RRB NTPC Tier I Official Paper (Held On: 30 Mar 2016 Shift 3) (Previous Year Paper)

RRB NTPC • 2016 • 100 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/rrb-ntpc/rrb-ntpc-tier-i-official-paper-held-on-30-mar-2016-shift-3-previo…

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

Q1. Find the factors of $(x^2 – x – 132)$?

(a) (x – 11)(x – 12)
(b) (x + 12)(x – 11)
(c) (x + 11)(x + 12)
(d) (x – 12)(x + 11)

Q2. A college council is auditioning students for a cultural festival. They must satisfy the following criteria —

1. Student must know at least one dance form.
2. Student must know to play at least one musical instrument.
3. Student must have good acting skills.

Which one of the following will the council definitely select?

A. Z is a Bharat Natyam dancer, a violinist but does not have any acting skills.
B. P plays football, guitar, has acted in road shows and is a classical dancer.
C. J is a contemporary dancer, a great actor and is planning to learn flute.
D. A plays sitar, is a hip-hop dancer and does not have any acting skills.

(a) P
(b) Z
(c) J
(d) A

Q3. If RESEARCH is $#!#%$&@ then SCARE is

A. !&%$#
B. !@%$#
C. !$%#&
D. !@%#$

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

Directions

Direction: The likes and professions of five friends Rosy, Mary, Lily, Andy and Daisy are given. Consider the following information and answer questions based on it.

1. Rosy likes Yellow and is a Student.
2. The Librarian likes Green.
3. Mary and Andy like Purple and Blue respectively and neither of them is a Teacher.
4. Lily likes Brown and the Inspector likes Blue.
5. One of the five is a Principal.

Q4. Which colour does the Teacher like?

A. Blue
B. Brown
C. Purple
D. Green

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

Q5. Who is the Principal?

A. Daisy
B. Andy
C. Mary
D. Lily

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

Q6. Which among the following is the wrong pair?

A. Andy - Inspector
B. Purple - Principal
C. Daisy - Green
D. Rosy - Teacher

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

Q7. What will come in place of question mark (?) in the following question?

1.123 + 11.23 + 112.3 = ?

(a) 123.453
(b) 132.343
(c) 124.653
(d) 134.643

Q8. The standard deviation of the set {10, 10, 10, 10, 10} is

(a) 0
(b) 1
(c) 5
(d) 10

Q9. Karan purchased one dozen pens for Rs. 120/ - and sold a pack of 3 pens for Rs. 35/. What is his gain percentage?

(a) 16.67%
(b) 20%
(c) 15%
(d) 33.33%

Q10. If Deplete : Exhaust, then Replenish : _____

A. Exhale
B. Inhale
C. Reuse

YourMockTest.com — Free Study Material

D. Restore

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

Q11. What is the noise level of normal conversation?

A. About 60 dB
B. About 70 dB
C. About 80 dB
D. About 90 dB

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

Q12. Statements:

1. X is 7 meters tall, Y is half as high and Z is 3 times the height of X.
2. P is taller than Z but shorter than A and B.

Conclusions:

I. B is the tallest of all.
II. The average height of X, Y and Z is less than 10 meters.

Find which of the given conclusions logically follows from the given statements.

A. Only conclusion I follows.
B. Only conclusion II follows.
C. Both I and II follow.
D. Neither I nor II follows.

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

Q13. G is twice as fast as S in doing work. If G can do a work in 30 days, in how many days will they take to complete the work together?

A. 25
B. 20
C. 22
D. 15

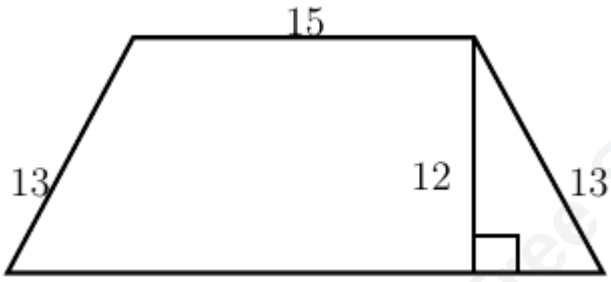
(a) D
(b) B
(c) A
(d) C

Q14. What is the ratio of simple interest earned on certain amount at the rate of 12% p.a. for 9 years and that for 12 years?

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

YourMockTest.com — Free Study Material

Q15. What is the area of this trapezoidal garden? (All measurements are in cm)



(a) 60 sq.cm
(b) 180 sq.cm
(c) 210 sq.cm
(d) 240 sq.cm

Q16. Select the alternative that shows a similar relationship as the given pair –

Mandatory : Compulsory

A. Philosophy : Science
B. Thesis : Subject
C. Generosity : Narrow - mindedness
D. Hypothesis : Supposition

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

Q17. For how many months is a cheque valid from the date of issue?

A. 1 month
B. 2 months
C. 3 months
D. 6 months

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

Q18. 'Ganga Action Plan' initiated by the Union Government aims at

A. Streamlining the flow of Ganga river.
B. Reduction of pollution on Ganga river.
C. Efficient use of Ganga water for irrigation.
D. Using Ganga river for generating hydel energy.

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

Q19. Find the range and mode of the data 17, 18, 28, 19, 16, 18, 17, 29, 18 ?

(a) 12 and 18
(b) 13 and 18
(c) 12 and 17
(d) 11 and 17

YourMockTest.com — Free Study Material

Q20. The percentage of nitrogen in the air is about

A. 74%
B. 76%
C. 78%
D. 80%

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

Q21. K purchased a table for Rs.11,000 and sold it for Rs. 13,500. What is his gain in percentage?

(a) 19.8%
(b) 20.6%
(c) 22.7%
(d) 22%

Q22. Shimla Agreement 1972 between India & Pakistan was signed in

A. Barne's Court
B. Ellerslie Building
C. Viceregal Lodge
D. Gorton Castle

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

Q23. The value of $(\sin \theta + \cos \theta)^2$ =

(a) $1 + \sin^2\theta$
(b) $\sin^2\theta + \cos^2\theta$
(c) $1 + 2\cos\theta\sin\theta$
(d) $\cos^2\theta + 1$

Q24. The instrument used to regulate temperature to a particular degree is called

A. Thermostat
B. Thermometer
C. Pyrometer
D. Thermocouple

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

Q25. Pressure is measured in terms of

A. Mass & Density
B. Work done
C. Force and Area
D. Force and Distance

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

YourMockTest.com — Free Study Material

Q26. How many times does the number 3 occur in unit's place for numbers ranging from 1 to 100?

A. 20
B. 11
C. 10
D. 19

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

Q27. Between small and large human intestine which one is longer?

A. Small intestine
B. Large intestine
C. Both are equal in length
D. Depends on male or female

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

Q28. To conduct a detailed study into a disease-causing organism in livestock, Biosafety Laboratory has been set up in India at

A. Ludhiana
B. Bengaluru
C. Anand
D. Allahabad

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

Q29. A pole is taller than a Giraffe which is taller than a Tree. A Signal is shorter than the pole but taller than a Building which is taller than the Giraffe. Who is the shortest?

A. Signal
B. Giraffe
C. Tree
D. Building

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

Q30. Find the missing (?) in the series

NA, PC, RE, TG, ?, XK, ZM

A. IV
B. VI
C. VII
D. VJ

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

YourMockTest.com — Free Study Material

Q31. Rearrange the jumbled letters to make a meaningful word and then select the one which is different.

A. DNHA
B. EDAH
C. THEA
D. IRHA

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

Q32. Sunil has a son Karna and a sister Sangeeta who is the mother of Jagdish and Vijay. Harnish is Jagdish's maternal uncle. How is Harnish related to Karna?

(a) Brother
(b) Father
(c) Nephew
(d) Uncle

Q33. International Maritime Organisation is concerned with

A. Air pollution
B. Sea pollution
C. Adulteration in food
D. Deforestation

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

Q34. Find the H.C.F. and L.C.M. of 20 and 28.

(a) 20, 280
(b) 5, 280
(c) 10, 140
(d) 4, 140

Q35. Astrosat is India's first

A. Reconnaissance satellite
B. Remote sensing satellite
C. Space observatory
D. Communication satellite

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

Q36. Air travels a distance of 300 m in 2 minutes and 30 seconds. What is its speed in kmph?

(a) 6.9
(b) 7.1
(c) 7.2
(d) 7.3

Q37. Four pairs of words are given. Find the odd one out.

A. Chalk : Slate
B. Pencil : Notebook
C. Pen : Ink

YourMockTest.com — Free Study Material

D. Sketch Pen : Drawing Book

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

Q38. The Gandhi-Irwin pact was signed in the year

A. 1930
B. 1931
C. 1932
D. 1933

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

Q39. Twice the difference between two numbers is equal to their sum. If one number is 15, find the other number.

(a) 15 or 45
(b) 10 or 30
(c) 5 or 45
(d) 20 or 35

Q40. The sum of three consecutive number is 126. Find the highest number?

(a) 41
(b) 42
(c) 43
(d) 44

Q41. Surya is 25 years older than his son. In 5 years, he will be twice as old as his son. What will be Surya's age after 3 years?

(a) 20
(b) 23
(c) 45
(d) 48

Q42. The name of the first bank established in India was

A. Bank of Hindustan
B. Reserve Bank of India
C. Imperial Bank
D. State Bank of India

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

Q43. If M = 14, TANK = 62, then STARDOM = _____

A. 79
B. 89
C. 99
D. 109

(a) D
(b) C
(c) B

YourMockTest.com — Free Study Material

(d) A

Q44. What is the 4^(th) proportional of 3, 8, 12,?

(a) 36
(b) 26
(c) 32
(d) 16

Q45. Which of the following is a Space-Based Augmentation System?

A. INSAT
B. GAGAN
C. GSAT
D. SARAL

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

Q46. An assertion (A) and a reason (R) are given below.

Assertion (A): Forest cover in the country has gradually decreased.
Reason (R): Encroachment by humans is one of the concerns for the forest department.
Choose the correct option.

A. Both A and R are true and R is the correct explanation of A
B. Both A and R are true, but R is not the correct explanation of A
C. A is true, but R is false
D. A is false, but R is true

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

Q47. If the interior angle of a regular polygon is 108°, then it is a

(a) Octagon
(b) Hexagon
(c) Pentagon
(d) Tetragon

Q48. Rupee sign 'Rs. ' is a

A. Devanagari letter
B. Roman letter
C. Sanskrit Script
D. A combination of Roman & Devanagari letters

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

Q49. Which of the following does not belong to the group?

A. Lakshadweep
B. Puducherry
C. Nicobar
D. Andaman

YourMockTest.com — Free Study Material

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

Q50. The headquarters of ISRO is located at

A. Bengaluru
B. New Delhi
C. Pune
D. Mumbai

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

Q51. Which of the following will appear third, if they are arranged according to a dictionary?

A. Autumn
B. Austere
C. Assert
D. Auspicious

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

Q52. If $\sin\theta = 1/\sqrt{2}$ then $(\tan\theta + \cos\theta) =$

(a) $1/\sqrt{2}$
(b) $2/\sqrt{2}$
(c) $3/\sqrt{2}$
(d) $(1 + \sqrt{2})/\sqrt{2}$

Q53. Find the mean and median of 7, 5, 5, 2, 7, 6, 5, 3, 7, 6 ?

(a) 5.3 and 5
(b) 5 and 6
(c) 5 and 5.5
(d) 5.3 and 5.5

Q54. Find the similarity in the following:

Olive Oil, Coconut Oil, Cod liver Oil, Sunflower Oil

A. All of them are vegetable oils.
B. All of them are rich in Vitamin A.
C. All of them are rich in Vitamin D.
D. All of them are oils.

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

Q55. Human nails are made of

A. Pigment
B. Elastin
C. Albumin
D. Keratin

YourMockTest.com — Free Study Material

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

Q56. Eastern boundary of Kashmir is

A. LOC
B. Jammu
C. POK
D. Ladakh region

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

Q57. The medicine paracetamol is

A. An analgesic
B. An antipyretic
C. An analgesic and antipyretic
D. A nonsteroidal anti-inflammatory drug

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

Q58. Sachin Tendulkar made his test debut in 1989 at

A. Karachi, Pakistan
B. Mumbai, India
C. Kolkata, India
D. Melbourne, Australia

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

Q59. Which key on a windows keyboard sets to full screen mode in most browsers?

A. F1
B. F10
C. F11
D. F12

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

Q60. The test for diagnosing HIV is

A. Pap Smear
B. ELISA
C. DNA
D. Mantoux

(a) D
(b) B

YourMockTest.com — Free Study Material

(c) A
(d) C

Q61. B has 32 pens, 24 pencils and 16 erasers. How many sets of these three items can be made without any left over?
(a) 6
(b) 7
(c) 8
(d) 9

Q62. Air Quality Index is
A. A measuring index of air pollution.
B. A number.
C. For measuring humidity level.
D. For forecasting rain.
(a) D
(b) B
(c) C
(d) A

Q63. Who served as the first Deputy Prime Minister of independent India?
A. K. Kamaraj
B. Morarji Desai
C. Sardar Vallabhbai Patel
D. C. Rajagopalachari
(a) A
(b) B
(c) D
(d) C

Q64. Gopal covers 100 km. He travels at a speed of 60 kmph for the first 40 km and the rest of the distance at 40 kmph. What is his average speed in kmph?
(a) 44.20 km/hr
(b) 45.20 km/hr
(c) 46.20 km/hr
(d) 47.20 km/hr

Q65. Secularism means
A. Not practicing any religion.
B. Practicing multiple religions.
C. Freedom to join any satsang.
D. Freedom of religion and worship.
(a) D
(b) B
(c) A
(d) C

Q66. A father purchased a piece of land for Rs. 18 lakh and spent Rs. 3 lakh for registration, fencing etc. He sold it for Rs. 24.57 lakh. Find his profit in percentage?
(a) 15%
(b) 14.15%
(c) 16.5%
(d) 17%

YourMockTest.com — Free Study Material

Q67. National Science Day falls on

A. 26^(th) February

B. 27^(th) February

C. 28^(th) February

D. 29^(th) February

(a) B

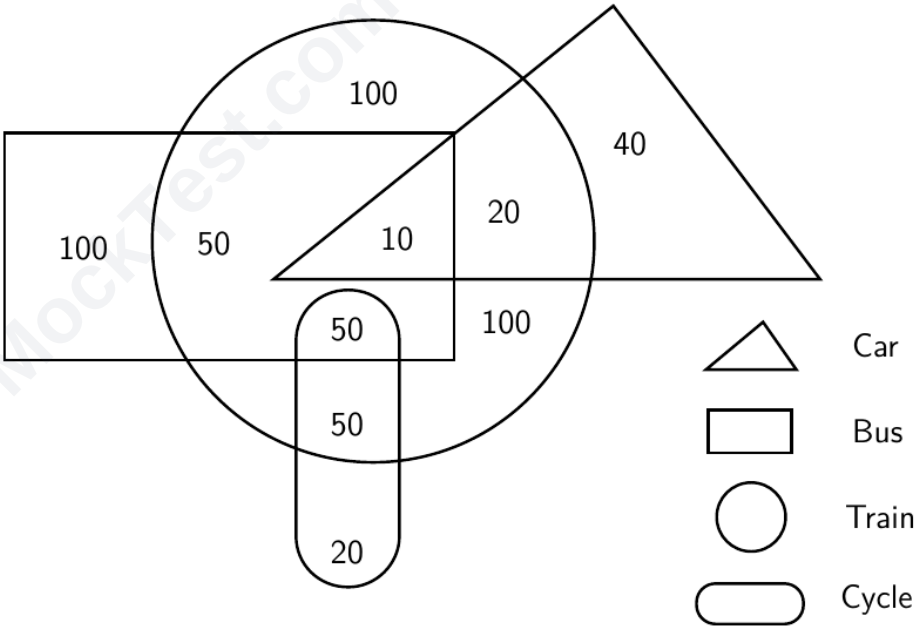
(b) D

(c) C

(d) A

Directions

Directions: Study the following diagram and answer questions based on it.



Q68. The ratio of total number of train travellers to the people who do not travel by train is?

A. 27/16

B. 28/16

C. 37/16

D. 38/16

(a) B

(b) D

(c) C

(d) A

Q69. Which two modes of transport used by people are mutually exclusive?

A. Car - Bus

B. Car - Cycle

C. Bus – Cycle

D. Cannot be determined

(a) D

(b) C

(c) A

(d) B

YourMockTest.com — Free Study Material

Q70. How many people who travel by train also travel by car or bus but not cycle?

A. 50

B. 70

C. 80

D. 100

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

Q71. Find the missing (?) in the series

14, 28, 42, 56, ?, 84, 98

(a) 68
(b) 70
(c) 72
(d) 74

Q72. After 9/11 tragedy, the rebuilt World Trade Center complex in New York is called

A. New World Trade Center

B. Empire State Building

C. One World Trade Center

D. World Trade Complex

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

Q73. The famous Nek Chand's Rock Garden is located in

A. Srinagar

B. Jammu

C. Chandigarh

D. Shimla

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

Q74. Expand: $(W - 9)^2$

(a) $(W^2 - 9w + 81)$
(b) $(W^2 - 9w + 18)$
(c) $(W^2 - 18w + 81)$
(d) $(W^2 - 18w - 81)$

Q75. On a certain Principal, simple interest amounts to Rs, 1000 in 1 year at a rate of 10% p.a. What will be the Effective rate of compound interest if the same is compounded on a half-yearly basis?

A. 10.10

B. 10.15

C.10.20

D. 10.25

(a) D
(b) A
(c) C

YourMockTest.com — Free Study Material

(d) B

Q76. In a certain code language if 41095 is READY and 840327 is FRAILS then 83145419 is

A. FEARY RED

B. FIERY RED

C. FAIRY RED

D. FIREY RED

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

Q77. Which one of the following does not belong to the group?

A. Monitor

B. Keyboard

C. Webcam

D. Mouse

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

Q78. If RATIONAL is CLETZYLW then EXPERIENCE is

A. OIZOCTOYMO

B. QJBDUQZOQ

C. OHZBSOXMO

D. PIAPCTPYNP

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

Q79. 1$ = Rs. 67.89. Money changer adds a margin of Rs. 1.11. What will be the cost of $150?

(a) Rs. 10,183
(b) Rs. 10,017
(c) Rs. 10,330
(d) Rs. 10,450

Q80. If the area of a circle is 9π sq. cm then its circumference is

(a) 9 cm
(b) 6π cm
(c) 3π cm
(d) 6 cm

Q81. 'Maharatna' refers to a group of

A. Emerging small and medium enterprises.

B. Central public sector enterprises.

C. Leading private sector enterprises.

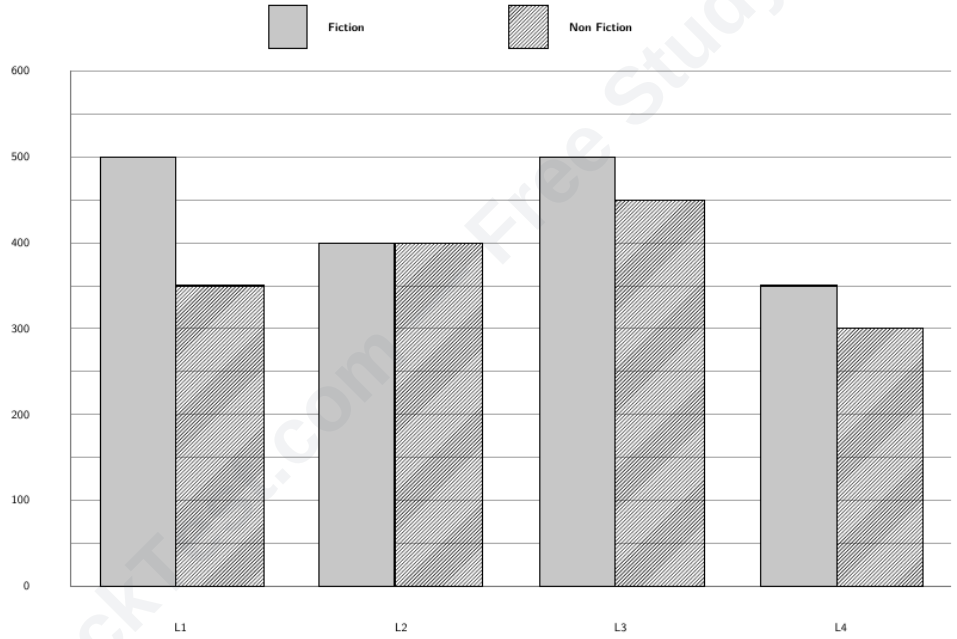
D. Leading multi-national companies.

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

YourMockTest.com — Free Study Material

Directions

The bar chart represents number of fiction and non - fiction books in four libraries L1, L2, L3 and L4. Consider the bar chart and answer questions based on it.



Q82. The ratio of total books of libraries L1 and L3 together to L2 and L4together is

(a) 29 : 36
(b) 33 : 32
(c) 36 : 29
(d) 32 : 33

Q83. The ratio of total number of non - fiction to fiction books in all libraries is

(a) 7/6
(b) 6/7
(c) 15/17
(d) 17/15

Q84. What is the percentage difference of total number of Fiction books in libraries L3 and L4 to the Non Fiction books in L3 and L4?

(a) 13.33%
(b) 11.76%
(c) 6.67%
(d) 0%

Q85. Which of the following statements is true with respect to ASCII?

A. A programming language
B. ASCII chart is not for decimals
C. American Security Code for Information Interchange
D. A character encoding scheme

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

Q86. The first Olympics games were held in

A. U.K.

B. U.S.A.

C. Greece

D. Italy

(a) C

(b) A

(c) D

(d) B

Q87. A person carries Rs. 165/ - in the form of currency notes of denominations Rs. 5, Rs. 10 & Rs. 20 in the ratio of 3 : 2 : 1. What is the value of currency notes of Rs. 20 denomination?

(a) Rs. 60

(b) Rs. 100

(c) Rs. 40

(d) Rs. 80

Q88. Which of the following fractions is the highest of all?

(a) 5/4

(b) 4/3

(c) 3/2

(d) 6/5

Q89. Name the Indian who became the CEO of Google in 2015.

A. Satya Nadella

B. Cyrus Mistry

C. Sundar Pichai

D. Vishal Sikka

(a) D

(b) A

(c) B

(d) C

Q90. The periodicity of the Commonwealth games is

A. No fixed interval

B. 4 years

C. 5 years

D. 6 years

(a) B

(b) A

(c) D

(d) C

Q91. Cricket World Cup 2023 is scheduled to be hosted by

A. India

B. Pakistan

C. Sri Lanka

D. West Indies

(a) B

(b) C

(c) A

(d) D

YourMockTest.com — Free Study Material

Q92. Which country launched its first commercial satellite on 24^(th) November 2015 as a part of its National Space Program?

A. Russia

B. India

C. Japan

D. China

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

Q93. Which of the following is not a Union Territory?

A. Puducherry

B. Chandigarh

C. Lakshadweep

D. Sikkim

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

Q94. If '+' and '÷', '×' and '-' are interchanged in the equation : 17 ÷ 7 – 27 + 7 × 37, then its value will be

A. 7

B. 17

C. 27

D. 37

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

Q95. If the mathematical operator '+' means division, '-' means multiplication, '×' means subtraction and '÷' means addition, then the value of

1 × 7 + 21 × 2 ÷ 2 + 3 – 4 is

A. 8/3

B. 4/3

C. - 4/3

D. - 8/3

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

Q96. 10 people can do a work in 30 days. In how many days, can 15 people complete double the work?

A. 20

B. 25

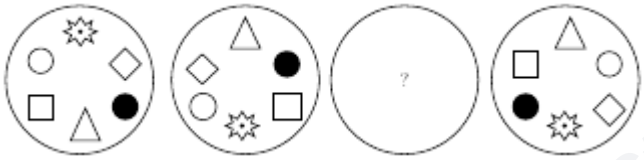
C. 40

D. 45

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

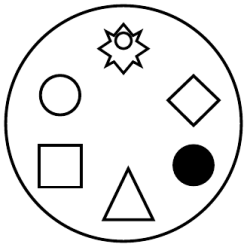
YourMockTest.com — Free Study Material

Q97. Look carefully at the sequence of symbols to find the pattern.

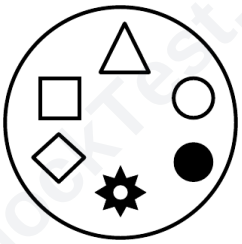


Which of the following will replace the (?) in the sequence?

(a)



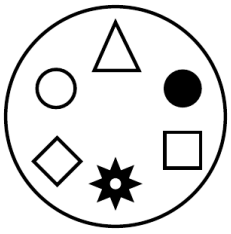
(b)



(c)



(d)



Q98. Statements followed by some conclusions are given below.

Statements:

1. Most people have orange scooters while some have red ones.
2. People like bright coloured scooters.

Conclusions:

I. People cannot afford bright coloured scooters.

II. Most people prefer orange over other bright colours.

Find which of the given conclusions logically follows from the given statements.

A. Only conclusion I follows.

B. Only conclusion II follows.

C. Both I and II follow.

D. Neither I nor II follows.

YourMockTest.com — Free Study Material

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

Q99. Which of the following is not a bleaching agent?

A. Sodium hypochlorite
B. Calcium hypochlorite
C. Hydrogen peroxide
D. Hydrogen sulphide

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

Q100. Which movement was called off following the violence at 'Chauri Chaura' incident?

A. Khilafat Movement
B. Quit India Movement
C. Non co-operation Movement
D. Home Rule Movement

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

ANSWER KEY

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

SOLUTIONS

Q1. Answer: (d) (x – 12)(x + 11)

From the given data,
=> $(x^2 – x – 132) = (x^2 – 12x + 11x – 132)$
=> $x(x – 12) + 11 (x – 12)$
=> $(x + 11)(x – 12)$
Therefore $(x^2 – x – 132) = (x + 11) (x – 12)$

Q2. Answer: (a) P

Person who fulfill all the three conditions get selected for the festival.

YourMockTest.com — Free Study Material

Conditions	Person Z	Person P	Person J	Person A
One dance form	True (Bharat Natyam)	True (Classical dancer)	True (Contemporary)	True (Hip-Hop)
One musical Instrument	True (violinist)	True (Guitar)	False (he is still learning flute)	True (Sitar)
Acting Skill	False	True (Road Show)	True	False

As we can see only person P fulfill all the three conditions.

Hence, Person P definitely gets selected.

Q3. Answer: (a) A

Alphabet in question	Symbol
R	$
E	#
S	!
A	%
C	&
H	@

So code for SCARE is !&%$#

Q4. Answer: (c) B

1) Rosy likes Yellow and is a Student.

2) Mary and Andy like Purple and Blue respectively and neither of them is a Teacher.

3) Lily likes Brown and the Inspector likes Blue.

4) The Librarian likes Green.

Persons	Color	Profession
Rosy	Yellow	Student
Mary	Purple	Teacher
Lily	Brown	
Andy	Blue	Inspector
Daisy	Green	Librarian

5) One of the five is a Principal.

Persons	Color	Profession
Rosy	Yellow	Student
Mary	Purple	Principal
Lily	Brown	Teacher
Andy	Blue	Inspector
Daisy	Green	Librarian

Hence, Teacher likes Brown color.

Q5. Answer: (b) C

1) Rosy likes Yellow and is a Student.

2) Mary and Andy like Purple and Blue respectively and neither of them is a Teacher.

3) Lily likes Brown and the Inspector likes Blue.

4) The Librarian likes Green.

Persons	Color	Profession

YourMockTest.com — Free Study Material

Rosy	Yellow	Student
Mary	Purple	Teacher
Lily	Brown	
Andy	Blue	Inspector
Daisy	Green	Librarian

5) One of the five is a Principal.

Persons	Color	Profession
Rosy	Yellow	Student
Mary	Purple	Principal
Lily	Brown	Teacher
Andy	Blue	Inspector
Daisy	Green	Librarian

Hence, Mary is the Principal.

Q6. Answer: (a) D

1) Rosy likes Yellow and is a Student.
2) Mary and Andy like Purple and Blue respectively and neither of them is a Teacher.
3) Lily likes Brown and the Inspector likes Blue.
4) The Librarian likes Green.

Persons	Color	Profession
Rosy	Yellow	Student
Mary	Purple	Teacher
Lily	Brown	
Andy	Blue	Inspector
Daisy	Green	Librarian

5) One of the five is a Principal.

Persons	Color	Profession
Rosy	Yellow	Student
Mary	Purple	Principal
Lily	Brown	Teacher
Andy	Blue	Inspector
Daisy	Green	Librarian

All pairs are correct except "Rosy - Teacher".
Hence, "Rosy - Teacher" is wrong pair.

Q7. Answer: (c) 124.653

From the given data,
=> 1.123 + 11.23 + 112.3 = 124.653
Therefore ? = 124.653

Q8. Answer: (a) 0

From the given data,
Mean = sum of observations/Total observations
Mean of (10, 10, 10, 10, 10) = (10 + 10 + 10 + 10 + 10)/5 = 10

YourMockTest.com — Free Study Material

Variance = $[\sum(x - x)^2]/(n)$

x = Value of one observation

x = mean value of all the observation

n = The number of observations

Calculations:

Variance = $[(10 - 10)^2 + (10 – 10)^2 + (10 – 10)^2 + (10 – 10)^2 + (10 – 10)^2]/(5)$

=> $(0 + 0 + 0 + 0 + 0)/5 = 0/5 = 0$

=> Standard deviation = √variance = √0 = 0

Q9. Answer: (a) 16.67%

From the given data,

Cost price of 12 pens = Rs. 120

=> Cost price of one pen = 120/12 = Rs. 10

Also, given that selling price of 3 pens = Rs. 35

=> Selling price of one pen = 35/3 = Rs. 11.66

Profit on one pen = selling price of one pen – cost price of one pen = 11.66 – 10 = Rs. 1.67

=> Profit percentage = (Profit/Cost price) × 100 = (1.67/10) × 100 = 16.67%

Q10. Answer: (d) D

Here both words DEPLETE and EXHAUST are synonyms. So we have to choose a synonym for REPLENISH.

REPLENISH means to fill something again.

So, RESTORE is the best synonym for this word.

Q11. Answer: (b) A

The Correct Answer is Option 2 i.e A.

Sound is measured in decibels (dB) and Noise above 70 dB over a prolonged period of time may start to damage hearing.

A common source of Noise	Average sound level (dB)
Normal conversation	60 dB
Washing machine	70 dB
City traffic, Gas-powered lawnmowers	80-85 dB
Boiler room	90 dB
Sirens	110-129 dB
Fireworks show	140-160 dB

Q12. Answer: (b) D

The height of X is 7 metre;

The height of Y is 3.5 metre;

The height of Z is 21 metre;

A/B ? P ? Z ? X ? Y

Here we can’t decide that B is tallest or A.

The average height of X,Y,Z is 7 + 3.5 + 21 = 31.5/3 = 10.5 it is more than 10.

So both conclusions are wrong.

Q13. Answer: (b) B

Given

G is twice as fast as S in doing work

Formula used

Total work = Efficiency × Time

Calculation

Let, efficiency of S be 1 unit/day and of G be 2 units/day.

Hence, total work = efficiency × time = 2 × 30 = 60 units

YourMockTest.com — Free Study Material

Now, Time taken by both to complete work together = total work/total efficiency = 60/(2 + 1) = 60/3 = 20 days.

Q14. Answer: (c) 3 : 4

We know,

Simple interest = P × T × R/100

Ratio of simple interest earned on certain amount at the rate of 12% p.a for 9 years and that for 12 years = (P × 9 × 12)/100 : (P 12 × 12)/100 = 9 : 12 = 3 : 4

Q15. Answer: (d) 240 sq.cm

From the given figure,

From ΔBEF, we get

=> $BF^2 = BE^2 + EF^2$

=> $13^2 = 12^2 + EF^2$

=> $EF^2 = 13^2 – 12^2 = 169 – 144 = 25$

=> EF = 5 cm

From the figure,

=> CD = EF = 5 cm and AB = DE = 15 cm

=> CF = CD + DE + EF = 5 + 15 + 5 = 25 cm

Area of the trapezoidal = ½ × BE × (AB + CF) = ½ × 12 (15 + 25) = 240 sq.cm

Q16. Answer: (d) D

Here Both the words are synonyms. So we have to choose two synonym words, HYPOTHESIS means our thinking or SUPPOSITION

so option D is perfect answer.

Q17. Answer: (d) C

The Correct Answer is Option 4 i.e C.

• The validity of a cheque is estimated to be within a period of three months from the date of its issue.

• With effect from April 1, 2012, the validity period of Cheques, Demand Drafts, Pay Orders, and Banker's Cheques was reduced from 6 months to 3 months, from the date of its issue.

• Post-dated cheque: It is a cheque on which future date is written by the issuer for the payment.

• Outdated cheque: A cheque is outdated when it is outstanding for a period of more than 3 months from the date of issue.

Q18. Answer: (b) B

The Correct Answer is Option 2 i.e B.

• The Ganga action plan was launched on 14th January 1986 by Shri Rajeev Gandhi, the then Prime Minister of India.

• The main objective of this plan aims at reducing the pollution on Ganga River.

• The plan was to improve the water quality by Interception, Diversion and treatment of domestic sewage and present toxic and industrial chemical wastes from identified grossly polluting units entering in to the river.

Q19. Answer: (b) 13 and 18

We know that,

Range = maximum value – minimum value = 29 – 16 = 13

Mode = maximum repeated value

Because 18 is repeated 3 times.

Mode = 18

Therefore Range and mode of the given data are 13 and 18

Q20. Answer: (c) C

The Correct Answer is Option 3 i.e C.

• Nitrogen is a colorless, odorless gas and is generally considered an inert element.

• It can also be used in food packaging for freezing and preserving.

• Nitrogen constitutes about 78 percent of the air in the atmosphere.

• Nitrogen (N) atomic number is 7

Gas Name	Percent Volume

YourMockTest.com — Free Study Material

Nitrogen (N2)	78.08 %
Oxygen (O_²)	20.95 %
Argon (Ar)	0.93 %
Neon (Ne)	0.0018 %
Carbon Dioxide (CO2)	0.0360 %
Methane (CH4)	0.00017 %
Hydrogen (H2)	0.00005 %
Nitrous Oxide (N2O)	0.00003 %
Ozone (O3)	0.000004 %

Q21. Answer: (c) 22.7%

From the given data,

Cost price of the table(C.P) = Rs. 11,000

Selling price of the table(S.P) = Rs. 13,500

=> Profit % = (S.P – C.P)/C.P × 100 = (13500 – 11000)/11000 × 100 = 22.7%

Q22. Answer: (b) A

The Correct Answer is Option 2 i.e A.

• Shimla Agreement:

• The Shimla Agreement was signed on 2 July 1972 by Prime Minister Indira Gandhi and Pakistani President Zulfikar Ali Bhutto.

• The agreement was signed following a 1971 war between India and Pakistan, which liberated East Pakistan and led to the creation of Bangladesh.

• The agreement was signed in Barnes Court at Shimla, Himachal Pradesh.

• The Barnes Court building has been constructed in the Tudor style of architecture.

• Ellerslie Building:

• Ellerslie is the Himachal Pradesh Secretariat, which is also known as Raj Bhawan.

• The Ellerslie building was designed by Lt. Col. H.E.S. Abbott during the British Empire

• Viceregal Lodge:

• Viceregal Lodge was built between 1886 and 1888.

• It was designed by architect Henry Irwin using local sandstone in the Jacobethan style.

• It was the residence of the British Viceroy Lord Dufferin.

• Gorton Castle:

• Gorton Castle is a heritage monument located in Shimla. It became the seat of the Accountant General of Himachal Pradesh.

• Gorton Castle was built in 1904 and was designed by Sir Winton Jacob.

Q23. Answer: (c) 1 + 2cosθsinθ

From the given data,

=> $(\sin\theta + \cos\theta)^2 = \sin^2\theta + \cos^2\theta + 2\sin\theta\cos\theta = 1 + 2\cos\theta\sin\theta$ (Because $\sin^2\theta + \cos^2\theta = 1$)

Q24. Answer: (c) A

The Correct Answer is Option 3 i.e A.

Instrument	Use
Pyrometer	Measures very high temperature
Thermostat	Regulates temperature at a particular point or degree
Thermometer	Measures temperature
Tonometer	To measure the pitch of a sound
Thermocouple	It is a kind of sensor used to measure the temperature at a specific point in the form of the EMF or an electric current.

YourMockTest.com — Free Study Material

Q25. Answer: (c) C

The Correct Answer is Option 3 i.e C.

CONCEPT:

• Pressure: The pressure is the force applied per unit area in a direction perpendicular to the surface of the object.

• SI unit of pressure is the pascal (Pa).

Pressure (P) = Force (F)/Area (A)

• Work: Work is measured by the product of force and displacement of the body along the direction of the force.

• SI unit of work is Joule (J).

• Energy: The capacity of doing work by a body is called its energy.

• SI unit of energy is Joule (J).

• Density: Density is the mass per unit volume.

• SI unit of volume is the cubic meter.

• SI unit of density is kilogram per cubic meter (kg/m^3).

EXPLANATION:

• Since the force per unit area is called pressure. So pressure is measured in terms of force and area. Hence option 3 is correct.

Q26. Answer: (d) C

Numbers from 1 to 100 in which 3 is coming at unit place are 3, 13, 23, 33, 43, 53, 63, 73, 83, 93.

Hence, total numbers are 10.

Q27. Answer: (a) A

The Correct Answer is Option 1 i.e A.

• Small Intestine:

• Small intestines are involved in the process of absorption of food and the digestion of food.

• It runs between the stomach and the large intestine.

• The small intestine is longer than the large intestine

• Duodenum, jejunum, and ileum are the three components of the small intestine.

• The small intestine is about 6 meters or 20 feet long.

• Large Intestine:

• The large intestine is much broader than the small intestine

• It is the end part of the intestine and smaller than the small intestine.

• The large intestine is involved in the absorption of water and in the production and absorption of vitamins.

• The large intestine does not involve digestion.

• The large intestine consists of the colon, rectum, and anal canal.

• The large intestine is about 1.5 meters or 5 feet long.

Q28. Answer: (d) B

The Correct Answer is Option 4 i.e B.

• Bengaluru:

• Bengaluru is the capital of the Indian state of Karnataka.

• It is commonly referred to as the “Silicon Valley of India”.

• To conduct a detailed study into a disease-causing organism in livestock, Biosafety Laboratory has been set up in India at Bengaluru.

• The lab was set up by the National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI).

• Ludhiana:

• It is the largest district in Punjab

• Ludhiana city was founded during the time of the Lodhi dynasty.

• Anand:

• The city of Anand is located in Gujarat.

• Anand is commonly known as the Milk Capital of India.

• It became famous for Amul dairy and its milk revolution.

• Allahabad:

• It is a city in the Indian state of Uttar Pradesh

• Allahabad has been officially renamed as Prayagraj.
• It is situated at the confluence of three rivers- Ganga, Yamuna and the invisible Saraswati.

Q29. Answer: (c) C

A pole is taller than a Giraffe which is taller than a Tree.
POLE ? GIRAFFE ? TREE
A Signal is shorter than the pole but taller than a building which is taller than the Giraffe
POLE ? SIGNAL ? BUILDING ? GIRAFFE
Thus, we get
POLE ? SIGNAL ? BUILDING ? GIRAFFE ? TREE
Hence, Tree is the shortest thing.

Q30. Answer: (d) B

Hence, VI is the missing term in the series

Q31. Answer: (a) C

From DNHA we can make HAND, from EDAH we can make HEAD, from THEA we can make HEAT and from IRHA we can make HAIR. Here, HEAT is different from others. Hence, the answer is 'THEA'.

Q32. Answer: (d) Uncle

Hence, Harnish is Uncle of Karna.

Q33. Answer: (c) B

The Correct Answer is Option 3 i.e B.
• International Maritime Organisation (IMO):
• IMO is the specialized agency of the United Nations
• It is responsible for the safety and security of shipping and the prevention of marine pollution from ships.
• Its Headquarters is in London, United Kingdom.
• Kitack Lim of South Korea is the current secretary-general of IM current secretary-general of IMO.
• Adulteration in food:
• It is the process of adding a few substances which are collectively called the adulterants in order to increase the quantity of food item in raw form or prepared form.
• Adding certain chemicals for faster ripening of fruits, Mixing of clay, pebbles, sand, and chips, to the grains and pulses are the forms of food adulteration.
• Deforestation: It is the process of clearing large areas of forest lands for various human activities.

Q34. Answer: (d) 4, 140

From the given data,
Factors of 20 = 1, 2, 4, 5, 10, 20
Factors of 28 = 1, 2, 4, 7, 14, 28
Therefore H.C.F = 4
LCM of 20, 28 = 2 × 2 × 5 × 7 = 140
Therefore H.C.F and LCM of 20, 28 are 4 and 140.

Q35. Answer: (a) C

The Correct Answer is Option 1 i.e C.
• Astrosat:
• ASTROSAT is India's first dedicated multi-wavelength space observatory.
• AstroSat mission enables the simultaneous multi-wavelength observations of various astronomical objects with a single satellite.
• ASTROSAT observes the universe in the optical, Ultraviolet, low and high energy X-ray regions of the electromagnetic spectrum
• It was launched by PSLV-C30.
• Remote sensing satellites:
• IRS-1A was the first of the series of indigenous state-of-art operating remote sensing satellites.
• It was successfully launched into a polar sun-synchronous orbit on March 17, 1988.
• Wetland mapping, Flood risk zone mapping, and flood damage assessment are few applications of remote sensing satellites.

YourMockTest.com — Free Study Material

• Communication Satellite:
• Indian First Communication Satellite is APPLE.
• The satellite successfully launched by Ariane-1, from French Guiana on June 19, 1981.
• APPLE was used in several communication experiments including relay of TV programmes, and radio networking.
• Reconnaissance satellite:
• RISAT-2 was the first India Reconnaissance satellite
• It is a Radar Imaging Satellite with the all-weather capability to take images of the earth.
• It was the first dedicated satellite for spying and reconnaissance for military use.

Q36. Answer: (c) 7.2

Given:
The distance travelled = 300 m
Time = 2 minutes and 30 seconds
Concept used:
1 minutes = 60 seconds
1 km = 1000 m
1 hour = 3600 seconds
Formula used:
Speed = distance/time
Calculation:
Distance = 300m = 0.3 km
Time = 2 min 30 sec = 150 sec = 150/3600 hour
Speed = distance/time = 0.3/(150/3600)
=> (0.3 × 3600)/150
=> 36/5
=> 7.2 km/hr

Q37. Answer: (d) C

All options except option C are same. With chalk we write on slate; With pencil we write on notebook; by using sketch pen we sketch a picture on drawing book; but ink is put in the pen.

Q38. Answer: (b) B

The Correct Answer is Option 2 i.e B.
• Gandhi-Irwin Pact was signed between Mahatma Gandhi and Viceroy Lord Irwin in London on 5 March 1931.
• Important features of this pact were:
• INC would agree to discontinue the Civil Disobedience Movement.
• The INC would agree to join the second Round Table Conference
• British would withdraw all orders imposing curbs on the activities of the Indian National Congress.
• British also agreed to withdraw trials relating to several offences except those involving violence.
• British also agreed to release of those who were arrested for participating in the civil disobedience movement.
• It was also agreed that the British would remove the tax on salt, which allowed Indians to produce, trade, and sell salt legally and for their own use.

Q39. Answer: (c) 5 or 45

Calculation:
Let the numbers be x and y
According to the question,
2(x – y) = x + y
=> 2x - 2y = x + y
=> 2x - x = y + 2y
=> x = 3y
Since, one of the number is 15
Case (1): If x = 15, so

x = 3y

=> 15 = 3y

=> y = 15/3 = 5

Case (2): If y = 15, so

x = 3y = 3 × 15 = 45

Thus, the other number is 5 or 45.

Confusion Points

In the question it is asked to find the other number and other numbers may be 5 or 45

It is not asked about the first number so 15 and 45 is not the correct answer.

Q40. Answer: (c) 43

Let the three consecutive number be x, x + 1, x + 2

=> x + (x + 1) + (x + 2) = 126

=> 3x + 3 = 126

=> 3x = 123

=> x = 41

Therefore Highest number = x + 2 = 41 + 2 = 43

Q41. Answer: (d) 48

Shortcut Trick

Age difference between two people always remains constant → 25 years.

In 5 years, Surya will be twice as old as his son → Ratio = 2 : 1.

Difference in ratio units = 2 − 1 = 1 unit → 25 years.

Surya's age in 5 years = 2 units × 25 = 50 years.

Surya's age after 3 years = 50 − 2 = 48 years.

Therefore The correct answer is 48 years.

Alternate Method

Given:

Current age difference = 25 years

Condition after 5 years: Surya's age = 2 × Son's age

Calculations:

=> Let the current age of the son be x years.

=> Surya's current age = x + 25 years.

=> After 5 years, Son's age = x + 5

=> After 5 years, Surya's age = (x + 25) + 5 = x + 30

=> According to the problem: x + 30 = 2 × (x + 5)

=> x + 30 = 2x + 10

=> 2x − x = 30 − 10

=> x = 20 years (Son's current age).

=> Surya's current age = 20 + 25 = 45 years.

=> Surya's age after 3 years = 45 + 3 = 48 years.

Therefore The correct answer is 48 years.

Additional Information

Constant Age Difference

The mathematical difference between the ages of two individuals never changes, regardless of how many years pass.

Ratio Property in Ages

When ages are given in ratios for different years, ensure the difference between ratio parts is scaled to match the actual constant age difference.

Linear Equations

Age problems can always be solved by forming a simple linear equation: Age_(Future) = Age_(Present) + n years.

YourMockTest.com — Free Study Material

Q42. Answer: (c) A

The Correct Answer is Option 3 i.e A.

• Bank of Hindustan:

• The Bank of Hindostan (1770-1832), set up by the agency house of Alexander and Company in the year 1770 was the first bank established in India.

• It was no longer exists now.

• Imperial Bank:

• The Imperial Bank was formed in 1921 as a joint-stock bank by amalgamating the Presidency Banks of Bombay, Calcutta, and Madras.

• State Bank of India was created in 1806, in Calcutta, Called the Bank of Calcutta,

• In 1809 It became the Bank of Bengal when the bank was granted a charter to serve all of Bengal.

• The imperial government by the middle of the century created two more regional banks.

• The Bank of Bombay was created in 1840, and was soon joined by the Bank of Madras in 1843. Together with the Bank of Bengal, they became known as the "presidency" banks.

• Imperial Bank of India was nationalized by the Government of India in the year 1955 with the Reserve Bank of India taking a 60% stake and the name was changed to State Bank of India.

• SBI Bank:

• It is the largest public sector banks in India.

• It began with the establishment of the Bank of Calcutta in Calcutta, on 2 June 1806.

• It was the first-ever joint-stock bank of British India, established under the sponsorship of the Government of Bengal.

• Tagline: "The banker to every Indian".

• Reserve Bank of India:

• The Reserve Bank of India was set up on the basis of the recommendations of the Hilton Young Commission

• The Reserve Bank of India was established on April 1, 1935, in accordance with the provisions of the Reserve Bank of India Act, 1934.

• It acts as a Banker to the Government as well as banker to banks.

Q43. Answer: (b) C

Coding according to reverse general alphabetical series.

M = 14, TANK = 7 + 26 + 13 + 16 = 62.

Similarly,

STARDOM = 8 + 7 + 26 + 9 + 23 + 12 + 14 = 99.

Hence, STARDOM will be coded as 99.

Q44. Answer: (c) 32

We know that,

a : b :: c : x

Then fourth proportional x = (bc)/a

From the given data,

Fourth proportional x = (8 × 12)/3 = 32

Therefore the correct answer is 32.

Q45. Answer: (b) B

The Correct Answer is Option 2 i.e B.

• INSAT:

• Indian National Satellite System launched by ISRO is a series of multipurpose Geo-stationary satellites to satisfy the telecommunications, broadcasting, meteorology, and search and rescue needs of India.

• GSAT:

• GSAT (Geosynchronous Satellites) satellites are ISRO's indigenously developed communication satellites.

• GAGAN:

• GAGAN is GPS Aided Geo Augmented Navigation.

• It is a Satellite-Based Augmentation System (SBAS) for the Indian Airspace.

• The objective of GAGAN is to establish, deploy and certify satellite-based augmentation system for safety-of-life civil aviation applications in India.

YourMockTest.com — Free Study Material

• SARAL:

• The SARAL is a joint Indo-French satellite mission for oceanographic studies.

• SARAL performs altimetric measurements designed to study ocean circulation and sea surface elevation.

• Its applications include Marine meteorology and sea state forecasting, Operational Oceanography, Seasonal forecasting, Climate monitoring etc.

Q46. Answer: (d) A

Forest has been gradually decreased because of increased population. Human cuts the forest and make houses. Many more thing are there to cut trees. Illegal cutting of trees one of the main concerns. So here reason is the best suitable for the given assertion.

Q47. Answer: (c) Pentagon

From the given data,

Exterior angle = 180° - interior angle = 180° - 108° = 72°

Therefore Number of sides = 360°/exterior angle = 360°/72° = 5

Therefore It is a pentagon

Alternate Method

Given that,

Interior angle of a polygon = 108°

The interior angle of n side regular polygon is given by, ((n - 2)180)/n or 180 - 360/n

=> 180 - 360/n = 108

=> 180n - 360 = 108n

=> 72n = 360

=> n = 5

Therefore It is a pentagon

Q48. Answer: (b) D

The Correct Answer is Option 2 i.e D.

• The symbol of Indian Rupee (Rs.) typifies India's international identity for money transactions and economic strength.

• The symbol is an amalgam of Devanagari "Ra" and the Roman Capital "R" with two parallel horizontal stripes running at the top representing the national flag and also the "equal to" sign.

• The Indian Rupee sign was adopted by the Government of India on 15th July 2010.

• The symbol conceptualized and designed by Udaya Kumar, a post-graduate in Design from the Indian Institute of Technology Bombay.

• Devanagari script is written from left to right.

• Sanskrit is the oldest language known to humans.

• Sanskrit is declared as a classical language in the year 2005

Q49. Answer: (b) B

The correct answer is B.

Key Points

• Puducherry:

• On November 1, 1954, the Government of India took over the administration of the territory of the French Establishments in India after the French possessions in India were de facto transferred to the Indian Union.

• N. Rangaswamy is the current chief minister

• Dr. Tamilisai Soundararajan is the current Lt. Governor.

Important Points

• Puducherry, unlike the other options, is NOT an Island group/Archipelago. Hence, Puducherry DOESN'T belongs to the group.

Additional Information

• Lakshadweep:

• It is an archipelago consisting of 36 Islands with an area of 32 sq km.

• It is the smallest union territory of India.

• Lakshadweep was constituted as a union territory in 1956.

• Lakshadweep islands are located in the Arabian sea.
• As these islands are built up by corals, they are called as the Coral Islands of India.
• Dineshwar Sharma is the current Lt. Governor.
• Kavaratti is the capital is Lakshadweep.
• The Andaman and Nicobar islands:
• It is an archipelago consisting of a group of Islands situated in the Bay of Bengal.
• The Andaman and Nicobars Islands are separated by the Ten Degree Channel.
• Sri Vijaya Puram is the capital of the Andaman and Nicobar Islands.
• Andaman and Nicobars Islands became a Union Territory in 1956.
• Andaman and Nicobar Islands are of tectonic origin.
• Devendra Kumar Joshi is the current Lieutenant Governor.

Q50. Answer: (a) A

The Correct Answer is A.
• ISRO:
• Dr Vikram Sarabhai is considered as the founding father of Indian space programme
• Its vision is to harness space technology for national development while pursuing space science research and planetary exploration.
• Dr. V. Narayan is the present chairman of ISRO.
• ISRO has become the 4th space agency to reach Mars after the United States, the Soviet Union, and the European Space Agency.
• The headquarters of ISRO is located in Bengaluru.
• Bengaluru:
• It is the capital of the Indian state of Karnataka.
• It is commonly referred to as the “Silicon Valley of India”.
• New Delhi:
• It was made a Union Territory in 1956.
• Delhi is surrounded on all sides by Haryana except the east, where it borders with Uttar Pradesh.
• New Delhi is situated on the banks of River Yamuna.
• Pune:
• Pune is located in the state of Maharashtra.
• It is the second-largest city in the state after Mumbai,
• Aga Khan Palace is one of the famous attraction, situated in Pune.
• Mumbai:
• Mumbai is the capital city of Maharashtra.
• The Gateway of India is the most famous monument and Iconic landmark located in Mumbai.
• Devendra Fadnavis is the current CM of Maharashtra.
• C.P. Radhakrishnan is the governor of Maharashtra.

Q51. Answer: (b) B

The correct order of words as they would appear in the English dictionary is:
C. Assert
D. Auspicious
B. Austere
A. Autumn
The correct order is 'C, D, B, A'
Austere will appear 3rd in the dictionary
Hence, the correct answer is 'Option (2)'.

Q52. Answer: (d) (1 + √2)/√2

Concept Used:
Calculation:
From the given data,

sinθ = 1/√2

=> sinθ = sin45°

=> θ = 45°

Therefore tanθ + cosθ = tan45° + cos45° = 1 + 1/√2 = (1 + √2)/√2

Q53. Answer: (d) 5.3 and 5.5

From the given data,

Mean = (7 + 5 + 5 + 2 + 7 + 6 + 5 + 3 + 7 + 6)/10 = 53/10 = 5.3

Total no of terms = 10

Ordering the numbers: 2, 3, 5, 5, 5, 6, 6, 7, 7, 7

Median = (5^(th) term + 6^(th)term)/2 = (5 + 6)/2 = 5.5

Therefore Mean and median of the given data are 5.3 and 5.5

Q54. Answer: (a) D

The Correct Answer is Option 1 i.e D.

• Vegetable oils are Edible oils extracted from plants.

• Common vegetable oils include soybean oil, sunflower oil, olive oil, and coconut oil.

• Olive Oil, Sunflower Oil, Coconut Oil is rich in Vitamin E and K.

• Cod Liver Oil:

• It is a type of fish oil that is derived from the liver of codfish.

• It is a rich vitamin A and vitamin D.

• The similarity among all the given oils is all of them are oils.

Q55. Answer: (b) D

The Correct Answer is Option 2 i.e D.

• Elastin:

• Elastin is a major extra cellular matrix protein.

• It is critical to the coil/stretch and recoil of many vertebrate tissues such as skin, heart, lungs, ligament, tendons.

• Keratin:

• Keratin is the type of protein.

• It exists naturally in hair and nails

• Keratins are best known for providing strength and resilience to cells that form the hair, skin, and nails.

• They are the fibrous proteins that form the structural framework of epithelial cells.

• Albumin:

• Albumin is a protein made by the liver.

• Albumin helps keep fluid in the bloodstream so it doesn't leak into other tissues.

• It also carries various substances throughout the body, including hormones, vitamins, and enzymes.

• Pigment:

• Color to skin, hair, and eyes are due to the Melanin pigment.

• Pigment is a substance which given color to plant or animal tissues.

Q56. Answer: (d) D

The Correct Answer is Option 4 i.e D.

• Ladakh:

• Ladakh became a Union Territory on 31st October 2019.

• The Union Territory of Ladakh comprises two districts namely Leh and Kargil.

• R K Mathur is the first Lt Governor of Ladakh.

• The Eastern boundary of Kashmir is the Ladakh region.

• Jammu and Kashmir border Indian states of Punjab and Himachal Pradesh.

• Jammu:

• Jammu is the winter capital of the Indian Union territory of J&K.

• Jammu is the most populous district in the Indian state of Jammu and Kashmir.

• Tawi river flows through the city of Jammu.

YourMockTest.com — Free Study Material

• LoC is the military Line of Control between Pakistan occupied Kashmir and Indian Kashmir.
• Pakistan Occupied Kashmir (PoK) is that part of the Jammu and Kashmir (India) which was invaded by Pakistan in 1947.

Q57. Answer: (d) C

The Correct Answer is Option 4 i.e C.
• Analgesic:
• They are a class of drugs that are used to relieve pain.
• They are also known as pain killers or pain relievers.
• Aspirin, ibuprofen and paracetamol are examples of Analgesics.
• Antipyretics:
• Antipyretics are used to reduce body temperature in fever.
• Example Aspirin, acetaminophen/paracetamol (Tylenol)
• Paracetamol is known as acetaminophen.
• Paracetamol is a well-known antipyretic and analgesic compound that is used to treat fever and pain.
• Nonsteroidal anti-inflammatory agents (NSAIDs) are a class of drugs that relieve pain and fever and reduce inflammation.

Q58. Answer: (d) A

The Correct Answer is Option 4 i.e A.
• Karachi, Pakistan:
• Sachin Tendulkar made his test debut in 1989 against Pakistan in Karachi at the age of sixteen.
• He made 15 runs, being bowled by Waqar Younis, who also made his debut in that match.
• Tendulkar also played his first ODI against Pakistan in Gujranwala on 18 December 1989 and scored 0 runs.
• Karachi is the largest city of Pakistan.
• It is known as the City of Lights for ages.
• Kolkata:
• Kolkata is the capital of West Bengal.
• Kolkata is the only city in India to have a tram network.
• Calcutta Polo Club, established in 1862 is considered the oldest polo club in the world.
• Melbourne:
• Melbourne is the coastal city in the Australian state of Victoria.
• National Gallery of Victoria, popularly known as the NGV, is an art museum in Melbourne is Australia's oldest, largest and most visited art museum.
• Mumbai:
• Mumbai is the capital city of Maharashtra.
• The Gateway of India is the most famous monument and Iconic landmark located in Mumbai.
• Devendra Fadnavis is the current CM of Maharashtra.
• C.P. Radhakrishnan is the governor of Maharashtra.

Q59. Answer: (d) C

The Correct Answer is Option 4 i.e C.

Keyboard shortcut	Action
F1	Opens the help menu
F5	Refresh
F11	Full-screen mode
F12	used mostly in word file to open save dialogue box
F10	opens menu bar options

Q60. Answer: (b) B

The Correct Answer is Option 2 i.e B.
• ELISA:
• It is an enzyme-linked immunosorbent assay

• It is a plate-based assay technique designed for detecting and measuring antibodies, hormones, peptides and proteins.
• ELISA test may be used to diagnose HIV, which causes AIDS
• Pap smear:
• It is also called a Pap test.
• It is used to test for cervical cancer in women.
• DNA:
• It is deoxyribonucleic acid.
• It is the hereditary material in humans and almost all other organisms.
• DNA has the shape of the double-helical structure.
• The DNA test is done in order to find or verify ancestral genealogical relationships and also the most commonly to identify whether a person is the biological parent of another individual.
• Mantoux:
• It is also known as the Tuberculin Skin Test (TST).
• It is to determine whether a person is infected with Mycobacterium tuberculosis.

Q61. Answer: (d) 9

Shortcut Trick

Find the Highest Common Factor (HCF) of the quantities: HCF(32, 24, 16) = 8.

Divide each item by the HCF to get the simplified ratio: 32÷8 = 4, 24÷8 = 3, 16÷8 = 2.

Sum the parts of the ratio to find the total items per set: 4 + 3 + 2 = 9.

Therefore The correct answer is 9.

Alternate Method

Given:

Number of pens = 32

Number of pencils = 24

Number of erasers = 16

Formula Used:

To distribute items equally without any leftover, we find the HCF. The value is then determined by the sum of the reduced quantities: Result = (Σ Items) ÷ HCF

Calculations:

=> Total items = 32 + 24 + 16 = 72

=> Prime factorization of 32 = 2 × 2 × 2 × 2 × 2

=> Prime factorization of 24 = 2 × 2 × 2 × 3

=> Prime factorization of 16 = 2 × 2 × 2 × 2

=> HCF = 2 × 2 × 2 = 8

=> Reduced quantities for each item:

=> Pens per set = 32 ÷ 8 = 4

=> Pencils per set = 24 ÷ 8 = 3

=> Erasers per set = 16 ÷ 8 = 2

=> Total items in simplified grouping = 4 + 3 + 2 = 9

Therefore The correct answer is 9.

Additional Information

HCF (Highest Common Factor)

It is the largest positive integer that divides each of the integers without a remainder. It is also known as the Greatest Common Divisor (GCD).

Ratio Simplification

A ratio is simplified by dividing all terms by their HCF. The sum of these simplified terms often represents the minimum number of items in a representative sample.

Equal Distribution Principle

When dividing multiple different quantities into identical groups with no leftovers, the number of groups is the HCF, and the sum of items per group is (Total Items) ÷ HCF.

YourMockTest.com — Free Study Material

Q62. Answer: (d) A

The Correct Answer is A.

• Air Quality Index (AQI):

• AQI is a measure of the changes in air pollution in the atmosphere.

• It is a quantitative measurement of air pollution with the range of 0-500.

• National Air Quality Index (AQI) launched by the Environment Minister.

• National AQI is determined on the basis of concentration of 8 pollutants namely Particulate Matter (PM 2.5, PM 10), sulphur dioxide (SO_2), nitrogen dioxide (NO_2), carbon monoxide (CO), ozone (O_3), ammonia (NH_3) and lead (Pb).

• A Hygrometer is an instrument which is used to measure relative humidity.

Q63. Answer: (d) C

The Correct Answer is Option 4 i.e C.

• K.Kamaraj:

• Kamaraj was elected President of the Tamil Nadu Congress Committee in February 1940.

• He became Chief Minister of Madras in 1954.

• He was posthumously honored with India’s highest civilian award, the Bharat Ratna, in 1976.

• Morarji Desai:

• He was the 4th PM (1977-1979) of India.

• He was the second deputy prime minister of India.

• He was the first non-congress Indian Prime Minister

• He is the only Indian who received the highest civilian awards from both India and Pakistan, the Bharat Ratna and Nishaan-e-Pakistan.

• Sardar Vallabhbai Patel:

• He is popularly known as the Iron Man of India.

• The Statue of Unity is built in dedication to Sardar Vallabhbhai Patel.

• He was India’s first Deputy Prime Minister and first Home Minister.

• Since 2014, October 31 is being celebrated as "National Unity Day" to commemorate the birth anniversary of Sardar Vallabhbhai Patel.

• C. Rajagopalachari:

• He was popularly known as Rajaji.

• He was independent India's first Indian Governor-General.

• He received Bharat Ratna, the nation’s highest civilian award in the year 1954.

• He was the founder of the Swatantra Party.

Q64. Answer: (c) 46.20 km/hr

Let he covers d1 km at s1 km/hr and d2 km at s2km/hr

Therefore Average speed = $[s_1s_2(d_1 + d_2)]/(s_1d_2 + s_2d_1)$

=> Average speed = $[60 \times 40 (40 + 60)]/(60 \times 60 + 40 \times 40) = 240000/5200 = 46.2$ kmph

Q65. Answer: (a) D

The Correct Answer is Option 1 i.e D.

• Secularism means freedom of religion and worship.

• The term Secular was added to the preamble by the 42nd amendment.

• Secularism was a part of the basic structure of the Constitution.

• Indian secularism is a positive concept of secularism i.e all the religions of the country have the same status and support from the state.

• Articles 25-28 of the Indian constitution deals with the Fundamental rights of religion.

• Article 25: Freedom of conscience and free profession, practice, and propagation of religion.

• Article 26: Freedom to manage religious affairs.

• Article 27: Freedom as to payment of taxes for promotion of any particular religion.

• Article 28: Freedom as to attendance at religious instruction or religious worship in certain educational institutions.

Q66. Answer: (d) 17%

From the given data,

Total cost of the land = Rs. (18 + 3) lakhs = Rs. 21 lakhs

Selling price of the land = Rs. 24.57

=> Profit = selling price - cost price = 24.57 - 21 = Rs. 3.57 lakhs

=> Profit percentage = profit/cost price × 100 = 3.57/21 × 100 = 17%

Q67. Answer: (c) C

The Correct Answer is Option 3 i.e C.

• National Science Day:

• It is celebrated every year on 28 February to commemorate the discovery of the 'Raman Effect'.

• On this day, Sir C.V. Raman announced the discovery of the 'Raman Effect' for which he was awarded the Nobel Prize in 1930.

• “WOMEN IN SCIENCE” is the theme of the National Science Day (NSD) 2020.

• | Dates and days | Event |

4th February	**World Cancer Day**
13th February	World Radio Day
26th February	National Pistachio Day
27th February	International Polar Bear Day
28th February	National Science Day
29th February	Commonly referred to as Leap year day

Q68. Answer: (b) D

The train travellers are = 100 + 100 + 50 + 10 + 20 + 50 + 50 = 380

the people who do not travel by train is = 40 + 20 + 100 = 160

The ratio of total number of train travellers to the people who do not travel by train is = 380/160 = 38/16

Q69. Answer: (d) B

As seen from the figure there are no people who used modes of transport Car and Cycle both. Therefore, these two modes of transport are mutually exclusive.

Q70. Answer: (a) C

People who travel by train also travel by car or bus but not cycle is = 50 + 10 + 20 = 80

Q71. Answer: (b) 70

The series is as follows,

14 × 1 = 14

14 × 2 = 28

14 × 3 = 42

14 × 4 = 56

14 × 5 = 70

14 × 6 = 84

14 × 7 = 98

Therefore Missing term = 14 × 5 = 70

Q72. Answer: (a) C

The Correct Answer is Option 1 i.e C.

• One world Trade Center:

• One world Trade Center is the main building of the rebuilt World Trade Center complex in New York after the 9/11 attack.

• The new tower, along with the rest of the World Trade Center complex, replaced the Twin Towers and surrounding complex, which were destroyed by terrorist attacks on September 11, 2001.

• Empire state building:

• Empire state building is located in the centre of Midtown Manhattan, Newyork.

YourMockTest.com — Free Study Material

• The Empire State Building was designed by William F. Lamb from the architectural firm Shreve, Lamb and Harmon.

Q73. Answer: (b) C

The Correct Answer is Option 2 i.e C.

• Chandigarh:
• It is a Union Territory of India and it was built by famous French architect Le Corbusier.
• Chandigarh capital complex has been added in the UNESCO World Heritage Site List in 2016.
• Chandigarh serves as the joint capital of the two neighbouring states of Haryana and Punjab.
• Rock Garden of Chandigarh, also known as Nek Chand's Rock Garden was named after its founder Nek Chand Saini.
• Srinagar:
• Srinagar is the Summer Capital of the Indian Union territory of J&K.
• River Jhelum passes through Srinagar city.
• Manoj Sinha is the Lieutenant Governor of Jammu and Kashmir.
• Jammu:
• Jammu is the winter capital of the Indian Union territory of J&K.
• Jammu is the most populous district in the Indian state of Jammu and Kashmir.
• Tawi river flows through the city of Jammu.
• Himachal Pradesh:
• Himachal Pradesh shares its borders with Jammu and Kashmir, Punjab, Haryana, Uttar Pradesh, and Uttarakhand.
• Shimla is the capital of Himachal Pradesh.
• Shri Jai Ram Thakur is the current CM of Himachal Pradesh.
• Rajendra Vishwanath Arlekar is the current governor of Himachal Pradesh.
• The key monastery, a Buddhist monastery located in Spiti valley of Himachal Pradesh.

Q74. Answer: (c) (W^2 - 18w + 81)

We know that,

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

$\Rightarrow (W - 9)^2 = W^2 - 18W + 81$

Q75. Answer: (a) D

Formula used

Effective rate for 2 years = x + y + (xy)/100

Calculation

Rate = 10% yearly

Hence, rate = 10/2 = 5% half yearly

Now, effective rate = x + y + (xy)/100 = 5 + 5 + (5 × 5)/100 = 10 + 0.25 = 10.25%

Q76. Answer: (d) B

Individual letters are given individual codes as follows:

Alphabets	Given code
R	4
E	1
A	0
D	9
Y	5

and

Alphabets	Given code
F	8
R	4

A	0
I	3
L	2
S	7

Similarly,

The code for 83145419 is FIERY RED.

Hence, B is the correct answer,

Q77. Answer: (c) A

The Correct Answer is Option 3 i.e A.

• An input device sends information to a computer system for processing, and the device reproduces or displays the results of that processing is an output device.

• Input devices include Keyboard, Mouse, Scanner, Microphone, Digital Cameras, Webcam, Barcode readers etc.

• Few examples of output devices include Printers, Plotters, Monitor, Speakers, Projectors, Head Phone, etc.

Q78. Answer: (a) D

Similarly,

Hence, code for EXPERIENCE will be PIAPCTPYNP

Q79. Answer: (b) Rs. 10,017

Given:

1$ = Rs. 67.89

Margin added by money changer = Rs 1.11 for each dollar

Concept used:

Whenever 1$ is converted to Rs, the money changer takes Rs 1.11 from that transaction.

Calculation:

So, in actual, after transaction, amount got to the user for 1$ = 67.89 - 1.11 = Rs 66.78

Then, for $150 = 150 × amount for $1 in INR

$150 = 150 × 66.78 = Rs 10,017

Therefore The cost of $150 is Rs 10,017.

Q80. Answer: (b) 6π cm

Given,

Area of a circle = 9π sq.cm

=> $\pi \times r^2 = 9\pi$

=> r = 3 cm

Also, Circumference = $2\pi \times r = 2 \pi \times 3 = 6\pi$ cm

Q81. Answer: (d) B

The Correct Answer is Option 4 i.e B.

• Maharatna Status:

• Central public sector enterprises (CPSEs) which are at the higher end of the Navratna category and have the potential to become Indian Multinational Companies (MNCs), can be granted a ‘Maharatna status.

• Bharat Heavy Electricals Limited, Bharat Petroleum Corporation Limited, Coal India Limited, GAIL (India) Limited, Hindustan Petroleum Corporation Limited are the few examples with Maharatna Status.

• Miniratna Status:

• The CPSEs which have made profits in the last three years continuously and have positive net worth are eligible to be considered for the grant of Miniratna status.

• Bharat Electronics Limited, Container Corporation of India Limited, Engineers India Limited are examples with Miniratna status

• Navratna Status:

• Criteria for grant of Navratna status:-

• The Miniratna Category – I and Schedule ‘A’ CPSEs, which have obtained ‘excellent’ or ‘very good’ rating under the Memorandum of Understanding system in three of the last five years, and have a composite score of 60 or above in the six

selected performance parameters, namely,

• (i) net profit to net worth,

• (ii) manpower cost to total cost of production/services,

• (iii) profit before depreciation, interest, and taxes to capital employed,

• (iv) profit before interest and taxes to turnover,

• (v) earning per share and

• (vi) inter-sectoral performance.

• Hindustan Aeronautics Limited, Power Finance Corporation Limited, Rashtriya Ispat Nigam Limited are examples with Navratna status.

Q82. Answer: (c) 36 : 29

From the given data,

Total books of libraries of L1 and L3 = (500 + 350) + (500 + 450) = 850 + 950 = 1800

Total books of libraries of L2 and L4 = (400 + 400) + (350 + 300) = 800 + 650 = 1450

Therefore Ratio of total books of libraries of L1 and L3 to L2 and L4 = 1800 : 1450 = 36 : 29

Q83. Answer: (b) 6/7

From the given data,

Total number of fiction books L1, L2, L3 and L4 = (500 + 400 + 500 + 350) = 1750

Total number of non - fiction books L1, L2, L3 and L4 = (350 + 400 + 450 + 300) = 1500

Therefore Ratio of total number of non - fiction to fiction books in all libraries = 1500 : 1750 = 6 : 7

Q84. Answer: (a) 13.33%

Total number of fiction books in libraries L3 and L4 = 500 + 350 = 850

Total number of non fiction books in libraries L3 and L4 = 450 + 300 = 750

Therefore Percentage difference = [(850 - 750)/750] × 100 = 13.33%

Q85. Answer: (a) D

The Correct Answer is D.

• ASCII stands for American Standard Code for Information Interchange.

• It is the numerical representation of a character.

• It is a character encoding scheme.

• It was created in 1963 by the "American Standards Association" Committee or "ASA".

• For example, ASCII code for character NUL (null) is 00 and 01 for SOH (start of heading).

Q86. Answer: (a) C

The Correct Answer is Option 1 i.e C.

• Greece:

• The first modern Olympics were held in Athens, Greece, in 1896.

• The Olympic Games were held every four years.

• Paris is to host the 2024 Olympics.

• Athens is the capital of Greece.

• U.K:

• London is the capital of England.

• The 2012 Summer Olympics held in London.

• U.S.A:

• Los Angeles, California, United States will host the 2028 Olympics.

• Washington, D.C is the capital of the US.

• Italy:

• Italy will host the 2026 Winter Olympics.

• Rome is the capital of Italy.

YourMockTest.com — Free Study Material

Q87. Answer: (a) Rs. 60

From the given data,

Given that ratio of Rs. 5, Rs. 10 and Rs. 20 are 3 : 2 : 1,

Then the ratio of value of Rs. 5, Rs. 10 and Rs. 20 are 15x : 20x : 20x

Also given that total amount = Rs. 165

=> 15x + 20x + 20x = 165

=> 55x = 165

=> x = 3

Therefore Value of currency notes of Rs. 20 denomination = 20x = 20 × 3 = Rs. 60

Q88. Answer: (c) 3/2

Concept used:

Convert all the fraction to the decimal form and then compare

Solution:

From the given data,

=> 5/4 = 1.25

=> 4/3 = 1.33

=> 3/2 = 1.5

=> 6/5 = 1.2

Therefore Highest of all is 3/2 = 1.5

Alternate Method LCM of 5/4, 4/3, 3/2, 6/5 is 60

=> 5/4 = 75/60

=> 4/3 = 80/60

=> 3/2 = 90/60

=> 6/5 = 72/60

Therefore Highest of all is 90/60 = 3/2.

Q89. Answer: (d) C

The Correct Answer is Option 4 i.e C.

• Sundar Pichai:

• Sundar Pichai became the CEO of Google in 2015.

• He is also the CEO of its parent company, Alphabet.

• He was born in Tamil Nadu, India.

• Satya Nadella:

• He became CEO of Microsoft in 2014.

• He was born in Hyderabad.

• Satya Nadella named Fortune Businessperson of the Year for 2019.

• Cyrus Mistry:

• He has been the chairman of Tata groups from 2012-2016.

• He was sixth chairman of Tata Sons and had taken over in 2012 after Ratan Tata.

• Vishal Sikka:

• Dr. Vishal Sikka is the founder and CEO of Vianai Systems, Inc., a startup company that provides advanced software and services in artificial intelligence and machine learning.

• He was the former CEO and Managing Director of Infosys Limited from 2014 to 2017.

Q90. Answer: (a) B

The Correct Answer is Option 1 i.e B.

• The Commonwealth Games take place every four years.

• The first Commonwealth Games were held in 1930 in Hamilton, Canada.

• The last country to join the Commonwealth was Rwanda in 2009.

• UK, Birmingham is to host the 2022 Commonwealth Games.

YourMockTest.com — Free Study Material

Q91. Answer: (c) A

The Correct Answer is Option 3 i.e A.

• India:

• Cricket World Cup 2023 is scheduled to be hosted by India between 9 February 2023 to 26 March 2023

• It will be the 13th edition of the men's Cricket World Cup.

• It is also for the first time that the tournament will be solely hosted by India.

• The Board of Control for Cricket in India is the national governing body for cricket in India

Q92. Answer: (a) C

The Correct Answer is Option 1 i.e C.

• Japan launched its first commercial satellite on 24 November 2015 as part of its national space programme.

• Japanese H-IIA rocket successfully launched, carrying the TELSTAR 12V communications and broadcasting satellite for Canadian satellite operator Telesat.

• Russia:

• Sputnik 1 was the world’s first artificial satellite

• It was successfully launched on Oct. 4, 1957.

• It was the Soviet Union’s first successful satellite.

• India had successfully launched its first commercial satellite in 2007 using Polar Satellite Launch Vehicle (PSLV) carrying Italian satellite AGILE.

• China has launched its first commercial satellite AsiaSat-1 on 7 April 1990.

Q93. Answer: (b) D

The Correct Answer is Option 2 i.e D.

• Chandigarh:

• It is a Union Territory of India and it was built by famous French architect Le Corbusier.

• Chandigarh capital complex has been added in the UNESCO World Heritage Site List in 2016.

• Chandigarh serves as the joint capital of the two neighbouring states of Haryana and Punjab.

• Chandigarh and the area surrounding it were constituted as a Union Territory on 1 November 1966.

• Puducherry:

• V. Narayanasam is the current chief minister

• Kiran Bedi is the current Lt. Governor

• On November 1, 1954, the French possessions in India were de facto transferred to the Indian Union and Puducherry became a Union Territory.

• Lakshadweep:

• It is an archipelago consisting of 36 islands with an area of 32 sq km.

• It is the smallest union territory of India.

• Kavaratti is the capital is Lakshadweep.

• Lakshwadeep was constituted as a union territory in 1956.

• Sikkim:

• It became a state of India in the year 1975 under the Thirty-sixth Amendment Act, 1975

• Gangtok is the capital, also the largest city of Sikkim.

• It shares a boundary with West Bengal on its south and shares international borders with Bhutan, Nepal, China.

• It is located in the northeastern part of the country.

Q94. Answer: (a) A

Given: 17 ÷ 7 – 27 + 7 × 37

Now we will interchange + with ÷ and ÷ with + and × with – and – with ×.

So, 17 + 7 × 27 ÷ 7 – 37 (7 is cancelled by the 7)

= 17 + 27 - 37 = 7

Hence, 'A' is the correct answer.

Q95. Answer: (a) B

Symbol in question	Meaning

÷	•
•	÷
×	•
•	×

1 - 7 ÷ 21 - 2 + 2 ÷ 3 × 4 = 4/3

Q96. Answer: (a) C

Formula used

(M1 × T1)/W1 = (M2 × T2)/W2

Calculation

(10 × 30)/1 = (15 × T2)/2

=> T2 = (10 × 30 × 2)\15

=> T2 = 40 days

Q97. Answer: (c) [figure]

Triangle and Flower symbol interchange there position in each step.

Circle, Square, filled circle and Rhombus are moving one place anti-clock wise in each step.

Hence, the correct answer is option 3.

Q98. Answer: (a) B

We can't say people cannot afford bright coloured scooters. Because there is nowhere mention about rate of the scooters. But conclusion 2 is right choice because most people have orange coloured scooters it is said in statement 1. So only conclusion 2 logically follows the given statement.

Q99. Answer: (a) D

The Correct Answer is Option 1 i.e D.

• Sodium Hypochlorite:

• Sodium Hypochlorite is a chlorine compound.

• It is often used as a disinfectant or a bleaching agent.

• It is colourless or slightly yellow.

• It is commonly referred to as liquid bleach.

• The molecular formula is NaClO.

• Calcium hypochlorite:

• Molecular formula is Ca(ClO)2

• It appears as a white granular solid.

• Bleaching powder or chlorinated lime is a white powder that is usually a mixture of calcium hydroxide, calcium hypochlorite, and calcium chloride.

• Hydrogen peroxide:

• H2O2 is the molecular formula,

• It has been used as a powerful bleaching agent because of its strong oxidising properties.

• It appears as a pale blue colour.

• Hydrogen Sulphide:

• It is a colourless, highly toxic and flammable gas.

• Molecular formula is H2S.

• It has a foul odour that smells like rotten eggs.

• This is reductant in nature.

Q100. Answer: (c) C

The Correct Answer is Option 3 i.e C.

• Non-cooperation Movement:

• The non-cooperation movement by Gandhiji was followed from September 1920 to February 1922.

• Jallianwala Bagh Massacre in Amritsar in 1919 was one of the major reason for the start of the Non-cooperation movement.

YourMockTest.com — Free Study Material

• The Chauri Chaura incident occurred at Chauri Chaura in the Gorakhpur district (Uttar Pradesh) on 4 February 1922, when a large group of protesters, participating in the Non-cooperation movement, clashed with police, who opened fire.

• As the incident turned violent Mahatma Gandhi has called off the ‘Non-cooperation Movement’ on 12 February 1922, as a direct result of this incident.

• Quit India Movement:

• In August 1942, Gandhiji started the 'Quit India Movement' and decided to launch a mass civil disobedience movement 'Do or Die' to call for an end to British rule in India.

• The movement was also known as India August Movement or Bharat Chodo Andolan.

• It was launched on August 8, 1942, by the Mahatma Gandhi at the Bombay session of the All India Congress Committee (AICC).

• Khilafat Movement:

• The movement was started as an agitation by the Indian Muslims against the treatment accorded to the Ottoman Empire after World War I.

• The Khilafat Movement begin in 1919 under the leadership of the Ali brothers; Maulana Muhammad Ali and Maulana Shaukat Ali.

• By the mid-1920s, the Khilafat leaders joined hands with Gandhi's Non-Cooperation Movement.

• Home rule movement:

• Its objective was to establish self-government

• Tilak started the movement in April 1916 while Annie Besant started in September 1916.

• Tilak’s movement was confined to Maharashtra and Karnataka. And the Annie Besant movement was spread to other parts of India.

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

YourMockTest.com — Free Study Material