

BSSC Statistical Officer Sample Paper

Q1. Which are the two major rivers that emerge from the Amarkantak Plateau, but they flow in different directions?

- (a) Chambal and Betwa
(b) Chambal and Sone
(c) Narmada and Sone
(d) Narmada and Betwa

Q2. The Budget has been presented by the Finance Minister, Mr. Nirmala Sitharaman, during the Budget Session of Parliament. How does it impact us through Amrit Kaal”.

- (a) Five
(b) Six
(c) Seven
(d) Eight

Q3. Ricky Kej, _____ Grammy Award-winning composer, _____

- (a) Third
(b) Fourth
(c) Second
(d) First

Q4. The membership of the Central Government is

(a) Central Government only
(b) State Government only
(c) Union Territory only
(d) Both the Union and State Governments

Q5. The term

- (a) 4 years
(b) 5 years
(c) 2 years
(d) 6 years

Q6. Dipa Karmakar has been handed a 21-month ban for failing a dope test conducted by the International Testing Agency. Dipa Karmakar is from which discipline?

- (a) Fencing
(b) Gymnastics
(c) Long Jumping
(d) Javelin Throw



Q7. What is the rate of tax for Income tax slab between the income of Rs 3 Lakh to Rs 6 Lakh for assessment year 2023-24?

- (a) 5%
- (b) 10%
- (c) 3%
- (d) 12%

Q8. "Bharat SHRI" will be set up in a digital epigraphy museum, with the digitization of one lakh ancient inscriptions in

- (a) Restoration
- (b) Restart
- (c) Repository
- (d) Recession

Q9. Which of the following is a famous monument in the city of Man Ru

- (a) The Guide
- (b) Untouchable
- (c) Victory City
- (d) The Room

Q10. Amjad Ali Khan is a famous

- (a) Violin
- (b) Sitar
- (c) Sarod
- (d) Veena

Q11. Chandigarh is a famous

- (a) Le Corbusier
- (b) Edward Lutyens
- (c) Christopher Wren
- (d) Michelangelo

Q12. The headquarter of the International Court of Justice is at:

- (a) Geneva
- (b) The Hague
- (c) Rome
- (d) Vienna



Q13. Who among the following has written the famous book 'Malgudi Days'?

- (a) V. S. Naipaul
- (b) Deepak Chopra
- (c) Rabindranath Tagore
- (d) R.K. Narayan

Q14. Who among the following never became President of the Indian National Congress?

- (a) Bal Gangadhar Tilak
- (b) Jawaharlal Nehru
- (c) Dadabhai Naoroji
- (d) Mahatma Gandhi

Q15. The famous Indus Valley Civilisation is associated with which of the following sites?

- (a) Rakhigarhi
- (b) Lothal
- (c) Mohenjodaro
- (d) Harappa

Q16. Who is known as the 'Father of the Indian Constitution'?

- (a) Warren Hastings
- (b) Sir John Shore
- (c) Lord William Bentinck
- (d) Lord Cornwallis

Q17. Which of the following was included in the 'Recommendation of the Bhratari Report'?

- (a) Right to Vote
- (b) Proposal for creation of Supreme Court
- (c) Federal form of government with residual powers with the centre
- (d) All of the above

Q18. Who among the following was the first woman to be elected to the Lok Sabha?

- (a) Dr. Rajendra Prasad
- (b) M.K. Gandhi
- (c) Sarojini Naidu
- (d) Pt. Madan Mohan Malviya

Q19. By vesting the residuary powers in the Union, the Indian Constitution has followed the:

- (a) The Canadian System
- (b) The British System
- (c) French Constitution
- (d) The German System

Q20. Which one of the following is NOT a part of the Preamble of the Indian Constitution?

- (a) Secularism
- (b) Democratic
- (c) Socialism
- (d) Federalism

Q21. Which of the following is a non-constitutional body of India?

- (a) State Human Right Commission
- (b) Union Service Public Commission
- (c) Finance Commission
- (d) Election Commission

Q22. Which Part of the Indian Constitution is not incorporated?

- (a) Part - II
- (b) Part - IV
- (c) Part - VII
- (d) Part - VI

Q23. If the article 107 of the Indian Constitution is merged with Article 108 of Parliament, how long will the President's term be?

- (a) 2 Months
- (b) 3 Months
- (c) 1 Months
- (d) 6 Months

Q24. Who was the first Finance Minister of India during the independence movement?

- (a) R.N. Thapar
- (b) V.K. Krishna Menon
- (c) Govind Ballabh Pant
- (d) Jagjivan Ram

Q25. The focus of the

- (a) Krishna
- (b) Parvati
- (c) Vishnu
- (d) Ganesha

Q26. Hathigumpha inscription is associated with _____.

- (a) Elephanta Caves
- (b) Sittanavasal Caves
- (c) Kanheri Caves
- (d) Udayagiri and Khandagiri Caves

Q27. What is called the maximum distance from the Sun in a planet in its orbit?

- (a) Perihelion
- (b) Aphelion
- (c) Apogee
- (d) Perigee

Q28. Which of the following pairs is NOT correctly matched?

- (a) Silent Volcano: Damavand
- (b) Active Volcano: Stromboli
- (c) Dormant Volcano: Mount Fuji
- (d) Extinct Volcano: Mount Vesuvius

Q29. Which of the following is not a climate?

- (a) Tundra
- (b) Monsoon
- (c) Mediterranean
- (d) Equatorial

Q30. Which of the following states is the smallest in area?

- (a) Goa
- (b) Kerala
- (c) Odisha
- (d) West Bengal

Q31. If cash reserve ratio decreases, credit creation will

- (a) Increase
- (b) Decrease
- (c) Does not change
- (d) First decrease and then increase

Q32. In which of the following markets?

- (a) Oligopoly
- (b) Monopoly
- (c) Duopoly
- (d) Competitive

Q33. Which state recently launched the “Samagra Shiksha Abhiyan”?

- (a) Uttar Pradesh
- (b) Madhya Pradesh
- (c) Himachal Pradesh
- (d) Andhra Pradesh



Q34. Union Finance Minister, Nirmala Sitharaman is presenting the Union Budget 2023 for the _____ time in a row.

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

Q35. _____ has joined the BRICS New Development Bank (NDB).

- (a) Israel
- (b) UAE
- (c) Tanzania
- (d) Egypt

Q36. The India Development Index 2022 was released by _____?

- (a) 45th
- (b) 47th
- (c) 44th
- (d) 46th

Q37. Who is known as the father of the Green Revolution?

- (a) G. Paul
- (b) Norman Borlaug
- (c) Van Neil
- (d) Dr. Mithcham

Q38. With which of the following was Satyajit Ray associated?

- (a) Commercial
- (b) Classical music
- (c) Classical dance
- (d) Direction

Q39. Pablo Picasso was a _____

- (a) French
- (b) Italian
- (c) Flemish
- (d) Spanish

Q40. Who among the following was the first Speaker of the Lok Sabha?

- (a) M. A. Ayyangar
- (b) G. V. Mavalankar
- (c) Sardar Hukam Singh
- (d) N. Sanjiva Reddy



Q41. Who has been honoured with the Maharashtra Bhushan award for the year 2022?

- (a) Appasaheb Dharmadhikari
- (b) Hari Balkrishnan
- (c) Sajjan Jindal
- (d) V Madhusoodanan Nair

Q42. A cyclone recently strikes the coast of the nation, and residents of Auckland, the largest city in New Zealand.

- (a) Gabcule
- (b) Granate
- (c) Gabrule
- (d) Gabrielle

Q43. Article 342 of the Indian Constitution lists the Sixth Schedule of the Indian Constitution. The Sixth Schedule was governed by the Sixth Schedule of the Indian Constitution while it

- (a) 2017
- (b) 2019
- (c) 2018
- (d) 2020

Q44. Which soil is found in the Western Ghats of India?

- (a) Red Soil
- (b) Alkaline Soil
- (c) Peaty Soil
- (d) Alluvial Soil

Q45. Bhangan is a type of soil found in the Western Ghats of India. It is a subtype of which soil in India?

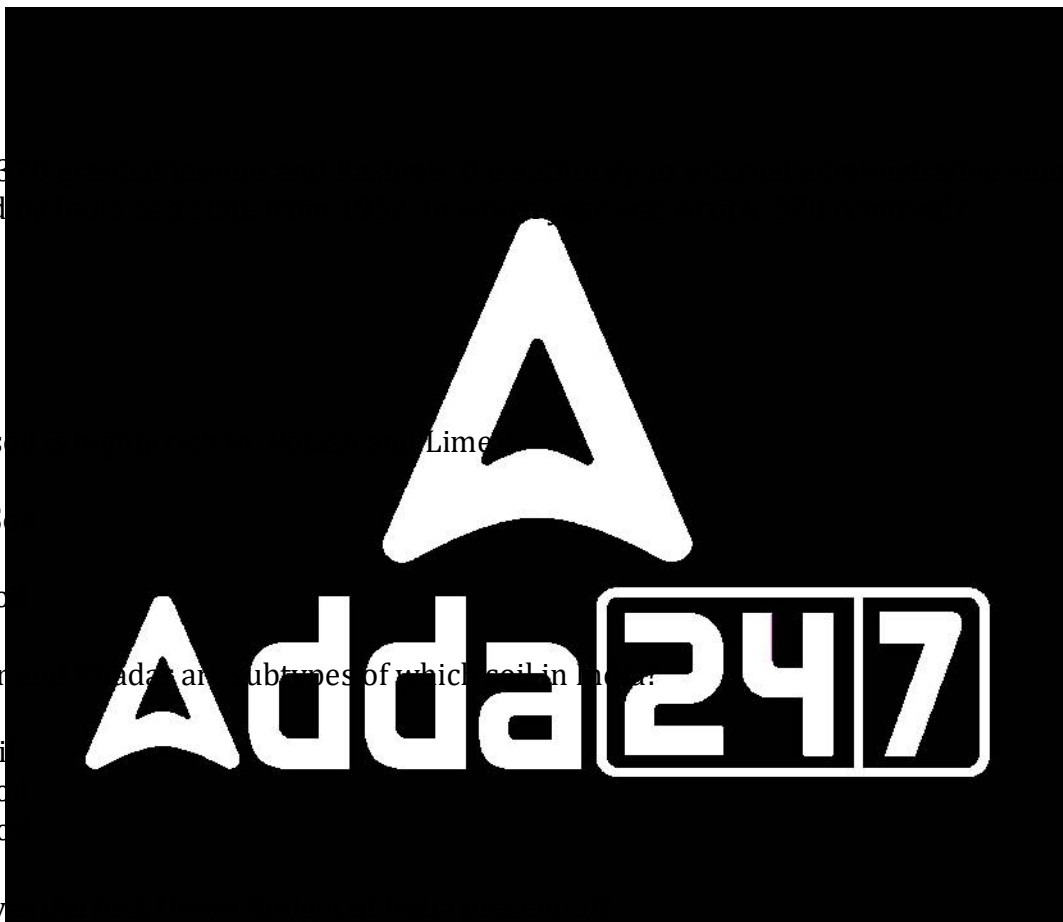
- (a) Black Soil
- (b) Yellow Soil
- (c) Laterite Soil
- (d) Alluvial Soil

Q46. When was the

- (a) 1947
- (b) 1948
- (c) 1949
- (d) 1950

Q47. What is the current year's economic growth is estimated at the Union budget 2023?

- (a) 4%
- (b) 8%
- (c) 7%
- (d) 6%



Q48. The Swadeshi Boycott Movement is related to -

- (a) Partition of Bengal in 1947
- (b) Partition of Bengal in 1905
- (c) Non-cooperation movement in 1921
- (d) Partition of Punjab in 1947

Q49. The Mutiny of 1857 was described as the First Indian War of Independence by -

- (a) Bal Gangadhar Tilak
- (b) Subhash Chandra Bose
- (c) Bhagat Singh
- (d) V. D. Savarkar

Q50. During the

- (a) Babar
- (b) Akbar
- (c) Jahangir
- (d) Shershah

Q51. Force of adhesion is associated with -

- (a) Surface tension
- (b) Cohesive force
- (c) Adhesive force
- (d) None of above

Q52. Static equilibrium is associated with -

- (a) Dynamic equilibrium
- (b) Situation of rest
- (c) Mental situation
- (d) Data analysis

Q53. The color

- (a) Distance from the earth
- (b) Temperature
- (c) Luminosity
- (d) Distance from the sun

Q54. Power of sunglass is-

- (a) 0 Dioptre
- (b) 1 Dioptre
- (c) 2 Dioptre
- (d) 4 Dioptre



Q55. Who invented Rocket?

- (a) Rich K Goyle
- (b) E M Forster
- (c) Robert Goddard
- (d) James Anderson

Q56. To remove the defect of long sightedness one uses-

- (a) Concave lens
- (b) Convex mirror
- (c) Convex lens
- (d) Concave mirror

Q57. An air bubble

- (a) Convex mirror
- (b) Convex lens
- (c) Concave mirror
- (d) Concave lens

Q58. Match the

- A. John Guttenberg
- B. W.K. Roentgen
- C. Michael Faraday
- D. Alexander Graham Bell

- 1. Telephone
- 2. Printing Press
- 3. X-Ray
- 4. Dynamo

Code:

A B C D

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

Q59. With reference to

- (a) Gravitational constant
- (b) Gravitational attraction
- (c) Gravitational force
- (d) Acceleration due to gravity

Q60. All isotopes of the same element have _____.

- (a) different atomic numbers and different atomic mass
- (b) different atomic numbers and the same atomic mass
- (c) the same atomic number but different atomic masses
- (d) the same atomic number and the atomic mass

Q61. Nitric acid does not react with -

- (a) Gold
- (b) Copper
- (c) Zinc
- (d) Iron

Q62. Which of the following gases is known as "Laughing Gas"?

- (a) Nitrous oxide
- (b) Nitrogen peroxide
- (c) Nitrogen
- (d) Nitric oxide

Q63. Name two

- (a) Silicon and
- (b) Carbon and
- (c) Iridium and
- (d) Tungsten and

Q64. Which of the following is the 'best' coal?

- (a) Anthracite
- (b) Bituminous
- (c) Coke
- (d) Lignite

Q65. In its reaction with silver nitrate, FeH_2 shows -

- (a) oxidising property
- (b) reducing property
- (c) basic property
- (d) acidic property

Q66. Hydrogen

- (a) controlled fission reaction
- (b) uncontrolled fission reaction
- (c) controlled fusion reaction
- (d) uncontrolled fusion reaction

Q67. The technique of calculating the age of fossil organisms is -

- (a) Radiocarbon dating
- (b) Electroporation
- (c) Counting the annual rings
- (d) Micro Manipulation



Q68. Which is the largest organ in human beings?

- (a) Skin
- (b) Large Intestine
- (c) Small Intestine
- (d) Liver

Q69. Delonix regia Rafin is the scientific name of -

- (a) Banyan
- (b) Gulmohar
- (c) Tamarind
- (d) Chiku

Q70. Which V

- (a) Rubella Vi
- (b) Varicella z
- (c) Rabies
- (d) Variola Vi

Q71. Yellow fever is transmitted by which of the following?

- (a) Flies
- (b) Mosquito
- (c) Rat
- (d) Cockroach

Q72. Which of the following organisms does not fit into the Cell Theory?

- (a) Bacteria
- (b) Virus
- (c) Fungi
- (d) Plants

Q73. Which d

- (a) Metformin
- (b) Diazepam
- (c) Latanoprost
- (d) Prednisone

Q74. Prothrombin, responsible for clotting of blood is produced in ____.

- (a) Small Intestine
- (b) Liver
- (c) Large Intestine
- (d) Heart



Q75. *Acacia arabica* is the scientific name of -

- (a) Neem
- (b) Teak
- (c) Babul
- (d) Pomegranate

Q76. The average of 21 numbers is 60. If each number is increased by 20, then find the number by which the average is increased.

- (a) 15
- (b) 18
- (c) 12
- (d) 20

Q77. Find the value of $6^2 + 4^2 - 20$ of $2 + 40$.

- (a) 50
- (b) 54
- (c) 52
- (d) 56

Q78. In how many letters of the word

- (a) 24
- (b) 30
- (c) 12
- (d) 60

Q79. By selling articles, a shopkeeper gains the selling price of 15 articles. Find his percentage.

- (a) 88%
- (b) 40%
- (c) 75%
- (d) 60%

Q80. Successi

- (a) 45.9%
- (b) 53.1%
- (c) 60.4%
- (d) 50.5%

Q81. In how many ways can a committee of 3 people be selected from 7 people?

- (a) 35
- (b) 21
- (c) 42
- (d) 28



Q82. The annual salary of Aniket increased from Rs.1000000 to Rs.1400000. What is the percent increase?

- (a) 20%
- (b) 4%
- (c) 14%
- (d) 40%

Q83. How many ways are there to choose 2 balls from a box containing 5 red and 6 blue balls?

- (a) 30
- (b) 15
- (c) 66
- (d) 55

Q84. Find the

- (a) 12
- (b) 108
- (c) 8
- (d) 96

Q85.

What is the value of $\frac{39}{25} \div \frac{13}{5} + \frac{33}{5} \times \frac{4}{11}$?

- (a) 3
- (b) 15
- (c) 5
- (d) 12

Q86. A bag contains 12 balls, 3 of which are red and 9 are blue. If a ball is drawn at random, what is the probability that it is red?

- (a) 1/2
- (b) 7/12
- (c) 3/4
- (d) 5/12

Q87. Which of the following numbers is divisible by 11?

- (a) 735394
- (b) 547896
- (c) 908172
- (d) 678123



Q88. After selling 4% of a quantity of sugar, 6 kg of sugar remains. Find the total quantity of sugar.

- (a) 6.25 kg
- (b) 11.11 kg
- (c) 525 kg
- (d) 7 kg

Q89. A sum of Rs. 21850 amounts to Rs. 28623.50 in 5 years at the rate of simple interest. The rate percent is:

- (a) 4.8% p.a.
- (b) 6.8% p.a.
- (c) 7.2% p.a.
- (d) 6.2% p.a.

Q90. How many products are there?

- (a) 12
- (b) 14
- (c) 10
- (d) 13

Q91. A trader buys a trolley bag for Rs. 800 and sells it for Rs. 960. He earns a profit of 20 percent on a trolley bag. What is the cost price of the trolley bag?

- (a) Rs. 880
- (b) Rs. 908
- (c) Rs. 930
- (d) Rs. 960

Q92. A sum of Rs. 5020 amounts to Rs. 5498 in 3 years. The sum is:

- (a) Rs.5020
- (b) Rs.4600
- (c) Rs.4980
- (d) Rs.4800

Q93. If $X : Y = 3 : 2$, then what is the value of $(X - Y) : (X + Y)$?

- (a) 1:5
- (b) 8:9
- (c) 3:7
- (d) 4:5



Q94. Find the value of $\sqrt{[(7^2 + 6^3 + 9^2) \div 2 + 52]}$

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

Q95. What is the compound interest on Rs. 8400 for 2 years at 10% per annum compounded annually?

- (a) Rs. 5064
- (b) Rs. 840
- (c) Rs. 1764
- (d) Rs. 10164

Q96. A number is increased by 4% and then decreased by 4%. What is the change in the number?

- (a) 4% increase
- (b) 5% increase
- (c) 4% decrease
- (d) 5% decrease

Q97. What is

- (a) 15
- (b) 5
- (c) 7
- (d) 25

Q98. What is

- (a) 7
- (b) 9
- (c) 6
- (d) 5

Q99. By selling an article at Rs.425, a shopkeeper had a loss of 15%. At what price should he sell the article so as to make a profit of 20%?

- (a) Rs.600
- (b) Rs.400
- (c) Rs.1000
- (d) Rs.800



Q100. The least number which when divided by 14, 18 and 36 and leaves 1 as remainder in each case is:

- (a) 253
- (b) 250
- (c) 251
- (d) 252

Q101. Find the missing number form the below options.

24	5
19	29

35	17
18	?

- (a) 27
- (b) 52
- (c) 44
- (d) 67

Q102. Four numbers are given, which three are same and one is different, choose the odd one out.

- (a) 99
- (b) 117
- (c) 135
- (d) 105

Q103. Four words are given, which three are same and one is different, choose the odd one out.

- (a) Yellow
- (b) Blue
- (c) Pink
- (d) Red

Q104. The statements given below are followed by two conclusions. Assuming that the information in the statements is true, decide which conclusion(s) logically and definitely follow(s) from the information given in the statements.

STATEMENTS:

All mobiles are computer.

All computers are rupees.

CONCLUSION:

I : No rupees are mobiles

II : All mobiles are rupees.

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

Q105. Raveena went from her club to the home. She started her journey facing West. First, she went 2 km straight; then she turned to her right and went 3 km; finally, she turned left and walked 2 km to reach the home. What is the shortest distance between Raveena's club and the home?

- (a) 3.5 km
- (b) 3 km
- (c) 4 km
- (d) 5 km

Q106. In certain code language, 138321141 is written as 1814137 and 118321141 is written as 187133251141, How will PRIME be written in the same code language?

- (a) 16183132
- (b) 18163231
- (c) 32311816
- (d) 31321618

Q107. Four words are given below, three of which are related to each other in a certain way. One word is different. Choose the odd word out.

- (a) Pen
- (b) Forceps
- (c) Hunter
- (d) Typewriter

Q108. Select the correct option which will complete the series.

CX, FU, IR, LU,

- (a) OM
- (b) OL
- (c) OK
- (d) OH

Q109. Find the missing number from the below options.

3	8	2	222
6	9	1	511
7	5	3	?

- (a) 553
- (b) 535
- (c) 635
- (d) 563

Q110. Which of the following equations will be correct if numbers 3 and 6 and signs + and $\times$ are interchanged?

- (a) $15 \times 6 + 3 = 43$
- (b) $20 \times 3 + 6 = 60$
- (c) $6 \times 3 + 25 = 135$
- (d) $35 \times 3 + 6 = 53$

Q111. Find the missing number.

4	3	50	5
7	6	?	8

- (a) 149
- (b) 139
- (c) 129
- (d) 159

Q112. Select the correct option that will fill in the blank and complete the series. The third term in the series is related to the first term.

$14 : 25 :: 53 : ?$

- (a) 46
- (b) 84
- (c) 18
- (d) 64

Q113. Four pairs of numbers have been given out of which three are alike in some manner, while one is different. Choose the odd one out.

- (a) $13 : 2186$
- (b) $7 : 336$
- (c) $11 : 1320$
- (d) $6 : 210$

Q114. Select the correct option that will fill in the blank and complete the series.

26, 38, 62, ____.

- (a) 78
- (b) 82
- (c) 98
- (d) 88

Q115. Find the missing term in the given analogous pair.

114 : 4, 16 : 3 :: _ : 6, 12 : 2

- (a) 50
- (b) 23
- (c) 40
- (d) 38

Q116. Select the letter-cluster from among the given options that can replace the question mark(?) in the following series

HPN KUQ NZT

- (a) TJV
- (b) TJU
- (c) TJZ
- (d) TJM

Q117. Read the statements and conclusions given in the statement is true. Which of the conclusions logically follow from the statements.

STATEMENTS

All pens are mobiles.

Some books are mobiles.

CONCLUSIONS

I. Some books are mobiles.

II. All mobiles are pens.

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

Q118. Select the letter-cluster from among the given options that can replace the question mark(?) in the following series

H, G, M, F, R, E

- (a) J
- (b) B
- (c) G
- (d) H

Q119. If in a certain coding language, '4 3 6' indicates 'Bears Are Scary', '8 6 5' indicates 'Kings Are Hungry', '9 7 5' indicates 'Kings Will Die' and '2 9' indicates 'they Die'. What would '2 7' indicate in that code language?

- (a) Hungry Are
- (b) They Will
- (c) Hungry Die
- (d) They Die

(a) D
(b) N
(c) P
(d) O

(a) FINL
(b) MNLB
(c) PIHJ
(d) NGHL

(a) 46
(b) 61
(c) 50
(d) 55

HIJ : NLK :: PQ :

(a) WUS
(b) VUS
(c) VTS
(d) WTS

(a) Q
(b) R
(c) P
(d) S



Q125. Four letter-cluster have been given, out of which three are alike in some manner and one is different. Select the odd letter-cluster.

- (a) GDB
- (b) KHE
- (c) ZWT
- (d) ROL

Q126. Three of the following four letter-cluster pairs are alike in a certain way and one is different. Pick the odd one out.

- (a) MAGIC : A
- (b) LOGIC : OI
- (c) FIRST : IF
- (d) CREST : R

Q127. If Z = Y and A = B, then which of the following is true?

- (a) $G > Q$
- (b) $Q > R$
- (c) $R > Z$
- (d) $H = Y$

Q128. Study the following number series and select the number which will replace the mark(?) in it.

(12, 3, 18) (48, 12, 36) (?)

- (a) 96
- (b) 72
- (c) 48
- (d) 76

Q129. Among the following, which letter is twice as heavy as the letter B? C is half as heavy as E. E is half as heavy as D. D is twice as heavy as A.

- (a) B
- (b) D
- (c) E
- (d) C

Q130. Select the options that is related to the third letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster.

CARE : HUFD :: TOMB : ?

- (a) EQRX
- (b) FPSW
- (c) DPRX
- (d) EPRW



Q131. In a class of 50 students, all students participate in one or both of the two games, i.e. cricket and football on. 13 students participate in both the games, whereas 18 students participate only in cricket. How many total students participate in football?

- (a) 42
- (b) 23
- (c) 32
- (d) 24

Q132. Which of the following is not a prime number?
77, 78, 74, 83,

- (a) 180
- (b) 129
- (c) 80
- (d) 92

Q133. The average salary of P, Q, R, S, T and U is Rs. 24,000. If the average salary of P, Q, R and S is Rs. 22,000, then the average salary of T and U is

- (a) Rs. 9000
- (b) Rs. 8500
- (c) Rs. 8400
- (d) Rs. 7500

Q134. Which of the following will replace the question mark (?) in the given series?
14, 30, 64, 130, 260, 510, 1064

- (a) 464
- (b) 264
- (c) 164
- (d) 364

Q135. Which two signs and two numbers should be interchanged in the following equation to make it correct?

$$35 + 15 - 4 \times 45 \div 5 = 98$$

- (a) 15 and 35; $\times$ and $\div$
- (b) 35 and 45; $\times$ and $-$
- (c) 35 and 45; $+$ and $-$
- (d) 15 and 5; $\times$ and $+$

Q136. Three statements are given, followed by three conclusions numbered I, II and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically follow(s) from the statements.

STATEMENTS:

All trains are roads.

No road is a park.

No train is a vehicle.

CONCLUSIONS:

I. No vehicle is a train.

II. No train is a

III. Some road

(a) Only concl

(b) Only concl

(c) All of the c

(d) Only concl

Q137. Select

meaningful or

1. Jewellery

2. Metal

3. Sell

4. Melt

5. Polish

(a) 2,4,1,5,3

(b) 2,4,5,1,3

(c) 1,4,2,5,3

(d) 1,5,3,4,2

Q138. Eight f

table, facing t

direction is H

(a) East

(b) South-west

(c) North

(d) West

Q139. In a certain code language, 'CARROT' is written as '450' and 'BOY' is written as '126'. How will 'FIRE' be written as in that language?

(a) 136

(b) 132

(c) 152

(d) 125



Q140. 'A + B' means 'A is husband of B'.

'A - B' means 'A is mother of B'.

'A × B' means 'A is brother of B'.

If $Z \times C + T - H \times P + Q$, then how is C related to P?

- (a) Mama
- (b) Father
- (c) Uncle
- (d) Brother

Q141. Which

110, 111, ?, 14

- (a) 89
- (b) 85
- (c) 119
- (d) 131

Q142. If 29 November 2017 was a Friday, then what day of the week was 1st January 2017?

- (a) Friday
- (b) Tuesday
- (c) Sunday
- (d) Wednesday

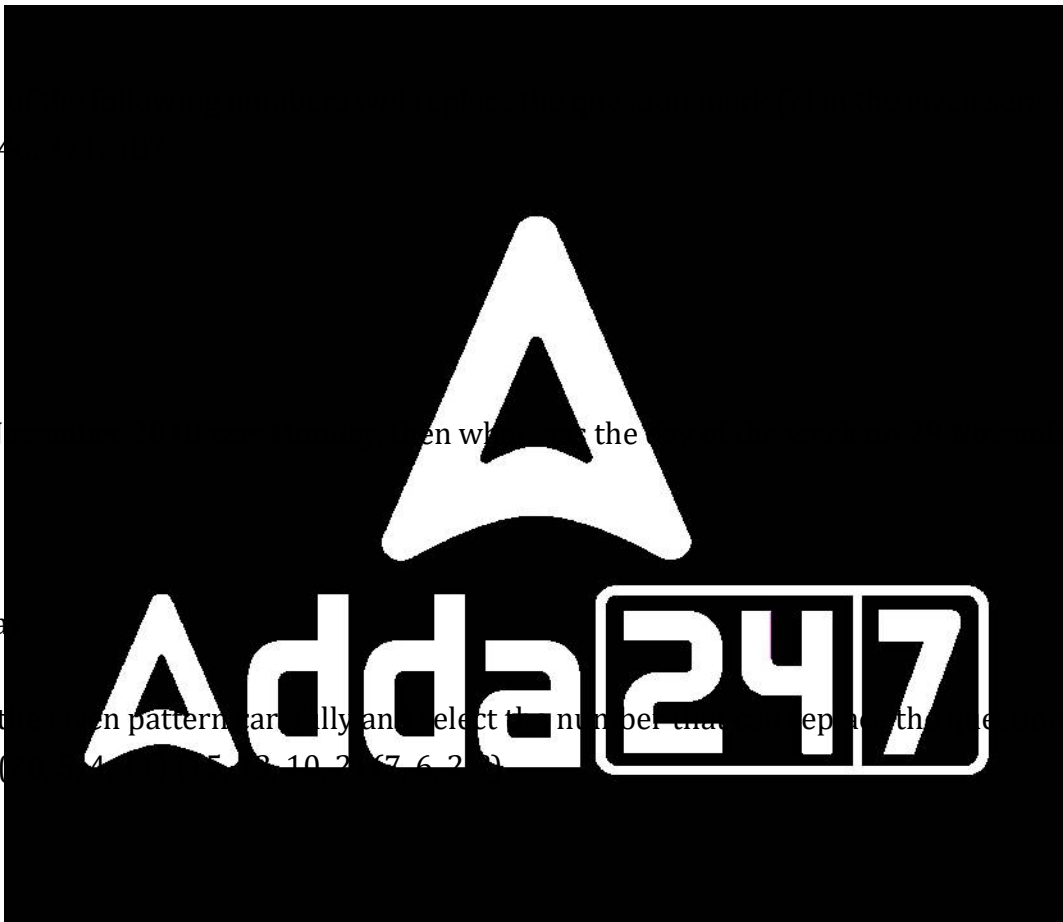
Q143. Study the given pattern carefully and select the number that replaces the question mark (?) in it.

(13, 8, 13, 6) (4, 5, 8, 10, 2, 6, 7, 6, 2, 3)

- (a) 32
- (b) 23
- (c) 25
- (d) 30

Q144. Aman is facing north-west, and then he turns 90° anticlockwise. After that, he turns 135° clockwise. Finally, he turns 90° anticlockwise. In which direction is he facing now?

- (a) North-east
- (b) East
- (c) South-west
- (d) West



Q145. Select the option figure in which the given figure is embedded. (rotation is NOT allowed)



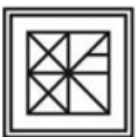
(a)



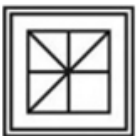
(b)



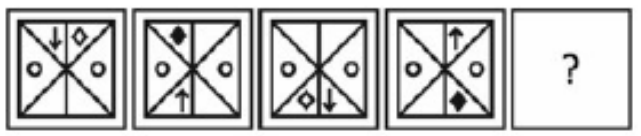
(c)



(d)



Q146. Select the figure from the given options that can replace the question mark in the following series.



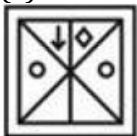
(a)



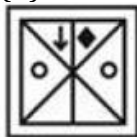
(b)



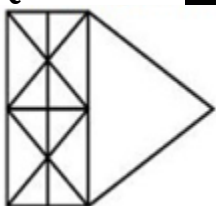
(c)



(d)



Q147. How many triangles are there in the figure?



- (a) 30
- (b) 31
- (c) 29
- (d) 27

Q148. Select the figure which is embedded in the given figure (in any orientation)



(a)



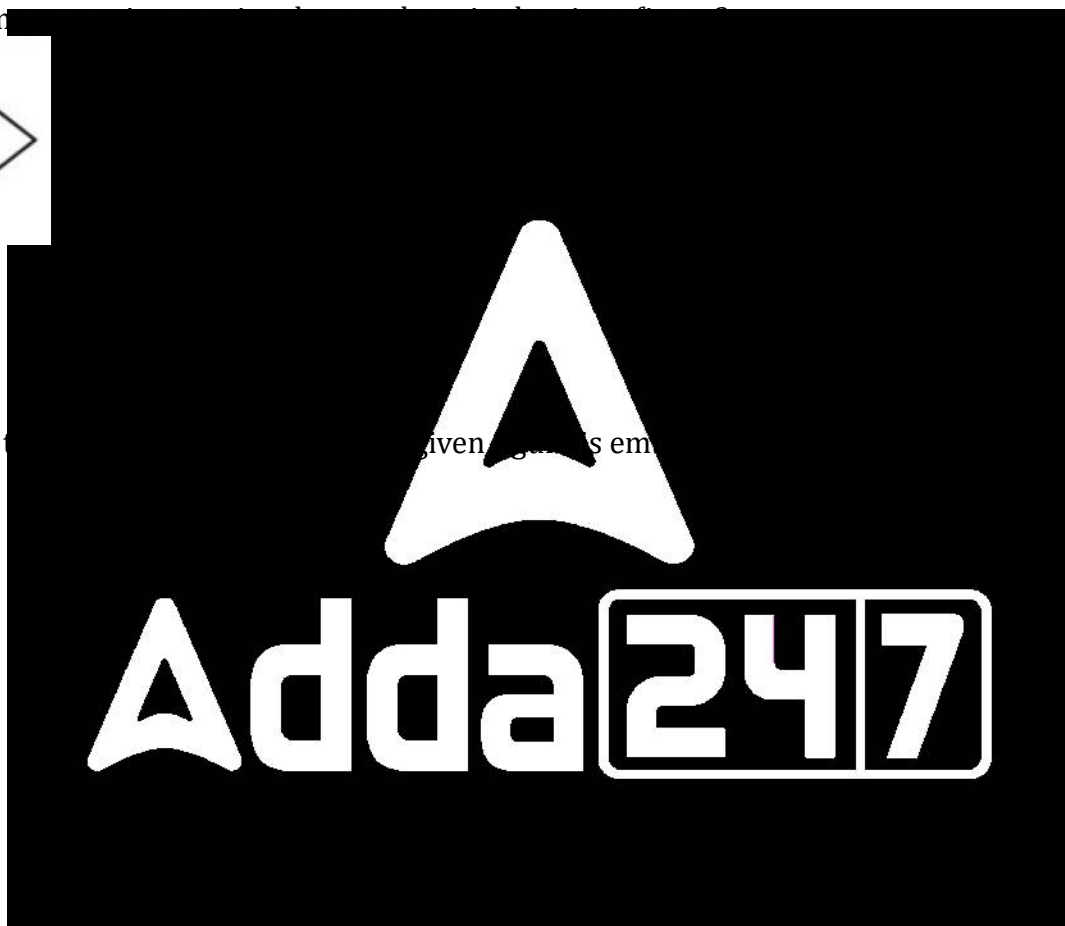
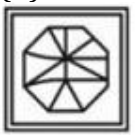
(b)



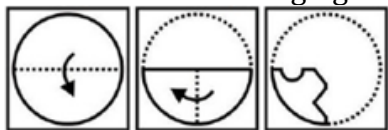
(c)



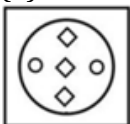
(d)



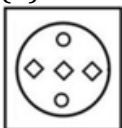
Q149. The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



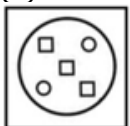
(a)



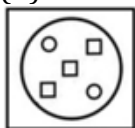
(b)



(c)



(d)

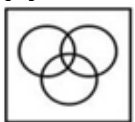


Q150. Select the figure which is different from the others.

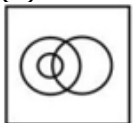
(a)



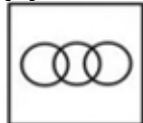
(b)



(c)



(d)



Solutions

S1. Ans.(c)

Sol. The Amarkantak Plateau, located in the central part of India, is the source of two major rivers, the Narmada and the Sone.

- The Narmada River flows towards the west and drains into the Arabian Sea, while the Sone, a tributary of the Ganges, flows towards the north and eventually merges with the Ganges.
- The other pairs of rivers mentioned in the options, such as Chambal and Betwa, Chambal and Sone, and Narmada and Betwa, do not both originate from the Amarkantak Plateau.

S2. Ans.(c)

Sol. The Budget of India is known as the “Amrit Kaal”.

S3. Ans.(a)

Sol. Ricky Kej won the Grammy Award for Best New Artist in 2022. He is a multi-talented musician, composer, and producer. He has won several awards, including the Grammy Award for Best New Artist in 2022. He is also a member of the Indian Academy of Music. He has written and composed music for several films and television shows. He has also performed live on stage and in concert. He is a very talented and successful musician.

S4. Ans.(d)

Sol. Members of the Indian services are responsible for maintaining both the internal and external security of the country.

S5. Ans.(b)

Sol. Article 67 of the Constitution of India states that the Vice President of India shall hold office for a term of five years from the date of appointment.

- In the event of a resignation, or impeachment, or removal from office, the Vice President shall hold office until the date of the next election.
- Additionally, the Vice President of India serves as the ex officio Chairperson of the Rajya Sabha.

S6. Ans.(b)

Sol. Gymnast Dipa Karmakar has been handed a 21-month ban for failing a dope test conducted by the International Testing Agency.

S7. Ans.(a)

Sol. 5% is the rate of tax for the Income tax slab between the income of Rs 3 Lakh to Rs 6 Lakh for the assessment year 2023-24.

S8. Ans.(c)

Sol. SHRI stands for "Shared Repository of Inscriptions".

- 'Bharat Shared Repository of Inscriptions' will be set up in a digital epigraphy museum, with the digitization of one lakh ancient inscriptions in the first stage.

S9. Ans.(c)

Sol. "Victory City" is a novel written by Salman Rushdie. Salman Rushdie is a renowned British-Indian author known for his significant contributions to literature.

S10. Ans.(c)

Sol. Ustad Ahmad Khan is known for his clear and fast drawing style. He was an internationally known architect since the 1960s. He was awarded the Padma Shri in 2001.

S11. Ans.(a)

Sol. Le Corbusier designed the buildings of the United Nations Assembly Palace, and the Secretariat Building in New York City.

- He also invented the concept of 'Open Hand' which stand 26 meters high.
- Chandigarh is one of the many Open Hand sculptures which stand 26 meters high.
- He was an architect and a painter.
- Seventeen of his buildings in India were included in the UNESCO World Heritage Sites list on 17 July 2016 as Le Corbusier's Architectural Works, an exceptional contribution to the Modern Movement.

S12. Ans.(b)

Sol. The International Court of Justice (ICJ) is the principal judicial organ of the United Nations and began work in April 1946.

- The International Court of Justice is the principal judicial organ of the United Nations and began work in April 1946.
- The official working languages of the International Court of Justice are English and French.
- It is charged with settling legal disputes submitted to it by states and giving advisory opinions on legal questions from U.N. bodies and agencies.

S13. Ans.(d)

Sol. "Malgudi Days" published in 1943 is a short story collection by RK Narayan which includes 32 stories, all set in the fictional town of Malgudi, located in South India during British rule and first introduced in his work "Swami and Friends."

S14. Ans.(a)

Sol. Bal Gangadhar Tilak never became President of Indian National Congress. Tilak joined the Indian National Congress in 1890. He opposed its moderate attitude, especially towards the fight for self-government. He was supported by fellow Indian nationalists Bipin Chandra Pal in Bengal and Lala Lajpat Rai in Punjab. They were referred to as the Lal-Bal-Pal triumvirate.

S15. Ans.(c)

Sol. The famous 'Dancing girl' found in Mohenjodaro is an artifact that is some 4,500 years old. The 10.8 cm long statue of the dancing girl was found in 1926 from a house in Mohenjodaro is made of bronze. Steatite (Soapstone) artifacts were found from Mohenjodaro site and were the primary evidence of the Harappan civilization.

S16. Ans.(d)

Sol. Lord Cornwallis was the first time by the East India Company's representatives. Lord Cornwallis stated that the British had no intention of

S17. Ans.(d)

Sol. In Nehru's view, the Government should take steps including the following:

- The Government should provide financial assistance to the Federal form.
- The Government should provide financial assistance to the Federal form.
- The Government should provide financial assistance to the Federal form.

S18. Ans.(a)

Sol. The Second All India Muslim League Conference was held in Madan Mohan Malaviya, Chaudhary Karam Das Birla, and other people.

S19. Ans.(a)

Sol. By vesting the trust in the Canadian System.

- The provisions of State government from the Canadian constitution. appointment all borrowed

S20. Ans.(d)

Sol. The Preamble of the Indian Constitution does not explicitly mention the term "Federalism." The Preamble declares India to be a "Sovereign Socialist Secular Democratic Republic."

- It emphasizes the commitment to justice, liberty, equality, and fraternity. While the Indian Constitution establishes a federal structure in terms of the distribution of powers between the central and state governments, the term "Federalism" itself is not mentioned in the Preamble.
- The concepts of "Secularism," "Democratic," and "Socialism" were explicitly added to the Preamble by the 42nd Amendment in 1976.

S21. Ans.(a)

Sol. State Human Rights Commission is a non-constitutional body of India. The State Human Rights Commission is a multi-member body. It consists of a chairman and two members. It can enquire into violation of human rights only in respect of subjects mentioned in the state list and concurrent list.

S22. Ans.(b)

Sol. Part IV of the Constitution of India (Article 36–51) contains the Directive Principles of State Policy (DPSP)

S23. Ans.(d)

Sol. If the annual rate of interest is 10%, the Government of India will continue to borrow from the Parliament, it

S24. Ans.(b)

Sol. Vengalil was a prominent figure often referred to as a national industrialist. He held the position of Deputy Minister of Industries during the Second World War.

S25. Ans.(c)

Sol. The focus is the center of curvature of V.

S26. Ans.(d)

Adda247

S27. Ans.(b)

Sol. The maximum distance from the Sun in a planet's orbit is called the Aphelion. In an elliptical orbit around the Sun, a planet will have a point closest to the Sun, known as the perihelion, and a point farthest from the Sun, known as the aphelion. The terms "apogee" and "perigee" are similar concepts but are used in the context of the distance of an object, such as a satellite or the Moon, from the Earth. Apogee is the point in orbit farthest from Earth, and perigee is the point closest to Earth.

S28. Ans.(d)

Sol. An extinct volcano is one which is no longer active and hasn't erupted in historical times. Some volcanoes lie dormant for thousands of years before erupting again. Etna is one of the most active volcanoes in the world.

S29. Ans.(d)

Sol. The Equatorial region receives rainfall throughout the year. This region, located around the equator, typically experiences a hot and wet climate with abundant and frequent rainfall.

- The high temperatures lead to high rates of evaporation, causing frequent and heavy rain showers. The rainfall in the equatorial region is often characterized by its afternoon thunderstorms and is not limited to a specific season, unlike the monsoon or Mediterranean climates.
- The Tundra region, on the other hand, is known for its cold and dry conditions with minimal precipitation. The Monsoon region experiences seasonal rainfall, with a distinct wet and dry season. The Mediterranean climate is characterized by dry summers and wet winters.

S30. Ans.(a)

Sol. India's coastline is 7,516.6 km long, of which 5,423 km is the mainland and 2,094 km is the island coastline. The longest coastline is that of Gujarat, followed by Andhra Pradesh, Tamil Nadu, and Odisha.

- The country has 14 major ports and 204 minor ports. The major ports are located in Gujarat, Andhra Pradesh, Tamil Nadu, Odisha, and West Bengal.
- Additional ports are being developed in Andhra Pradesh, Odisha, and West Bengal.

S31. Ans.(a)

Sol. When the central bank increases the reserve ratio, it reduces the amount of money that banks can lend. This leads to a decrease in the money supply, which in turn increases the interest rate.

S32. Ans.(b)

Sol. Monopoly is a market structure in which there is only one seller or producer of a particular product or service in the market. A monopoly basically holds the entire market, controls prices and supplies, and prevents any competition or it doesn't even let competition start because of high market entry costs or legal barriers.

S33. Ans.(a)

Sol. Uttar Pradesh is the largest state in India by area and population. It is a landlocked state and is surrounded by other states and countries. It is a major agricultural state and is known for its sugarcane and wheat production. It is also a major industrial state and is home to many large industries.

- The Samakshik Yojana is a government scheme for the safety and security of girls from the marginalized communities. It is a part of the National Girl Child Protection Scheme.
- The major goal of this scheme is Gender sensitization which is intended to address gender inequality concerns in the city.

S34. Ans.(b)

Sol. Union Finance Minister, Nirmala Sitharaman presented the Union Budget 2023 for the 5th time in a row.

- She presented the financial statements and tax proposals for the fiscal year 2023-24 (April 2023 to March 2024).
- A Made in India tablet has replaced the traditional 'Bahi Khata' as Union Finance Minister Nirmala Sitharaman leaves the Finance Ministry's office to go to the Parliament to present the Budget.

S35. Ans.(d)

Sol. Egypt has joined the BRICS New Development Bank (NDB). The African-Arab nation became an NDB member on February 20, 2023 though a formal notification was issued on March 22, 2023.

- New Development Bank was to set up by BRICS nations in 2014. In May 2022, the New Development Bank set up a regional office in India in the state of Gujarat.
- BRICS (member) - Brazil, Russia, India, China, and South Africa.
- The highlight of the fifteenth summit was the agreement to admit six new member countries: Argentina, Egypt, Ethiopia, Iran, Saudi Arabia, United Arab Emirates, who will officially join the group in January 2024.

S36. Ans.(b)

Sol. The India

- From a modern perspective, the Indian Navy has 158 ships and 78 aircraft and is expected to have 200 ships and 80 aircraft by 2025.
- Indian Coast Guard in the Indian Ocean.

S37. Ans.(b)

Sol. Norman Borlaug was an agronomist and geneticist who was instrumental in the development of high-yielding wheat varieties that contributed to the Green Revolution in agricultural production. He is known as Father of the Green Revolution.

S38. Ans.(d)

Sol. Satyajit Ray was a film director, writer, and composer of music in India.

- For films such as *The Apu Trilogy* (1955–59), *The Music Room* (1958), *The 400 Blows* (1963), and *Charulata* (1964), he is widely considered to have been one of the greatest filmmakers of all time.
- In Calcutta, he was a writer, poet, and a literary critic. He was also a writer of literature and arts. After his death, he was posthumously awarded the Bharat Ratna for his contribution to neorealist film making after beginning his career as a commercial artist.
- In his career, he won several important awards, including 32 National Indian Film Awards, a Golden Lion, a Golden Bear, 2 Silver Bears, a variety of additional awards at international film festivals and ceremonies, and an Honorary Academy Award in 1992.
- He was honoured in 1992 by the Government of India with the Bharat Ratna, the highest civilian award.

S39. Ans.(d)

Sol. Pablo Picasso (25 October 1881 – 8 April 1973) was a Spanish painter, sculptor, printmaker, ceramicist, stage designer, poet, and playwright who spent most of his adult life in France.

S40. Ans.(b)

Sol. Ganesh Vasudev Mavalankar, commonly known as G. V. Mavalankar, was the first Speaker of the Lok Sabha, the lower house of India's bicameral Parliament.

- He served as the Speaker from 1952 until his death in 1956. Mavalankar played a crucial role in laying down the rules and procedures of the Lok Sabha and is often remembered for his contributions to the establishment and strengthening of the parliamentary democracy in India.
- The other individuals listed - M. A. Ayyangar, Sardar Hukam Singh, and N. Sanjiva Reddy - also served as Speakers of the Lok Sabha, but after Mavalankar's tenure.

S41. Ans.(a)

Sol. The state of Maharashtra has conferred the Padma Shri award for the year 2022 to the reformer Dattatreya Appasaheb.

- The Maharashtra Sahitya Akademi award will be conferred to Appasaheb.
- Appasaheb was a prominent Marathi writer and a social worker. He passed away in 2017.

S42. Ans.(d)

Sol. Cyclone Ockhi hit the west of India, and the largest city in New Zealand.

S43. Ans.(b)

Sol. Article 370 of the Indian Constitution was in force from 1952 to 2019.

- Article 370 of the Indian Constitution gave Jammu and Kashmir the authority to make its own administrative laws while it was governed by the state from 1952 until 1 October 2019.
- Jammu and Kashmir, which is part of the wider area of Kashmir, is situated in the northern section of the Indian subcontinent, between China, Pakistan, and India.
- Article 370 of the Indian Constitution gave Jammu and Kashmir the authority to make its own administrative laws while it was governed by the state from 1952 until 31 October 2019.

S44. Ans.(d)

Sol. Alluvial soils are formed mainly due to silt deposited by Indo-Gangetic Brahmaputra rivers. In coastal regions, some alluvial deposits are formed due to wave action.

- It is rich in Potash and the colour of this soil varies from light grey to ash.
- Crop supported: rice, maize, wheat, sugarcane, oilseeds, etc.
- It is suitable for the growth of a wide variety of Rabi and Kharif crops such as Wheat, Rice and Cash Crops like Sugarcane.

S45. Ans.(d)

Sol. In India, two different types of alluvial soils have developed viz. bhangra and khaddar. Khadar and Bangar are terms used in the Indo-Gangetic plains of North India and Pakistan to differentiate between two types of river plains and alluvial soils.

S46. Ans.(a)

Sol. The first Finance Minister of independent India was R. K. Shanmukham Chetty. He presented the first Union budget of India on 26 Nov.1947. The first mini-budget was presented by T. T. Krishnamachari on November 30, 1956.

S47. Ans.(c)

Sol. In the 75th anniversary of the Indian National Congress, the Government of India issued a postage stamp with the motto '75 Years of the Indian National Congress' and the slogan '75 Years of the Indian National Congress'.

S48. Ans.(b)

Sol. The Swadeshi Movement was a part of the Indian National Congress. It was a movement for the revival of Indian industries and the promotion of Indian goods.

S49. Ans.(d)

Sol. The Mutiny of 1857 was a significant event in the history of India. It was a rebellion against the British rule in India. It began on May 10, 1857.

S50. Ans.(b)

Sol. Tobacco was introduced to India during the Mughal rule. It was introduced by the Emperor Akbar (reigned from 1556 to 1605). It is often credited with bringing tobacco cultivation to India. Akbar was known for his interest in various cultural innovations, and tobacco was one of the crops introduced during his reign. The cultivation of tobacco plants in the Indian subcontinent became popular during the Mughal era and later spread to various parts of the Indian subcontinent.

S51. Ans.(c)

Sol. Adhesive force is the force of attraction between molecules of different substances. This force allows liquids to wet and spread over solid surfaces and is responsible for phenomena like capillary action and the rise of liquids in narrow tubes.

- Adhesive force is distinct from cohesive force, which is the force of attraction between molecules of the same substance. Surface tension, on the other hand, is the result of cohesive forces at the surface of a liquid, creating a "skin" that minimizes the surface area.

S52. Ans.(b)

Sol. Static science is associated with situations of rest or objects at rest. It deals with the study of objects and systems that are not in motion or experiencing changes in their state. This is in contrast to dynamic science, which focuses on objects and systems in motion or undergoing changes.

S53. Ans.(b)

Sol. The colour of the stars reflects the age of stars. Colour is reflected from the temperature is high, then the star is young. The star will be blue during young stage which indicates high temperature. If star is red the temperature is low.

S54. Ans.(a)

Sol. Sunglasses typically have a power of 0 Dioptre (also written as "0 D" or plano). This means that they do not have any optical power for focusing light. Sunglasses are primarily designed to block harmful ultraviolet (UV) rays and reduce the intensity of bright light. They are not intended to correct vision, so their power is 0 D. A power of 0 D indicates no refractive power.

S55. Ans.(c)

Sol. Robert H. Goddard (August 10, 1892 – August 10, 1972) was an American physicist, engineer, professor, physicist, and inventor. He is best known for his work on liquid-fueled rockets.

S56. Ans.(c)

Sol. Farsightedness, also known as hyperopia, is a condition where the eye cannot focus on nearby objects. It is a refractive error where light entering the eye focuses at a point behind the retina. The medical term for this is hyperopia. Distant objects are usually seen clearly, but nearby objects appear blurry. The problem one should use a convex lens to correct it.

S57. Ans.(d)

Sol. Air is optically denser than water. When light travels from air to water, it bends towards the normal. When light travels from water to air, it bends away from the normal. This is why a fish underwater looks closer than it actually is. The angle of incidence is greater than the angle of refraction. It is clearly visible when a fish is seen through water. A converging lens (convex lens) is used to correct this problem.

S58. Ans.(d)

Sol. The correct answer is (d).
John Guttenberg – printing press
John Roentgen – X-rays
Michael Faraday – Dynamo
Alexander Graham Bell – telephone

S59. Ans.(a)

Sol. The gravitational constant, symbolized G , is a physical constant that appears in the equation for Newton's law of gravitation. This is different from 'g' which denotes the acceleration due to gravity.

S60. Ans.(c)

Sol. All isotopes of the same element have the same atomic number but different atomic masses.

S61. Ans.(a)

Sol. Some precious metals such as pure gold and platinum do not react with nitric acid. Pure gold does react with aqua regia a mixture of concentrated nitric acid and hydrochloric acid.

S62. Ans.(a)

Sol. Nitrous oxide, commonly known as laughing gas or nitrous, is a chemical compound, an oxide of nitrogen with the formula N₂O. At room temperature, it is a colorless non-flammable gas, with a slight metallic scent and taste.

S63. Ans.(a)

Sol. A transistor is a semiconductor device used to amplify signals and electrical power. Silicon is a semiconductor.

S64. Ans.(d)

Sol. Lignite, or brown coal, is a soft brownish-black sedimentary rock that occurs somewhere between coal and peat in the geological scale. It is the lowest rank of coal in terms of carbon content. It has a carbon content of about 70%.

S65. Ans.(d)

Sol.

Silver(I) nitrate react with acetylene to produce silver(I) acetylide and hydrogen chloride.

$2\text{AgNO}_3 + \text{C}_2\text{H}_2 \rightarrow \text{Ag}_2\text{C}_2 + 2\text{HNO}_3$. Hence, C_2H_2 shows acidic property.

S66. Ans.(d)

Sol. Hydrogenation is based on the principle of fusion reaction. It is an endothermic reaction.

S67. Ans.(a)

Sol. The technique of fractional distillation was developed by Willard Libby and his colleagues.

S68. Ans.(a)

Sol. The skin is the largest organ of the body, with a total area of about 20 square feet. The skin protects us from microbes and the elements, helps regulate body temperature, and permits the sensations of touch, heat, and cold.

S69. Ans.(b)

Sol. Delonix regia Rafin is the scientific name of the Gulmohar tree. The Gulmohar tree is known for its beautiful red and orange flowers and is often planted for its ornamental value in various parts of the world.

S70. Ans.(b)

Sol. Chickenpox, also known as varicella, is a highly contagious disease caused by the initial infection with varicella zoster virus (VZV).

S71. Ans.(b)

Sol. The disease is caused by the yellow fever virus and is spread by the bite of an infected female mosquito. It infects only humans, other primates, and several species of mosquitoes.

S72. Ans.(b)

Sol. Cell theory states that all living organisms are made up of cells. Cells are the basic unit of life. They contain genetic material (DNA or RNA). So the correct answer is (b).

S73. Ans.(d)

Sol. Prednisolone is a corticosteroid. It is used to treat a variety of conditions, such as inflammation, allergic reactions, asthma, blood or bone marrow disorders, or vision problems, lupus, skin conditions, and rheumatoid arthritis.

S74. Ans.(b)

Sol. Prothrombin is converted into thrombin in the presence of thrombolytic agents.

S75. Ans.(c)

Sol. Acacia arabica is a tree that is native to several regions of India and is used for a variety of purposes.

S76. Ans.(d)

Sol.

$$\text{Average} = \frac{21 \times 60 + 20 \times 21}{21} = 80$$

$$\text{Increment} = 80 - 60 = 20$$

Alternative method:

Each number increase by 20, then average also increase by 20.

S77. Ans.(c)

Sol.

$$6^2 + 4^2 - 20 \text{ of } 2 + 40$$

$$36 + 16 - 40 + 40$$

$$= 52$$

S78. Ans.(a)

Sol. Word 'EXAM'

Formula Used: Number of ways to arrange n distinct objects = n!

Solution: The number of letters in 'EXAM' = 4

Number of arrangements = $4! = 4 \times 3 \times 2 \times 1 = 24$

S79. Ans.(c)

Sol.

$$35 \text{ CP} + 15 \text{ SP} = 35 \text{ SP}$$

$$35 \text{ CP} = 20 \text{ SP}$$

$$\frac{CP}{SP} = \frac{20}{35}$$

$$\text{Gain \%} = \frac{35-20}{20} \times 100 = 75\%$$

S80. Ans.(b)

Sol.

$$33\% + 30\% - \frac{33 \times 30}{100} \%$$

$$53.1\%$$

S81. Ans.(a)

Sol. 7 people,

Formula Used: Number of ways to select r objects from n = $\frac{n!}{r!(n-r)!}$

Solution: $7C3 = \frac{7!}{3!(7-3)!} = \frac{7 \times 6 \times 5}{(3 \times 2 \times 1)} = 35$

S82. Ans.(d)

Sol.

$$\text{Percentage increase} = \frac{1400000 - 1000000}{1000000} \times 100 = 40\%$$

S83. Ans.(d)

Sol. 5 red balls and 6 blue balls, Choose 2 balls

Formula Used: Number of ways to choose 2 objects from n = nC_2

Solution: The total number of ways to choose 2 balls from 11 (5 + 6) is $11C_2 = \frac{11!}{(2!(11-2)!)} = \frac{(11 \times 10)}{2} = 55$

S84. Ans.(d)

Sol.

$$\text{Mean proportion} = \sqrt{64 \times 144} = 8 \times 12 = 96$$

S85. Ans.(a)

Sol.

$$\frac{39}{25} \div \frac{13}{5} + \frac{33}{5} \times \frac{4}{11}$$

$$\frac{39}{25} \times \frac{5}{13} + \frac{12}{5}$$

$$\frac{3}{5} + \frac{12}{5} = \frac{15}{5} = 3$$

S86. Ans.(b)

Sol. 4 red balls

Formula Used

Solution: Total

Favorable out

Probability =

S87. Ans.(a)

Sol. Given:

We need to check whether the number is divisible by 11.

Formula Used: For a number to be divisible by 11, the difference between the sum of digits at odd places and the sum of digits at even places must be divisible by 11.

Solution:

For 738394:

Sum of digits at odd places = $7 + 3 + 9 = 19$

Sum of digits at even places = $3 + 8 + 4 = 15$

Difference = $19 - 15 = 4$ (Not divisible by 11)

For 547896:

Sum of digits at odd places = $5 + 7 + 9 = 21$

Sum of digits at even places = $4 + 8 + 6 = 18$

Difference = $21 - 18 = 3$ (Not divisible by 11)

For 908172:

Sum of digits at odd places = $9 + 8 + 1 = 18$

Sum of digits at even places = $0 + 7 + 2 = 9$

Difference = $18 - 9 = 9$ (Not divisible by 11)

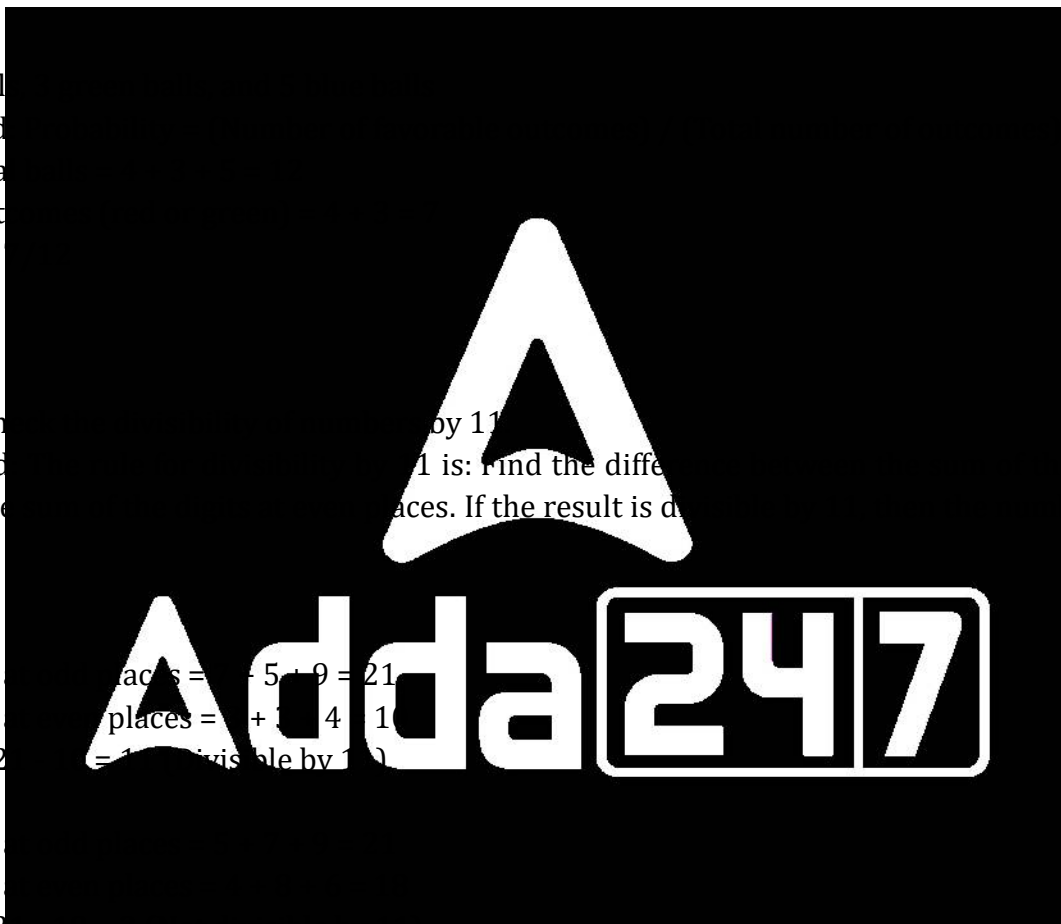
For 678123:

Sum of digits at odd places = $6 + 8 + 2 = 16$

Sum of digits at even places = $7 + 1 + 3 = 11$

Difference = $16 - 11 = 5$ (Not divisible by 11)

Hence, the correct answer is (a).



S88. Ans.(a)

Sol.

Let Total quantity of Sugar = X

$$X \times \frac{96}{100} = 6 \text{ Kg.}$$

$$X = \frac{600}{96} = 6.25 \text{ Kg.}$$

S89. Ans.(d)

Sol.

$$\text{SI in one year} = \frac{28623.50 - 21850}{5} = 1354.7$$

$$R\% = \frac{1354.7}{21850} \times 100 = 6.2\%$$

S90. Ans.(a)

Sol. Given: We have to find the number of trailing zero in $50!$ is given by

Formula Used: $\left[\frac{n}{5} \right] + \left[\frac{n}{5^2} \right] + \left[\frac{n}{5^3} \right] + \dots$ where $n!$ is given by n and $[x]$ is the integer part of x .

Solution:

For $n = 50$,

$$\left[\frac{50}{5} \right] = 10$$

$$\left[\frac{50}{25} \right] = 2$$

Thus, the total number of trailing zeros in $50!$ is $10 + 2 = 12$.

Hence, the correct answer is 12.

S91. Ans.(c)

Sol.

$$\text{C.P.} : \text{M.P.}$$

$$100 - \text{Discount} : 100 + \text{Profit}$$

$$100 - 25 : 100 + 20$$

$$75 : 120$$

According to the question 120 units = 1488 Rs.

$$1 \text{ units} = 12.4 \text{ Rs.}$$

$$\text{Cost price of the trolley bag } 75 \text{ units} = 75 \times 12.4 = 930 \text{ Rs.}$$

S92. Ans.(b)

Sol. Interest of the one year = $6072 - 5704 = 368$ Rs.

Interest of the three years = $368 \times 3 = 1104$ Rs.

Sum = $5704 - 1104 = 4600$ Rs.

S93. Ans.(a)

Sol.

Given that $X : Y = 3 : 2$

Let $X = 3x$ and $Y = 2x$

Then,

$$(X - Y) : (X + Y)$$

$$3x - 2x : 3x + 2x$$

$$x : 5x$$

$$1 : 5$$

S94. Ans.(b)

Sol.

The value of the of $\sqrt{[(7^2 + 6^3 + 9^2) \div 2 + 52]}$

$$= \sqrt{(49 + 216 + 81) \div 2 + 52}$$

$$= \sqrt{346 \div 2 + 52}$$

$$= \sqrt{173 + 52}$$

$$= \sqrt{225}$$

$$= 15$$

S95. Ans.(c)

Sol.

Effective rate of 10 % for 2 years = $10 + 10 + \frac{10 \times 10}{100} = 21\%$

Compound intrest = $8400 \times 21\% = 1764$ Rs.

S96. Ans.(c)

Sol.

Net percentage change in number = $20 - 20 + \frac{20 \times -20}{100}$

$$= -4\%$$

S97. Ans.(b)

Sol.

$$25 = 5 \times 5$$

$$15 = 3 \times 5$$

$$75 = 3 \times 5 \times 5$$

Then Highest Common Factor if 25, 15 and 75 = 5

S98. Ans.(b)

Sol. Given: We

Formula Used

Solution:

Perform the d

$$1296 \div 13 = 9$$

Therefore, the

Hence, the co

S99. Ans.(a)

Sol.

According to the question $85\% = 425$ Rs.

$$\text{The price of the articles to make profit } 20\% = \frac{425}{85} \times 120$$

$$= 600 \text{ Rs.}$$

S100. Ans.(a)

Sol. L.C.M of t

Least number

S101. Ans.(b)

Sol. In the 1st square

$$24 - 5 = 19$$

Similarly,

$$24 + 5 = 29$$

In the 2nd square,

$$35 - 17 = 18$$

$$\text{Similarly, } 35 + 17 = 52$$

S102. Ans.(d)

Sol. Options

a) $99 \div 9 = 11$

b) $117 \div 9 = 13$

c) $135 \div 9 = 15$

d) 105 is not divisible by 9

Hence, 105 is the odd one out.

S103. Ans.(c)

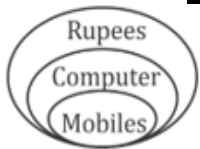
Sol. VIBGYOR

VIBBGYOR, W

So, Pink is the

S104. Ans.(a)

Sol.

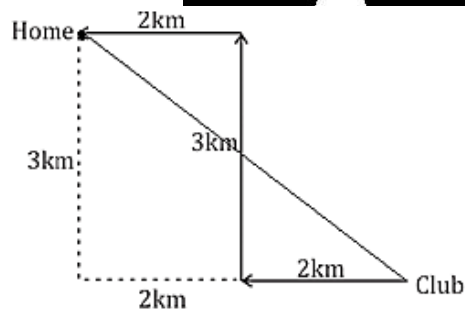


Conclusion I: No rupees are mobile $\rightarrow$ False

II: All mobile are rupees $\rightarrow$ True

S105. Ans.(d)

Sol.



Shortest distance $= \sqrt{3^2 + 4^2} = \sqrt{25} = 5\text{km}$

Hence, 5km is the correct.

S106. Ans.(a)

Sol.

<i>M</i>	<i>O</i>	<i>O</i>	<i>D</i>	<i>Y</i>
↓	↓	↓	↓	↓
13	4	4	4	25

Here, for consonant the positional Vowels are taken and for Vowels the value taken are according to the vowel series

Vowels	A	E	I	O	U
Series	1	2	3	4	5
L	U	D	H	I	Y
↓	↓	↓	↓	↓	↓
12	5	4	8	3	25

Similarly,

P	R	I	M	E
↓	↓	↓	↓	↓
16	18	3	13	2

Hence 16183132 is the correct answer.

S107. Ans.(c)

Sol. Option (a)

(b) Forceps is

(c) Hunter is

(d) Type Writ

Hence, Hunter

S108. Ans.(b)

Sol.

C $\xrightarrow{+3}$ F $\xrightarrow{+3}$ I $\xrightarrow{+3}$ L $\xrightarrow{+3}$ O $\xrightarrow{+3}$ R

X U R U L U
 $\xrightarrow{-6}$ $\xrightarrow{-6}$

Hence 'OL' is the correct answer.

S109. Ans.(a)

Sol. 382 - (16

691 - (160+2

753 - (160+4

Hence, 553 is the correct answer.

S110. Ans.(d)

Sol. $35 \times 3 + 6 = 53$

By interchanging 3 and 6, + and $\times$ using BODMAS Rule

$35 + 6 \times 3 = 53$

$35 + 18 = 53$

$53 = 53$

Hence, Option 'd' is correct.

S111. Ans.(a)

Sol.

In the 1st row

$$4^2 + 3^2 + 5^2 = 50$$

In the 2nd row

$$7^2 + 6^2 + 8^2 = \boxed{149}$$

Hence, 149 is the correct answer.

S112. Ans.(d)

Sol.

$$14 : 25$$

$$1 + 5 = 5 \Rightarrow 5^2 = 25$$

Similarly, 53:-

$$5 + 8 = 8 \Rightarrow (8)^2 = 64$$

Hence, 64 is the correct answer.

S113. Ans.(a)

Sol.

$$\text{Option (a) } 13^3 = 2197$$

$$2197 - 13 = 2184 \neq 2186$$

$$\text{(b) } 7^3 = 343$$

$$343 - 7 = 336$$

$$\text{(c) } 11^3 = 1331$$

$$1331 - 11 = 1320$$

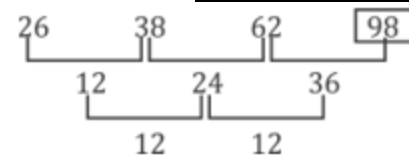
$$\text{(d) } 6^3 = 216$$

$$216 - 6 = 210$$

Hence, 13 : 2136 is the odd one out.

S114. Ans.(c)

Sol.



Hence, 98 is the correct answer.

S115. Ans.(d)

Sol.

$$114 : 4, 16 : 3 :: \underline{\hspace{1cm}} : 6, 12 : 2$$

The 1st analogy is $114 \times 4 = 456$

The 2nd analogy is $16 \times 3 = 48$

The 3rd analogy is $x \times 6 = 6x$

The 4th analogy is $12 \times 2 = 24$

Here, we get to know that the 2nd analogy is double the 4th analogy.

Similarly, the 1st analogy will be double the 3rd analogy.

$$6x \times 2 = 456$$

$$12x = 456$$

$$x = 38$$

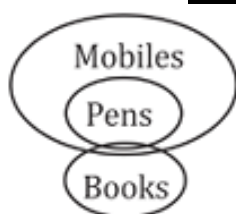
S116. Ans.(c)

Sol.

+3	+5	+3
H	P	N
↓	↓	↓
K	U	Q
↓	↓	↓
N	Z	T
↓	↓	↓
Q	E	W
↓	↓	↓
T	J	Z

S117. Ans.(a)

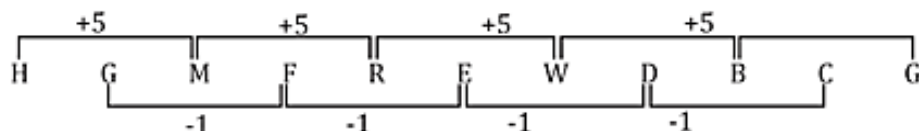
Sol.



- i. True
- ii. false

S118. Ans.(c)

Sol.



Hence, G is the correct answer.

S119. Ans.(b)

Sol.

Bears (Are) Scary $\rightarrow$ 4 3 (6)
 Kings (Are) Hungry $\rightarrow$ 8 (6) (5)
 Kings Will (Die) $\rightarrow$ (9) 7 (5)
 They (Die) $\rightarrow$ 2 (9)

Hence, they will is the correct answer.

S120. Ans.(d)

Sol.

According to the question the arrangement of English alphabet will be:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
M	L	K	J	I	H	G	F	E	D	C	B	A	N	O
26	25	24	23	22	21	20	19	18	17	16	15	14	13	12

16	17	18	19	20	21	22	23	24	25	26
P	Q	R	S	T	U	V	W	X	Y	Z
11	10	9	8	7	6	5	4	3	2	1

S121. Ans.(c)

Sol. (a) FINL $\Rightarrow$ 14

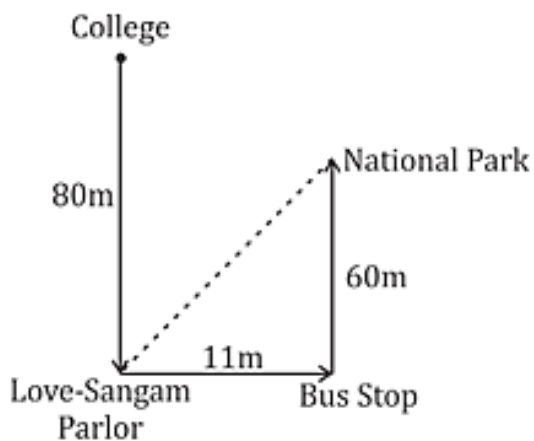
(b) MNLB $\Rightarrow$ 12 + 14 = 26

(c) PIHJ $\Rightarrow$ 16 + 14 = 30

(d) NGHL $\Rightarrow$ 14 + 8 + 12 = 34

S122. Ans.(b)

Sol.



$$\sqrt{11^2 + 60^2} = \sqrt{121 + 3600} = 61m$$

Hence, 61m is the correct answer.

S123. Ans.(c)

Sol.

Then,



Hence, VTS is the correct answer.

S124. Ans.(a)

Sol.

U is the last seat on the right side. S is Sitting exactly b/w Q and U



T is Sitting on the last seat at the one end of the row. Since U is already of right end, where, T is sitting at left end.



Q is at the immediate right of P



P is sitting to the immediate right of R



Q is sitting on 4th position from left.

S125. Ans.(a)

Sol.

$$G \xrightarrow{-3} D \xrightarrow{-2} B$$

$$K \xrightarrow{-3} H \xrightarrow{-3} E$$

$$Z \xrightarrow{-3} W \xrightarrow{-3} T$$

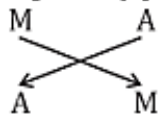
$$R \xrightarrow{-3} O \xrightarrow{-3} L$$

Hence, GDB is the correct answer.

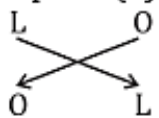
S126. Ans.(d)

Sol.

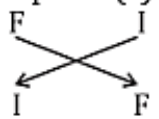
Option (a)



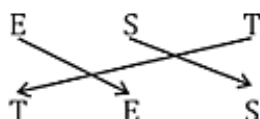
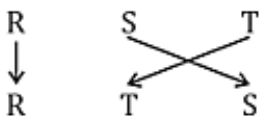
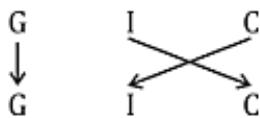
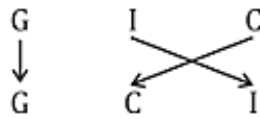
Option (b)



Option (c)



Option (d)



Hence, 'd' is the odd one out.

S127. Ans.(c)

Sol. $Z = Y > R$

(a) $G > Q \rightarrow T$

(b) $Q > R \rightarrow T$

(c) $R > Z \rightarrow F$

(d) $H = Y \rightarrow T$

Hence, 'c' is the correct answer.

S128. Ans.(b)

Sol.

Logic : subtract the 1st the number with the 2nd then multiply the difference with 2

$$12 - 3 = 9$$

$$\& \quad 9 \times 2 = 18$$

$$48 - 23 = 25$$

$$\& \quad 25 \times 2 = 50$$

$$87 - 51 = 36$$

$$\& \quad 36 \times 2 = 72$$

Hence, 72 is the correct answer.

S129. Ans.(b)

Sol.

B is twice as heavy as A

$$B = 2A$$

D is twice as heavy as B.

$$D = 2B = 4A$$

C is half as heavy as E

$$C = \frac{1}{2} E = \frac{1}{2} B = A$$

E is equally as heavy as B.

$$E = B = 2A$$

$$A : B : C : D : E$$

$$A : 2A : A : 4A : 2A$$

$$1 : 2 : 1 : 4 : 2$$

D is the heaviest among all Five persons.

Hence, D is the right answer.

S130. Ans.(d)

Sol. CARE : H

$$C + 3 = F$$

$$A + 3 = D$$

$$R + 3 = U$$

$$E + 3 = H$$

Similarly,

$$T + 3 = W$$

$$O + 3 = R$$

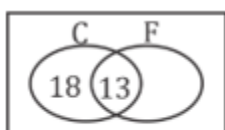
$$M + 3 = P$$

$$B + 3 = E$$

TOMB : EPRW

S131. Ans.(c)

Sol.

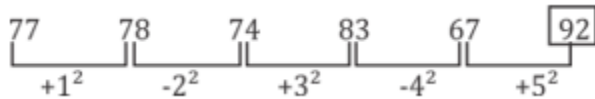


The total students participate in football = $50 - 18 = 32$

Hence, The correct answer is 32

S132. Ans.(d)

Sol.



S133. Ans.(c)

Sol. The average income of six friends = 6300

So, the total income = $6300 \times 6 = 37800$

Also, the total

Thus, the total

Rs. $37800 - 2$

Again, given that

less than R's income

So, $P + R = 13$

$P + P + 3000 =$

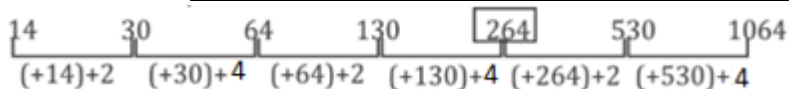
$2P = 10800 =$

Thus, the income

= Rs. 8400

S134. Ans.(b)

Sol.



Hence, the common difference is 2.

S135. Ans.(b)

Sol.

Option (b) 35 and 45; $\times$ and $-$

$45 + 15 \times 4 - 35 \div 5 = 98$

$45 + 60 - 7 = 98$

$105 - 7 = 98$

$98 = 98$

S136. Ans.(c)

Sol.



I. True

II. True

III. True

Hence, the correct answer is 'Option (c)'

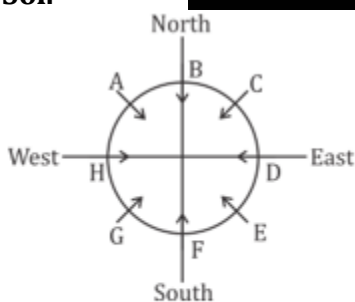
S137. Ans.(a)

Sol. The order of words will be

2, 4, 1, 5, 3

S138. Ans.(a)

Sol.



Thus, H is facing in East direction.

Hence, the correct answer is option (a)

S139. Ans.(c)

Sol.

$$\begin{array}{cccccc} C & A & R & R & O & T \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow \\ 3 & +1 & +18 & +18 & +15 & +20 = 75 \\ \Rightarrow 75 \times 6 = 450 \end{array}$$

Similarly,

$$\begin{array}{cccc} F & I & R & E \\ \downarrow & \downarrow & \downarrow & \downarrow \\ 6 & +9 & +18 & 5 = 38 \\ \Rightarrow 38 \times 4 = 152 \end{array}$$

S140. Ans.(b)

Sol.

Symbol in Diagram



=



Meaning

Female

Male

Married couple

Siblings

Difference of a generation

$$Z \times C + T - H \times P + Q$$

Diagram 1: A network graph with nodes Z, C, T, H, P, Q. Nodes Z, C, and H are squares; T, P, and Q are circles. Edges: Z-C (single), C-T (double), T-H (single), H-P (single), P-Q (double).

A number line starting at 110 and ending at 487. The line is marked with the numbers 110, 111, 119, 146, 271, and 487. Below the line, there are five brackets representing jumps of 100, 10, and 1. The jumps are labeled 1^3 , 2^3 , 3^3 , 5^3 , and 6^3 . The number 119 is highlighted in a box.

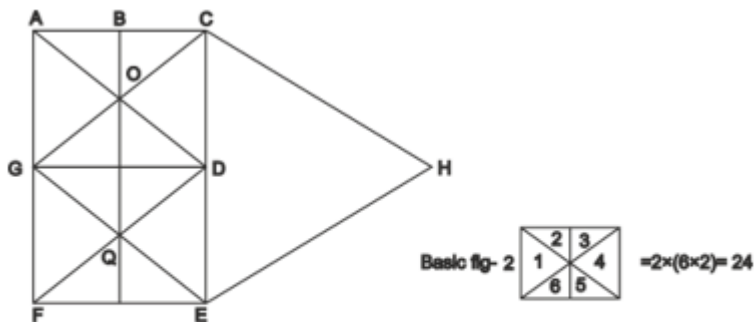
54

S145. Ans.(c)

S146. Ans.(c)

S147. Ans.(c)

Sol.



Extra = CGE, ADF, GOQ, OQD = 4

CHE = 1

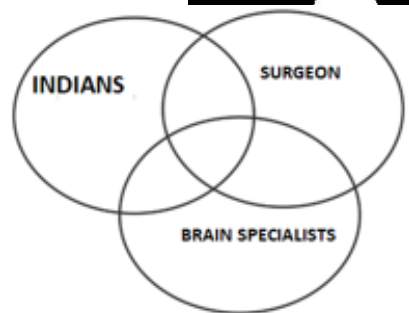
Total triangles = $24 + 4 + 1 = 29$

S148. Ans.(a)

S149. Ans.(a)

S150. Ans.(b)

Sol.



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