Test-I: English Language

Directions (Q. 1-8): Read the following passage and answer the given questions. Certain words/phrases are given in bold to help you locate them while answering some of the questions.

One day, a farmer was hoeing his vineyard when he struck something hard. He bent over and saw that he had unearthed a fine mortar beautifully engraved. When he cleared the dirt of it he saw it was made of solid gold. ‘I do not own it, I ought to give it to the king,’ he said. When he went home with the fine mortar he saw his daughter and announced his intention of presenting it to the king. ‘It is a good idea, father,’ she said. ‘It is worthy of a king but the king will find fault with it since something is missing – the pestle.’ The farmer shrugged off her words and marched straight to the king’s palace. The guards weren’t going to let him in but seeing the wonderful gift, they did. The farmer bowed low before the king and said, ‘I found this mortar in my vineyard, your Majesty, and I am giving it to you to do with it as you deem fit.’ The king took the mortar and turned it around, examining it carefully and said, ‘Where is the pestle, my dear man?’ These were his daughter’s words exactly and the farmer slapped his brow and exclaimed out loud, ‘She guessed it!’ ‘Guessed what?’ said the king. ‘My daughter told me that you would say those words and I refused to believe her.’ ‘This daughter of yours must be very clever. Take this flax and tell her to make the shirts for a whole regiment of soldiers. But tell her to do it quickly since I need the shirts right now.’ The farmer was stunned. But he did not argue with the king and picked up the bundle which contained only a few measly strands of flax and set out for home. ‘My daughter,’ he said, when he reached home, ‘you really are in for it.’ And he told her what the king had said. ‘You get upset over nothing,’ said his daughter. ‘Give me the flax.’ And taking it, she shook it out until a few scales from the flax fell onto the floor – hardly a handful. The farmer’s daughter gathered those up and gave them to her father, ‘Go to the king tomorrow and tell him I will make the shirts but since I have no loom to weave the cloth I will have to have one made for me with this handful of scales to carry out his order to the letter.’ The farmer did not have the nerve to go back to the king with this reply but he did fearing for his daughter’s life. The king was eager to meet the farmer’s daughter on hearing the reply she sent through her father and said, ‘Tell your daughter to come to the palace when it is neither day nor night, neither on foot nor on horseback. She is to obey on both these conditions or both your head and hers will roll.’ The farmer arrived home in the lowest of spirits. But his daughter told him not to worry. She rose and set out for the palace seated on a nanny goat with one foot touching the ground and the other off it. She managed to reach the palace after the difficult journey just as dawn was breaking (neither day nor night completely). The guards were reluctant to let her in but learning that the king had commanded it, they finally did. ‘Your Majesty, I am here in compliance with your order,’ she said. The king burst into laughter on seeing the girl and announced that she was worthy of being a ruler’s wife. He married her and they ruled in wisdom.

1. Which of the following cannot replace the word 
   STRUCK as used in the passage?
   1) discovered  2) uncovered  3) attacked  
   4) stumbled on  5) turned up

2. What impact did the farmer’s encounters with the king have on his (the king’s) life?
   1) The king stopped harassing his subjects.
   2) The king got married.
   3) The king gave up his throne to marry the farmer’s daughter.
   4) The king gained fine ornaments and clothes for his soldiers.
   5) The king was humiliated by the farmer’s daughter and he left the kingdom.

3. Which of the following is most nearly the OPPOSITE of the word NERVE as used in the passage?
   1) calm  2) anger  3) demotivated  
   4) tearfulness  5) boldness

4. Why did the farmer utter the words, ‘You really are in for it’?
   1) He was conveying to his daughter the king’s desire to marry her.
   2) He was angry with his daughter for disagreeing with him.
   3) He was upset because his daughter refused to weave the clothes as the king had ordered her to.
   4) He did not see how his daughter could accomplish the seemingly impossible task set by the king.
   5) He was feeling sorry for himself as his daughter was bullying him.
17. The DSC Prize for South Asian literature 2015 was awarded to
1) Unacustomed Earth 2) The Lowland
3) Noontide Toll 4) A God in Every Stone
5) The Mirror of Beauty

18. For its initiatives and achievements in the field of environment, the Union Minister of state for Environment, Prakash Javadekar recently presented the Golden Peacock environment management award to Krishnapatnam Port situated in the Indian state of
1) Tamil Nadu 2) Andhra Pradesh
3) Kerala 4) Karnataka
5) Other than those given as options

19. MS Vishwanathan, who recently died at the age of 88, was a well known
1) Music Director and Composer
2) Fiction and Children's Author
3) Historian and Educator
4) Film Director and Screenwriter
5) Physicist

20. FIFA Women's World Cup 2015 was won by
1) USA 2) Chile 3) Germany
4) Italy 5) Japan

21. An ancient Buddhist garden dating back to over 1,200 years to the period of the Tang Dynasty (618AD-907AD) has recently (July 2015) been discovered in
1) India 2) Japan 3) Myanmar
4) China 5) Bangladesh

22. The official currency of Bangladesh is
1) Rupee 2) Lira 3) Rupee / 4) Taka 5) Baht

23. The objective of the recently launched Pradhan Mantri Micro Units Development and Refinance Agency (MUDRA) Yojana is to encourage especially
1) big infrastructural projects
2) small and medium enterprises
3) other than those given as options
4) social and cultural activities
5) small banks

24. The first Indian bank to provide Equated Monthly Instalment (EMI) facility on purchases made on its debit cards is
1) ICICI Bank 2) State Bank of India
3) Union Bank of India 4) IDBI Bank
5) Punjab National Bank

25. India has recently (June, 2015) signed a historic land boundary agreement with
1) Bangladesh 2) Bhutan 3) Nepal
4) Myanmar 5) China

26. Which of the following Indian states has the highest population of tigers?
1) Madhya Pradesh 2) Andhra Pradesh
3) Uttar Pradesh 4) Karnataka 5) Gujarat

27. The articles determining each country's share and lender's initial capital in respect of the USD 100-billion Asian Infrastructure Investment Bank (AIIB) was signed recently by as many as
1) 57 founding members 2) 40 founding members
3) 50 founding members 4) 69 founding members
5) 61 founding members

28. Mundra Thermal Power Station is located in the Indian state of
1) Gujarat 2) Chhattisgarh 3) Madhya Pradesh
4) Rajasthan 5) Haryana

29. As per the current provisions of the Coinage Act, 2011, coins can be issued by RBI in India up to the denomination of
1) ₹500 2) ₹100 3) ₹50 4) ₹20 5) ₹1000

30. Major Dhyan Chand National Stadium is a field hockey stadium situated in
1) New Delhi 2) Kanpur 3) Kolkata
4) Lucknow 5) Nagpur

31. The 5-nation BRICS group has recently signed an agreement to create a USD 100-billion pool of foreign exchange reserves to help each other in case of any problem with dollar liquidity. India's contribution to the pool is
1) USD 5 billion 2) USD 10 billion 3) USD 15 billion
4) USD 18 billion 5) USD 41 billion

32. The Nashik-Trimbakeshwar Simhasha Kumbh Mela was recently held on the banks of the river
1) Sabarmati 2) Godavari 3) Saraswati
4) Narmada 5) Krishna

33. The 'Desert National Park', known for hatching of the near-extinct Great Indian Bustard, is situated in the Indian state of
1) Rajasthan 2) Gujarat 3) Uttar Pradesh
4) Haryana 5) Madhya Pradesh

34. In the banking sector in India, an unclaimed deposit is the one that has not been claimed for a period of at least
1) three years 2) five years 3) ten years
4) two years 5) four years

35. Shri Pranab Mukherjee, President of India, recently received first copy of the book titled Uniki at Hyderabad. The book is written by
1) C Vidyasagar Rao, Governor of Maharashtra
2) Bandaru Dattatreya, Union Minister
3) N Chandrababu Naidu, CM, Andhra Pradesh
4) Venkaiah Naidu, Union Minister
5) Other than those given as options

36. Which of the following persons has been named as the first Chairman of the upcoming Kolkata-based Bandhan Bank?
1) Montek Singh Ahluwalia 2) Ashok Kumar Lahiri
3) Kaushik Basu 4) Amartya Sen
5) Arvind Virmani
37. Which of the following currencies has now become the world's second most used currency in trade finance?
   1) British Pound  
   2) Japanese Yen  
   3) Euro Zone's Euro  
   4) US Dollar  
   5) Chinese Renminbi

38. The first Chief Minister of the newly formed state of Telangana is
   1) KT Rama Rao
   2) YS Rajasekhara Reddy
   3) K Chandrashekar Rao
   4) Other than those given as options
   5) T Harish Rao

39. Which of the following national programmes aims to create skilled manpower at grass roots level by providing them vocational, technical and skill-development education?
   1) PMKVY
   2) PMSBY
   3) PMAY
   4) PMUDD
   5) PMMY

40. The RBI has recently set up a committee headed by Deepak Mohanty. The objective of the committee is to work out a medium level (five-year) measurable action plan for
   1) Trade Finance
   2) FDI
   3) Financial Inclusion
   4) PPP
   5) Disinvestment

Test-II: Quantitative Aptitude

41. A, B and C, each working alone, can finish a project in 42 days, 28 days and 48 days respectively. A started the project by working alone for 7 days and then B took over from A. B worked alone for 7 days, and then C took over from B. In how many days will C finish the remaining work?
   1) 35 days
   2) 28 days
   3) 32 days
   4) 24 days
   5) 21 days

42. ₹7200 was partly invested in scheme 'A' for 6 years and partly in scheme 'B' for 2 years. Both the schemes offered simple interest at 12% per annum. The total interest accrued from 'A' and 'B', at the end of their respective investment period was ₹4008. How much was invested in scheme 'A'?
   1) ₹4750
   2) ₹5450
   3) ₹5850
   4) ₹6000
   5) ₹5250

43. There is a circular plot of radius 11 metres. A circular seating space is constructed at the centre of the plot at a total cost of ₹231 at ₹6 per square metre. What is the area of the remaining part of the circular plot?
   1) 1245 sqm
   2) 1574.25 sqm
   3) 1605.75 sqm
   4) 1347.5 sqm
   5) 1386 sqm

44. A train running at an average speed of 54 kmph crosses a pole in 14 seconds. How much time will a man take to cross the same train if it is stationary, when he is cycling at a speed of 7 kmph? (in seconds)

45. A, B and C invested in a business for different periods of time in a year. A invested ₹18000, B invested ₹15000 and C invested ₹12000. A invested for a period which was 1.5 times the period for which B invested and C invested for a period which is twice the period for which B invested. If at the end of the year, B received an amount of ₹2725 as his share in the profit, what was C's share in the profit?
   1) ₹4000
   2) ₹1200
   3) ₹4560
   4) ₹4280
   5) ₹4360

46. The total time taken by a boat travelling from X to Y and Y to X is 2 hours. The speed of the boat is 12 kmph and the distance between X and Y is 9 km. What is the speed of the current?
   1) 5 kmph
   2) 2 kmph
   3) 4 kmph
   4) 16 kmph
   5) 7 kmph

47. A jar contains 91 litres of mixture of milk and water in the ratio of 11:2. Now, 26 litres of mixture is taken out from the jar and 5 litres of pure water is added to the jar. What is the percentage of water in the resultant mixture?
   1) 28\frac{1}{7}
   2) 24\frac{4}{7}
   3) 22\frac{2}{7}
   4) 21\frac{3}{7}
   5) 23\frac{2}{7}

Directions (Q. 48-54): What should come in place of question mark (?) in the following question? (You are not expected to calculate exact value.)

48. \((47.1)^2 - (7.9)^2 - (12.01)^2 = ?
   1) 2010
   2) 2070
   3) 2160
   4) 2280
   5) 2340

49. \sqrt{48 + \sqrt{(4900)}} \times \sqrt{(76)} = 184 - ? + 7
   1) 1204
   2) 1183
   3) 1246
   4) 1169
   5) 1267

50. \((10^3 \times 3.465 + 10^3 \times 0.253) + (120 \times 10^2) = 10^3 \times 2
   1) 6
   2) 8
   3) 3
   4) 5
   5) 2

51. \frac{1863 + 6.5 - 184}{?} = 851 + 37
   1) 3
   2) 9
   3) 8
   4) 5
   5) 7

52. \((\sqrt{1756} \times \sqrt{567} + \sqrt{4.77})^2 = ?
   1) 240
   2) 360
   3) 450
   4) 520
   5) 900

53. 8866 + 39 \times 45 = ? \times 19
   1) 400
   2) 350
   3) 540
   4) 250
   5) 600

54. \sqrt{(4.5 \times 3.2) \times \sqrt{(625)}} = 12 \frac{6}{7} \div \frac{?}{14}
   1) 11
   2) 5
   3) 10
   4) 8
   5) 3

Directions (Q. 55-62): What should come in place of question mark in the following questions?

55. \sqrt{\frac{15 + 24 \times 0.5}{10.2 + ?}} = 3
   1) 2.4
   2) 5.7
   3) 1.7
   4) 3.4
   5) 6.8
56. \[ \sqrt{\frac{2}{144} + \frac{1}{2}} + \sqrt{\frac{1}{576} + \frac{49}{576}} \times \frac{27}{34} = ? + 25 \]
   1) 3 2) 27 3) 6 4) 9 5) 15

57. \[ 65 \times 9 + \frac{\sqrt{256}}{101} = \sqrt{256} \]
   1) 4.5 2) 4 3) 18 4) 3 5) 5

58. \[ \frac{2}{3} \text{ of } 1440 + 40\% \text{ of } 3550 = ? = 61^2 \]
   1) 99 2) 129 3) 81 4) 121 5) 119

59. \[ ? + \left( \frac{25\% \text{ of } 289 - 32}{3} \right) = 0.2 \]
   1) 6.5 2) 7.9 3) 6.7 4) 3.8 5) 8.5

60. \[ 84 + 14^2 = \text{?} \times 105 + 8.5 \]
   1) 23 2) 21 3) 22 4) 24 5) 26

61. \[ (12.5 \times 14) + 20 + 41.25 = ? + 2.5 \]
   1) 6 2) 5 3) 3 4) 4 5) 7

62. \[ 0.36 \times 0.36 + 0.28 \times 0.36 + 0.14 \times ? = ? \]
   1) 0.144 2) 0.25 3) 0.016 4) 0.025 5) 0.16

63. In the month of October, Daya spent 12% of his monthly income on groceries, 24% on paying his children’s school fees and 30% on paying bills. Out of the remaining amount, he deposited 60% in fixed deposits. If his monthly salary is ₹26500, what is the amount that is left with him?
   1) ₹3540 2) ₹3506 3) ₹3604 4) ₹3582 5) ₹3570

64. The ratio of monthly earnings of P to that of Q is 4 : 7. If the monthly earning of P increases by 20% and that of Q decreases by 40%, the new ratio becomes 8 : 7. What is P’s monthly earning?
   1) ₹18200 2) ₹15800 3) ₹16400 4) ₹16500 5) Can’t be determined

65. If Y is 5 times of X and the ratio of (Y + 1) to (X + 19) is 3 : 1, then what is the difference between X and Y?
   1) 112 2) 103 3) 122 4) 113 5) 123

66. The ratio of the present age of Sita to that of Gita is 3 : 8. Five years ago, the ratio of the age of Sita to that of Gita at that time was 2 : 7. What is Gita’s present age?
   1) 32 years 2) 42 years 3) 30 years 4) 40 years 5) 36 years

67. The perimeter of a rectangle is 120m. If the difference between the length and the breadth of the rectangle is 4m, what is the circumference of the largest circle that can be drawn inside the rectangle? (in m)
   1) 154 2) 90 3) 110 4) 132 5) 88

68. The average salary of A, B and C is ₹7200. The average salary of B, C and D is ₹7550. If D’s salary is 25% more than A’s salary, then what is the average of B’s and C’s salary?
   1) ₹9950 2) ₹9450 3) ₹13000 4) ₹9900 5) ₹8700

**Directions (Q. 69-73): What will come in place of question mark (?) in the given number series?**

69. 16 18 27 55 120 ?
   1) 232 2) 246 3) 254 4) 242 5) 248

70. 13 10.8 15.4 8.2 17.8 ?
   1) 5.8 2) 5.4 3) 6.2 4) 7.2 5) 6.8

71. 4 19 64 139 ?
   1) 245 2) 233 3) 236 4) 242 5) 262

72. 7 17 37 77 ?
   1) 167 2) 160 3) 163 4) 147 5) 151

73. 12 8 10 17 36 ?
   1) 92 2) 84 3) 76 4) 98 5) 104

**Directions (Q. 74-78): Study the table and answer the given questions.**

**Number of bangles sold by 6 stores during 5 months**

<table>
<thead>
<tr>
<th>Month</th>
<th>P</th>
<th>Q</th>
<th>R</th>
<th>S</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>154</td>
<td>129</td>
<td>87</td>
<td>89</td>
<td>165</td>
</tr>
<tr>
<td>June</td>
<td>121</td>
<td>120</td>
<td>145</td>
<td>89</td>
<td>172</td>
</tr>
<tr>
<td>July</td>
<td>145</td>
<td>88</td>
<td>105</td>
<td>133</td>
<td>104</td>
</tr>
<tr>
<td>August</td>
<td>169</td>
<td>102</td>
<td>130</td>
<td>114</td>
<td>129</td>
</tr>
<tr>
<td>September</td>
<td>128</td>
<td>177</td>
<td>94</td>
<td>220</td>
<td>131</td>
</tr>
</tbody>
</table>

74. Out of the total number of bangles sold by store R in June, July and August together, 35% were made of gold. What was the total number of gold bangles sold by store R in June, July and August together?
   1) 27 2) 139 3) 121 4) 145 5) 133

75. What is the difference between the total number of bangles sold by store S in June and July together and the total number of bangles sold by store P in the same months together?
   1) 72 2) 58 3) 44 4) 64 5) 62

76. What is the average number of bangles sold by stores Q, R and T in May?
   1) 131 2) 117 3) 127 4) 135 5) 123

77. What is the ratio of the total number of bangles sold by stores S and T together in August to the total number of bangles sold by the same stores together in September?
   1) 9 : 13 2) 7 : 9 3) 11 : 13 4) 9 : 11 5) 7 : 11

78. The number of bangles sold by store Q increased by what per cent from June to September?
   1) 42.5 2) 45 3) 40 4) 47.5 5) 44.5

79. A shopkeeper sold 25 chocolates at a profit of 20% and 15 chocolates at a profit of 30%. Had he sold all the chocolates at a profit of 25% he would have earned ₹6 more. What is the cost price of each chocolate?
   1) ₹10 2) ₹12 3) ₹8 4) ₹14 5) ₹16

80. There are two numbers. When 50% of the first number is added to the 2nd number, the resultant number is 0.875 times the 1st number. What is the ratio of the 1st to the 2nd number?
   1) 8 : 3 2) 8 : 5 3) 9 : 2 4) 9 : 4 5) 5 : 1
81. are the computers that provide resources
to other computers in a network.
1) Touchscreens 2) Platforms 3) Servers
4) Monitors 5) Peripheral devices

82. One gigabyte is approximately
1) One billion bytes 2) 1 million bits
3) 1 trillion bytes 4) 1000 bytes
5) 4000 bytes

83. In MS Internet Explorer (IE), what is the shortcut key
to open the favourites box?
1) Ctrl + W 2) Ctrl + P 3) Ctrl + E
4) Ctrl + F 5) Ctrl + I

84. Examples of a telecommunication device is
1) Keyboard 2) Mouse 3) Modem
4) Printer 5) Monitor

85. In telecommunications and computer network,
is a method by which multiple analog
signals or digital data streams are combined into one
signal over a shared medium.
1) multi-tasking 2) multiple challenging
3) broadband 4) co-processing
5) multiplexing

86. Which of the following standard protocols is used for
transferring files from one host to another over a TCP-
based network?
1) FTP 2) SMTP 3) ANMP 4) RPE 5) SNMP

87. Which of the following is not a binary number?
1) 100 2) 111 3) 123 4) 101 5) 110

88. is a temporary holding for data, application
program instructions and the operating system.
1) RAM 2) EEPROM 3) PROM
4) Disk storage 5) ROM

89. The content that combines contents from text, sound,
graphics, motion wave and animations is called
1) multimedia 2) sound wave 3) picture media
4) motion wave 5) macromedia

90. What is the name of the supercomputer developed in
India?
1) ICAD 2) ACTION 3) DRAM
4) PARAM 5) CRAY

91. In an MS Word document, the best way to move 4th
line to be placed after the 5th line is
1) view cut 2) format, paste 3) insert, paste
4) cut, paste 5) delete, paste

92. A Home page is
1) a webpage that identifies the website
2) the last page of the website
3) a web page you eventually reach by clicking a series
of hyperlinks
4) a web page created by an individual home user as
opposed to the one created by the organisation
5) the web page you like to visit the most

93. What is an organisation's internal private network
called that uses the infrastructure and standards of
the Ethernet and the web?
1) Choke 2) Intranet 3) Gate
4) Extranet 5) Supernet

94. The largest unit of digital information is
1) Byte 2) Kilobytes 3) Megabytes
4) Terabytes 5) Gigabytes

95. In computing, an indicator (symbol) that shows the
position on computer monitor screen that will respond
to input and lead input of pointing device is called
1) frame 2) cursor 3) device pointer
4) monitor 5) pixels

96. Devices such as monitors and printers that are
called connected to computer are called
1) input devices 2) attachment devices
3) system devices 4) processing devices
5) peripheral devices

97. Usually the e-mail is in
1) upper case 2) middle case 3) italics
4) bold 5) lower case

98. Which of the following would not be considered a
form of a secondary storage of a computer version?
1) Optical disk 2) Flash drive 3) Floppy disk
4) RAM 5) Hard Disk

99. Storage that retains the data after the power is turned
off is referred to as
1) direct storage 2) sequential storage
3) nondestructive storage 4) volatile storage
5) nonvolatile storage

100. HTML stands for
1) Hyper Type Markup Language
2) Hyper Tool Machine Language
3) Hyper Text Markup Language
4) Hyper Text Machine Language
5) Hyper Text Marking Language

101. What does the term EPROM mean?
1) Erasable Programmable Read Only Memory
2) Erasing Permitted Read Often Memory
3) Easily Permitted Read Often Memory
4) Easily Programmable Readable Only Memory
5) Electrically Programmable Read-Only Memory

102. To move to the end of an MS Word Document, press
1) Ctrl + Home key 2) Home Key
3) End Key 4) Ctrl + Backspace Key
5) Ctrl + End key

103. In SMTP server SMTP means
1) Simple Mail Transfer Protocol
2) Short Messages Transfer Protocol
3) Simple Messaging Text Protocol
4) Server Message Text Protocol
5) Service Message Text protocol
104. Debugging is done on software code for  
   1) finding errors  2) compiling  3) initialising  
   4) installing  5) assembling  
105. Which key is used to delete the letter immediately left  
    of the cursor while formatting document using MS Word?  
   1) Shift  2) Tab  3) Backspace  
   4) Spacebar  5) Delete  
106. The shortcut key Ctrl + Y in MS Word will  
   1) redo last action performed  
   2) undo last action  
   3) cut selected text  
   4) paste  
   5) insert link  
107. Printers and screens of computer systems are common  
    form of  
   1) Computation units  2) Output units  
   3) Storage units  4) Processing units  
   5) Input units  
108. VoIP is a group of technologies for delivery of voice  
    communication. VoIP stands for  
   1) Voice over Internet Protocol  
   2) Voice on Internet Price  
   3) Voice on Information Process  
   4) Voice on Internet Portal  
   5) Voice over Information Portal  
109. The system component called __________ is a  
    multipurpose, programmable device that accepts  
    digital data in input, processes it according to the  
    instructions stored in the memory and provides results  
    as output.  
   1) keyboard  2) mouse  3) monitor  
   4) microprocessor  5) plotter  
110. The primary function of the ________ of a personal  
    computer is to initialise and test system hardware-  
    components and load on operating system from a mass  
    memory device.  
   1) Memory  2) BIOS  
   3) System programs  4) CPU  
   5) Application program  
111. An EULA stands for  
   1) Environmental Use Licensing Agreement  
   2) Employee-Use Legal Arrangement  
   3) End-User License Agreement  
   4) End-Use License Arrangement  
   5) Everyday User Leading Assistance  
112. In CDMA technology, CDMA means  
   1) Code Division Medium Allotment  
   2) Compact Disk Media Access  
   3) Common Division Medium Allotment  
   4) Clear Disc Multiple Access  
   5) Code Division Multiple Access  
113. W3C is an international community which participates  
    to develop Web standards. W3C denotes  
114. MICR stands for  
   1) Magnetic Ink Classic Record  
   2) Magnetic Ink Character Recognition  
   3) Magnetic Ink Computer Record  
   4) Major Information on Character Recognition  
   5) Magnetic Ink Computer Recognition  
115. The computer chip is also called a  
   1) micro chip  2) thin-film  3) thin-plate  
   4) semi-conductor  5) modem  
116. Which of the following cables can transmit data at  
    high speeds?  
   1) Co-axial cables  2) Twisted pair cable  
   3) Optical fibre cables  4) Flat cables  
   5) UTP  
117. A program that translates/transforms the source code  
    written in a programming language to Machine  
    Language, also known as object code, at one go is  
    called  
   1) Divider  2) Assembler  3) Compiler  
   4) Interpreter  5) Decoder  
118. A hexadecimal number is a number to the base  
   1) 20  2) 16  3) 2  4) 8  5) 4  
119. ________ is a computer network software  
    administration utility used to test the machinability of  
    a host on an IP network.  
   1) Peak  2) View  3) Search  4) Size  5) Ping  
120. The operating system is stored on the hard disk of the  
    computer. During the ________ process, a copy of the  
    OS is transferred to RAM, where it can be accessed  
    quickly whenever computer needs to carry out an  
    input, output or storage operation.  
   1) Booting  2) Saving  3) Editing  
   4) Storing  5) Processing  

Test-IV: English Language

Directions (Q. 121-125): In this question a sentence  
with four words in bold type is given. One of these four  
words given in bold may be either wrongly spelt or  
inappropriate in the context of the sentence. Find out the  
word which is wrongly spelt or inappropriate, if any. That  
word is your answer. If all the words given in bold are  
correctly spelt and also appropriate in the context of the  
sentence, mark 'All correct' as your answer.  
121. Much to everyone's surprise, the man road the horse  
    with the finesse of a well trained journey.  
   1) surprise  2) road  3) finesse  
   4) journey  5) All correct  
122. The second any man declared his love for the princess
and asked for her hand in marriage, thousands of goblins appeared to capture him and push him over the cliff.
1) declared 2) marriage 3) appeared
4) cliff 5) All correct

123. “Are all living beings to be loved and cared for?” asked the little girl.
1) living 2) beings 3) loved
4) cared 5) All correct

124. The boy lived alone with his grandmother in a cottage beyond the fields.
1) alone 2) cottage 3) beyond
4) fields 5) All correct

125. The water surged up above that massive rock and drenched the old man.
1) surged 2) massive 3) rock
4) drenched 5) All correct

Directions (Q. 126-130): Rearrange the given six sentences (A), (B), (C), (D), (E) & (F) in a proper sequence so as to form a meaningful paragraph and then answer the given questions.

(A) Since then the camel transports man and his goods and is the ship of the desert.
(B) After a while the camel quietly walked up to a small pool of water and drank deeply.
(C) In olden times, there was no system of transport across the desert and travellers across these vast lands had to face many difficulties.
(D) Suddenly the man heard some loud grunts and turning his head, he saw many such animals heading his way.
(E) One day, while travelling across one such desert, a man suddenly saw a camel chewing leaves and thought to himself, “What a strange creature this is!”
(F) “They must be very strong; they can walk for long distances across the desert and survive on some water and a few desert plants; I shall make them my vehicle.”

126. Which of the following is the FIRST sentence after rearrangement?
1) A 2) B 3) C 4) D 5) E

127. Which of the following is the SECOND sentence after rearrangement?
1) A 2) B 3) C 4) D 5) E

128. Which of the following is the FIFTH sentence after rearrangement?
1) A 2) C 3) D 4) E 5) F

129. Which of the following is the SIXTH (LAST) sentence after rearrangement?
1) A 2) B 3) C 4) D 5) E

130. Which of the following is the THIRD sentence after rearrangement?
1) A 2) B 3) C 4) D 5) F

131. Which of the following is most nearly the SAME in meaning as the word ‘STUMBLED’ as used in the story?
1) fell 2) plundered 3) broke
4) hesitated 5) lost

132. As mentioned in the story, Emperor Sultan sentenced the gardener to death because
1) the gardener was not watering the plants in the garden.

Directions (Q. 131-140): Read the following passage carefully and answer the questions given below. Some of the words are given in bold to help you locate them while answering some of the questions.

One day Emperor Sultan was taking a walk in the Royal Garden, when he accidentally stumbled upon a small rock. He was in a very bad mood that day. He summoned the gardener and sentenced him to death for not having removed the stone. The poor gardener was distraught at receiving such a harsh sentence. He pleaded with the Emperor, but Sultan was adamant. So the gardener ran to Badelal in despair and begged him to find a way to save his life. The gardener told Badelal the entire story. Badelal wondered how he could help the poor gardener. He pondered for a while and finally thought of a way. He told the gardener not to worry and then whispered some instructions in his ear. The next day, the Emperor Sultan was walking in his royal garden. The gardener came up to the Emperor and spat at his ‘feet’. The Emperor was shocked at him. He was furious to see the same gardener commit such an act of disrespect. Just then Badelal walked up to the Emperor. Sultan was even more surprised to discover that Badelal had instructed the gardener to spit on his feet. Seeing that the Emperor was furious, Badelal then explained to him as to why the gardener had done such a deed. He told the Emperor that the gardener was one of the most loyal subjects who served the king. And it would have been shame on the Emperor’s part for sentencing a man to death for such a petty reason as forgetting to remove a small rock. And therefore, Badelal had asked the gardener to spit at Sultan’s feet. That was a vile offence and would give Emperor Sultan a genuine reason to sentence him to death. The Emperor was stunned by the whole incident and he instantly realised his mistake and forgave the gardener.
2) he thought that the gardener had failed to report to duty that day.
3) he wanted to punish him for misbehaving with Badelal a few days back.
4) the gardener spit on his feet in front of all the royal courtiers.
5) None of the given options

133. Which of the following can be a suitable title to the story?
1) Emperor Sultan and his favourite gardener
2) Badelal and his friendship with the gardener
3) The Mischievous Gardener
4) Badelal and his Intelligence
5) Be Careful while Trying Traps for Others

134. As mentioned in the story, Emperor Sultan was in a bad mood before stumbling upon the rock because
1) he had had a bad dream.
2) he was not feeling well.
3) he had fought with Badelal.
4) he was angry with the royal cook for not preparing his favourite meal.
5) Not clearly mentioned in the passage

135. Which of the following is most nearly the OPPOSITE in meaning of the word 'DESPAIR' as used in the story?
1) trust
2) misery
3) cheer
4) desperation
5) secret

136. Which of the following attributes of Emperor Sultan gets highlighted in the story?
1) unreasonable but just
2) depressed
3) thoughtful
4) ill-tempered and rude
5) confident

137. Which of the following is most nearly the SAME in meaning as the word ‘HARSH’ as used in the story?
1) severe
2) soft
3) weak
4) loud
5) uneven

138. As mentioned in the story, Badelal directed the gardener to spit on Emperor Sultan’s feet as
(A) he wanted Emperor Sultan to punish the gardener severely.
(B) he wanted to make Emperor Sultan realise his mistake.
(C) he was trying to play a prank on the gardener.
1) Only A
2) Only B
3) Both A and B
4) Both A and C
5) Only C

139. Which of the following statements is true in the context of the story?
1) Emperor Sultan punished both the gardener and Badelal when the gardener spat on his feet.
2) Emperor Sultan had decided to punish the gardener even before he came across the rock in the garden.
3) Badelal was Emperor Sultan’s nephew.
4) The gardener would usually seek Badelal’s advice on all matters.
5) None of the given options is true

140. Which of the following is most nearly the OPPOSITE in meaning of the word ‘ADAMANT’ as used in the story?
1) firm
2) flexible
3) creative
4) rigid
5) unfixed

Directions (Q. 141-145): Read this sentence to find out whether there is any grammatical error in it. The error, if any, will be in one part of the sentence. Mark the part with the error as you answer. If there is no error, mark ‘No error’ as your answer. (Ignore the errors of punctuation, if any.)

141. Unfortunate many people only / invest in insurance to get / tax exemptions and do not / study the schemes offered, in depth.
1) Unfortunate many people only
2) invest in insurance to get
3) tax exemptions and do not
4) study the schemes offered, in depth.
5) No error

142. One of the factors that / resulted in the large number / of non-performing assets in banks is / the misuse of regulations by banks themselves.
1) One of the factors that
2) resulted in the large number
3) of non-performing assets in banks is
4) the misuse of regulations by banks themselves.
5) No error

143. A budget is a record / of money comes in from sources / such as salary and payments to / be made such as rent and insurance premiums.
1) A budget is a record
2) of money comes in from sources
3) such as salary and payments to
4) be made such as rent and insurance premiums.
5) No error
I was happy to learn that he had received the prestigious award and when I visited him to congratulate himself he was hard at work as usual.
1) I was happy to learn that
2) he had received the prestigious award
3) and when I visited him to congratulate himself
4) he was hard at work as usual.
5) No error

145. While LIC's lending operations are vast its lending standards are also as stringent as those following banks.
1) While LIC's lending operations are
2) vast its lending standards
3) are also as stringent as
4) those following banks.
5) No error

Directions (Q. 146-150): The sentence has a blank indicating that something has been omitted. Choose the word that best fits the meaning of the sentence as a whole.

146. No-frills airports are those which have only ________ infrastructure to handle aircraft.
1) no
2) construct
3) any
4) basic
5) extravagant

147. She was careful with money and would keep ________ account of the petty cash in a diary.
1) its
2) minute
3) exactly
4) no
5) properly

148. India intends to import skill training to 402 million people over the next five years and ________ them in sectors like construction and retail.
1) employs
2) deploy
3) hired
4) pay
5) occupied

149. The philanthropist donated a well on the ________ that everyone would draw water from it and that it would belong to the whole village.
1) chance
2) condition
3) term
4) credit
5) law

150. I had systematically planned my weekend trip, I was at a loss when he asked me to work on the weekend instead.
1) Though
2) Despite
3) Until
4) Still
5) As

Directions (Q. 151-160): In the passage, there are blanks, each of which has been numbered. Against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case. A shepherd-boy, who (151) a flock of sheep near a village, brought out the villagers many times by (152) out “Wolf! Wolf!” and when his neighbours came to help him (153) at them for their pains. He did this on a regular basis just to (154) cheap thrills from the activity. No (155) how much the villagers tried to (156) him to cease the activity, he would not stop doing it. The Wolf, however, did (157) come at last. The shepherd-boy, now really (158) shouted in an agony of terror. “Pray, do come and help me. The Wolf is killing the sheep!” But no one paid any (159) to his cries nor (160) any assistance. The Wolf, having no cause for fear, at his leisure, lacerated and destroyed the whole flock.

151. 1) caught
4) guard
152. 1) saying
4) shout
153. 1) giggle
4) cheered
154. 1) mention
4) derive
155. 1) much
4) way
156. 1) commence
4) told
157. 1) finally
4) truly
158. 1) alarmed
4) curious
159. 1) money
4) attentive
160. 1) passed
4) call

Test-V: Reasoning Ability

Directions (Q. 162-166): Study the given information carefully to answer the given questions.

In a certain code language, ‘telephone lines are busy’ is written as ‘vk jk ba ef’, ‘draw two parallel lines’ is written as ‘qn vk hf om’, ‘busy people never draw’ is written as ‘ba su hf’ and ‘two lines are intersecting’ is written as ‘mi om jk vk’. (All codes are two-letter codes only.)

162. Which may be the possible code for ‘lines intersecting together’ in the given code language?
1) mi
2) jk om cz
3) jk om cz
4) cz
5) vk

163. What will be the code for ‘draw parallel’ in the given code language?
1) mi
2) jk om cz
3) jk om cz
4) jk
5) mi

164. In the given code language, what does the code ‘ba’ stand for?
1) busy
2) two
3) parallel
4) are
5) lines

Directions (Q. 162-166): Study the given information carefully to answer the given questions.
165. What is the code for 'people' in the given code language?
1) Either 'su' or 'tx'
2) Other than those given as options
3) Either 'mi' or 'jd'
4) vk
5) qn

166. What is the code for 'telephone' in the given code language?
1) mi 2) qn 3) vk
4) Other than those given as options
5) ef

Directions (Q. 167-171): Study the following information and answer the questions.
Seven friends namely T, U, V, W, X, Y and Z are standing in a straight line facing north, but not necessarily in the same order. U stands exactly in the centre of the line. Only one person stands between T and U. Only one person stands between Z and W.
Z stands neither on the immediate left nor on the immediate right of U. X stands second to the right of Y. V stands on the immediate right of Z.

167. Four of the following five form a group as per the given arrangement. Which of the following does not belong to that group?
1) XY 2) ZW 3) YW 4) TV 5) UT

168. What is the position of X with respect to U?
1) Third to the right
2) Immediate right
3) Third to the left
4) Immediate left
5) Second to the left

169. Which of the following is TRUE regarding V?
1) V stands at one of the extreme ends of the line.
2) V stands second to the left of Y.
3) Only one person stands between V and U.
4) Only two persons stand between V and W.
5) T is one of the immediate neighbours of V.

170. Which of the following represents the position of W from the right end of the line?
1) Second 2) Third 3) First
4) Fifth 5) Sixth

171. Which of the following pairs stand at the extreme ends of the line?
1) V, Y 2) Z, X 3) Y, Z 4) V, X 5) T, X

How many such pairs of letters are there in the word 'PROHIBITS' each of which has as many letters between them (in both forward and backward directions) as they have between them in the English alphabetical series?
1) More than three
2) Three
3) Two
4) One
5) None

Directions (Q. 173-174): Study the following information and answer the given questions.
Each of the five friends, F, G, H, I and J has a different height. H is taller than both I and G but shorter than J. J is not the tallest. G is not the shortest. The tallest of them all is 172 cm tall and the second shortest is 160 cm tall.

173. Which of the following is true with respect to the given arrangement?
1) I is the third tallest among them.
2) Only one person is taller than F.
3) None of the given options is true
4) H's height is 160 cm.
5) F's height is definitely more than 160 cm.

174. H's height is 8 cm more than G's height. Which of the following can be H's height?
1) 165 cm 2) 172 cm 3) 150 cm
4) 168 cm 5) 170 cm

Directions (Q. 175-179): In each question, two/three statements followed by two conclusions numbered I and II have been given. You have to take the given statements to be true even if they seem to be at variance with the commonly known facts and then decide which of the given conclusions logically follows from given statements disregarding commonly known facts.

175. Statements: All keys are locks.
Some locks are irons.
Conclusions: I. All keys are irons.
II. Some irons are definitely not keys.
1) Both conclusion I and II are true.
2) Neither conclusion I nor II is true.
3) Either conclusion I or II is true.
4) Only conclusion I is true.
5) Only conclusion II is true.

176. Statements: All instructions are manuals.
All manuals are rules.
Conclusions: I. All instructions are rules.
II. All manuals are instructions.
1) Only conclusion II is true.
2) Neither conclusion I nor II is true.
3) Either conclusion I or II is true.
4) Only conclusion I is true.
5) Both conclusion I and II are true.
177. Statements: Some cards are papers.
All papers are books.
No book is a novel.

Conclusions: I. At least some cards are books.
II. No novel is a card.
1) Both conclusion I and II are true.
2) Either conclusion I or II is true.
3) Neither conclusion I nor II is true.
4) Only conclusion I is true.
5) Only conclusion II is true.

178. Statements: Some doors are windows.
No window is a cabinet.

Conclusions: I. No cabinet is a door.
II. At least some cabinets are doors.
1) Both conclusion I and II are true.
2) Neither conclusion I nor II is true.
3) Either conclusion I or II is true.
4) Only conclusion I is true.
5) Only conclusion II is true.

179. Statements: Some bulbs are lights.
Some lights are fans.

Conclusions: I. Some fans are definitely not bulbs.
II. All bulbs are fans.
1) Both conclusion I and II are true.
2) Neither conclusion I nor II is true.
3) Either conclusion I or II is true.
4) Only conclusion I is true.
5) Only conclusion II is true.

Directions (Q. 180-184): The question is based on the five words given below:
SLY BUD MET DYE AIM
(The new words formed after performing the mentioned operations may or may not be meaningful English words.)

180. How many letters are there in the English alphabetical order between the first letter of the word which is second from the left and the second letter of the word which is first from the right of the given words?
1) Two  2) Three  3) Six  4) None  5) Five

181. If each letter in each word is arranged in alphabetical order within the words, how many words will change when compared to the original set of words?
1) One  2) Three  3) None  4) Four  5) Two

182. If in each of the given words, each of the consonants is changed to the previous letter and each vowel is changed to the next letter as per the English alphabetical order, in how many words thus formed will no vowel appear?
1) Four  2) Two  3) One  4) More than four  5) Three

183. If the first alphabet in each of the words is changed to the next alphabet as per the English alphabetical order, how many words having two or more vowels (same or different) will be formed?
1) None  2) Two  3) Four

184. If the given words are arranged in the order as they appear in a dictionary from left to right, the position of which of the following words will remain unchanged?
1) MET  2) SLY  3) AIM  4) DYE  5) BUD

185. Four of the following pair of letters are alike in a certain way based on English alphabetical order and hence form a group. Which is the one that does not belong to the group?
1) DW  2) KO  3) JQ  4) FU  5) HS

Directions (Q. 186-190): Study the following information and answer the given questions.

Eight persons, J, K, L, M, N, O, P and Q are sitting around a circular table, facing the centre with equal distance between each other but not necessarily in the same order. K is an immediate neighbour of both J and O. Only one person sits between J and L. M sits second to the left of P. P is not an immediate neighbour of O. Only one person sits between M and N.

186. Which of the following pairs of letters represents the people who sit exactly between L and N when counted from the right hand side of N?
1) JK  2) OQ  3) OP  4) KM  5) MQ

187. What is P's position with respect to the one who is on the immediate left of Q?
1) Second to the right  2) Third to the right  3) Fourth to the left  4) Second to the left  5) Third to the left

188. How many people are sitting between O and P when counted in the clockwise direction starting from P?
1) Four  2) More than four  3) One  4) Three  5) Two

189. Which of the following is true regarding Q as per the given arrangement?
1) Only three persons sit between Q and P.
2) M sits second to the left of Q.
3) None of the given options is true.
4) Q is an immediate neighbour of both P and J.
5) One of the immediate neighbours of Q sits on the immediate right of L.

190. Who is sitting on the immediate right of O?
1) M  2) K  3) L  4) N  5) Q

Directions (Q. 191-195): In each question, a relationship between different elements is shown in the statements. The statements are followed by two conclusions. Study the conclusions based on the given statements and mark the appropriate answer.

191. Statement: A < Y = B ≤ X = C ≥ Z
Conclusions: I. A < C  II. A = C
1) Both conclusion I and II are true.
2) Neither conclusion I nor II is true.
3) Either conclusion I or II is true.

192. Statement: A < B < C < D < E
Conclusions: I. B < C  II. D < E
1) Both conclusion I and II are true.
2) Neither conclusion I nor II is true.
3) Either conclusion I or II is true.

193. Statement: A < B < C < D < E
Conclusions: I. B < C  II. D < E
1) Both conclusion I and II are true.
2) Neither conclusion I nor II is true.
3) Either conclusion I or II is true.

194. Statement: A < B < C < D < E
Conclusions: I. B < C  II. D < E
1) Both conclusion I and II are true.
2) Neither conclusion I nor II is true.
3) Either conclusion I or II is true.

195. Statement: A < B < C < D < E
Conclusions: I. B < C  II. D < E
1) Both conclusion I and II are true.
2) Neither conclusion I nor II is true.
3) Either conclusion I or II is true.
4) Only conclusion I is true.
5) Only conclusion II is true.

192. Statements: \( P \leq A < R = K; S \geq J \geq R \)

Conclusions: I. \( P < J \) II. \( S \geq K \)
1) Both conclusion I and II are true.
2) Either conclusion I or II is true.
3) Neither conclusion I nor II is true.
4) Only conclusion I is true.
5) Only conclusion II is true.

193. Statements: \( P < A < R = K; S \geq J \geq R \)

Conclusions: I. \( A > J \) II. \( S > P \)
1) Neither conclusion I nor II is true.
2) Both conclusion I and II are true.
3) Either conclusion I or II is true.
4) Only conclusion I is true.
5) Only conclusion II is true.

194. Statements: \( P < A > S \geq T = F < D \)

Conclusions: I. \( T \geq P \) II. \( D > S \)
1) Both conclusion I and II are true.
2) Neither conclusion I nor II is true.
3) Only conclusion II is true.
4) Only conclusion I is true.
5) Either conclusion I or II is true.

195. Statements: \( O < P \geq T > S; P \leq N < L \)

Conclusions: I. \( N > S \) II. \( O > L \)
1) Either conclusion I or II is true.
2) Neither conclusion I nor II is true.
3) Both conclusion I and II are true.
4) Only conclusion I is true.
5) Only conclusion II is true.

Directions (Q. 196-200): Study the following information and answer the given question.

Eight friends M, N, O, P, Q, R, S and T live on eight different floors of a building but not necessarily in the same order. The lowermost floor of the building numbers one, the one above that is numbered two and so on till the topmost floor is numbered eight.

Q lives on an odd-numbered floor but not on the floor numbered 7. T lives immediately below Q. Only three people live between T and M. O lives on an even-numbered floor immediately above S. Only two people live between N and R. N lives on one of the floors above R. P does not live on the floor numbered 5.

196. Who lives exactly between the floors on which T and O live?
1) M 2) R 3) P 4) Q 5) S

197. Who amongst the following lives on the floor numbered 5?
1) Q 2) N 3) R 4) M 5) S

198. Which of the following is true about N as per the given arrangement?
1) S lives on one of the floors above N.
2) Only two people live between N and Q.
3) N lives on the topmost floor.
4) N lives immediately below P.
5) All the given statements are true.

199. If M and S interchange their positions and so do P and T, who amongst the following will live between T and Q as per the new arrangement?
1) No one 2) Both S and P 3) Only N 4) Both R and M 5) Only M

200. Four of the following are alike as per the given arrangement and thus form a group. Which of the following does not belong to that group?
1) NR 2) QO 3) TP 4) QM 5) TR

---

**Answers**

1. 4 2. 2 3. 1 4. 3 5. 5
6. 2 7. 1 8. 5 9. 3 10. 1
11. 1 12. 2 13. 2 14. 3 15. 1
16. 5 17. 2 18. 2 19. 1 20. 1
21. 4 22. 4 23. 2 24. 1 25. 1
26. 4 27. 1 28. 1 29. 5 30. 1
31. 4 32. 2 33. 1 34. 3 35. 1
36. 2 37. 5 38. 3 39. 1 40. 3

41. 2. Let the total work be 336 units (LCM of 42, 28 and 48 = 336 units)
A's one day's work = \( \frac{336}{42} = 8 \) units
Similary, B's one day's work = \( \frac{336}{28} = 12 \) units
C's one day's work = \( \frac{336}{48} = 7 \) units per day
A's 7 days' work = \( 7 \times 8 = 56 \) units
B's 7 days' work = \( 7 \times 12 = 84 \) units
Remaining work = 336 - (56 + 84) = 196
\[ C \text{ can do the remaining work in } \frac{196}{7} = 28 \text{ days} \]

42. 1. Scheme A Scheme B
\( \text{Invested} x \) 7200 - \( x \)
Let Rs be invested for 6 years at the rate 12% per annum.
And Rs(7200 - \( x \)) be invested for 2 years at the rate of 12% per annum.
Now, \( 6 \times 12\% + 2 \times 12\% \) of (7200 - \( x \)) = 4008
or, \( 72\% + 24\% \) of (7200 - \( x \)) = 4008
or, \( 0.72x + 0.24x = 4008 - 24 \times 72 \)
\( 0.48x = 2280 \)
\( x = \frac{2280}{0.48} = 4750 \)
\( \text{Quicker Approach:} \)
Overall % interest = \( \frac{4008}{7200} \times 100 = 55\frac{2}{3}\% \)

43. 4. Area of the circular plot = \( \pi r^2 \)
\( = \frac{22}{7} \times 21 \times 21 - 231 \)
\( = 66 \times 21 - 38.5 = 1386 - 38.5 = 1347.5 \text{ sq metre} \)

---

**Using alligation method**

\[ \begin{array}{c|c|c|c}
A & \text{6\%-12\%} & B & \text{2\%-24\%} \\
\hline
\text{31}\frac{2}{3} & 55\% & \text{16}\frac{1}{3} & 49\% \\
\hline
\end{array} \]

\[ \text{Investment in A} = \frac{7200 \times 95}{95 + 49} = \frac{7200 \times 95}{144} = \frac{7200}{2} = \text{Rs}4750 \]

\[ \text{Area of the remaining part of the circular plot} = \frac{22}{7} \times 21 \times 21 - 231 \]
\[ = 66 \times 21 - 38.5 = 1386 - 38.5 = 1347.5 \text{ sq metre} \]
44. Length of train = \(54 \times 14 \times \frac{5}{18}\) 
= 210 metres

\[\text{Time taken by the man to cross the train} = \frac{210 \times 18}{7 \times 5} = 6 \times 18\] 
\[= 108 \text{ seconds}\]

45. Ratio of profit A : B : C

So, \(A = B = C\)

\[18000 = 1.5x\]
\[15000 = x\]
\[12000 = 2x\]

or, \(27x = 15x\)
\[24x = 15x\]
\[9x = 5x\]

Now, \(5x = 2725\)

\[8x = \frac{2725}{5} \times 8 = 4360\]

\[C's \text{ share in profit} = 4360\]

46. Let the speed of the current be \(x\) kmph.

Then, \(\frac{9}{12 + x} = 2\)

\[9(12 - x + 12 + x) = 2\]

\[144 - x^2 = 2\]

or, \(x^2 = 142\)

or, \(x = 11\) kmph

Quick Approach: When we reach at the stage

\[\frac{9}{2} - \frac{13}{2} = 2\]

It comes to our mind that \(x\) should be a multiple of 3, because RHS is a whole number and LHS has numerators and parts of denominators as multiple of 3. So, select the suitable choice and verify the equation.

Choice (4) 6 km/h satisfies the equation as

\[9 \times 6 \times 2\]

47. Total quantity of mixture is 91 litres.

Now, 26 litres mixture is taken out.

Remaining mixture = 91 - 26 = 65 litres

Now, 5 litres pure water is added to the mixture.

Now, total quantity of mixture = 65 + 5 = 70 litres

Total quantity of water in the new mixture = \(\left(\frac{65 \times 2 + 5}{13}\right)\) litres

Reqd % = \(\frac{15}{70} \times 100 = \frac{150}{7} = 21\frac{3}{7}\%\)

Method II. Total quantity of mixture = 91 litres

Now, 26 litres mixture is taken out.

Remaining mixture = 91 - 26 = 65 litres

Ratio of milk to water in the mixture is 11 : 2.

\[\frac{65}{13} \times 11 = 55\]

5 litres is water added

\[55 + 15 = 70 \text{ litres}\]

Required % of water in the new mixture = \(\frac{15}{70} \times 100 = \frac{150}{7} = 21\frac{3}{7}\%\)

56. \(\sqrt{2 + \frac{1}{144}} = \sqrt{\frac{145}{144} \times \frac{27}{34}}\)

\[= \sqrt{\frac{576}{625}}\]

\[= \frac{24}{25}\]

57. \(65 \times 9 + ? = 101 + \sqrt{256} = 101 + 16 = 117\)

or, \(? = \frac{659}{117} = 5\)

58. \(\frac{5}{3}\) of 1440 + 40% of 3550 = \(?\)

or, \(\frac{5}{3} \times 1440 + \frac{40}{100} \times 3550 = \(?\)

59. \(? + \left(\frac{25}{100}\right) \times 289 = \frac{131}{4}\)

or, \(? + \left(\frac{1}{4} \times 289 - \frac{131}{4}\right) = 0.2\)

or, \(? + \frac{289 - 131}{4} = 0.2\)

or, \(? + \frac{18}{4} = 0.2\)

or, \(? = \frac{18}{4} = 0.2\)

or, \(? = \frac{9}{2}\)

or, \(? = \frac{2}{3}\)

60. \(84 + 14 + \sqrt{?} = 105 + 8.25\)

or, \(84 + 196 = ?\)

or, \(? = \frac{280 \times 8.25}{105} = \frac{280 \times 8 + 280 \times \frac{1}{4}}{105}\)

\[= \frac{2240 + 70}{105} = \frac{2310}{105} = 22\]

61. \((12.5 \times 14) + 20 + 41.25 = (?)^3 + 2.5\)

or, \(87.5 + 41.25 = (?)^3\)

or, \(128.75 = (?)^3\)

or, \(? = \left(\frac{128.75}{3}\right)^{1/3} = 4.9\)
62. 2. \[
\frac{0.36 \times 0.36 + 0.28 \times 0.36 + 0.14^3}{(a + b)^3} = a^2 + 2ab + b^2
\]
\[= (0.36 + 0.14)^3 = (0.5)^3 = 0.25\]

63. 3. Let Diya's monthly salary be \(₹100\).
Now, she spends \((12 \times 24 + 30)^\circ\) = 66%.
Remaining amount = 100 - 66
Now, again she spends 60% of ₹34 on fixed deposit.
Remaining amount = 40% of ₹34 = ₹13.6
Since, 100 = 26500
\[\therefore \frac{26500}{100} \times \frac{13.6}{100} = 265 \times 13.6 = ₹3604\]

64. 5. Monthly ratio of earning of P to Q:
\[\frac{4x}{7x} = \frac{4}{7}\]
\[\frac{4x \times 12x}{7x} = \frac{21x}{5} = \frac{4.8x}{5}\]
\[\frac{4.8x \times 5}{8} = \frac{21x}{7}\]
Now, \[\frac{21x}{7} = \frac{3x}{1}\]
So, we can't determine the amounts of the monthly earnings of P and Q.
Note: Since all the given values are in ratio or % (and no absolute value is given), we can't find the solution.

65. 1. \[y = 5x\]
\[y + 1 = \frac{3}{x + 19} = \frac{3}{1}\]
\[5x + 1 = 3\] \[x + 19 = 1\]
\[5x + 1 = 3x + 57\] \[x = 26\]
\[x = 28\]
\[\therefore \text{Difference} = 5x - x = 4x = 4 \times 28 = 112\]

66. 4. Let Sita's present age be 3x.
Then Gita's present age = 8x.
\[3x - 5 = \frac{2}{8x - 5} = 7\]
\[14x - 35 = 16x - 10\] \[x = 25\]
\[x = 5\]
Hence the present age of Gita = 8 \times 5 = 40 years

Method II. Sita

<table>
<thead>
<tr>
<th>Present</th>
<th>Gita</th>
<th>3 years ago</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>

\[\therefore \text{Difference in terms of ratio} = 3 - 2 = 1\]
\[\text{or,} 8 - 7 = 5\]
\[\text{Gita's present age} = (8 \times 5) = 40 years\]

67. 5. Perimeter of the rectangle = 2(l + b) = 120
\[2(b + 4 + b) = 120\]
\[or, 4b + 8 = 120\]
\[112 = 4\]
\[b = 28\]

The largest circle drawn inside the rectangle will have diameter equal to the breadth of the rectangle.

79. 1. Let the cost of each chocolate be ₹x.
Then, profit on 25 chocolates:
\[25 \times \frac{20}{100} = 5x\]

Profit on 15 chocolates = 15x \times \frac{30}{100} = 4.5x.
\[\therefore \text{Profit on all} \ (25 + 15 =) \ 40 \text{ chocolates} = 40x \times \frac{25}{100} = 10x\]
\[\therefore \text{10x} - (5x + 4.5x) = 6\]
or, \[0.5x = 6\]
\[\therefore x = \frac{6}{0.5} = ₹12\]

80. 1. First number | Second number
\[x \| y\]
\[0.5x + y = 0.875x\]
\[\Rightarrow y = 0.375x\]
\[\therefore \frac{x}{y} = \frac{1000}{75} = \frac{40}{3} = \frac{8}{3}\]
\[81. 3 82. 1 83. 5 84. 3 85. 5\]
\[86. 1 87. 3 88. 1 89. 1 90. 4\]
\[91. 4 92. 1 93. 2 94. 4 95. 2\]
\[96. 5 97. 5 98. 4 99. 5 100. 3\]
\[101. 1 102. 5 103. 1 104. 1 105. 3\]
\[106. 1 107. 2 108. 1 109. 4 110. 2\]
\[111. 3 112. 5 113. 2 114. 2 115. 1\]
\[116. 3 117. 3 118. 2 119. 5 120. 1\]
\[121. 2 \{The appropriate word should be ‘rode’\}\]
\[122. 2 \{The correct spelling is ‘marriage’\}\]
\[123. 5\]
\[124. 2 \{The correct spelling is ‘cottage’\}\]
\[125. 1 \{The correct spelling should be ‘surged’\}\]

126-130: CEFDAB
\[126. 3 127. 5 128. 5 129. 1 130. 2\]
\[131. 1 132. 5 133. 4 134. 5 135. 3\]
\[136. 1 137. 1 138. 2 139. 5 140. 2\]
\[141. 1 \{Replace ‘unfortunate’ with ‘unfortunately’\}\]
\[142. 5\]
\[143. 2 \{Insert that before comes’\}\]
\[144. 3 \{Replace ‘himself’ with ‘him’\}\]
\[145. 4 \{Replace ‘following’ with ‘followed by’\}\]
\[146. 4 147. 2 148. 2 149. 2 150. 5\]
\[151. 3 152. 5 153. 3 154. 4 155. 2\]
\[156. 3 157. 4 158. 1 159. 3 160. 5\]
\[161. 2 \{INSTRUCTION\}\]
The required letters are S, R, U and O. With these letters the words that can be formed are SOUR and OURS.

(162-166):
telephone lines are busy → vk jd ha cf ...(i)
draw two parallel lines → qn vk hf om ...(ii)
bussy people never draw → tx ba su hf ...(iii)
two lines are intersecting
→ mi om jk vd ...(iv)
From (i) and (ii), lines → vk ...(v)
From (i) and (iii), busy to ba ...(vi)
From (i), (iv) and (v), are → jd ...(vii)
From (i), (v), (vi) and (vii), telephone → cf ...(viii)
From (ii), (iv) and (v), two → om ...(ix)
From (ii) and (iii), draw → hf ...(x)
From (ii), (v), (ix) and (x), parallel → qn ...(xi)
From (iii), (vi) and (x), people/never → tx/su ...(xii)
From (iv), (v), (vi) and (x), intersecting → mi ...(xiii)

162. 4 163. 4 164. 1 165. 1 166. 5

Facing north: Z V W U Y T X

(167-171):
All others have only one friend sitting between the two friends given in each pair.

168. 1 169. 3 170. 4 171. 2

(172-174):

F > J > H > G > I

(172 cm) (160 cm)

173. 5 174. 4 160 + 8 = 168 cm

175. 2 All keys are locks (A) + Some locks are iron (I) → A + I = No conclusion.
Hence conclusion 1 does not follow. Neither does conclusion II follow.

176. 4 All instructions are manuals (A) + All manuals are rules (R) = A + R = All instructions are rules.
Hence conclusion I follows.

177. 4 Some cards are papers (l) + All papers are books: (A) = I + A = 1 = Some cards are books.
Hence conclusion I follows.

Again. Some cards are books (i) + No book is a novel = I + E = O = Some cards are not novels.
Hence conclusion II does not follow.

178. 3 Some doors are windows (l) + No window is a cabinet (E) = I + E = O = Some doors are not cabinets.
Hence neither I nor II follows. But the two conclusions make a complementary E-I pair. Hence either conclusion I or II follows.

179. 1 J-type statements can’t be combined.
Hence neither conclusion follows.

180. 3 First letter of the second word from the left = B
Second letter of the first word from the right = I

There are six letters between B and I in the alphabetical order.

181. 4 SLY → LSY; BUD → BDU;
MET → EMT; DYE → DEY;
AIM → AIM

182. 1 SLY → RKK; BUD → AVC;
MET → LFS; DYE → CKF; AIM → BJL

183. 5 SLY → SMY; BUD → CUD;
MET → MFT; DYE → EYE; AIM → BIM

184. 5 SLY BUD MET DYE AIM
→ AIM BUD DYE MET SLY

185. 2 In all others, the first letter occupies the same place in alphabetical order from the left as the second does from the right.

(186-190):

186. 5 187. 3 188. 1 189. 3 190. 4

191. 4 A ≤ Y = B ≤ X = C ≤ Z

.. A < C
Hence conclusion I is true but conclusion II is not true.

192. 1 Given statements:
P ≤ A ≤ R = K ...(i)
S ≥ J > R ...(ii)

Combining (i) and (ii), we get
P ≤ A ≤ R = K ≤ J ≤ S
Hence conclusion I is true. Also, S > K and conclusion II is true.

194. 2 Given statement:
P < A < S < T < J < D
Hence T and P can’t be compared and conclusion I does not follow. Neither does conclusion II.

195. 4 Given statements:
O < P < T < S ...(i)
P ≤ N < L ...(ii)

From (i) and (ii),
N ≥ P ≥ T > S or N > S. Hence conclusion I is true.
Also, O < P ≤ N < L or O < L.
Hence conclusion II doesn’t follow.

(196-200):

<table>
<thead>
<tr>
<th>Floor</th>
<th>Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>M</td>
</tr>
<tr>
<td>7</td>
<td>P</td>
</tr>
<tr>
<td>6</td>
<td>N</td>
</tr>
<tr>
<td>5</td>
<td>Q</td>
</tr>
<tr>
<td>4</td>
<td>T</td>
</tr>
<tr>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>2</td>
<td>O</td>
</tr>
<tr>
<td>1</td>
<td>S</td>
</tr>
</tbody>
</table>

296. 2
297. 1
298. 4
299. 3

200. 5 In all others, there are two floors between the floors of the friends given in each pair.