Bihar Lab Assistant Sample Paper

Q1. The term Roaring Forties is associated with the
(a) Planetary winds
(b) Trade winds
(c) Westerly winds
(d) Polar winds

Q2. Trade winds blow from the
(a) Polar high pressure
(b) Equatorial low pressure
(c) Subtropical high pressure
(d) Subpolar low pressure

Q3. Which of the following Harappan sites was not located in Gujarat?
(a) Lothal
(b) Daimabad
(c) Surkotada
(d) Dholavira

Q4. Which of the following Harappan sites used mud-bricks in ample for the construction of houses?
(a) Mohenjodaro
(b) Harappa
(c) Kalibangan
(d) Chanhudaro

Q5. In ancient India, Nalanda University represented a great centre for the study of
(a) Mahayana Buddhism
(b) Hinduism
(c) Hinayana Buddhism
(d) Jainism

Q6. According to the Indian Constitution, at one time, a person can be the Governor of a maximum number of how many State/States?
(a) Three
(b) Two
(c) The maximum number is not fixed
(d) One

Q7. The Governor holds office for a period of _____.
(a) 6 years
(b) 3 years
(c) During the pleasure of the Chief minister
(d) During the pleasure of the President

Q8. Which of the following rivers does not have a delta in the eastern coastal plain of India?
(a) Mahanadi
(b) Krishna
(c) Godavari
(d) Narmada

Q9. Which is the largest island in Japan among the following options?
(a) Hokkaido
(b) Honshu
(c) Shikoku
(d) Kyushu

Q10. Who was the first Governor-General of India to order a census?
(a) Lord Dalhousie
(b) Lord Ripon
(c) Lord Minto
(d) Lord Mayo

Q11. What was the sex ratio of India in 2011?
(a) 927 females per 1000 males
(b) 933 females per 1000 males
(c) 943 females per 1000 males
(d) 947 females per 1000 males

Q12. Which organization is responsible for conducting the Census in India?
(a) Ministry of Home Affairs
(b) Ministry of Statistics and Programme Implementation
(c) Registrar General and Census Commissioner of India
(d) National Sample Survey Organization

Q13. Which state had the highest sex ratio in 2011?
(a) Mizoram
(b) Kerala
(c) Lakshadweep
(d) Sikkim

Q14. Which coast of the western coastal plains is rich in iron deposits?
(a) Kachchh and Kathiawar coast
(b) Konkan coast
(c) Kanada coast
(d) Malabar coast

Q15. Which coastal region in southern Kerala consists of lagoons running parallel to the coast?
(a) Kachchh and Kathiawar coast
(b) Konkan coast
(c) Kanada coast
(d) Malabar coast

Q16. Khizr Khan, who founded Sayyid Dynasty was the governor of?
(a) Punjab
(b) Bengal
(c) Multan
(d) None of the above

Q17. Who among the following shifted his capital from Delhi to Daulatabad?
(a) Alauddin Khalji
(b) Ibrahim Lodi
(c) Muhammad Bin Tughluq
(d) Qutbuddin Aibak

Q18. Which Article of the Indian Constitution has provisions for a financial emergency?
(a) Article 356
(b) Article 360
(c) Article 352
(d) Article 350

Q19. During the President Rule in a state of India, the President cannot assume the powers of?
(a) The Governor of that state
(b) The bureaucrats of that state
(c) The High Court of that state
(d) The Council of Ministers of that state

Q20. Which of the following is NOT a type of bank account in India?
(a) Current account
(b) Savings account
(c) F. D account
(d) Trading account

Q21. In which five-year plan Panchayati Raj was started?
(a) first
(b) second
(c) third
(d) fourth

Q22. An earthquake of magnitude _____ on the Richter scale has a thousand times more destructive energy than an earthquake of magnitude 4.
(a) 5
(b) 7
(c) 6
(d) 8

Q23. Which of the following is NOT an example of a Volcanic Mountain?
(a) Mount Etna
(b) Mount Fujiyama
(c) Mount Black
(d) Mount Kilimanjaro

Q24. Which ruler of Gupta Empire is also known as "Napoleon of India"?
(a) Chandragupta I
(b) Chandragupta II
(c) Samudragupta
(d) Sri Gupta

Q25. Which of the following was not actively engaged in social and religious reforms in India?
(a) Raja Ram Mohan Roy
(b) Pandit Ishwar Chandra Vidyasagar
(c) Jyotiba Phule
(d) Bharatendu Harish Chandra

Q26. Who among the following is the ex-officio chairman of the Zonal Council?
(a) Union Home Minister
(b) Chief Minister of states in rotation
(c) Prime Minister of India
(d) Union Home Secretary

Q27. Right to Information Act, 2005 came into force on which of the following date?
(a) 15 August 2005
(b) 15 June 2005
(c) 12 October 2005
(d) 22 June 2005

Q28. The wide treeless grassy plains in South America are called
(a) Selvas
(b) Pampas
(c) Prairies
(d) Steppes

Q29. Which of the following rivers is the longest-flowing river of Europe
(a) Rhone
(b) Rhine
(c) Danube
(d) Volga

Q30. Which category had the highest percentage of workers in the 2011 Census of India?
(a) Agriculture
(b) Industry
(c) Services
(d) Construction

Q31. Which of the following is a flagship program of NITI Aayog aimed at improving the infrastructure and services in urban areas?
(a) Digital India
(b) AMRUT
(c) Atal Innovation Mission
(d) Skill India

Q32. Which of the following is the oldest National Park in India?
(a) Jim Corbett National Park
(b) Gir National Park
(c) Kaziranga National Park
(d) Nilgiri Biosphere Reserve

Q33. Which wildlife sanctuary in Andhra Pradesh is known for its population of Asian elephants?
(a) Koundinya Wildlife Sanctuary
(b) Papikonda Wildlife Sanctuary
(c) Nagarjunsagar-Srisailam Tiger Reserve
(d) Coringa Wildlife Sanctuary

Q34. What was the name of the famous university founded during the Gupta Dynasty?
(a) Nalanda University
(b) Taxila University
(c) Vikramshila University
(d) Valabhi University

Q35. What was the name of the famous astronomer who lived during the Gupta Dynasty?
(a) Aryabhata
(b) Brahmagupta
(c) Bhaskara
(d) Varahamihira

Q36. Which Article of the Indian Constitution has provisions for a national emergency?
(a) Article 324
(b) Article 352
(c) Article 354
(d) Article 356

Q37. If the announcement of the National Emergency has been approved by both Houses of Parliament, how long will it be effective?
(a) 2 Months
(b) 3 Months
(c) 1 Months
(d) 6 Months

Q38. Which of the following Hindu festivals is celebrated in the last month of the Hindu calendar?
(a) Diwali
(b) Makara Sankranti
(c) Holi
(d) Raksha Bandhan

Q39. Chulia waterfall is situated on the Chambal River in _____.
(a) Madhya Pradesh
(b) Uttar Pradesh
(c) Gujarat
(d) Rajasthan

Q40. In which of the following states is Neora Valley National Park situated?
(a) Kerala
(b) West Bengal
(c) Himachal Pradesh
(d) Maharashtra

Q41. 'Per Drop More Crop' is the goal for which Government of India scheme?
(a) Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)
(b) Pradhan Mantri Jan-Dhan Yojana (PMJDY)
(c) Pradhan Mantri Awaas Yojana Gramin (PMAY-G)
(d) Pradhan Mantri MUDRA Yojana (PMMY)

Q42. One-third of the members of the Vidhan Parishad retire every _____ year/s.
(a) four
(b) two
(c) three
(d) one

Q43. Who among the following presided over the special session of Congress in September 1923 and at the age of 35 became the youngest man to be elected as the President of the Congress?
(a) Ram Manohar Lohia
(b) Bal Gangadhar Tilak
(c) Mahadev Govind Ranade
(d) Maulana Abul Kalam Azad

Q44. In which of the following years was the Cornwallis Code enacted?
(a) 1723
(b) 1857
(c) 1793
(d) 1805

Q45. Which of the following factors is NOT responsible for the loss of fertility of agricultural land?
(a) Higher cation exchange capacity of soil
(b) Alkalisation of soil
(c) Salinisation of soil
(d) Waterlogging

Q46. How many Rajya Sabha seats come from the state of Assam?
(a) 18
(b) 9
(c) 7
(d) 15

Q47. Who was the Nawab of Bhopal that ruled from 1868 to 1901?
(a) Begum Sajida Sultan
(b) Sikander Jahan Begum
(c) Shah Jahan Begum
(d) Sultan Kaikhusrau Jahan Begum

Q48. Which river has tributaries by the name of Mayurakshi, Damodar, Kangsabati and Rupnarayan?
(a) Brahmaputra
(b) Yamuna
(c) Godavari
(d) Hooghly

Q49. In the state of _____, the general direction of the Himalayas is from southwest to northeast.
(a) Nagaland
(b) Mizoram
(c) Arunachal Pradesh
(d) Manipur

Q50. In which of the following years did the Government of India set up the Monetary Policy Committee?
(a) 2016
(b) 2010
(c) 2008
(d) 2019

Q51. If a body slides over a surface, the force resisting the motion between them is called _____.
(a) Centripetal force
(b) Friction
(c) Centrifugal force
(d) Inertia

Q52. In a streamline flow, _____ at every point in the fluid remains same.
(a) Force
(b) Pressure
(c) Velocity
(d) Speed

Q53. The value of acceleration due to gravity (g) at a distance of 2R from the surface of earth, where R is the radius of earth is _____.
(a) g/3
(b) g/4
(c) g/9
(d) g/2

Q54. What is the SI unit of intensity of sound?
(a) Decibel
(b) Newton
(c) Hertz
(d) Tesla

Q55. Which colour is formed when Blue and Green are mixed?
(a) Cyan
(b) Brown
(c) Black
(d) Violet

Q56. What is the SI unit of Power?
(a) Boyle
(b) Watt
(c) Newton
(d) Pascal

Q57. The gas used in discharge tubes for optical decoration and advertising is-
(a) Carbon dioxide
(b) Ammonia
(c) Sulphur dioxide
(d) Neon

Q58. The distance-time graph for the motion of an object moving with a constant speed is a _____.
(a) Dot
(b)Circle
(c) Straight Line
(d) Curve

Q59. What is dry ice?
(a) Solid Carbon dioxide
(b) Solid Nitrogen dioxide
(c) Solid Sulphur dioxide
(d) Solid Water

Q60. In which industry Potassium Nitrate is used commercially?
(a) Glass Manufacturing
(b) Electroplating
(c) Fire Cracker Manufacturing
(d) Leather Industry

Q61. Which of the following is not an example of Allotrope?
(a) Diamond
(b) Graphite
(c) Ozone
(d) Steel

Q62. PET is a very familiar form of _____. It is used for making bottles.
(a) Nylon
(b) Acrylic
(c) Polyester
(d) Rayon

Q63. What is nature of pH of Milk?
(a) Slightly Acidic
(b) Slightly Basic
(c) Highly Acidic
(d) Highly Basic

Q64. Which among the following is not an example of emulsion?
(a) Chocolate-Milk
(b) Butter
(c) Whipped Cream
(d) Curd

Q65. What is the common name of $CaOCl_2$?
(a) Baking Powder
(b) Baking Soda
(c) Bleaching Powder
(d) Washing Soda

Q66. Which among the following is used to treat Indigestion?
(a) Antacid
(b) Antiseptic
(c) Analgesic
(d) Antibiotic

Q67. Which of the following cannot be beaten into Sheets?
(a) Gold
(b) Silver
(c) Potassium
(d) Aluminum

Q68. The famous 'Bubble Baby Disease' is so called because:
(a) It is caused by water bubble
(b) the suffering baby makes bubbles of saliva
(c) The suffering baby is treated in a germ-free plastic bubble
(d) It is cured only water bubble

Q69. Ornithophily is effected by
(a) Snails
(b) Bats
(c) Insects
(d) Birds

Q70. Which of the following vitamins help in the absorption of calcium?
(a) Vitamin A
(b) Vitamin D
(c) Vitamin B1
(d) Vitamin B2

Q71. Which of the following vitamins contain nitrogen?
(a) Vitamin A
(b) Vitamin B
(c) Vitamin C
(d) Vitamin D

Q72. Science dealing with study of soil is called
(a) Pedology
(b) Pedagogy
(c) Ecology
(d) Pomology

Q73. _____ are made up of sclerenchymatous cells. These are generally absent in the primary phloem but are found in the secondary phloem.
(a) Xylem fibres
(b) Xylem parenchyma
(c) Phloem parenchyma
(d) Phloem fibres

Q74. What type of a body plan does coelenterates, ctenophores and echinoderms have?
(a) Annelida
(b)Radial
(c)Bilateral
(d)Platyhelminthes

Q75. In the names Mangifera indica (mango), Solanum tuberosum (potato) and Panthera leo (lion), the terms Mangifera, Solanum and Panthera represent the higher level of?
(a) Taxon
(b) Taxonomic Hierarchy
(c) Specific Epithet
(d) Binomial Nomenclature

Q76. The value of $5\frac{1}{6}+\left[3\frac{1}{6}+\left\{17\times\left(4\frac{4}{5}\div 2\frac{2}{50}\right)\right\}\right]$ is equal to:
(a) 48.33
(b) 30
(c) 45.50
(d) 54

Q77. In how many different ways can the letters of the word 'ARRANGE' be arranged?
(a) 1560
(b) 1260
(c) 720
(d) 120

Q78. Kartik sold an AC to Balram at a profit of 20%. Balram sold this AC at a profit of 12.5% to Mayank. The profit made by Balram is Rs 60 less than the profit made by Kartik. What is the cost price of AC for Kartik?
(a) Rs. 820
(b) Rs. 950
(c) Rs.1200
(d) Rs. 960

Q79. The value of $42 \div 6$ of $4 \times [8 - (24 - 14) \div 5]$of $\frac{3}{4} + 8 - 12 \div 6$ of 2 is:

(a) $\frac{357}{24}$

(b) $\frac{357}{44}$

(c) $\frac{352}{24}$

(d) $\frac{378}{24}$

Q80. A sum of Rs 39804 is divided between P, Q and R such that the ratio of share P and Q is 7 : 8 and that of P and R is 5 : 7. The share of Q is:

(a) Rs 12890

(b) Rs 12840

(c) Rs 12480

(d) Rs 12700

Q81. A person deposits a certain sum which becomes Rs 53,728 at 23% p.a. simple interest after 2 years. What will be the amount of the sum after two years at the half rate of interest?

(a) Rs 45,564

(b) Rs 45,464

(c) Rs 45,364

(d) Rs 45,264

Q82. Radhika have a piggy bank in which she deposits denomination (in the form of coins) of Rs 1, Rs 2, Rs 5 and Rs 10 in the ratio of 9 : 7 : 5: 3. If there are 144 coins in all, then how much money is there in the piggy bank in the form of coins?

(a) Rs. 568

(b) Rs. 468

(c) Rs. 670

(d) Rs. 456

Q83. If $57\frac{1}{7}\%$ of a number is added with itself then result become 1353. Find the original number.

(a) 861

(b) 870

(c) 900

(d) 560

Q84. By selling a clock watch for Rs 570 a person loss 18% of its selling price. At what price should he sell it to gain 18% on its cost price?

(a) Rs. 797

(b) Rs. 794

(c) Rs. 889

(d) Rs. 857

Q85. The market price of the luminous inverter is Rs 12500. A whole seller sells it by giving 15% discount on its market price. If the cost price of the article is Rs 7580, then his profit percent is :
(a) 44.37%
(b) 47%
(c) 49%
(d) 40.17%

Q86. The ratio of the ages of Abhilash and Bipasha, four years ago was 4 : 5. Eight years from now the ratio of the ages of Abhilash and Bipasha will be 11 : 13. What is the sum of their present ages?
(a) 80 Years
(b) 87 Years
(c) 90 Years
(d) 98 Years

Q87. The average of 15 numbers is 78. The average of first five numbers is 75 and that of the next seven numbers is 84. The 13^{th} and 14^{th} number are 2 and 3 more than the 15^{th} number respectively. What is the average of 13^{th} and 15^{th} number?
(a) 75.67
(b) 68.33
(c) 80
(d) 85

Q88. $120 \div 15 \text{ of } 5[130 \div 5 \text{ of } \{3 \times 5 - (5 - 3)\}] \div (50 \div 2 \times 5)$ is:
(a) 0.250
(b) 0.0256
(c) 0.0350
(d) 0.0206

Q89. The quantity of mixture of milk and water is 70 litre. This mixture contains 10% water. How many litres of water should be mixed in the mixture to make 25% water in the mixture?
(a) 19 L
(b) 18 L
(c) 14 L
(d) 11 L

Q90. Twenty-eight persons can make a road in 36 days. After 10 days of work, 18 workers left the work and joined on the last day of the work. In how many days a road can be made?
(a) 80
(b) 75
(c) 81
(d) 90

Q91. The value of $\frac{95-1215\div27+14\times7}{3+3\frac{1}{4}of4-8}$ is:

(a) 16.5
(b) 18.5
(c) 18
(d) 19

Q92. $4\frac{2}{5}\div\left[1\frac{2}{3}-\left\{\frac{5}{6}-\left(\frac{2}{5}+\frac{4}{15}-\frac{3}{10}\right)\right\}\right]$ is equal to:

(a) 1
(b) $3\frac{2}{3}$
(c) 0
(d) $3\frac{1}{3}$

Q93. How many ways can 5 people be seated in a row if two of them, say A and B, must always sit together?

(a) 48
(b) 24
(c) 96
(d) 16

Q94. The market price of a hand bag is Rs 976.5. If a shopkeeper sold the hand bag at 10% loss after giving 30% discount, then the cost price of the article is:

(a) Rs 709.5
(b) Rs 679
(c) Rs 759.5
(d) Rs 619.5

Q95. From a group of 10 men and 8 women, how many ways can a committee of 5 people be formed if at least 3 women must be included?

(a) 3248
(b) 3347
(c) 3276
(d) 3425

Q96. The ratio of the third proportional to 9 & 30 and the mean proportional between 9 & 25 is:

(a) 20 : 3
(b) 15 : 11
(c) 3 : 20
(d) 11 : 15

Q97. What is the smallest value that must be added to 705, so that the resultant is a perfect square?
(a) 10
(b) 20
(c) 24
(d) 28

Q98. If 3A = 2B and 2B = 3C, then what is A : B : C?
(a) 3 : 2 : 3
(b) 2 : 3 : 2
(c) 1 : 3 : 1
(d) 2 : 3 : 4

Q99. How many ways can you distribute 6 different books to 4 students such that each student gets at least one book?
(a) 1560
(b) 1550
(c) 1558
(d) 1556

Q100. What is the simplified value of $(0.0256)^{0.25}$
(a) 0.4
(b) 0.04
(c) 0.004
(d) 0.0004

Q101. In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.
Statements:
I. All M are A.
II. No A is R.
Conclusion:
I. No M is R.
II. Some A are M.
III. Some R are A.
(a) Both conclusions I and II follows
(b) Both conclusions II and III follows
(c) All conclusion follows
(d) Both conclusions I and III follows

Q102. Which two signs and two numbers should be interchanged in the following equation to make it correct?
98 – 9 × 21 ÷ 7 + 56 = 69
(a) 56 and 9, + and ×
(b) 56 and 21, + and ×
(c) 98 and 9, + and ×
(d) 21 and 7, + and –

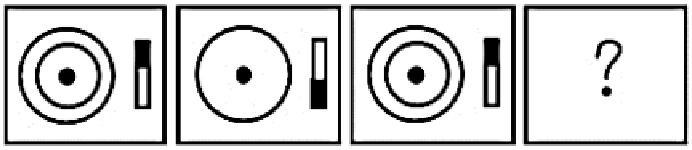
Q103. By interchanging the given two signs which of the following equation will be correct?
+ and –
(a) 55 ÷ 11 – 15 + 3 × 2 = 15
(b) 4 × 3 – 6 ÷ 2 + 7 = 7
(c) 15 – 7 × 8 + 18 ÷ 3 = 65
(d) 529 ÷ 23 + 10 – 5 × 4 = 30

Q104. After arranging the given words according to dictionary order, which word will come at 'Fourth' position?
1. Remark
2. Remain
3. Remember
4. Remnant
5. Remanent
(a) Remanent
(b) Remark
(c) Remnant
(d) Remember

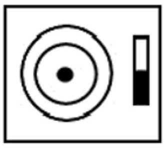
Q105. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
NMTS, SGAK, XAHC, CUOU, ?
(a) OMQR
(b) HVMO
(c) HOVM
(d) RMNO

Q106. If A ÷ B means that A is the father of B, A – B means that A is the mother of B, A + B means that A is the brother of B then which of the following expression shows that P is the mother of R?
(a) Q – P + R
(b) P – Q + R
(c) P – Q ÷ R
(d) R + P – Q

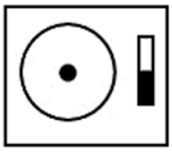
Q107. Select the figure that will replace the question mark (?) in the following figure series.



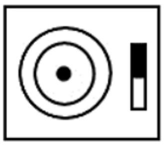
(a)



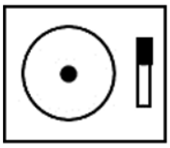
(b)



(c)



(d)



Q108. Three of the following letter-clusters are alike in some manner and hence form a group. Which letter-cluster does not belong to that group?

(a) HBL

(b) IJR

(c) XUC

(d) TYG

Q109. Select the correct mirror image of the given combination when the mirror is placed at 'PQ' as shown below.

(a) 

(b) 

(c) 

(d) 

Q110. Select the correct combination of mathematical signs to sequentially replace the % signs and to balance the given equation.
[{(32 % 28) % (6 % 4)} % (1 % 7)] % 5 % 20
(a) −, +, ×, ÷, ×, ×, =
(b) ×, ÷, ×, ×, −, +, =
(c) ×, −, +, ×, ÷, ×, =
(d) −, +, ×, ×, ×, ×, =

Q111. Three different positions of the same dice are shown. Find the number on the face opposite the face having '3'.

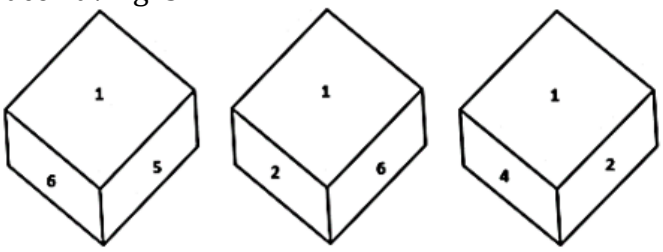
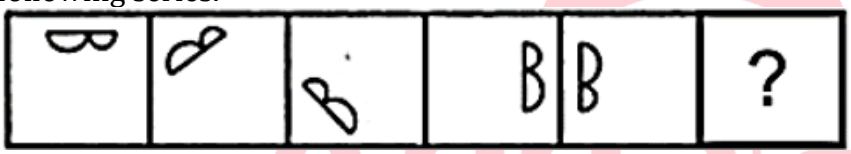
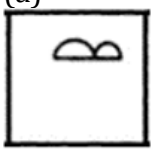


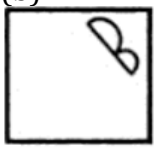
Figure 1 Figure 2 Figure 3

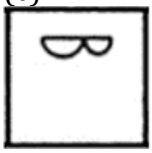
(a) 1
(b) 2
(c) 5
(d) 6

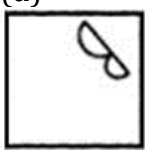
Q112. Select the figure form among the given options that can replace the question mark (?) in the following series.



(a)


(b)


(c)


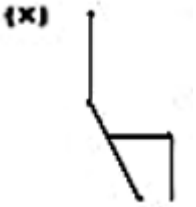
(d)


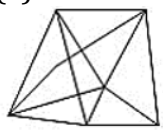
Q113. In a certain code language, 'ABOUT' is written as 'YZQSR' and 'PARTS' is written as 'NYTRQ'. How will 'PLANT' be written in that language?
(a) NICRL
(b) NJCLR
(c) RJCLV
(d) NJDLP

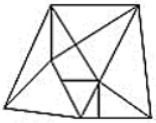
Q114. Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.
5 : 150 :: 6 : ? :: 8 : 576
(a) 252
(b) 255
(c) 225
(d) 222

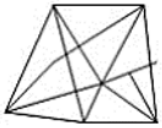
Q115. Which letter cluster will replace the question mark (?) to complete the given series? ZYWT, XWUR, VUSP, ?, RQOL
(a) TSQN
(b) TSQM
(c) TSPN
(d) STQN

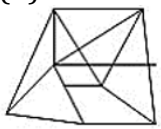
Q116. Select the option figure in which the given figure (X) is embedded as its part (rotation is NOT allowed).



(a)


(b)


(c)


(d)


Q117. Study the given pattern carefully and select the number that can replace the question mark (?) in it.
First row - 6, 9, 90
Second row - 12, 8, 120
Third row - 13, 6, ?
(**NOTE :** Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting / multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is NOT allowed)
(a) 114
(b) 125
(c) 102
(d) 110

Q118. Which of the following numbers will replace the question mark (?) in the given series?
286, 192, 263, 176, 240, 160, 217, 144, ?
(a) 186
(b) 194
(c) 165
(d) 190

Q119. Select the set in which the numbers are related in the same way as are the numbers of the following set.
(**NOTE:** Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits.)
(12, 112, 9)
(10, 84, 8)
(a) (12, 149, 12)
(b) (13, 55, 4)
(c) (11, 99, 9)
(d) (18, 94, 5)

Q120. Three statements are given, followed by two conclusions numbered I and II. 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 c are f.
No f is t.
All p are c.
Conclusions:
I. Some t are c.
II. No p is t.
(a) Only conclusion II follows.
(b) Only conclusion I follows.
(c) Neither conclusion I nor II follows.
(d) Either conclusion I or II follows.

Q121. In the following question, four number pairs are given. In each pair, the number on the left side of (–) is related to the number of the right side of (–) with some Logic/Rule/Relation. Three pairs are similar on basis of same Logic/Rule/Relation. Select the odd one out from the given alternatives. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g.13 – Operations on 13 such as adding /subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)
(a) 7 – 24
(b) 13 – 42
(c) 11 – 37
(d) 5 – 18

Q122. 'A ∞ B' means 'A is the sister of B'.
'A * B' means 'A is the mother of B'.
'A @ B' means 'B is the father of A'.
'A # B' means 'B is the wife of A'.
If V ∞ U @ W # Y * Z, then how is V related to Z?
(a) Sister
(b) Mother
(c) Wife
(d) Father

Q123. Select the word-pair that best represents a similar relationship to the one expressed in the given pair of words. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Thermometer : Temperature
(a) Glucometer : Measure
(b) Odometer : Car
(c) Oximeter : Oxygen level of blood
(d) Pedometer : Bone Fractures

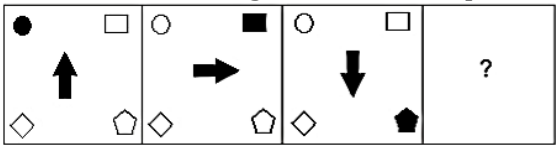
Q124. In a certain code language, 'PRESIDENT' is written as 'RPESDINTE' and 'KNOWLEDGE' is written as 'NKOWELGED'. How will 'EDUCATION' be written in that language?
(a) DEUCTAONI
(b) DEUCTOANI
(c) DUECTAONI
(d) DECUTAONI

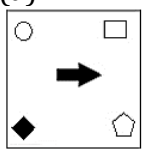
Q125. Select the option that is related to the fifth letter-cluster in the same way as the second letter-cluster is related to the first letter-cluster and the fourth letter-cluster is related to the third letter-cluster.
BEAR : QZDA :: DUST : SRTC :: GOLD : ?
(a) CKNF
(b) KCFN
(c) CNFJ
(d) FGNC

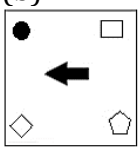
Q126. A # B means 'A is the brother of B'.
A @ B means 'A is the son of B'.
A & B means 'A is the father of B'.
A % B means 'A is the mother of B'.
If W # Q @ T & Y @ M % K % L, then how is K related to W?
(a) Sister
(b) Sister-in-law
(c) Mother
(d) Daughter

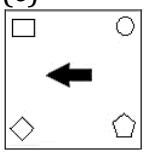
Q127. In a certain code language, 'PEPPER' is coded as 76 and 'CUCUMBER' is coded as 86. How will 'CAULIFLOWER' be coded in that language?
(a) 125
(b) 126
(c) 116
(d) 106

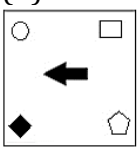
Q128. Select the figure that will replace the question mark (?) in the following figure series.



(a)


(b)


(c)


(d)


Q129. If A – B means that A is the father of B, A + B means that A is the mother of B, A × B means that A is the brother of B then which of the following expression shows that Q is the brother of P?
(a) P × Q – R
(b) P × Q + R
(c) R + P × Q
(d) Q × P – R

Q130. By interchanging the given two signs which of the following equation will be not correct?
+ and ÷
(a) 12 ÷ 8 × 12 + 6 – 7 = 21
(b) 9 – 3 + 12 × 8 ÷ 4 = 11
(c) 46 + 23 ÷ 14 × 5 – 6 = 66
(d) 6 + 20 ÷ 12 × 7 – 11 = 70

Q131. Select the option that is related to the third term in the same way as the second term is related to the first term and the sixth term is related to the fifth term.
4 : 84 :: 11 : ? :: 13 : 2379
(a) 1221
(b) 1463
(c) 1440
(d) 819

Q132. Select the option that represents the correct order of the given words as they would appear in an English dictionary.
1. Effluent
2. Edifice
3. Effleurage
4. Edacious
5. Effeminate
6. Eccentric
7. Effulgent
(a) 6, 4, 2, 5, 3, 1, 7
(b) 6, 4, 2, 3, 5, 1, 7
(c) 6, 4, 2, 5, 1, 3, 7
(d) 6, 4, 2, 5, 7, 3, 1

Q133. Which letter-cluster will replace the question mark (?) to complete the given series? XDNC, VGOE, ?, RMQI, PPRK
(a) TJRG
(b) TKPG
(c) TJPG
(d) TJQG

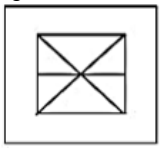
Q134. Select the set in which the numbers are related in the same way as are the numbers of the given set.
(**NOTE:** Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting / multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)
(3, 13, 18)
(29, 39, 44)
(a) (17, 27, 42)
(b) (25, 30, 55)
(c) (26, 30, 47)
(d) (16, 26, 31)

Q135. In the following question, select the missing number from the given series.
7, 21, 63, 189, 567, ?
(a) 1701
(b) 1800
(c) 1720
(d) 1781

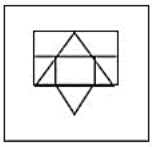
Q136. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
NTRQ, GOIF, ZJZU, SEQJ, ?
(a) LZHY
(b) QNRT
(c) LMRC
(d) LXYQ

Q137. By Interchanging the given two numbers which of the following equation will be correct?
5 and 8
(a) 5 × 2 – 8 + 9 ÷ 1 = 20
(b) 8 + 5 × 4 – 9 ÷ 3 = 30
(c) 5 × 7 + 8 – 3 ÷ 1 = 55
(d) 8 – 5 × 2 + 6 ÷ 2 = –9

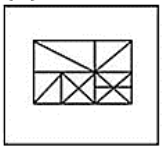
Q138. Select the option in which the given figure is embedded (rotation is NOT allowed).



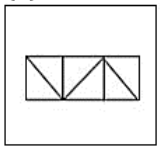
(a)



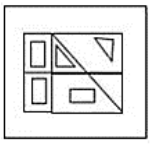
(b)



(c)



(d)



Q139. Three different position of the same dice are shown. Find the number on the face opposite the face showing '2'.

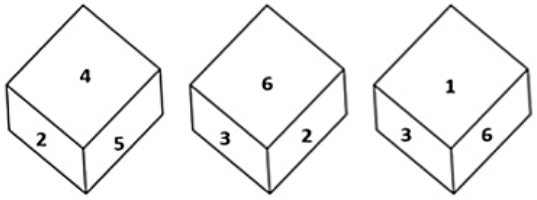
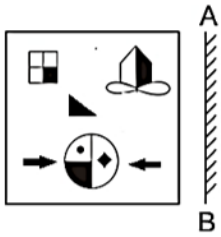
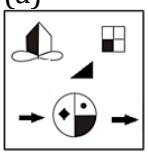


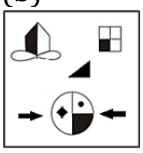
Figure 1 Figure 2 Figure 3

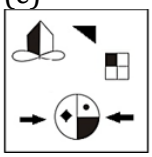
(a) 1
(b) 6
(c) 3
(d) 4

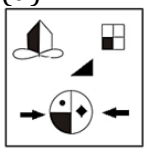
Q140. Select the correct mirror image of the given figure when the mirror is placed at AB as shown.



(a)


(b)


(c)


(d)


Q141. In a certain code language, 'health is wealth' is coded as '626', 'exercise regularly' is coded as '89' and 'bring good food' is coded as '544'. How will 'balanced diet is key' be coded in that language?
(a) 8423
(b) 7312
(c) 3721
(d) 4832

Q142. In the following question below are given some statements followed by some conclusions based on those statements. Taking the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.

Statements:

I. Some G are U.

II. Some S are U.

Conclusion:

I. No S is G.

II. No U is G.

(a) Only conclusion I follows

(b) Only conclusion II follows

(c) Neither conclusion follows

(d) Both conclusions I and II follows

Q143. Select the odd group of numbers. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g.13 – Operations on 13 such as adding /subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

(a) 18 – 329

(b) 16 – 263

(c) 14 –201

(d) 12 – 149

Q144. Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

All the medicines are capsules.

Some capsules are bangles.

Some bangles are toothpastes.

Conclusions:

I. Some bangles are medicines.

II. Some toothpastes are capsules.

III. Some medicines are bangles.

IV. Some medicines are toothpastes.

(a) Only conclusions III and IV follow

(b) None of the conclusions follow

(c) Only conclusions II and III follow

(d) Only conclusions I and II follow

Q145. Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.

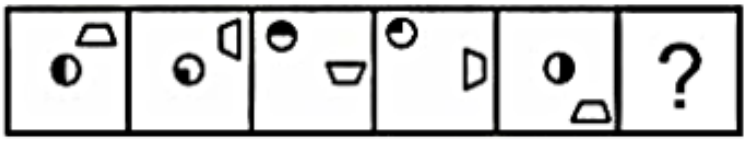
(a) UVD

(b) PQI

(c) JKZ

(d) EFT

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



(a)

(b)

(c)

(d)

Q147. If '+' means '÷', '–' means '+', '×' means '–' and '÷' means '×', what will be the value of the following expression?

[{(34 × 12) - (4 ÷ 3)} + (12 - 5)] ÷ 5

(a) 10

(b) 1

(c) 2

(d) 20

Q148. Select the option that is related to the third word in the same way as the second word is related to the first word. (The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)

Kite : Diamond :: Ball : ?

(a) Triangle

(b) Square

(c) Round

(d) Pentagon

Q149. Select the word-pair that best represents a similar relationship to the one expressed in the given pair of words.
(The words must be considered as meaningful English words and must not be related to each other based on the number of letters/number of consonants/vowels in the word)
Money plant : Climber
(a) Rose : Shrub
(b) Peas : Green
(c) Basil : Tree
(d) Banyan : Roots

Q150. Select the option that is related to the third number in the same way as the second number is related to the first number and the sixth number is related to the fifth number.
15 : 125 :: 27 : ? :: 36 : 1728
(a) 689
(b) 749
(c) 790
(d) 729

Solutions

S1. Ans.(c)
Sol. The term "Roaring Forties" is associated with the westerly winds found in the Southern Hemisphere between approximately 40 and 50 degrees latitude.
• These winds are known for their strength and consistency, and they earned the name "Roaring Forties" due to the powerful gusts and rough seas encountered by sailors in this region.

S2. Ans.(c)
Sol. Trade Wind flows outward down the pressure gradient away from the subtropical high pressure.
• This force causes the winds in the Northern Hemisphere to move from the east in the direction of the west below the subtropical high, & from the west in the direction of the east above the subtropical high.
• As it does so, it encounters the Coriolis Effect caused by the rotation of the Earth. The opposite is true in the Southern Hemisphere. Above the subtropical high winds move from east to west, & below the subtropical high winds move from west to east.

S3. Ans.(b)
Sol. Daimabad is a deserted village and an archaeological site on the left bank of the Pravara River, a tributary of the Godavari River in Shrirampur taluka in Ahmednagar district of Maharashtra state in India.
• This site was discovered by B. P. Bopardikar in 1958.

S4. Ans.(c)
Sol. Harappan sites Kalibangan used mud-bricks in ample for the construction of houses.

S5. Ans.(a)
Sol. In ancient India, Nalanda University was indeed a great center for the study of Mahayana Buddhism.
• Mahayana Buddhism is a major branch of Buddhism that emerged around the 1st century CE. It emphasizes the ideal of the bodhisattva, a being who seeks enlightenment not only for oneself but also for the benefit of all sentient beings.
• Nalanda University played a significant role in the development and promotion of Mahayana Buddhist philosophy and teachings. The university attracted scholars from various Buddhist traditions and became a hub for the study and propagation of Mahayana Buddhism.

S6. Ans.(c)
Sol. According to the Indian Constitution, at one time, a person can be the Governor of a maximum of any number of states, the maximum number is not fixed.

S7. Ans.(d)
Sol. Article 156 states that the term of the Governor is generally five years.
• The Governor shall hold office during the pleasure of the President.
• The Governor may, by writing under his hand addressed to the President, resign his office.
• Subject to the foregoing provisions of this article, a Governor shall hold for a term of five years from the date on which he enters upon his office.
• Provided that a Governor shall, notwithstanding the expiration of his term, continue to hold office until his successor enters upon his office.

S8. Ans.(d)
Sol. Narmada River does not form a delta in the eastern coastal plain.
• The Narmada River is a major west-flowing river in central India. It passes through the states of Madhya Pradesh, Maharashtra, and Gujarat.
• The deltas of the rivers Mahanadi, Krishna, and Godavari are present in the eastern coastal plain. These deltas are known for their fertility and agricultural productivity.

S9. Ans.(b)
Sol. Honshu is the largest island of Japan.
• It is also the most populous island in the country and is home to major cities such as Tokyo, Osaka, and Kyoto.
• Hokkaido is the second-largest island, followed by Kyushu and Shikoku.

S10. Ans.(d)
Sol. Lord Mayo was the Viceroy of India from 1869 to 1872. He ordered the first census of India in 1872.
• The census was conducted by the Statistical Survey of India, which was established by Lord Mayo in 1871.
• Beginning in 1872 under British Viceroy Lord Mayo, the first complete census was taken in 1881 during the tenure of Lord Rippon.

S11. Ans.(c)
Sol. According to the 2011 Census of India, the sex ratio of India was 943 females per 1000 males. This means that there were 943 females for every 1000 males in India in 2011.

S12. Ans.(c)
Sol. The Registrar General and Census Commissioner of India, under the Ministry of Home Affairs, is responsible for conducting the Census in India.
• The RGI is a statutory authority under the Ministry of Home Affairs, Government of India. It is responsible for conducting the decennial census of India, as well as other surveys and censuses. The RGI also maintains the National Population Register (NPR), which is a database of all citizens of India.
• The RGI was established in 1948, after India gained independence from British rule.
• The RGI is headquartered in New Delhi.

S13. Ans.(b)
Sol. According to the 2011 Census of India, Kerala had the highest sex ratio of 1084 females per 1000 males.
• This was followed by Puducherry (1031), Andhra Pradesh (997), Tamil Nadu (995), and Chhattisgarh (991).
• Lakshadweep has a sex ratio of 946 females for every 1000 males.
• According to figures from the 2011 Census, out of the 1210.1 million population, 623.7 million are male and 586.4 million are females.
• Thus, the overall sex ratio for Indian Population according to the 2011 Census, is 943.

S14. Ans.(c)
Sol. The Kanada coast extends between Marmagaon and Mangalore and is known for its rich iron deposits. This natural resource plays a significant role in the economy of the region.
• Kachchh and Kathiawar coast: Rich in petroleum and natural gas deposits.
• Malabar coast: Known for its fertile agricultural land and spices.

S15. Ans.(d)
Sol. Malabar coast, which extends between Mangalore and Kanyakumari, is relatively broad and consists of lagoons known as "backwaters" running parallel to the coast in southern Kerala.
• The Malabar coast, also known as the Malabar region, is located in the southwestern part of Kerala.
• The backwaters of Kerala, including famous destinations like Alleppey (Alappuzha) and Kumarakom, are popular tourist attractions known for their serene beauty and houseboat cruises.

S16. Ans.(c)
Sol. Sayyid Khizr Khan was the founder of the Sayyid dynasty, the ruling dynasty of the Delhi sultanate.
• In northern India soon after the invasion of Timur and the fall of the Tughlaq dynasty.
• He was Governor of Multan under the Tughlaq ruler, Firuz Shah Tughlaq.

S17. Ans.(c)
Sol. The correct answer is (c) Muhammad Bin Tughluq.
• Muhammad Bin Tughluq, the Sultan of Delhi from 1325 to 1351, shifted his capital from Delhi to Daulatabad. In 1327, Muhammad Bin Tughluq decided to transfer his capital from Delhi to Daulatabad, which is located in present-day Maharashtra, India.

S18. Ans.(b)

Sol. The correct answer is (b) Article 360 of the Indian Constitution.

• Article 360 provides for the proclamation of a financial emergency in India.

• This article empowers the President of India to declare a financial emergency if the financial stability or credit of the nation or any part of its territory is threatened.

• The President can take various measures during a financial emergency, including the reduction of salaries of government officials, the reduction of allowances and grants to states, and giving directions to the states regarding the financial matters.

S19. Ans.(c)

Sol. During the President's Rule in a state of India, the President cannot assume the powers of (c) The High Court of that state.

• Under Article 356 of the Indian Constitution, the President can impose President's Rule or Governor's Rule in a state if there is a failure of constitutional machinery in that state.

• During this period, the President assumes the powers and functions of the state government.

• However, the President does not assume the powers of the High Court of that state. The judiciary, including the High Court, continues to function independently during the President's Rule.

S20. Ans.(d)

Sol. A trading account is not a type of bank account in India. A trading account is an investment account. The three main types of bank accounts in India are current accounts, savings accounts, and F. D accounts.

• A current account is typically used by businesses and allows for frequent transactions, while a savings account is designed for individuals and offers interest on the account balance.

• fixed deposit account allows customers to deposit a lump sum of money for a fixed period of time and earn a higher rate of interest.

S21. Ans.(b)

Sol. Panchayati Raj system was introduced in the second five-year plan.

• Panchayati Raj system launched on 2nd Oct 1959 in Nagaur (Rajasthan).

• Panchayati Raj system was introduced under the recommendation of Balwant Rai Mehta committee.

S22. Ans.(c)

Sol. An earthquake of magnitude 6 on the Richter scale has a thousand times morebdestructive energy than an earthquake of magnitude 4.

• The Richter scale is logarithmic, so each increase of one magnitude represents a tenfold increase in the amplitude of the seismic waves and a thousandfold increase in the amount of energy released.

• An earthquake is measured with a machine called a seismograph. The magnitude of the earthquake is measured on the Richter scale.

S23. Ans.(c)

Sol. From the given options Mount Black is NOT a Volcanic Mountain. Mount Black is a prominent mountain of Antarctica, 3,005 meters (9,860 ft) high, with a gentle snow-covered slope on its southwest side and a steep rock face on its northwest side, forming a part of the polar escarpment just west of Bennett Platform and the upper reaches of Shackleton Glacier.

• Mount Etna - example of a Volcanic Mountain. It is an active stratovolcano located on the east coast of the island of Sicily, Italy. Mount Etna is also a UNESCO World Heritage site.

• Mount Fujiyama - commonly known as Mount Fuji, is an example of a Volcanic Mountain. It is an active stratovolcano located on the Honshu Island of Japan. Mount Fuji is also a UNESCO World Heritage site.

• Mount Kilimanjaro - a dormant volcano located in the Kilimanjaro Region of Tanzania. It has three volcanic cones: Kibo, Mawenzi, and Shira. It is the highest mountain in Africa.

S24. Ans.(c)

Sol. Samudragupta (335-375 AD) of the Gupta dynasty is known as the Napoleon of India. Historian AV Smith called him so because of his great military conquests known from the 'Prayag Prashati' written by his courtier and poet Harisena, who also describes him as the hero of a hundred battles.

S25. Ans.(d)

Sol. The correct answer is (d) Bharatendu Harish Chandra.

• Bharatendu Harishchandra, also known as Bharatendu Harishchandra Srivastava, was an influential figure in Hindi literature during the late 19th century. He played a significant role in the development of modern Hindi literature and theater, but he was not actively engaged in social and religious reforms in India.

• On the other hand, Raja Ram Mohan Roy, Pandit Ishwar Chandra Vidyasagar, and Jyotiba Phule were all prominent social and religious reformers in India.

S26. Ans.(a)

Sol. The correct answer is (a) Union Home Minister. The ex-officio chairman of the Zonal Council is the Union Home Minister of India.

• The Zonal Councils are statutory bodies established to promote interstate cooperation and coordination among states in India.

• There are six Zonal Councils in total, each covering a specific zone comprising several states and union territories.

• The Union Home Minister chairs the meetings of the Zonal Councils to discuss and resolve issues related to economic and social development, infrastructure, security, and other matters of common interest among the states in that particular zone.

S27. Ans.(c)

Sol. The Right to Information Act came into force fully on the 12th October, 2005 (120th day of its enactment i.e., 15th June, 2005).

• The Right to Information Act is a legislative enactment in India that outlines the regulations and processes governing the access of citizens to information held by public authorities. This act superseded the earlier Freedom of Information Act of 2000.

S28. Ans.(b)
Sol. The wide treeless grassy plains in South America are called Pampas.
• The Pampas are fertile South American lowlands, covering more than 750,000 km2 (289,577 sq mi), that include the Argentine provinces of Buenos Aires, La Pampa, Santa Fe, Entre Ríos and Cordoba, most of Uruguay, and the southernmost Brazilian State, Rio Grande do Sul.
• Selvas is the dense tropical rainforest found in the Amazon basin and other parts of South America.
• Prairies are the large, flat grasslands found in North America.
• Steppes is the vast grassland plains found in Eurasia, particularly in Central Asia, characterized by a semi-arid climate and sparse vegetation.

S29. Ans.(d)
Sol. The Volga is the largest river in Europe in terms of length, discharge, & watershed. It flows through the western part of Russia, & is widely viewed as the national river of Russia.
• Danube is the second-longest river in Europe, flowing through several countries including Germany, Austria, Hungary, and Romania

S30. Ans.(a)
Sol. According to the 2011 Census of India, the category with the highest percentage of workers was agriculture.
• According to the 2011 Census of India, 54.6% of the workforce was employed in agriculture. This was followed by industry at 22.8% and services at 22.6%.

S31. Ans.(b)
Sol. The Atal Mission for Rejuvenation and Urban Transformation (AMRUT) is a flagship program of NITI Aayog aimed at improving the infrastructure and services in urban areas.
• Jawaharlal Nehru National Urban Renewal Mission was renamed to Atal Mission for Rejuvenation and Urban Transformation and then relaunched by Prime Minister of India Narendra Modi in June 2015.

S32. Ans.(a)
Sol. Jim Corbett National Park is the oldest national park in India.
• Established in 1936 as Hailey National Park.
• It is located in the Nainital district of Uttarakhand and is known for its population of Bengal tigers.

S33. Ans.(a)
Sol. Koundinya Wildlife Sanctuary is located in Andhra Pradesh and is known for its population of Asian elephants.
• It is the only sanctuary in the state that has a significant number of these elephants.The sanctuary is covered by southern tropical dry deciduous and thorn forests, providing a suitable habitat for these magnificent creatures.
• The sanctuary is named after the famous sage Koundinya and is an important conservation area for wildlife in Andhra Pradesh.
• Papikonda National Park is a national park in India, located near
• Rajamahendravaram in the Papi Hills of the Alluri Sitharama Raju and Eluru districts of Andhra Pradesh, and covering an area of 1,012.86 km 2 (391.07 sq mi).

• Nagarjunsagar-Srisailam Tiger Reserve is located in the states of Andhra Pradesh and Telangana, making it one of the few tiger reserves in India that spans across two states. It is also the largest tiger reserve in India, covering a total area of 3,728 km2 (1,439 sq mi).
• Coringa Sanctuary, named after a tiny village coringa in East Godavari District of Andhra Pradesh a part of Godavari Mangroves was declared as a wildlife sanctuary by Govt. of Andhra Pradesh vide G.O.

S34. Ans.(a)
Sol. The name of the famous university founded during the Gupta Dynasty was Nalanda University. Nalanda University was founded in the 5th century CE during the reign of the Gupta Empire and was located in the present-day Indian state of Bihar.
• The university was a center of learning for various fields such as philosophy, astronomy, mathematics, medicine, and Buddhist studies. Nalanda University was one of the oldest and most prominent universities in ancient India and attracted scholars from all over the world.
• The university was destroyed during the 12th century CE by foreign invaders, but the legacy of Nalanda University continues to inspire academic and intellectual pursuits to this day.

S35. Ans.(a)
Sol. The name of the famous astronomer who lived during the Gupta Dynasty was Aryabhata. Aryabhata was a mathematician and astronomer who was born in 476 CE in present-day Patna, India, during the reign of the Gupta Empire. He is known for his works on mathematics, astronomy, and the concept of zero.
• Aryabhata's most significant work is the Āryabhaṭīya, a treatise on mathematics and astronomy, which was written in Sanskrit and included his ideas on the motion of planets and the solar system.

S36. Ans.(b)
Sol. The correct answer is (b) Article 352 of the Indian Constitution. Article 352 provides for the proclamation of a National emergency in India.
• It empowers the President of India to declare a national emergency if the security of India or any part of its territory is threatened by war, external aggression, or armed rebellion. During a National emergency, the Central government is vested with extraordinary powers to deal with the emergency situation effectively. The President can issue necessary directions and take other measures to address the crisis.
• Article 356 of the Constitution of India, if a state government is unable to function according to Constitutional provisions, the Union government can take direct control of the state machinery.
• Article 354: Application of provisions relating to distribution of revenues while a Proclamation of Emergency is in operation.
• Article 324: Superintendence, direction and control of elections to be vested in an Election Commission.

S37. Ans.(d)
Sol. If the announcement of the National Emergency has been approved by both Houses of Parliament, it will be effective for (d) 6 months.

S38. Ans.(c)
Sol. Holi is celebrated in the last month of the Hindu calendar.
• Holi is celebrated in the Month of Phalguna.Phalguna is the twelfth and last month of the year, according to the Hindu calendar.
• It corresponds with February/March in the Gregorian calendar.

S39. Ans.(d)

Sol. Chulia waterfall is located on the Chambal River in the Chittorgarh district of Rajasthan.

• The Chuliya waterfall is 5 km upstream of the Chambal River near Bhainsrorgarh.

S40. Ans.(b)

Sol. Neora Valley National Park is located in the Kalimpong district of West Bengal.

• It was established in 1986.

• It is well-known for Red Panda.

S41. Ans.(a)

Sol. Per Drop More Crop is a key component of 'Pradhan Mantri Krishi Sinchayee Yojana (PMKSY).It is a centrally sponsored micro-irrigation scheme.

• It was launched by The Department of Agriculture, Cooperation & Farmers Welfare on 1st July 2015.

• The Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) is a national mission to improve farm productivity and ensure better utilization of the resources in the country.

S42. Ans.(b)

Sol. Members of Vidhan Parishad are elected or nominated for six years and one-third of them retire at the expiration of every second year.

• Legislative Council or Vidhan Parishad is the upper house of the bicameral legislature.

• As of 2022, 6 out of 28 states have a State Legislative Council.

• These are - Andhra Pradesh, Karnataka, Telangana, Maharashtra, Bihar, and Uttar Pradesh.

S43. Ans.(d)

Sol. Abul Kalam Azad presided over the Special Session of the Indian National Congress, held in Delhi in 1923.

• In 1923, at an age of 35, he became the youngest person to serve as the President of the Indian National Congress.

S44. Ans.(c)

Sol. Cornwallis Code, enactment by which Lord Cornwallis governor-general of India in 1793.

• The code contained significant provisions governing, policing and judicial and civil administration.

• Its best-known provision was the Permanent Settlement (or the zamindari system enacted in 1793).

S45. Ans.(a)

Sol. The higher cation exchange capacity of soil is not responsible for the loss of fertility of agricultural land.

• Factors such as deforestation, ill management of industrial wastes, overgrazing by cattle, and urban expansion, are also notable causes.

• Organic matter plays a key role in maintaining soil fertility by holding nutrients to the soil.

S46. Ans.(c)
Sol. 7 Rajya Sabha seats come from the state of Assam.
About Rajya Sabha:
• The Rajya Sabha, is the upper house of the bicameral Parliament of India.
• Total Seats - 245 out of these 12 members are nominated by the President or their contribution and expertise in the fields of Art, Literature, Science, and Social Service.
• Rajya Sabha Members are elected by the elected members of state legislative assemblies using a method of proportional representation.

S47. Ans.(c)
Sol. Shah Jahan Begum was the Nawab of Bhopal who ruled from 1868 to 1901.
• She was the Begum of Bhopal (the ruler) for two periods: 1844–60 (her mother acting as regent), and secondly during 1868–1901.
• Bhopal state was unique for a continuous lineage of four female Nawabs who ruled its throne for over a century between 1819 and 1926.

S48. Ans.(d)
Sol. River Hooghly has tributaries by the name of Mayurakshi, Damodar, Kangsabati and Rupnarayan.
• The Hooghly River or the Bhagirathi-Hooghly is also known as the 'Ganga' or the 'Kati-Ganga' in mythological texts.
• It is the eastern distributary of the Ganges River in West Bengal.

S49. Ans.(c)
Sol. In the state of Arunachal Pradesh, the general direction of the Himalayas is from southwest to northeast.

S50. Ans.(a)
Sol. The Government of India set up the Monetary Policy Committee in 2016.
• Under Section 45ZB of the amended RBI Act, 1934, the central government is empowered to constitute a six-member Monetary Policy Committee (MPC) to determine the policy interest rate required to achieve the inflation target.

S51. Ans.(b)
Sol. The force resisting the motion between a body and a surface is called friction. Friction opposes the relative motion between two surfaces in contact and acts in the direction opposite to the direction of motion. It is responsible for slowing down or stopping the motion of the body.

S52. Ans.(c)
Sol. Streamline flow, also known as laminar flow, is characterized by a consistent flow rate of fluid at all points within the flow. This uniform flow rate ensures that the velocity of fluid particles remains constant along the path known as a streamline. Additionally, in streamline flow, there is minimal turbulence, allowing the velocity and pressure of fluid particles to remain relatively constant in a specific direction.

S53. Ans.(c)
Sol.
Accelaration due to gravity, g = (G×M)/R2,
Thus, Accelaration due to gravity at a distance 2R,
g'=(G×M)/(2R+R)2
=(G×M)/9R2
=g/9 (Since g={G×M}/R2).

S54. Ans.(a)
Sol. Decibel(dB) is the SI unit of intensity of sound.

S55. Ans.(a)
Sol. When blue and green colour combine, the result is cyan.

S56. Ans.(b)
Sol. SI unit of power is watts. A watt is the power that it takes to do one joule of work in one second.

S57. Ans.(d)
Sol. The neon gas is used in discharge lamps, tubes and in fluorescent bulbs.

S58. Ans.(c)
Sol. The distance-time graph for the motion of an object moving with a constant speed is a Straight Line.

S59. Ans.(a)
Sol. Dry ice is the common name for solid carbon dioxide (CO_2). It is called "dry ice" because it sublimates directly from a solid to a gas without going through a liquid phase, leaving no residue, hence the term "dry."

S60. Ans.(c)
Sol. Potassium nitrate (KNO_3) is commonly used in the commercial production of fireworks and firecrackers because it is an important component in their explosive compositions.

S61. Ans.(d)
Sol. Steel is not an example of an allotrope. Allotropes are different structural forms of the same element in the same physical state. Diamond, graphite, and ozone are examples of allotropes of carbon and oxygen, respectively, but steel is not an element; it's an alloy primarily composed of iron and carbon.

S62. Ans.(c)
Sol. PET, which stands for Polyethylene Terephthalate, is a type of polyester. It is commonly used for making bottles, especially for beverages and other liquids.

S63. Ans.(a)
Sol. The pH of milk is typically slightly acidic, with a pH range of around 6.5 to 6.7.

S64. Ans.(d)
Sol. An emulsion is a mixture of two or more liquids that are normally immiscible (unmixable or unblendable). Except Curd all other are example of emulsion.

S65. Ans.(c)
Sol. Calcium hypochlorite is an inorganic compound with formula CaOCl2. As a mixture with lime and calcium chloride, it is marketed as chlorine powder or bleach powder for water treatment and as a bleaching agent. Common name of $CaOCl_2$ is Bleaching Powder.

S66. Ans.(a)
Sol. Antacids are commonly used to treat indigestion by neutralizing excess stomach acid, helping to relieve symptoms such as heartburn and discomfort.

S67. Ans.(c)
Sol. Potassium cannot be easily beaten into sheets like gold, silver, or aluminum. Gold and silver are known for their malleability and can be beaten into extremely thin sheets known as gold leaf and silver leaf. Aluminum is also highly malleable and is commonly used in the production of aluminum foil. However, potassium is a highly reactive alkali metal, and its properties are quite different from those of the metals that can be easily beaten into sheets.

S68. Ans.(c)
Sol. The term "Bubble Baby Disease" refers to Severe Combined Immunodeficiency (SCID), a genetic disorder that affects the immune system. Babies born with SCID have a severely compromised immune system and are often kept in a sterile or germ-free environment, such as a plastic bubble, to protect them from infections while they receive treatment.

S69. Ans.(d)
Sol. Ornithophily is a type of pollination that is effected by birds. It involves the transfer of pollen from one flower to another by bird species, typically while they are feeding on nectar.

S70. Ans.(b)
Sol. Vitamin D is essential for the absorption of calcium in the intestines. It helps the body absorb calcium from the food we eat and plays a crucial role in maintaining calcium balance in the body.

S71. Ans.(b)
Sol. Vitamin B complex contains several vitamins that contain nitrogen, including B1 (thiamine), B2 (riboflavin), B3 (niacin), B5 (pantothenic acid), B6 (pyridoxine), B7 (biotin), B9 (folate or folic acid), and B12 (cobalamin). These vitamins play important roles in various metabolic processes in the body.

S72. Ans.(a)
Sol. The science dealing with the study of soil is called pedology. It focuses on understanding the formation, classification, and properties of soils.

S73. Ans.(d)
Sol. Phloem fibres are made up of sclerenchymatous cells and are generally absent in the primary phloem but can be found in the secondary phloem. These fibres provide mechanical support to the plant and are involved in the transport of nutrients and sugars in the phloem.

S74. Ans.(b)
Sol. Coelenterates, ctenophores, and echinoderms have a radial body plan. Radial symmetry means that their body parts are arranged symmetrically around a central axis, like spokes on a wheel. This type of symmetry is characteristic of these particular animal groups.

S75. Ans.(a)
Sol. In the names Mangifera indica (mango), Solanum tuberosum (potato), and Panthera leo (lion), the terms Mangifera, Solanum, and Panthera represent the higher level of taxon.
• These are the genus names in the binomial nomenclature system used in taxonomy, where organisms are classified into a hierarchy of categories, from species (specific epithet) to genus, family, order, class, phylum, kingdom, and domain. The genus is a higher taxonomic category than the species.

S76. Ans.(a)
Sol.

$$\Rightarrow 5\frac{1}{6} + \left[3\frac{1}{6} + \left\{17 \times \left(4\frac{4}{5} \div 2\frac{2}{50}\right)\right\}\right]$$
$$\Rightarrow \frac{31}{6} + \left[\frac{19}{6} + \left\{17 \times \left(\frac{24}{5} \times \frac{50}{102}\right)\right\}\right]$$
$$\Rightarrow \frac{31}{6} + \left[\frac{19}{6} + \left\{17 \times \frac{40}{17}\right\}\right]$$
$$\Rightarrow \frac{31}{6} + \left[\frac{19}{6} + 40\right]$$
$$\Rightarrow \frac{31}{6} + \left[\frac{259}{6}\right]$$
$$= \frac{31 + 259}{6} = \frac{290}{6} = 48.33$$

S77. Ans.(b)
Sol. The word 'ARRANGE' consists of 7 letters where A occurs 2 times, R occurs 2 times, and the rest of the letters are unique.
The formula for permutations of a word with repeated letters is: n! / (p1! * p2! * ... * pk!).
For 'ARRANGE': 7! / (2! * 2!) = 5040 / 4 = 1260.
Answer: 1260 ways.

S78. Ans.(c)
Sol.

CP + P = SP
Kartik = 5 + 1 = 6
Balram = 8 + 1 = 9

	CP		SP
Kartik (5	6) × 4 = 20	:	24
Balram (8	9) × 3 = 24	:	27

Difference of profit = 4 - 3 = 1
1 unit → 60
1 unit → 60
The cost price of Air condition = 60 × 20 = 1200

S79. Ans.(a)

Sol.

$42 \div 6 \text{ of } 4 \times [8 - (24 - 14) \div 5] \text{ of } \frac{3}{4} + 8 - 12 \div 6 \text{ of } 2$

$\Rightarrow 42 \div 24 \times [8 - 10 \div 5] \text{ of } \frac{3}{4} + 8 - 12 \div 12$

$\Rightarrow 21 \div 12 \times [6] \text{ of } \frac{3}{4} + 8 - 1$

$\Rightarrow 21 \div 12 \times \frac{9}{2} + 8 - 1$

$\Rightarrow \frac{21}{12} \times \frac{9}{2} + 8 - 1$

$\Rightarrow \frac{189+192-24}{24} = \frac{357}{24}$

S80. Ans.(b)

Sol.

Ratio of share $\Rightarrow$ P : Q : R

7 : 8

5 : : 7

35 : 40 : 49

Share of Q = $\frac{40}{124} \times 39{,}804$ = Rs. 12,840

S81. Ans.(d)

Sol.

Amount = $\frac{P \times r \times t}{100} + P$

Amount = $P\left(\frac{rt}{100} + 1\right)$

$53728 = P\left(\frac{23 \times 2}{100} + 1\right)$

$53728 = P \times \frac{146}{100}$

P = 36800

SI = $\frac{36800 \times 11.5 \times 2}{100}$

SI = Rs. 8464

Amount after One year = 36800 + 8464

= Rs. 45,264

S82. Ans.(b)

Sol.

Rs. 1	**Rs. 2**	**Rs. 5**	**Rs. 10**	
9	7	5	3	(Ratio of No. of coins)
9	14	25	30	(Total value of denomination)

(9 + 7 + 5 + 3) units = 144

24 units = 144

1 unit = 6

Total money in Piggy bank = 6 × (9 + 14 + 25 + 30)

= 6 × 78 = Rs. 468

S83. Ans.(a)
Sol.

$57\frac{1}{7}\% = \frac{4}{7}$

$\frac{4}{7}$ → Original no.

New added number

(7 + 4) units = 1353

1 unit = 123 units

Then,

The original no. = 123 units × 7

= 861

S84. Ans.(b)
Sol.

$18\% = \frac{-9 \rightarrow \text{Loss}}{50 \rightarrow \text{SP}}$

SP of watch = 50 → 570

1 → 11.14

59 → 672.6

New selling price of watch.

$= \frac{672.6}{100} \times 118 = 793.67$

= 794

S85. Ans.(d)
Sol.

Selling price of inverter = $12500 \times \frac{85}{100} = 10{,}625$

$\text{Profit} = \frac{(10{,}625 - 7580)}{7580} \times 100$

$= \frac{3045}{7580} \times 100$

= 40.17%

S86. Ans.(a)
Sol.

The ratio of Abhilash and Bipasha = 4x : 5x

Four year ago.

After 8 years from now

$\frac{4x + 12}{5x + 12} = \frac{11}{13}$ [Total Year = 4 + 8 = 12]

52x + 156 = 55x + 132

$24 = 3x \Rightarrow x = 8$

Sum of their present age = 4x + 4 + 5x + 4 = 80 years.

S87. Ans.(b)
Sol.

A.T.Q.,

$75 \times 5 + 7 \times 84 + \underbrace{x + 2}_{13^{th}} + \underbrace{x + 3}_{14^{th}} + \underbrace{x}_{15^{th}} = 15 \times 78$

$3x + 5 = 1170 - 963$
$3x = 207 - 5$
$x = 67.33$

$\text{Average} = \frac{sum\ of\ numbers}{Number\ of\ observation}$

$= \frac{13th\ Number\ +\ 15th\ number}{2}$

$= \frac{(67.33 + 2) + 67.33}{2}$

$= 68.33$

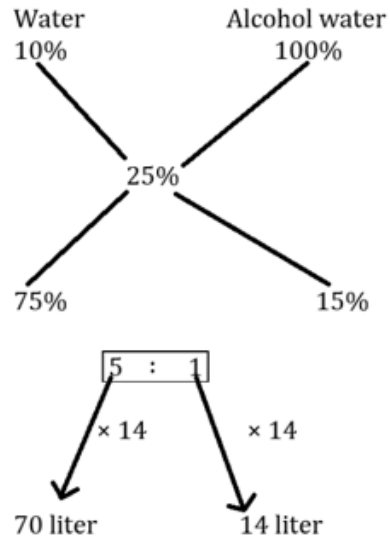
S88. Ans.(b)

Sol.

$\Rightarrow [120 \div 15 \text{ of } 5\ [130 \div 5 \text{ of } \{3 \times 5 - (5 - 3)\}] \div (50 \div 2 \times 5)$
$\Rightarrow 120 \div 15 \text{ of } 5\ [130 \div 5 \text{ of } 13] \div (125)$
$\Rightarrow 120 \div 15 \text{ of } 5\ [130 \div 65] \div 125$
$\Rightarrow 120 \div 15 \text{ of } 5 \times [2] \div 125$
$\Rightarrow 120 \div 75 \times 2 \div 125$
$= 1.6 \times 0.016 = 0.0256$

S89. Ans.(c)

Sol.



Required water = 14 liter

S90. Ans.(c)

Sol.

Total work = 28 × 36 = 1008
After 10 days remaining work
will be = 1008 − 10 × 28 = 728
work done on the last day = 28
Remaining work in between done by 10 workers in $\frac{728-28}{10}$ = 70 days.
Total work completed in = 70 + 10 + 1 = 81 days

S91. Ans.(b)
Sol.

$$\Rightarrow \frac{95-1215\div 27+14\times 7}{3+3\frac{1}{4}\ of\ 4-8}$$

$$\Rightarrow \frac{95-45+98}{3+13-8}$$

$$\Rightarrow \frac{148}{8}=18.5$$

S92. Ans.(b)
Sol.

$$4\frac{2}{5}\div\left[1\frac{2}{3}-\left\{\frac{5}{6}-\left(\frac{2}{5}+\frac{4}{15}-\frac{3}{10}\right)\right\}\right]$$

$$\Rightarrow \frac{22}{5}\div\left[\frac{5}{3}-\left\{\frac{5}{6}-\left(\frac{12+8-9}{30}\right)\right\}\right]$$

$$=\frac{22}{5}\div\left[\frac{5}{3}-\left\{\frac{5}{6}-\frac{11}{30}\right\}\right]$$

$$=\frac{22}{5}\div\left[\frac{5}{3}-\frac{14}{30}\right]=\frac{22}{5}\div\frac{36}{30}$$

$$=\frac{22}{5}\times\frac{30}{36}=\frac{22}{6}=3\frac{2}{3}$$

S93. Ans.(a)
Sol. Treat A and B as a single unit. Now, there are 4 units to arrange.
The number of ways to arrange 4 units is 4! = 24.
A and B can switch places within their unit in 2! = 2 ways.
So, the total number of arrangements is 4! * 2! = 24 * 2 = 48.
Answer: 48 ways.

S94. Ans.(c)
Sol.
Loss 10%

$$\text{Discount} = 30\% = \frac{-3}{10} \rightarrow MP$$

CP	SP	MP
	7	10
10	9	.
70	63	90

90 units → 976.5
70 → 759.5 rs
The cost price of article would be Rs. 759.5

S95. Ans.(c)
Sol. We solve this by cases:
- Case 1: 3 women and 2 men: (8 choose 3) * (10 choose 2) = 56 * 45 = 2520.
- Case 2: 4 women and 1 man: (8 choose 4) * (10 choose 1) = 70 * 10 = 700.
- Case 3: 5 women: (8 choose 5) = 56.
Total ways = 2520 + 700 + 56 = 3276.
Answer: 3276 ways.

S96. Ans.(a)

Sol.

Mean proposition of 9 and 25

$= \sqrt{9 \times 25} = 15$

Third Proportion of 9 and 30

$= \frac{(30)^2}{9} = \frac{900}{9} = 100$

$\therefore$ required Ratio = 100 : 15 = 20 : 3

S97. Ans.(c)

Sol.

$25^2 = 625$

$26^2 = 676$

$27^2 = 729 > 705$

$\therefore$ 729 – 705 = 24 Must be added to make if a perfect square.

S98. Ans.(b)

Sol.

$3A = 2B$

$\frac{A}{B} = \frac{2}{3}$

$2B = 3C$

$\frac{B}{C} = \frac{3}{2}$

A : B : C = 2 : 3 : 2

S99. Ans.(a)

Sol. To solve this problem, we need to find how many ways 6 different books can be distributed among 4 students such that each student gets at least one book. This problem can be tackled by using the principle of inclusion-exclusion.

1. Total Number of Ways Without Restriction:

First, calculate the total number of ways to distribute 6 different books to 4 students, without any restrictions. Since each of the 6 books can be given to any of the 4 students, the total number of ways is:

4^6 = 4096

2. Subtract Invalid Cases (Inclusion-Exclusion Principle):

Now, we need to subtract the cases where one or more students do not receive any books. This can be done using the inclusion-exclusion principle.

a) Number of ways where at least 1 student gets no book:

There are C(4, 1) = 4 ways to choose one student to get no books, and the remaining 3 students will receive all 6 books. The number of ways to distribute 6 books among 3 students is 3^6 = 729. Thus, the number of ways where at least one student gets no books is:

4 x 729 = 2916

b) Number of ways where at least 2 students get no book:
There are C(4, 2) = 6 ways to choose two students to get no books, and the remaining 2 students will receive all 6 books. The number of ways to distribute 6 books among 2 students is 2^6 = 64. Thus, the number of ways where at least two students get no books is:
6 x 64 = 384
c) Number of ways where at least 3 students get no book:
There are C(4, 3) = 4 ways to choose three students to get no books, and the remaining 1 student will receive all 6 books. There is only 1 way to do this. Hence, the number of ways where at least three students get no books is:
4 x 1 = 4
3. Apply Inclusion-Exclusion:
Using the inclusion-exclusion principle, the number of valid ways to distribute the books (where each student gets at least one book) is:
4096 - 2916 + 384 - 4 = 1560
Thus, the number of ways to distribute 6 different books to 4 students such that each student gets at least one book is 1560.

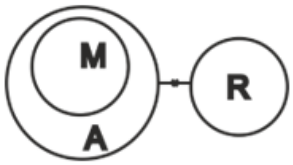
S100. Ans.(a)
Sol.

$(0.0256)^{0.25}$

$= \left(\frac{256}{10000}\right)^{\frac{1}{4}} = \left(\frac{44}{104}\right)^{\frac{1}{4}}$

$= \frac{4}{10} = 0.4$

S101. Ans.(a)
Sol.



I) Right
II) Right
III) Wrong
Ans only I and II follow

S102. Ans.(a)
Sol.

eqn:- $98 - 9 \times 21 \div 7 + 56 = 69$

Do it by options.

a) 56 and 9, + and ×

$98 - 9 \times 21 \div 7 + 56 = 69$

$98 - 56 + 21 \div 7 \times 9 = 69$

$\boxed{69 = 69} \rightarrow correct$

b) 56 *and* 21, $+ and \times$

$98 - 9 \times 21 \div 7 + 56 = 69$

$98 - 9 + 56 \div 7 \times 21 = 69$

$\Rightarrow 98 - 9 + 168 = 69$

$\boxed{257 \neq 69} \rightarrow$ not correct

c)

98 *and* 9, $+ and \times$

$98 - 9 \times 21 \div 7 + 56 = 69$

$9 - 98 + 21 \div 7 \times 56 = 69$

$\Rightarrow 9 - 98 + 168 = 69$

$\boxed{79 \neq 69} \rightarrow not\ correct$

d)

21 and 7 , + and –

98-9×21÷7+56=69

98+9×7÷21-56=69

$\Rightarrow \boxed{45 \neq 69} \rightarrow not\ correct$

Ans option 'a'

S103. Ans.(c)

Sol.

Dot it by options:-

a)

$55 \div 11 - 15 + 3 \times 2 = 15$

$55 \div 11 + 15 - 3 \times 2 = 15$

$= 5 + 15 - 6 = 15$

$\boxed{14 \neq 15} = not\ correct$

b) $4 \times 3 - 6 \div 2 + 7 = 7$

$4 \times 3 + 6 \div 2 - 7 = 7$

$12 + 3 - 7 = 7$

$\boxed{8 \neq 7}$ = *not correct*

c) $15 - 7 \times 8 + 18 \div 3 = 65$

$15 + 7 \times 8 - 18 \div 3 = 65$

$= 15 + 56 - 6 = 65$

$\boxed{65 = 65}$ *correct*

d) $529 \div 23 + 10 - 5 \times 4 = 30$

$= 529 \div 23 - 10 + 5 \times 4 = 30$

$= 23 - 10 + 20 = 30$

$\boxed{33 \neq 30}$ = *not correct*

Ans option 'c'

S104. Ans.(d)

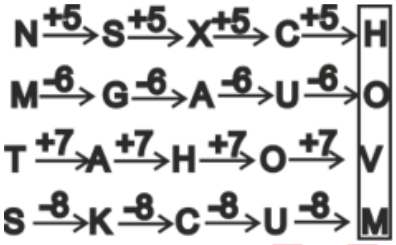
Sol. Dictionary order =

(1) Remain (2) Remanent (3) Remark (4) Remember (5) Remnant

4^{th} = Remember

S105. Ans.(c)

Sol.



S106. Ans.(b)

Sol.

÷= *Father*, −= *mother*, += *Brother*,

Q. P is mother of R.

(a) Q-P+R

⇓

Q

P R

Ans P is brother of R.

(b) P-Q+R

⇓

p

Q R

P is mother of R.

(c) P-Q÷R

⇓

P

Q

R

P is grandmother of R.

(d) R+P-Q

⇓

R P

Q

P is sister of R.

Ans option 'b'

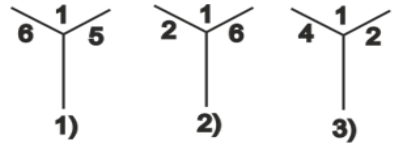
S107. Ans.(b)
Sol. Ans option b

S108. Ans.(a)
Sol.
(a) HBL = $H \leftrightarrow S \neq L$
(b) IJR = $I \leftrightarrow R$
(c) XUC = $X \leftrightarrow C$
(d) TYG = $T \leftrightarrow G$
Option (a) is odd one.

S109. Ans.(d)
Sol. Ans option 'd'

S110. Ans.(a)
Sol.
[{(32 % 28) % (6 % 4)} % (1 % 7)] % 5 % 20
Do it by options:-
(a) $-, +, \times, \div, \times, \times, =$
$= [(4 + 24) \div 7] \times 5 = 20$
$4 \times 5 = 20,$
$\boxed{20 = 20} = correct$
(b) $\times, \div, \times, \times, -, +, =$
$[\{(32 \times 28) \div (6 \times 4)\} \times (1 - 7)] + 5 = 20$
$= [(37.33) \times (-6)] + 5 = 20$
$= -223.98 + 5 = 20$
$\boxed{218.98 \neq 20} = not\ correct$
(c) $\times, -, +, \times, \div, \times, =$
$[\{(32 \times 28) - (6 + 4)\} \times (1 \div 7)]\} \times 5 = 20$
$= \left(886 \times \frac{1}{7}\right) \times 5 = 20$
$\boxed{632 \neq 20} = not\ correct$
(d) $-, +, \times, \times, \times, \times, =$
$[\{(32 - 28) + (6 \times 4)\} \times (1 \times 7)\} \times 5] = 20$
$= \{(4 + 24) \times 7\} \times 5 = 20$
$= \boxed{980 \neq 20} = not\ correct$
Ans option 1

S111. Ans.(a)
Sol.



using one common trick I & III Dice

3 < 1-5-6 / 1-2-4

1↔3
5↔2
6↔4

3↔1

S112. Ans.(b)

Sol. Ans option b

S113. Ans.(b)

Sol.

A	B	O	U	T		P	A	R	T	S		P	L	A	N	T
↓	↓	↓	↓	↓		↓	↓	↓	↓	↓		↓	↓	↓	↓	↓
Y	Z	Q	S	R		N	Y	T	R	Q		N	J	C	L	R
-2	-2	+2	-2	-2		-2	-2	+2	-2	-2		-2	-2	+2	-2	-2

S114. Ans.(a)

Sol.

$5 : 150 \quad :: \quad 66 : ? \quad :: \quad 8 : 576$

$\Downarrow$

$5^3 + 5^2 = 150 \qquad 6^3 + 6^2 = 252 \qquad 8^3 + 8^2 = 576$

S115. Ans.(a)

Sol.

Z -2→ X -2→ V -2→ T -2→ R

Y -2→ W -2→ U -2→ S -2→ Q

W -2→ U -2→ S -2→ Q -2→ O

T -2→ R -2→ P -2→ N -2→ L

? = TSQN

S116. Ans.(b)

Sol. option b

S117. Ans.(a)

Sol.

$(6\ 9\ 90) = (6 + 9) \times 6 = 90$

$(12,\ 8,\ 120) = (12 + 8) \times 6 = 120$

Similarly,

$(13, 6, ?) = (13 + 6) \times 6 = 114$

S118. Ans.(b)

Sol.

-16 -16 -16

286, 192, 263, 176, 240, 160, 217, 144, ?

-23 -23 -23 -23

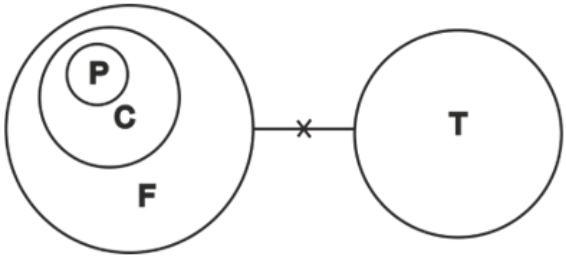
217-23 = 194

217-23 = 194

S119. Ans.(d)
Sol.

$(12, 112, 9)$ $\Downarrow$ $(12 \times 9) + 4$ $= 112$	$(10, 84, 8)$ $\Downarrow$ $(10 \times 8) + 4$ $= 84$	$(18, 94, 5)$ $\Downarrow$ $(18 \times 5) + 4$ $= 94$

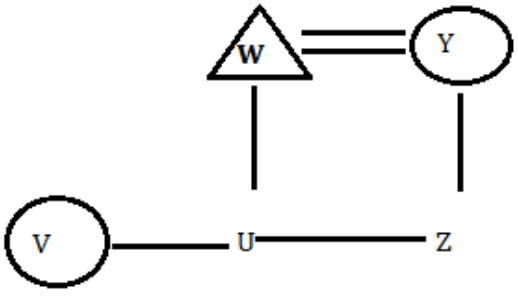
S120. Ans.(a)
Sol.



Con.
I) Wrong
II) Right
Ans only II follow

S121. Ans.(c)
Sol.
a) $7 - 24 = (7 + 1) \times 3 = 24$
b) $13 - 42 = (13 + 1) \times 3 = 42$
c) $11 - 37 = (11 + 1) \times 3 = 36 \neq 37$
d) $5 - 18 = (5 + 1) \times 3 = 18$
Ans = 11-37 is odd one.

S122. Ans.(a)
Sol.
$\infty = sister, * = Mother, @ = Father, \# = Wife$

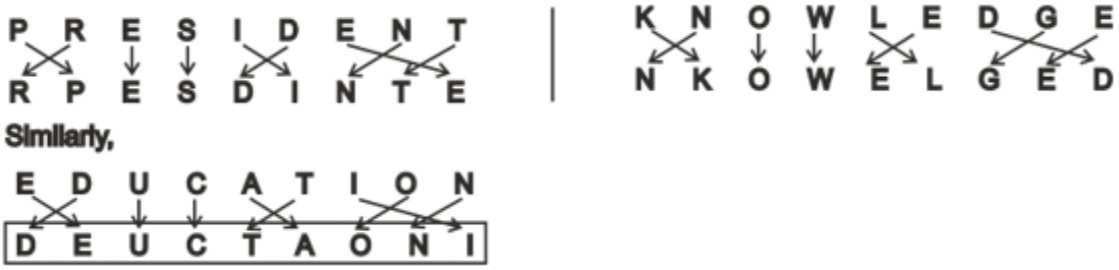


V is sister of Z.

S123. Ans.(c)
Sol. Thermometer : Temperature
Thermometer is used to measure temperature
Similarly,
Oximeter : Oxygen level of blood
Oximeter is use to measure oxygen level of blood.

S124. Ans.(a)

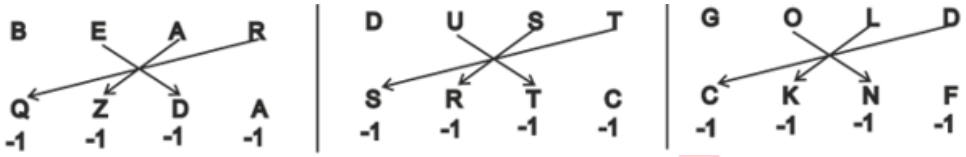
Sol.



Similarly,

S125. Ans.(a)

Sol.

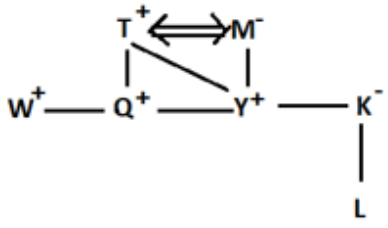


S126. Ans.(a)

Sol.

$\# \rightarrow Brother, @ \rightarrow son, \& \rightarrow father, \% \rightarrow Mother$

Eq^{n} = W#Q@T&y@m%k%L



("+" – male, "-" – female)

Ans→ K is sister of W.

S127. Ans.(a)

Sol.

Pattern = sum of each letters value.

P E P P E R = 76	C U C U M B E R = 86
↓ ↓ ↓ ↓ ↓ ↓	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
16+5+16+16+5+18 = 76	3+21+3+21+13+2+5+18 = 86

Similarly,

C A U L I F L O W E R = ?

↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓

3+ 1+21+12+9+6+12+15+23+5+18 = 125

S128. Ans.(d)

Sol.

Ans $\boxed{Option - 4}$

S129. Ans.(a)
Sol.
- →Father, +→Mother, ×→Brother,
Q is brother of P
1) P × Q - R
↓
P Q
R
Ans Q is brother of P. (Right)

2) P × Q + R
↓
P Q
R
Ans Q is sister of P (Wrong)

3) R + P × Q
↓
R
P Q
Ans Q is either sister/brother (Wrong)

4) Q × P − R
↓
Q P
R
Ans Q is uncle of P (Wrong)
Ans- Option (1)

S130. Ans.(d)
Sol.
Do it by options:-
1) $12 \div 8 \times 12 + 6 - 7 = 21$
$12 + 8 \times 12 \div 6 - 7 = 21$
$12 + 16 - 7 = 21$, $\boxed{21 = 21} \rightarrow correct$

2) $9 - 3 + 12 \times 8 \div 4 = 11$
$9 - 3 \div 12 \times 8 + 4 = 11$
$9 - 2 + 4 = 11$
$\boxed{11 = 11} \rightarrow correct$

3) $46 + 23 \div 14 \times 5 - 6 = 66$
$46 \div 23 + 14 \times 5 - 6 = 66$
$2 + 70 - 6 = 66$
$\boxed{66 = 66} \rightarrow correct$

4) $6 + 20 \div 12 \times 7 - 11 = 70$
$6 \div 20 + 12 \times 7 - 11 = 70$
$0.3 + 84 - 11 = 70$
$\boxed{73.3 \neq 70} \rightarrow not\ correct$
Ans option 4

S131. Ans.(b)

Sol.

4 : 84 :: 11 : ? :: 13:2379

$4^3 + 4^2 + 4 \Rightarrow 84$ $11^3 + 11^2 + 11 = 1463$ $13^3 + 13^2 + 13 = 2379$

S132. Ans.(a)

Sol.

Dictionary order ⇒

Eccentric, Edacious, Edifice, Effeminate, effleurage, Effluent, Effulgent

↓ ↓ ↓ ↓ ↓ ↓ ↓

6 4 2 5 3 1 7

Ans 6,4 2, 5, 3, 1, 7

S133. Ans.(c)

Sol.

X -2→ V -2→ T -2→ R -2→ P

D +3→ G +3→ J +3→ M +3→ P

N +1→ O +1→ P +1→ Q +1→ R

C +2→ E +2→ G +2→ I +2→ K

?⇒ TJPG

S134. Ans.(d)

Sol.

(3, 13, 18) | (29, 39, 44) | (16, 26, 31)

+10 +5 +10 +5 +10 +5

S135. Ans.(a)

Sol.

7, 21, 63, 189, 567, ?

×3 ×3 ×3 ×3 ×3

567×3 = 1701

S136. Ans.(a)

Sol.

N -7→ G -7→ Z -7→ S -7→ L

T -5→ O -5→ J -5→ E -5→ Z

R -9→ I -9→ Z -9→ Q -9→ H

Q -11→ F -11→ U -11→ J -11→ Y

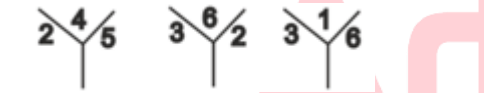
S137. Ans.(a)
Sol.
Do it by options:-
1) 5×2-8+9÷1=20
8×2-5+9÷1 = 20
= 16-5+9 = 20, $\boxed{20 = 20} \rightarrow$ *correct*

2) 8+5×4-9÷3 = 30
8+8×4-9÷3 = 30
⇒ 5+32-3 = 30
$\boxed{34 \neq 30} \rightarrow$ *not correct*

3) 5×7+8-3÷1 = 5
8×7+5-3÷1 = 55
= 56+2 ⇒ 55
$\boxed{58 \neq 55} \rightarrow$ *not correct*

4) 8-52+6÷2=-9
5-8×2+6÷2 = -9
$= \boxed{-8 \neq -9} \rightarrow$ *not correct*
Ans = option 1)

S138. Ans.(b)
Sol.
Ans option -2

S139. Ans.(a)
Sol.


Using one common trick (1) and (2) dice

1 < 2-4-5 / 2-3-6

2⇔1
4⇔3
5⇔6

2⇔[1]

S140. Ans.(b)
Sol. ans option -2

S141. Ans.(a)
Sol.
Pattern = Total number of letters in the work.

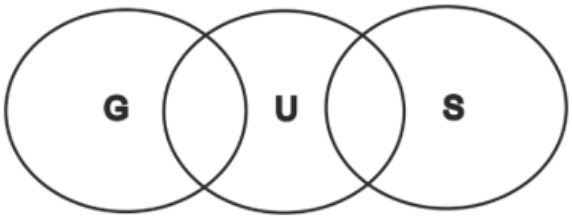
	Health	is	wealth = 626
	↓	↓	↓
Total Letters	6	2	6 = 626

Similarly

Total Letters =	Balanced	Diet	is	Key = ?
	8	4	2	3 = 8423

S142. Ans.(c)

Sol.



Con. I) ×
II) ×
Ans not follow

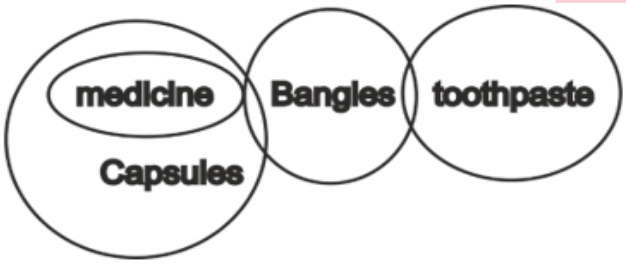
S143. Ans.(b)

Sol.

1) 18-329 $\Rightarrow 18^2 + 5 \Rightarrow 329$
2) 16-263 $\Rightarrow 16^2 + 5 \Rightarrow 261 \neq 263$
3) 14-201 $\Rightarrow 14^2 + 5 = 201$
4) 12-149 $\Rightarrow 12^2 + 5 \Rightarrow 149$
Ans = 16-263 is different from rest.

S144. Ans.(b)

Sol.



Con I) ×
II) ×
III) ×
IV) ×
Ans not follow

S145. Ans.(c)

Sol.

1) UVD = one vowel, Two consonants
2) PQI = one vowel, Two consonants
3) JKZ = All consonants
4) EFT = One vowel, Two consonants
Ans= JKZ is odd one because except this all others are having one vowel.

S146. Ans.(a)

Sol. Option 1

S147. Ans.(a)
Sol.

$+ \rightarrow \div$
$- \rightarrow +$
$\times \rightarrow -$
$\div \rightarrow \times$
$[(34 \times 12) - (4 \div 3) + (12 - 5)] \div 5$
$[\{(34 - 12) + (4 \times 3)\} \div (12 + 5)] \times 5$
Using BODMAS
$[(22 + 12) \div 17) \times 5]$
$\Rightarrow (34 \div 17) \times 5 \quad \Rightarrow 10\ Ans$

S148. Ans.(c)
Sol.

Kite	:	Diamond	::	Ball	: ?
Kite having diamond shape				Ball having round shape	

S149. Ans.(a)
Sol.

Money	Plant	:	Climber
Money	Plant	is a climber.	

Similarly,
$\boxed{Rose : Shrub}$
$\boxed{Rose\ is\ a\ shrub.}$

S150. Ans.(d)
Sol.

15 : 125	::	27:?	::	36:1728
$\left(\frac{15}{3}\right)^3 = 125$		$\left(\frac{27}{3}\right)^3 = 729$		$\left(\frac{36}{3}\right)^3 = 1728\ Ans$