fuel-efficient and environmentally friendly mode of transport compared to road and rail, significantly reducing the logistics cost in the country.

Q58. Answer: (b) New Delhi

The correct answer is New Delhi.

Key Points

• The 7th Asia-Pacific Regional Committee meeting of the International Solar Alliance (ISA) was hosted in New Delhi, India, from July 24 to July 26, 2024.

• The meeting was presided over by Shri Pralhad Joshi, the Union Minister for New and Renewable Energy and President of the ISA Assembly.

• The primary objective of this regional committee was to review and discuss the progress of solar energy projects across the Asia-Pacific region, focusing on scaling up solar deployments and improving energy access.

• During the session, the committee highlighted the SolarX Startup Challenge, an initiative designed to identify and support innovative startups in the solar sector to drive entrepreneurship and technological advancements.

• Representatives from various member countries in the Asia-Pacific region participated to share best practices and address the financial and technical barriers hindering the transition to clean energy.

Additional Information

• International Solar Alliance (ISA):

• The ISA is an action-oriented, member-driven, collaborative platform for the increased deployment of solar energy technologies.

• It was jointly launched by the Prime Minister of India and the President of France on November 30, 2015, at the COP21 held in Paris.

• The Headquarters of the International Solar Alliance is located in Gurugram, Haryana, India.

• The alliance aims to mobilize more than USD 1000 billion of investments needed by 2030 for the massive deployment of solar energy.

• One Sun One World One Grid (OSOWOG):

• This is a flagship initiative supported by the ISA to develop a global ecosystem of interconnected renewable energy resources (mainly solar) that can be shared across borders.

• The vision is "The Sun Never Sets," emphasizing the continuous generation of solar power somewhere on the globe at any given time.

• Membership Status:

• Initially, membership was limited to countries between the Tropics of Cancer and Capricorn, but it has since been expanded to include all United Nations member states.

• As of 2024, more than 100 countries have signed and ratified the ISA Framework Agreement.

Important Points

• The 7th meeting emphasized the Global Solar Stocktake, which aims to provide a comprehensive assessment of solar energy progress globally, aligned with the Paris Agreement goals.

• The STAR-C (Solar Technology Application Resource Centre) program was discussed as a vital tool for capacity building and providing technical assistance to developing member states.

• The Solar Facility, a payment guarantee mechanism, was introduced to catalyze private sector investment in solar projects in underserved markets, particularly in Africa and parts of the Asia-Pacific.

• In 2024, India continues to play a leadership role as the President of the ISA, with France serving as the Co-President.

Q59. Answer: (c) 5

Concept:

The National Green Hydrogen Mission is a flagship program launched by the Government of India in January 2023. Its goal is to make India a global hub for the production, utilization, and export of Green Hydrogen. The mission focuses on reducing carbon emissions and decreasing the country dependency on fossil fuel imports by promoting energy produced through renewable sources.

Mission Targets:

Production Capacity ≥ 5 Million Metric Tonnes (MMT) per annum by 2030.

Given

• Target Year: 2030

• Objective: Green Hydrogen production capacity

• Implementing Agency: Ministry of New and Renewable Energy (MNRE)

Explanation

The Government of India has set ambitious targets under the mission to be achieved by 2030. The primary production objective is to develop a capacity of at least 5 million tonnes per annum of green hydrogen. To support this massive production, the mission also aims for:

• An addition of approximately 125 GW of renewable energy capacity in India.

• An investment of over Rs. 8 lakh crore in the green energy sector.

• Creation of more than 6 lakh jobs.

• Cumulative reduction in fossil fuel imports by over Rs. 1 lakh crore.

• Abatement of nearly 50 MMT of annual greenhouse gas emissions.

Comparing the mission objectives with the requirement, the specific numerical target for annual production capacity by 2030 is 5 million tonnes.

Final Answer: ? 5

Q60. Answer: (b) Rajendra Prasad

The correct answer is Rajendra Prasad.

Key Points

• The book India Divided was authored by Dr. Rajendra Prasad, who later became the first President of India, serving from 1950 to 1962.

• The work was primarily drafted during his imprisonment at Bankipur Jail in Patna between 1942 and 1945, following his arrest during the Quit India Movement.

• Published in 1946, the book provides a rigorous intellectual and statistical critique of the Two-Nation Theory proposed by the Muslim League.

• It traces the history of Hindu-Muslim relations and argues that the two communities had developed a common culture over centuries, making the Partition of India unnecessary and potentially harmful.

• The book is noted for its detailed analysis of the economic and social implications of partition, documenting how the division of resources would impact both proposed nations.

Additional Information

• Jawaharlal Nehru:

• He was the first Prime Minister of independent India and a key figure in the Indian Independence Movement.

• His literary contributions include The Discovery of India, Glimpses of World History, and Letters from a Father to His Daughter.

• B.R. Ambedkar:

• Recognized as the Chief Architect of the Indian Constitution and the first Law Minister of India.

• He wrote a similarly titled but distinct book called Pakistan or the Partition of India (1940), which examined the political and philosophical aspects of the demand for Pakistan.

• Vallabhbhai Patel:

• Known as the Sardar and the Iron Man of India, he served as the first Home Minister and Deputy Prime Minister.

• He is celebrated for the political integration of over 560 princely states into the Indian Union.

Q61. Answer: (d) 8

The correct answer is 4.

• Women's Artistic Gymnastics (WAG) is a discipline where athletes compete on four distinct apparatuses designed to test strength, balance, and agility.

• Vault: This event requires the gymnast to sprint down a 25-meter runway, launch from a springboard, and perform acrobatic maneuvers after pushing off a Vaulting Table.

• Uneven Bars: Athletes perform continuous swinging motions, transitions, and release moves between two horizontal bars set at different heights, specifically 1.7 meters and 2.5 meters from the floor.

• Balance Beam: This apparatus is only 10 centimeters wide and stands 1.25 meters high; gymnasts must execute a routine of leaps, flips, and turns without falling.

• Floor Exercise: Performed on a 12×12 meter spring floor, this is the only event where female gymnasts perform to musical accompaniment, combining dance elements with tumbling passes.

• International Federation of Gymnastics (FIG):

• The FIG is the global governing body that establishes the Code of Points used to score performances.

• In Men's Artistic Gymnastics (MAG), athletes compete on 6 apparatuses: Floor Exercise, Pommel Horse, Still Rings, Vault, Parallel Bars, and Horizontal Bar.

• Olympic History:

• Gymnastics has been a staple of the Modern Olympic Games since 1896.

• Women's events were officially introduced during the 1928 Amsterdam Olympics.

Q62. Answer: (a) Decision change

The correct answer is Decision change.

Key Points

• The Decision change signal is used by a cricket umpire to indicate that a previously made decision or signal is being revoked or altered. Hence, the description matches the signal for a decision change.

• The physical action for this signal involves the umpire crossing their arms across their chest, typically with each hand touching the opposite shoulder. This gesture clearly communicates to the players, scorers, and spectators that the previous call is void.

• Under Law 2.12 of the MCC Laws of Cricket, an umpire may alter a decision provided that the alteration is made promptly after the initial decision.

• This signal has gained significant prominence with the introduction of the Decision Review System (DRS). When the Third Umpire overturns an on-field call, the on-field umpire must perform this signal before indicating the new decision.

• It is a vital communication tool to ensure scoring accuracy, as it instructs the official scorers to negate the last recorded event and replace it with the corrected outcome.

Additional Information

• Other common cricket umpire signals include:

• Four:

• Signaled by waving an arm from side to side, finishing with the arm across the chest. This signifies that the ball reached the boundary after touching the ground.

• Dead ball:

• Executed by crossing and uncrossing wrists below the waist. This indicates the ball is no longer in play due to various reasons like a bowler aborting their run-up or the ball getting lodged in clothing.

• Short run:

• Signaled by the umpire bending the arm upwards and touching the near shoulder with the fingertips. This occurs when a batsman fails to ground their bat behind the popping crease while completing a run.

• No Ball:

• Indicated by extending one arm horizontally, usually when a bowler oversteps the crease or performs an illegal delivery.

• Wide Ball:

• Signaled by extending both arms horizontally, indicating the ball passed too far from the batsman to be hit.

Q63. Answer: (b) Akbar

The correct answer is Akbar.

Key Points

• The third Mughal Emperor, Akbar, began the architectural development of Fatehpur Sikri in 1569.

• The city was planned and constructed to honor the Sufi saint Sheikh Salim Chishti, who had resided in the village of Sikri and predicted the birth of Akbar's sons.

• It served as the capital city of the Mughal Empire from 1571 to 1585, showcasing a transition from military forts to palatial residential complexes.

• The architecture of the city is characterized by a unique fusion of Persian, Central Asian, and Indian (Hindu and Jain) styles, primarily utilizing red sandstone quarried from the surrounding areas.

Additional Information

• Major Structures within Fatehpur Sikri:

• Buland Darwaza: Built in 1601, this 54-meter-high gateway is the highest in the world, constructed to commemorate Akbar's victory over Gujarat.

• Panch Mahal: A five-story wind tower structure with 176 intricately carved columns, designed for the ladies of the court.

• Ibadat Khana: The 'House of Worship' where Akbar conducted philosophical and religious debates, leading to the declaration of Din-i-Ilahi.

• Tomb of Salim Chishti: A masterpiece of white marble craftsmanship located within the Jama Masjid courtyard.

• Babur: The founder of the Mughal Empire who focused more on laying out Persian-style gardens (Charbagh) rather than large-scale city building.

• Jahangir: Akbar's son, born at Sikri, who preferred painting and nature over massive architectural projects, though he maintained the Agra Fort.

• Shah Jahan: Known as the 'Engineer King', he represented the peak of Mughal architecture with the Taj Mahal and Shahjahanabad, moving away from Akbar's red sandstone to white marble.

Q64. Answer: (b) 14

The correct answer is 14.

Key Points

• Haripala (also known as Haripaladeva), a king belonging to the Yadava dynasty of Devagiri, is the celebrated author of the musical treatise Sangeeta Sudhakara.

• The work Sangeeta Sudhakara was composed in the 14th century A.D. and serves as a vital historical document in the evolution of Indian Classical Music.

• This text is particularly renowned for being the first literary source to categorize Indian music into two distinct traditions: Carnatic (South Indian) and Hindustani (North Indian).

• The categorization reflects the socio-cultural shifts occurring during the Medieval period, where regional variations became prominent enough to be formally recognized in theoretical texts.

Additional Information

• Evolution of Musical Traditions:

• Prior to the 13th and 14th centuries, Indian music was largely a unified system based on ancient texts like the Natyashastra by Bharata Muni and Sangeeta Ratnakara by Sarngadeva.

• Carnatic Music: This system remained more conservative, preserving the ancient Svara and Raga structures primarily in the southern regions of Karnataka, Tamil Nadu, Andhra Pradesh, and Kerala.

• Hindustani Music: This system evolved in the North through the synthesis of indigenous traditions with Persian and Arabic musical influences introduced during the Delhi Sultanate.

• The distinction noted in Sangeeta Sudhakara highlights the transition from Gandharva music to the regionalized Desi forms that eventually solidified into the two major schools recognized today.

Q65. Answer: (a) Rakesh Sharma

The correct answer is Rakesh Sharma.

Key Points

• Wing Commander Rakesh Sharma became the first Indian citizen to travel into space on April 3, 1984.

• He was a former Indian Air Force pilot who flew aboard the Soviet spacecraft Soyuz T-11 as part of the Intercosmos program.

• The mission was a joint venture between the Indian Space Research Organisation (ISRO) and the Soviet Space Program.

• During the mission, he spent 7 days, 21 hours, and 40 minutes aboard the Salyut 7 orbital station, conducting various scientific experiments, including multi-spectral photography of northern India.

YourMockTest.com — Free Study Material

• When asked by the then Prime Minister Indira Gandhi about how India looked from space, he famously responded, "Sare Jahan Se Achha" (Better than the whole world). Hence, the correct answer is Rakesh Sharma.

Additional Information

• Ravish Malhotra:

• He was an Air Commodore in the Indian Air Force and served as the backup cosmonaut for Rakesh Sharma.

• He trained alongside Sharma at the Yuri Gagarin Cosmonaut Training Center in Star City, Russia, but did not actually travel into space.

• Raja Chari:

• He is an Indian-American astronaut and a graduate of the US Air Force Academy.

• In 2021, he served as the Mission Commander of the NASA-SpaceX Crew-3 mission to the International Space Station (ISS).

• Sirisha Bandla:

• She is an Indian-born aeronautical engineer who flew on the Virgin Galactic Unity 22 mission on July 11, 2021.

• She became the second Indian-born woman to go to space, following Kalpana Chawla.

• Kalpana Chawla:

• She was the first woman of Indian origin to go to space. Her first mission was in 1997 on the Space Shuttle Columbia (STS-87).

• Tragically, she died in 2003 during the STS-107 mission when the Space Shuttle Columbia disintegrated during re-entry.

Important Points

• Ashoka Chakra: Upon his return from space, Rakesh Sharma was awarded the Ashoka Chakra, India's highest peacetime gallantry award. He was the first person to be honored with this award who was also named a Hero of the Soviet Union.

• Gaganyaan Mission: ISRO is currently working on the Gaganyaan project, which is India's first indigenous manned space mission. It aims to send a 3-member crew to an orbit of 400 km for a 3-day mission and bring them back safely to Earth.

• Space Milestones: India became the 14th nation in the world to send a man into outer space with Rakesh Sharma's flight in 1984.

• Sunita Williams: Another notable astronaut of Indian descent, she holds the record for the longest spaceflight by a woman and has completed multiple spacewalks.

Q66. Answer: (d) Under the weather

The correct answer is '4' i.e. Under the weather.

Key Points

• The idiom "Under the weather" means feeling slightly unwell or in low spirits.

• In contrast, the other options have different meanings:

• Keep a weather eye out: To remain alert or watchful.

• Weather the storm: To endure a difficult or challenging situation.

• Break in the weather: A temporary improvement in weather conditions.

• Therefore, the correct idiom that matches the meaning "slightly unwell or in low spirits" is "Under the weather."

Correct sentence: "I didn’t go to work today because I was feeling under the weather."

Additional Information

• Origin: The phrase "under the weather" originates from maritime terminology. When sailors were unwell, they were sent below deck, away from the weather, to recover.

• Usage: The idiom is commonly used in informal conversations to describe someone who feels slightly ill or not in the best condition.

Q67. Answer: (b) To remain a guest in a place, especially someone's home, for too long, to the point where the host no longe...

The correct answer is '2' i.e. To remain a guest in a place, especially someone's home, for too long, to the point where the host no longer wishes one to stay.

Key Points

• The idiom "Wear out one's welcome" refers to staying somewhere, especially at someone’s home, for too long, to the extent that the host no longer wants the guest to stay.

• It is typically used in situations where the guest has overstayed their welcome and is no longer wanted or appreciated by the host.

• In contrast, none of the other options accurately convey this specific meaning of the idiom.

Correct Meaning: To remain a guest in a place, especially someone's home, for too long, to the point where the host no longer wishes one to stay.

Additional Information

• Option 1: "To greet someone very happily and eagerly; to give someone a very warm, enthusiastic welcome" is incorrect because it describes a positive reception rather than overstaying one's welcome.

• Option 3: "To welcome one with an extensive or elaborate display of friendliness and hospitality" is also incorrect, as it implies elaborate friendliness rather than the negative connotation of overstaying.

• Option 4: "An expression of glib commiseration used when one shares some unpleasant condition or situation with one or more other people" is unrelated to the idiom's meaning.

Q68. Answer: (c) Existence

The correct answer is '3' i.e. Existence.

Key Points

• The word Existence is correctly spelt and is used to refer to the state of being real or living.

• Option 1 (Existance) is incorrect because it includes an extra 'a' where 'e' should be.

• Option 2 (Existense) is incorrect as it replaces 'c' with 's', which is an incorrect spelling.

• Option 4 (Existanse) is incorrect because it combines errors from options 1 and 2, creating a completely invalid spelling.

Correct usage: The existence of life on other planets is still a topic of debate among scientists.

Additional Information

• Spelling is critical in written communication, as incorrect spelling can alter the meaning or convey a lack of professionalism.

• To ensure accurate spelling, consult trusted dictionaries or use spell-check tools while writing.

Q69. Answer: (b) ostentatious

The correct answer is '2' i.e. ostentatious.

Key Points

• The word ostentateous in the sentence is misspelled. The correct spelling is ostentatious.

• Ostentatious refers to something that is designed to impress or attract notice, often in a showy or pretentious way.

• In the given sentence, the word is used to describe the jewellery, which drew attention due to its showy nature but lacked genuine elegance.

Correct sentence: Her ostentatious jewellery drew attention at the party, though it lacked genuine elegance.

Additional Information

• Always ensure the spelling of descriptive words matches standard English usage to maintain clarity and professionalism.

• Examples of correct usage:

• She wore an ostentatious gown to the event, grabbing everyone's attention.

• His ostentatious display of wealth made him unpopular among his peers.

Q70. Answer: (c) governerce

The correct answer is '3' i.e. governerce.

Key Points

• The word "governerce" is incorrectly spelled in the given sentence.

• The correct spelling is "governance", which refers to the process or system of controlling and managing a country, organization, or institution.

• All other words in the options, i.e., "emissions," "accountable," and "deployments," are spelled correctly.

Correct sentence: The Royal Academy urges governance for data centres to report energy, water use, and carbon emissions, ensuring accountable AI deployments.

Additional Information

• Spelling mistakes are common in written communication, and they can change the meaning or reduce the clarity of a sentence.

• It is important to carefully proofread your writing or use spell-check tools to ensure accuracy, particularly for formal or professional communication.

Q71. Answer: (b) Inevitible

The correct answer is '2' i.e. Inevitible.

Key Points

• The word “Inevitible” is misspelt in the given options.

• The correct spelling of the word should be “Inevitable”, which means something that is certain to happen or unavoidable.

• All other options—Credible, Invisible, and Plausible—are correctly spelt.

Correct sentence: The misspelt word is Inevitible, and it should be corrected to Inevitable.

Additional Information
• Spelling Tips:
• To avoid spelling errors, break down the word into syllables (e.g., "In-ev-it-able").
• Memorize common prefixes like "In-" and suffixes like "-able."
• Usage:
• The word "inevitable" can be used in sentences such as: "The outcome of the match was inevitable."
• It is often used to describe events that are certain to occur.

Q72. Answer: (c) Distasteful

The correct answer is '3' i.e. Distasteful.
Key Points
• The word “delicious” refers to something that is very pleasant to taste or eat.
• Among the given options, the word “distasteful” is the most opposite in meaning to “delicious.”
• Distasteful refers to something that is unpleasant or offensive, especially in taste.
• Other options like tasty, delectable, and savory are synonyms or similar in meaning to “delicious.”
Correct word: Distasteful
Additional Information
• Synonyms of “Delicious”: Tasty, Delectable, Savory.
• Antonyms of “Delicious”: Distasteful, Unappetizing, Bland.
• Always consider the context and meaning of the given word when identifying opposites.

Q73. Answer: (d) Frequently

The correct answer is '4' i.e. Frequently.
Key Points
• The word "Hardly ever" indicates something that occurs very rarely or infrequently.
• An antonym for "Hardly ever" would describe something that happens regularly or often.
• Among the given options, Frequently is the correct antonym because it means happening often or regularly.
• The other options, such as Occasionally, Rarely, and Seldom, also describe infrequent occurrences, making them incorrect.
Correct answer: The antonym of "Hardly ever" is Frequently.
Additional Information
• Synonyms of "Hardly ever": Rarely, Seldom, Almost never.
• Antonyms of "Hardly ever": Frequently, Often, Regularly.

Q74. Answer: (b) plain

The correct answer is '2' i.e. plain.
Key Points
• The word "plain" refers to a large area of flat land, which is the appropriate context for the given sentence.
• Option "plane" refers to either a flat surface or an aircraft, which does not fit the sentence.
• Option "plan" refers to an arrangement or strategy, which is irrelevant here.
• Option "plaid" refers to a pattern of tartan or checkered fabric, which is also unrelated.
Correct sentence: The deer ran swiftly across the open plain.
Additional Information
• Word Usage:
• "Plain": Refers to flat, open land, often used in geographical contexts.
• "Plane": Can refer to an aircraft or a flat, level surface.
• "Plan": Indicates a strategy, arrangement, or intention.
• "Plaid": Refers to a checkered or tartan pattern, usually on fabric.
• It is important to choose the word that best fits the context of the sentence.

Q75. Answer: (c) Lapidist

The correct answer is '3' i.e. Lapidist.
Key Points
• A Lapidist is a person who cuts, polishes, or engraves precious stones, excluding diamonds.

YourMockTest.com — Free Study Material

• The term Gemologist refers to an expert who studies gems and their properties but does not necessarily cut them.
• Polyglot means a person who speaks multiple languages, which is unrelated to the given context.
• Drover refers to someone who drives cattle or sheep, which is also unrelated to the cutting of precious stones.

Correct sentence: The person who cuts precious stones is called a Lapidist.

Additional Information

• Gemologist: Studies and identifies gemstones but does not perform cutting or engraving.
• Lapidary: Related to the art of working with stones, including cutting and polishing.
• Diamond Cutter: A specialist focused on cutting diamonds, which is distinct from a Lapidist.

Q76. Answer: (d) Orology

The correct answer is '4' i.e. Orology.

Key Points

• Mycology: The study of fungi.
• Entomology: The study of insects.
• Virology: The study of viruses and viral diseases.
• Orology: The study of mountains, their formation, and other related phenomena. This is the correct answer as it directly refers to the study of mountains.

Correct sentence: The study of mountains is referred to as Orology.

Additional Information

• The term Orology comes from the Greek word "oros," meaning mountain, and "-logy," meaning study.
• It includes aspects such as mountain formation (orogeny), geology, climate, flora, and fauna of mountainous regions.
• Mycology, Entomology, and Virology are unrelated to the study of mountains, making them incorrect options.

Q77. Answer: (b) Will the new policy be approved by the committee tomorrow?

The correct answer is '2' i.e. Will the new policy be approved by the committee tomorrow?

Key Points

• The given sentence is in the future tense and is in active voice.
• The sentence asks about an action (approval of the new policy) that will take place in the future.
• When converting a sentence into passive voice, the object of the active sentence becomes the subject of the passive sentence.
• In the passive voice, the structure for future tense is Will + be + past participle.

Correct conversion: Will the new policy be approved by the committee tomorrow?

Additional Information

• Active Voice: The subject performs the action. Example: The committee will approve the new policy.
• Passive Voice: The subject receives the action. Example: The new policy will be approved by the committee.
• Incorrect Options:
• Option 1: "Has the new policy been approved by the committee tomorrow?" is incorrect because "has been approved" indicates present perfect tense, which does not align with "tomorrow" (future time).
• Option 3: "Will the new policy be approving by the committee tomorrow?" is incorrect because "be approving" is grammatically incorrect in this context.
• Option 4: "Was the new policy approved by the committee tomorrow?" is incorrect because "was approved" indicates past tense, which does not align with "tomorrow" (future time).

Q78. Answer: (d) Were the Greeks defeated by the Romans?

The correct answer is '4' i.e. Were the Greeks defeated by the Romans?

Key Points

• The given sentence is in the interrogative form and written in the active voice.
• To convert it into passive voice, the object of the active voice sentence ("the Greeks") becomes the subject of the passive voice sentence.
• The auxiliary verb "were" is used because "Greeks" is plural, and the past participle of the verb "defeat" is "defeated."
• The correct structure for converting this sentence into the passive voice is: Were + subject + past participle + by + agent?

Correct sentence: Were the Greeks defeated by the Romans?

Additional Information

• Rules for Passive Voice Conversion:
• Identify the subject, verb, and object of the active voice sentence.

YourMockTest.com — Free Study Material

• Make the object of the active voice sentence the subject of the passive voice sentence.
• Use the auxiliary verb (be) in the same tense as the active voice verb.
• Use the past participle form of the main verb.
• Add the preposition "by" followed by the agent (optional).
• Examples:
• Active: Did he complete the project? Passive: Was the project completed by him?
• Active: Did they build the bridge? Passive: Was the bridge built by them?

Q79. Answer: (b) Were the teachers checking the examination papers until late at night?

The correct answer is '2' i.e. Were the teachers checking the examination papers until late at night?.

Key Points

• The given sentence is in the passive voice, as indicated by the use of "Were" and "being checked."
• To convert it into the active voice, the subject (teachers) becomes the doer of the action, and the object (examination papers) is acted upon.
• The structure of the sentence in active voice is Subject + was/were + verb (-ing) + object.
• Thus, the correct active voice sentence is "Were the teachers checking the examination papers until late at night?".

Correct sentence: Were the teachers checking the examination papers until late at night?.

Additional Information

• Active and Passive Voice:
• Active Voice: The subject performs the action. (e.g., The teacher checked the papers.)
• Passive Voice: The subject receives the action. (e.g., The papers were checked by the teacher.)
• Key Steps to Convert Passive to Active Voice:
• Identify the subject, verb, and object in the passive sentence.
• Rearrange the sentence so that the subject performs the action.
• Ensure the verb agrees with the subject.

Q80. Answer: (a) Couldn’t the doctors stop the cancer from spreading further?

The correct answer is '1' i.e. Couldn’t the doctors stop the cancer from spreading further?

Key Points

• The given sentence is in the passive voice: "Couldn’t the cancer be stopped from spreading further by the doctors?"
• To convert it into the active voice, the subject (the doctors) must perform the action.
• The sentence structure is adjusted so that the subject comes before the verb, resulting in: "Couldn’t the doctors stop the cancer from spreading further?"
• Among the options, Option 1 is the most accurate conversion of the given sentence into the active voice.

Correct sentence: Couldn’t the doctors stop the cancer from spreading further?

Additional Information

• Active Voice: The subject performs the action. Example: "The teacher explained the topic."
• Passive Voice: The subject receives the action. Example: "The topic was explained by the teacher."
• To convert from passive to active voice:
• Identify the subject, verb, and object.
• Rearrange the sentence so the subject performs the action.
• Adjust the verb form accordingly.

Q81. Answer: (b) shelf on the upper one and

The correct answer is '2' i.e. shelf on the upper one and contains the error.

Key Points

• The sentence uses the phrase "shelf on the upper one", which is grammatically and contextually incorrect.
• The correct preposition to use in this context is "to" instead of "on", as the intended meaning is to move the books to the upper shelf.
• The corrected phrase should be: "shelf to the upper one."

Correct sentence: Let’s move all the books kept on this shelf to the upper one and make space for the new books purchased from the market today.

Additional Information

YourMockTest.com — Free Study Material

• Common Preposition Usage:
• On: Refers to a position above a surface (e.g., The book is on the table).
• To: Indicates direction or movement towards a specific location (e.g., Move the books to the shelf).
• Other examples:
• Incorrect: Place the files on the other table.
• Correct: Place the files to the other table.

Q82. Answer: (c) in

The correct answer is '3' i.e. in violation of the law.

Key Points

• The given sentence is asking for the correct preposition to complete the phrase "violation of the law."
• The correct preposition here is "in," which is commonly used with "violation" to express an act that goes against the law or rules.
• The phrase "in violation of" is a standard collocation in English grammar.

Correct sentence: Thousands of students consume drugs in violation of the law.

Additional Information

• The preposition "for" is used to indicate purpose or reason but does not fit in this context.
• The preposition "of" is used to show possession or a relationship between parts of a sentence, but it does not convey the intended meaning here.
• The preposition "by" is used to indicate the agent performing an action, which is also incorrect in this case.
• The correct option "in" is used to indicate inclusion or being within a certain context, such as "in violation of the law."

Q83. Answer: (d) DABC

The correct answer is '4' i.e. DABC.

Key Points

• The sentences must be arranged logically to form a cohesive narrative while maintaining unity and coherence.
• The sequence starts with identifying a person (S1), then introduces another person (D), provides details about the first person's relationship (A), explains the background story (B), and connects the second person with the first through context (C).
• Finally, the paragraph concludes with the general knowledge about the second person (S2).

Correct sequence: DABC

Additional Information

• Reasoning: The sentence marked D introduces the next character in the narrative logically after S1. Sentence A elaborates on the Marquis, sentence B explains his background, and sentence C ties the story together by identifying the father.
• This sequence ensures smooth progression and proper coherence.

Q84. Answer: (d) BDAC

The correct answer is '4' i.e. BDAC.

Key Points

• The paragraph begins with S1, where Sofia's voice is described as unchanged despite her words, setting the tone of emotional depth.
• Sentence B logically follows as it describes Roberto's reaction to Sofia's frank and pure expression, linking directly with her unchanged tone.
• Sentence D comes next, as Roberto feels a sense of naturalness and inevitability, emphasizing his acceptance of the situation.
• Sentence A follows D, describing Roberto's feeling of predestination and long-awaited connection with Sofia.
• Sentence C comes after, describing their mutual gaze and connection before parting.
• S2 concludes the paragraph with Sofia's gesture of parting, leaving Roberto with a sense of closure.

Correct sequence: BDAC.

Additional Information

• Unity and coherence: The sequence ensures logical flow and emotional connection between the sentences.
• Chronological narrative: The rearranged order reflects the progression of events and feelings, aligning with the paragraph's theme.

Q85. Answer: (c) take the bull by the horns

The correct answer is '3' i.e. take the bull by the horns.

Key Points

YourMockTest.com — Free Study Material

• The phrase “take the bull by the horns” is an idiom that means to confront a difficult or challenging situation directly and boldly.

• In the given sentence, the phrase “take the bull by the head” is incorrect, as it does not align with the conventional idiom.

• Option 3, “take the bull by the horns”, is the correct replacement that improves the sentence while preserving its intended meaning.

Correct sentence: We must take the bull by the horns and resolve all pending issues if we want progress.

Additional Information

• Idioms are expressions or phrases that have figurative meanings different from their literal interpretation.

• Other incorrect options:

• Option 1: "Take the bull by the tail" is not a recognized idiom.

• Option 2: "Pull the bull by its ears" is also not an established idiom.

• Option 4: "No improvement required" is incorrect because the original phrase needs correction for clarity and accuracy.

Q86. Answer: (c) grapple

The correct answer is Option 3.

Key Points

• To choose the correct verb form, we must identify the Subject of the sentence and the Tense used in the passage.

• The subject is "Scientists" (plural). According to the rules of Subject-Verb Agreement, a plural subject takes a plural verb (without an 's' or 'es' in the simple present tense).

• The passage is written in the Simple Present Tense to describe general facts and ongoing realities of space exploration (e.g., "stands," "require," "design").

• Option 3 (grapple) is the base form of the verb, which correctly matches the plural subject "Scientists."

• Why other options are incorrect:

• Option 1: "Grappled" is the past tense. While scientists have struggled in the past, the sentence uses "often," implying a habitual or current fact.

• Option 2: "Grappling" is the present participle (-ing form). It cannot act as the main verb of a sentence without an auxiliary verb (like "are").

• Option 4: "Grapples" is the singular form of the verb. It would be correct if the subject were "A scientist" (singular), but not for "Scientists."

Therefore, the correct answer is 3.

Analytical Insight: In high-level competitive exams, Subject-Verb Agreement is a "frequent flier" topic. Always ignore the "distractor" prepositional phrases (like "who work on spaceship development") and look directly at the head noun ("Scientists") to determine the verb form.

Additional Information

• Grapple: To engage in a close fight or struggle without weapons; or to wrestle with a difficult problem.

• Terrestrial: Relating to the earth or to land (as opposed to space or water).

• Confluence: An act or process of merging; a coming together of different factors or disciplines.

• Meticulously: In a way that shows great attention to detail; very thoroughly.

Q87. Answer: (a) affects

The correct answer is Option 1.

Key Points

• To select the correct verb form, we must identify the True Subject and the Tense of the sentence.

• In the phrase "The absence of gravity," the head noun is "absence" (singular). The words "of gravity" are part of a prepositional phrase modifying the subject.

• According to the rules of Subject-Verb Agreement, a singular subject requires a singular verb. In the simple present tense, singular verbs typically end in 's' or 'es'.

• The passage is written in the Simple Present Tense because it describes universal scientific facts and ongoing conditions of space travel.

• Option 1 (affects) is the singular, simple present form of the verb, which correctly agrees with the singular subject "absence."

• Why other options are incorrect:

• Option 2: "Affect" is the plural form of the verb. It would be correct if the subject were "The effects" (plural), but not for "absence."

• Option 3: "Were affecting" is past continuous and plural. It does not match the singular subject or the factual tone of the passage.

• Option 4: "Affected" is the simple past tense. While this happened in the past, the sentence describes a constant reality of space, making the present tense more appropriate.

Therefore, the correct answer is 1.

Analytical Insight: In high-level exams, examiners often place a plural noun (like "operations" or "astronauts") or a mass noun ("gravity") near the blank to confuse you. Always trace back to the word before the first preposition to find your subject: The Absence [of gravity] affects...

Additional Information

• Affect vs. Effect: Affect is usually a verb (to influence), while Effect is usually a noun (the result).

• Physiological: Relating to the way in which a living organism or bodily part functions.

• Formidable: Inspiring fear or respect through being impressively large, powerful, intense, or capable.

• Cusp: A point of transition between two different states.

Q88. Answer: (b) Gathering or coming together

The correct answer is Option 2.

Key Points

• To determine the meaning of "confluence," we look at its context in the second paragraph: "Spaceships require a confluence of various scientific disciplines."

• The sentences following this phrase list several different fields—aerospace engineering, astrophysics, and biology—working together toward a single goal.

• Confluence refers to the junction of two or more things, or the act of gathering or coming together (originally used to describe where two rivers meet). In this context, it describes the merging of different scientific experts into one collaborative effort.

• Why other options are incorrect:

• Option 1: Separation is an antonym. The passage emphasizes that these disciplines must work together, not apart.

• Option 3: Conflict suggests disagreement. While scientists may have challenges, the passage highlights "collective efforts" and "collaboration," not fighting.

• Option 4: Expansion means getting larger. While space exploration involves expansion, the word "confluence" specifically refers to the meeting of the disciplines required to make that happen.

Therefore, the correct answer is 2.

Analytical Insight: In high-level competitive exams, "Contextual Vocabulary" is best solved by looking for "Listing" patterns. When an author uses a word followed by a list of different things (Engineering, Physics, Biology), that word almost always means "a mix," "a combination," or "a gathering."

Additional Information

• Confluence: A situation in which two or more things come together or happen at the same time.

• Multidisciplinary: Combining or involving several academic disciplines or professional specializations in an approach to a topic or problem.

• Terrestrial: On or relating to the earth.

• Ingenuity: The quality of being clever, original, and inventive.

Q89. Answer: (c) Difficult to deal with

The correct answer is Option 3.

Key Points

• To determine the meaning of "formidable," we examine its context in the third paragraph: "Despite these formidable obstacles, the collective efforts... have repeatedly demonstrated triumph over adversity..."

• The "obstacles" mentioned just before this include vacuum, radiation, temperature fluctuations, absence of gravity, and communication delays. These are all serious, dangerous, and hard-to-solve problems.

• Formidable describes something that inspires fear or respect because it is impressively large, powerful, intense, or difficult to deal with. In this context, it emphasizes how challenging the obstacles are.

• Why other options are incorrect:

• Option 1: "Easy to overcome" is the opposite of the intended meaning. The passage highlights "sheer human determination" and "triumph over adversity," which implies the task is very hard.

• Option 2: While "formidable" can sometimes mean "inspiring respect," in the context of obstacles or challenges, the primary meaning is the difficulty they present.

• Option 4: "Small or insignificant" contradicts the author's description of space development as a "monumental testament" and "hostile environment."

Therefore, the correct answer is 3.

Analytical Insight: In competitive exams, pay attention to the word "Despite." It indicates a contrast. If the teams "triumphed," the obstacles they faced must have been tough or difficult.

YourMockTest.com — Free Study Material

Additional Information

• Formidable: Aggravatingly difficult; powerful; daunting.

• Ingenuity: The quality of being clever, original, and inventive.

• Perseverance: Persistence in doing something despite difficulty or delay in achieving success.

• Physiological: Relating to the way in which a living organism or bodily part functions.

Q90. Answer: (c) The development of spaceships is a complex, collaborative effort involving multiple scientific fields to ov...

The correct answer is Option 3.

Key Points

• To identify the main idea, we must look for the most comprehensive statement that reflects the entire content of the passage.

• The passage covers three main themes:

• Multidisciplinary Collaboration: It details the "confluence of various scientific disciplines" such as aerospace engineering, astrophysics, and biology.

• Extraordinary Challenges: It lists "formidable obstacles" like the vacuum of space, radiation, zero gravity, and communication delays.

• Human Achievement: it describes the development as a "monumental testament" to "human ingenuity and perseverance."

• Option 3 accurately captures all these elements: the complexity, the collaborative nature, the variety of fields, and the overcoming of significant challenges.

• Why other options are incorrect:

• Option 1: This is too narrow and factually incorrect based on the text. The passage states spaceships are "intricate systems" (not simple) and involve multiple types of scientists, not just aerospace engineers.

• Option 2: This contradicts the text. The passage describes the challenges as "formidable" and "hostile," not minimal.

• Option 4: This is false according to the passage, which states that these efforts have "revolutionized our understanding" and are "pushing the very boundaries of human exploration."

Therefore, the correct answer is 3.

Analytical Insight: In high-level competitive exams, the main idea should never be too specific or too negative if the passage is generally positive. Look for "holistic" words like "complex," "collaborative," and "multidisciplinary" to find the strongest summary.

Additional Information

• Multidisciplinary: Combining or involving several academic disciplines or professional specializations.

• Monumental: Great in importance, extent, or size.

• Interstellar: Situated or occurring between the stars.

• Physiological: Relating to the way in which a living organism or bodily part functions.

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

YourMockTest.com – Free Study Material