

All questions carry equal mark of 2 each. Attempt all questions.

Put a tick (✓) mark against the correct answer in the space given in each question.

If a candidate gives more than one answer to one question, it will be treated as wrong answer even if one of the given answers happens to be correct.

SIMPLE ARITHMETIC - 100 MARKS

1. The Value of $(7 + 5)(7 - 5)$ is:

- | | |
|--------|-----|
| (a) 11 | () |
| (b) 12 | () |
| (c) 44 | () |
| (d) 61 | () |

2. The value of $x^2 + \frac{1}{x^2}$ when $x + \frac{1}{x} = 5$

- | | |
|---------|-----|
| (a) 25 | () |
| (b) 23 | () |
| (c) 27 | () |
| (d) 125 | () |

3. $\frac{x^2 + x - 6}{x^2 - 4x + 4}$ in its lowest term is:

- | | |
|-----------------------|-----|
| (a) $\frac{x-2}{x+3}$ | () |
| (b) $\frac{x+3}{x-2}$ | () |
| (c) $\frac{x-1}{x+2}$ | () |
| (d) $\frac{x-3}{x+2}$ | () |

4. $\frac{2x}{x^2 - 9} - \frac{1}{x+3} - \frac{2}{x-3}$ in its lowest term is:

- | | |
|----------------------|-----|
| (a) $\frac{-1}{x-3}$ | () |
| (b) $\frac{1}{x-3}$ | () |
| (c) $\frac{-1}{x+3}$ | () |
| (d) $\frac{1}{x+3}$ | () |

5. In an auditorium, the number of rows is equal to the number of chair in each row. If the capacity of the auditorium is 2025, the number of chairs in each row is:
- (a) 40 ()
(b) 45 ()
(c) 50 ()
(d) 60 ()
6. The smallest number by which 3087 may be multiplied so that the product will be a perfect cube is:
- (a) 49 ()
(b) 9 ()
(c) 7 ()
(d) 3 ()
7. The mean of 40 observations was found to be 65 . But later on, it was discovered that 86 was misread as 68 at one place . The correct mean is:
- (a) 66.5 ()
(b) 65.5 ()
(c) 65.45 ()
(d) 65.25 ()
8. The marks in a mathematics test of 15 students is as follows : 24, 30, 28, 27, 14, 26, 20, 15, 10, 21, 30, 25, 28, 17, 26.
The median mark of the the above data is:
- (a) 24 ()
(b) 25 ()
(c) 26 ()
(d) 27 ()
9. The following size of shoes sold by a shopkeeper on a particular day are as follows : 5, 9, 8, 6, 9, 4, 3, 9, 5, 6 . The modal size of shoe is:
- (a) 3 ()
(b) 9 ()
(c) 5 ()
(d) 6 ()
10. The marked price of a ceiling fan is Rs 1250 and the shopkeeper allows a discount of 10 % on it. The selling price of the fan is:
- (a) Rs 1125 ()
(b) Rs 1175 ()
(c) Rs 1200 ()
(d) Rs 1225 ()
11. The single discount equivalent to two successive discount of 20% and 10% is:
- (a) 30% ()
(b) 28 % ()
(c) 25 % ()
(d) 20 % ()

12. Thanga spends 85 % of his salary and saves the rest . If he saves Rs 7500, monthly salary of Thanga is:
- (a) Rs 15,000 ()
- (b) Rs 50,000 ()
- (c) Rs 55,000 ()
- (d) Rs 75,000 ()
13. There are two candidates in an election, the winning candidates secured 6600 votes out of 11000 votes. The percentage of votes secured by the losing candidates is:
- (a) 20 % ()
- (b) 35 % ()
- (c) 40 % ()
- (d) 60 % ()
14. In an examination, 63 % of the student passed in English, 71 % passed in Hindi and 18 % failed in both the subjects. If 442 students passed in both the subjects, then the number of students appeared in an examination is:
- (a) 800 ()
- (b) 842 ()
- (c) 850 ()
- (d) 900 ()
15. If Selling Price = Rs 1596 , Gain % = 12 % . Then, the Cost Price is:
- (a) Rs 1584 ()
- (b) Rs 1608 ()
- (c) Rs 1650 ()
- (d) Rs 1425 ()
16. The cost price of 12 pens is equal to the selling price of 15 pens. Then, the loss percent is:
- (a) 10 % ()
- (b) 20 % ()
- (c) 30 % ()
- (d) 40 % ()
17. In a School, the ratio of number of boys to girls is 5 : 8 , If there are 320 girls, the total number of students is:
- (a) 200 ()
- (b) 300 ()
- (c) 520 ()
- (d) 600 ()
18. A mixture contains sugar and water in the ratio 2 : 11 . If it contains 4.6 kg of sugar. The quantity of water in the mixture is:
- (a) 25.3 kg ()
- (b) 25 kg ()
- (c) 25.5 kg ()
- (d) 26 kg ()

19. P and Q invested in a business. The profit earned was divided in the ratio 2 : 3. If P invested Rs 40,000, the amount invested by Q is:
- (a) Rs 45,000 ()
(b) Rs 50,000 ()
(c) Rs 60,000 ()
(d) Rs 70,000 ()
20. Lala and Rova invested in a business in the ratio of 3 : 2. If 5 % of the profit goes to charity and Lala's share is Rs 855, the total profit is:
- (a) Rs 1425 ()
(b) Rs 1500 ()
(c) Rs 1537.50 ()
(d) Rs 1576 ()
21. 3 pumps ,working 8 hours a day can empty a tank in 2 days. How many hours a day must 4 pumps work to empty the tank in 1 day:
- (a) 9 hrs ()
(b) 10 hrs ()
(c) 11 hrs ()
(d) 12 hrs ()
22. A fort had provision of food for 150 men for 45 days. After 10 days, 25 men left the fort, the number of days for which the remaining food will last is:
- (a) 29 days ()
(b) 37 days ()
(c) 42 days ()
(d) 54 days ()
23. A and B can finish a piece of work in 20 days and 12 days respectively. A started the work alone and then after 4 days, B joined till the completion of work. time taken to finish the remaining work is:
- (a) 4 days ()
(b) 6 days ()
(c) 8 days ()
(d) 10 days ()
24. A and B together can do a piece of work in 6 days. A alone can do it in 10 days. Time taken by B to finish the work is:
- (a) 15 days ()
(b) 16 days ()
(c) 25 days ()
(d) 30 days ()
25. $\sqrt{10} \times \sqrt{15}$ is equal to:
- (a) $5\sqrt{6}$ ()
(b) $6\sqrt{5}$ ()
(c) $\sqrt{25}$ ()
(d) $5\sqrt{10}$ ()

26. A speed of 37.8 Km/ h equals to:

- (a) 10 m/s ()
- (b) 10.5 m/s ()
- (c) 11.5 m/s ()
- (d) 105 m/s ()

27. Siama and his son starting from the same place walk at the rate of 7 Km/h and 4 Km/h respectively. If they walk in the opposite direction, time taken by them to be 22 Km apart is:

- (a) 2 hours ()
- (b) 3 hours ()
- (c) 4 hours ()
- (d) 7 hours ()

28. A train running at a speed of 108 Km/ h passes a pole on the platform in 18 seconds. The length of the train in metres is:

- (a) 126 m ()
- (b) 450 m ()
- (c) 540 m ()
- (d) 600 m ()

29. The amount on Rs 16,000 for 1 years at 10 % p.a., compounded half yearly is:

- (a) Rs 17,640 ()
- (b) Rs 18,522 ()
- (c) Rs 32,000 ()
- (d) Rs 32,522 ()

30. The difference between compound interest and simple interest on Rs 10,000 in 2 years at 10 % p.a. is:

- (a) Rs 12,100 ()
- (b) Rs 2100 ()
- (c) Rs 2000 ()
- (d) Rs 100 ()

31. The circumference of a circle is 44 cm. Then, its diameter is:

- (a) 3.5 cm ()
- (b) 7 cm ()
- (c) 14 cm ()
- (d) 28 cm ()

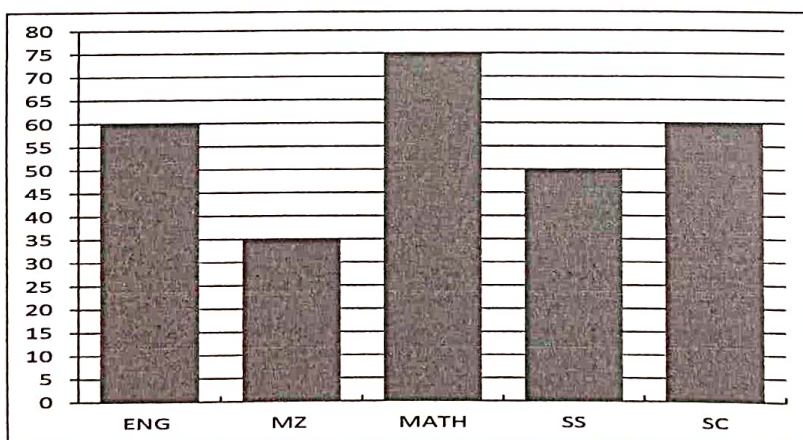
32. A wall 13.5 m long, 6 m high and 22.5 cm thick has to be constructed by a brick (27cm x12.5cm x 9cm). The number of bricks required to construct a wall is:

- (a) 6000 ()
- (b) 7000 ()
- (c) 8000 ()
- (d) 9000 ()

33. Mawia has 10 friends and he wants to invite 6 of them to a party. How many times will 3 particular friends never attend the party:
- (a) 7 ()
- (b) 8 ()
- (c) 72 ()
- (d) 35 ()
34. How many permutation of the letters of the word 'APPLE' are there ?
- (a) 600 ()
- (b) 120 ()
- (c) 240 ()
- (d) 60 ()
35. Total surface area of a cube is 96cm^2 . Find the volume of cube.
- (a) 8 cm^3 ()
- (b) 27 cm^3 ()
- (c) 64 cm^3 ()
- (d) 512 cm^3 ()
36. Find the volume of sphere whose radius is 21 cm.
- (a) 38808 cm^3 ()
- (b) 9261 cm^3 ()
- (c) 29106 cm^3 ()
- (d) 36024 cm^3 ()

Direction (Question no. 37 & 38) : Study the following Graph and answer the Questions that follows:

Marks scored by Lala in an examination:

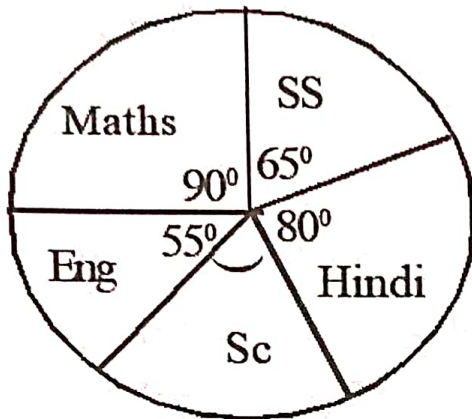


37. Average marks scored by Lala is:
- (a) 35 ()
- (b) 50 ()
- (c) 56 ()
- (d) 60 ()

38. Range of marks scored by Lala is:

- | | |
|--------|-----|
| (a) 25 | () |
| (b) 40 | () |
| (c) 45 | () |
| (d) 55 | () |

Direction (Question no. 39 & 40) : Study the following pie-chart and answer the Questions that follows:



The pie-chart gives the marks scored in an examination by a student in Hindi, English, Mathematics, Social science and Science. If the total marks obtained by the student is 540.

39. The central angle for Science is:

- | | |
|---------|-----|
| (a) 66° | () |
| (b) 69° | () |
| (c) 70° | () |
| (d) 75° | () |

40. In which subject did the student score 135 marks:

- | | |
|--------------------|-----|
| (a) Mathematics | () |
| (b) Social Science | () |
| (c) English | () |
| (d) Science | () |

41. If $\frac{1}{4}x + \frac{1}{6}x = x - 14$

The value of x is:

- | | |
|----------|-----|
| (a) - 24 | () |
| (b) 24 | () |
| (c) 12 | () |
| (d) -12 | () |

42. The value of $60 - |13 + \{12 \div (8 - 2)\}| \times 10 \div 3$ is:

- (a) 10 ()
 (b) 5 ()
 (c) 20 ()
 (d) 25 ()

43. The value of $\left[\{ (125 \times 33 \div 11 + 2) \times 34 \} \div 493 \right] \frac{1}{13}$ is:

- (a) 5 ()
 (b) 13 ()
 (c) 4 ()
 (d) 2 ()

44. The solution of $x^2 - 5x - 6 = 0$ is:

- (a) $x = 5$ or 1 ()
 (b) $x = -5$ or -1 ()
 (c) $x = 6$ or -1 ()
 (d) $x = 2$ or 3 ()

45. The solution of the system of linear equations, $2x + 3y - 8 = 0$ & $x - 2y = -3$ is:

- (a) $x = 1, y = 2$ ()
 (b) $x = -1, y = -2$ ()
 (c) $x = -1, y = 2$ ()
 (d) $x = 1, y = -2$ ()

46. In a group of 95 people, 40 like coffee, 50 like tea and 20 like both. Number of persons who like neither coffee nor tea is:

- (a) 20 ()
 (b) 25 ()
 (c) 70 ()
 (d) 45 ()

47. The probability that a non leap year selected at random will contain 53 Wednesday is:

- (a) $\frac{4}{7}$ ()
 (b) $\frac{3}{7}$ ()
 (c) $\frac{2}{7}$ ()
 (d) $\frac{1}{7}$ ()

48. A loan of Rs 27,000 is returned in two equal annual installment of Rs 14,500 each. The total interest charged is:

- (a) Rs 1250 ()
 (b) Rs 2000 ()
 (c) Rs 2900 ()
 (d) Rs 4150 ()

49. The number of terms of the AP 5,9,13,17,.....101 is:

- (a) 23 ()
- (b) 24 ()
- (c) 25 ()
- (d) 26 ()

50. The sum of all natural numbers less than 1001.

- (a) 5,00,500 ()
- (b) 5,00,000 ()
- (c) 5050 ()
- (d) 50,050 ()

BASIC COMPUTER KNOWLEDGE - 100 MARKS

51. VoIP stands for:

- (a) Voice over Internet Protocol ()
- (b) Video over Internet Protocol ()
- (c) Virtual Internet Program ()
- (d) Visual Online Protocol ()

52. Connections to the Internet using a phone line and a modem are called _____ connections.

- (a) digital ()
- (b) dial-up ()
- (c) broadband ()
- (d) Both (b) and (c) ()

53. Which one of the following is a valid E-mail?

- (a) address@mizoram.co.@.in ()
- (b) support@mizoram.co.in ()
- (c) @support@mizoram.co.in ()
- (d) support.mizoram.co.in ()

54. It is a communication protocol available on every GSM-enabled mobile device.

- (a) USSD ()
- (b) AEPS ()
- (c) NPCI ()
- (d) SS7 ()

55. Which type of network uses telephone lines?

- (a) WAN ()
- (b) LAN ()
- (c) PAN ()
- (d) Wireless ()

56. _____ is a collection of many separate networks.
- (a) A WAN ()
 - (b) An internet ()
 - (c) A LAN ()
 - (d) None of the above ()
57. Which of the following is not a transmission medium?
- (a) Modem ()
 - (b) Coaxial cables ()
 - (c) Telephone lines ()
 - (d) Air ()
58. The software that allows users to surf the Internet is called a/an _____.
- (a) Search engine ()
 - (b) Internet Service Provider (ISP) ()
 - (c) Internet Surfing Provider ()
 - (d) Web browser ()
59. This was the first computer network:
- (a) CSNET ()
 - (b) NSFNET ()
 - (c) ANSNET ()
 - (d) ARPANET ()
60. Which is not the search engine?
- (a) altavista.com ()
 - (b) google.com ()
 - (c) facebook.com ()
 - (d) yahoo.com ()
61. Among the following types of memory in a computer system, which is slowest in terms of read/v speed?.
- (a) Hard disk ()
 - (b) CD-ROM ()
 - (c) Cache memory ()
 - (d) Static RAM ()
62. The IC chip used in computers is made of _____.
- (a) chromium ()
 - (b) iron oxide ()
 - (c) silica ()
 - (d) copper ()
63. To make the number pad act as directional arrows, you can press the _____ key.
- (a) Num Lock ()
 - (b) Caps Lock ()
 - (c) Arrow Lock ()
 - (d) Shift ()

64. What type of software is LINUX?

- (a) Compiler ()
- (b) System Software ()
- (c) Utility Software ()
- (d) Application Software ()

65. The term 'gigabyte' refers to:

- (a) 1024 bytes ()
- (b) 1024 kilobytes ()
- (c) 1024 megabytes ()
- (d) 1024 gigabytes ()

66. The basic unit of a worksheet into which you enter data in Excel is called as _____.

- (a) tab ()
- (b) box ()
- (c) cell ()
- (d) range ()

67. Hard disk drives are considered _____ storage.

- (a) Flash ()
- (b) Non-volatile ()
- (c) Temporary ()
- (d) non-permanent ()

68. The unit of speed used for supercomputer is _____.

- (a) KB ()
- (b) FLOPS ()
- (c) GB ()
- (d) EB ()

69. When you create a chart on a separate sheet in the same workbook it is called a/an _____.

- (a) chart sheet ()
- (b) embedded chart ()
- (c) view sheet ()
- (d) view chart ()

70. Pressing _____ is a quick way to center a paragraph.

- (a) CTRL+L ()
- (b) CTRL+E ()
- (c) CTRL+R ()
- (d) CTRL+J ()

71. The process of automatically generating personalized documents from a template is called _____.

- (a) Data source ()
- (b) Main document ()
- (c) Mail merge ()
- (d) Merging documents ()

72. Which view lets you edit all animations' timing at once?
(a) Slide Sorter ()
(b) Animation Pane ()
(c) Slide Master ()
(d) Rehearse Timings ()
73. Which format plays the slideshow but can't be edited?
(a) PPTX ()
(b) PPSX ()
(c) POTX ()
(d) PDF ()
74. Shortcut for Presenter View?
(a) Shift+F5 ()
(b) Alt+F5 ()
(c) Ctrl+F5 ()
(d) F5 ()
75. Which ensures equal spacing of objects?
(a) Align ()
(b) Distribute ()
(c) Position ()
(d) Snap to Grid ()
76. Which reference updates both column & row no. when copied down?
(a) \$A\$1 ()
(b) A\$1 ()
(c) \$A1 ()
(d) A1 ()
77. What does "\$A\$1:\$C\$10" represent?
(a) Mixed range ()
(b) Absolute range ()
(c) Relative range ()
(d) Invalid range ()
78. Which key creates a manual line break inside a cell?
(a) Alt + Enter ()
(b) Ctrl + Enter ()
(c) Shift + Enter ()
(d) Enter ()
79. What does Ctrl + ` (grave accent) show?
(a) Gridlines ()
(b) Cell formulas ()
(c) Cell formats ()
(d) Comments ()

80. Which view shows thumbnails for arranging slide order?
- (a) Normal ☐
 - (b) Reading ☐
 - (c) Slide Sorter ☐
 - (d) Outline ☐
81. Which view allows editing speaker notes?
- (a) Slide Sorter ☐
 - (b) Notes Page ☐
 - (c) Reading View ☐
 - (d) Zoom View ☐
82. Which feature syncs a slide show on dual monitors during presentations?
- (a) Reading View ☐
 - (b) Presenter View ☐
 - (c) Compare View ☐
 - (d) Recording View ☐
83. Track Changes in Word is used to:
- (a) Format text ☐
 - (b) Monitor edits ☐
 - (c) Spell check ☐
 - (d) Print document ☐
84. Which slide element can not be edited in Slide Master?
- (a) Footer ☐
 - (b) Theme Fonts ☐
 - (c) Handout Layout ☐
 - (d) Embedded chart data ☐
85. PowerPoint uses which rendering engine for high-quality graphics?
- (a) DirectX ☐
 - (b) OpenGL ☐
 - (c) GDI+ ☐
 - (d) Metal ☐
86. What is the shortcut to insert a page break in MS Word?
- (a) Ctrl + Enter ☐
 - (b) Ctrl + Shift + Enter ☐
 - (c) Alt + Enter ☐
 - (d) Ctrl + PageDown ☐
87. Which feature divides a document into separate editable areas in MS Word?
- (a) Breaks ☐
 - (b) Sections ☐
 - (c) Columns ☐
 - (d) Splits ☐

88. Shortcut for "Change Case" in MS Word?
- (a) Shift + F1 ()
 - (b) Shift + F3 ()
 - (c) Shift + F7 ()
 - (d) Ctrl + Shift + F3 ()
89. Which allows numbering to continue across multiple documents in MS Word?
- (a) Link Sections ()
 - (b) Master Document ()
 - (c) Sequence Field ()
 - (d) Chapter Numbering ()
90. Which view hides images and headers to speed editing in MS Word?
- (a) Draft ()
 - (b) Print Layout ()
 - (c) Web Layout ()
 - (d) Outline ()
91. Which device assigns IP addresses dynamically in a network?
- (a) Router ()
 - (b) Switch ()
 - (c) DHCP Server ()
 - (d) Hub ()
92. Which of the following storage technologies uses cylinders, tracks, and sectors?
- (a) SSD ()
 - (b) Pen drive ()
 - (c) Magnetic hard disk ()
 - (d) Optical disk ()
93. What does PSR automatically capture during recording?
- (a) Keystrokes & network traffic ()
 - (b) Mouse clicks and screenshots ()
 - (c) Only screen video ()
 - (d) Voice commands ()
94. ROM is:
- (a) Volatile ()
 - (b) Non-volatile ()
 - (c) Temporary ()
 - (d) Erased when power off ()
95. Which type of memory is used to boot the computer?
- (a) RAM ()
 - (b) Cache ()
 - (c) ROM ()
 - (d) Flash Drive ()

96. Which Windows tool is used to move, copy, or delete files?
- (a) File Explorer ☐
 - (b) Task Manager ☐
 - (c) Control Panel ☐
 - (d) Device Manager ☐
97. Which of the following is a hidden system folder in Windows?
- (a) Documents ☐
 - (b) Program Files ☐
 - (c) AppData ☐
 - (d) Downloads ☐
98. Which of the following is the default Windows file system for hard drives?
- (a) FAT32 ☐
 - (b) NTFS ☐
 - (c) exFAT ☐
 - (d) EXT4 ☐
99. Which port does HTTP use by default?
- (a) 20 ☐
 - (b) 21 ☐
 - (c) 80 ☐
 - (d) 443 ☐
100. Which protocol is used for transferring files on the Internet?
- (a) SMTP ☐
 - (b) FTP ☐
 - (c) HTTP ☐
 - (d) POP3 ☐

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