

1. What is the primary function of a Central Processing Unit (CPU)?
  - A) Storage of data
  - B) Execution of instructions
  - C) Display of graphics
  - D) Network communication
  
2. Which computer component is responsible for storing data in a long-term, non-volatile manner?
  - A) RAM
  - B) CPU
  - C) Hard Drive
  - D) Monitor
  
3. What is the main function of an input device?
  - A) Display information
  - B) Process data
  - C) Enter data into the computer
  - D) Store data permanently
  
4. What is the purpose of an operating system?
  - A) To perform arithmetic calculations
  - B) To manage hardware resources and run applications
  - C) To display graphics
  - D) To store and retrieve data
  
5. Which type of software is designed to protect a computer from viruses and malware?
  - A) Word processor
  - B) Antivirus software
  - C) Web browser
  - D) Spreadsheet software
  
6. What is the primary function of a modem?
  - A) To display images on the screen
  - B) To provide power to the computer
  - C) To connect the computer to the internet
  - D) To store data
  
7. What is the purpose of random access memory (RAM) in a computer?
  - A) Long-term storage of data
  - B) Temporary storage of data and program instructions
  - C) Display of images
  - D) Data input through a keyboard

8. Which of the following is not an example of an output device?
- A) Printer
  - B) Speaker
  - C) Monitor
  - D) Keyboard
9. Which of the following is not a high-level programming language?
- A) Python
  - B) Assembly
  - C) Java
  - D) C++
10. Which data structure uses the Last-In-First-Out (LIFO) principle?
- A) Queue
  - B) Stack
  - C) Array
  - D) Linked List
11. What is the purpose of an algorithm in computer science?
- A) To execute a program
  - B) To provide a step-by-step solution to a problem
  - C) To store data in memory
  - D) To create a user interface
12. Which programming paradigm is associated with objects that encapsulate data and behavior?
- A) Procedural
  - B) Functional
  - C) Object-Oriented
  - D) Imperative
13. What is the binary equivalent of the hexadecimal number "1A"?
- A) 1010
  - B) 10001
  - C) 1101
  - D) 11100
14. What is the purpose of a compiler in programming?
- A) To execute the program
  - B) To convert source code into machine code
  - C) To debug the program
  - D) To manage memory allocation

(Set - D)

15. What does HTML stand for in web development?  
A) Hyperlink Text Markup Language  
B) Hyper Text Management Language  
C) Hyper Transfer Markup Language  
D) HyperText Markup Language
16. Which of the following is not an input device?  
A) Keyboard  
B) Mouse  
C) Printer  
D) Scanner
17. What type of software is responsible for managing hardware components and providing a user interface?  
A) System software  
B) Application software  
C) Open-source software  
D) Freeware
18. What is the primary characteristic of open-source software?  
A) It is always free of charge.  
B) The source code is freely available and can be modified.  
C) It is always developed by large corporations.  
D) It is never used in commercial applications.
19. Which organization oversees the development of the open-source web browser Firefox?  
A) Google  
B) Mozilla Foundation  
C) Microsoft  
D) Apple
20. What is a primary key in MS Access?  
A) A unique identifier for a record  
B) A way to format text  
C) A type of report  
D) A form control
21. What does SQL stand for in the context of MS Access?  
A) Structured Query Language  
B) System Query Logic  
C) Structured Query Logic  
D) System Query Language

22. What is the term used for a single slide in a PowerPoint presentation?
- A) Sheet
  - B) Frame
  - C) Slide
  - D) Card
23. What does PDF stand for?
- A) Portable Document Format
  - B) Personal Document File
  - C) Print Document Format
  - D) Plain Document File
24. What does URL stand for?
- A) Universal Resource Locator
  - B) Uniform Resource Locator
  - C) Universal Resource Link
  - D) Uniform Resource Link
25. What does CC stand for in an email context?
- A) Carbon Copy
  - B) Copy Content
  - C) Confidential Copy
  - D) Computer Copy
26. What is a computer virus?
- A) A type of computer hardware
  - B) A software program designed to damage or infect computers
  - C) A type of computer network
  - D) A computer accessory
27. How do computer viruses typically spread?
- A) Through physical contact with infected computers
  - B) Via email attachments, downloads, and infected files
  - C) Through wireless networks only
  - D) By overheating the computer's hardware
28. Which of the following is **NOT** a common objective of computer viruses?
- A) Stealing personal data
  - B) Slowing down system performance
  - C) Spreading awareness about online security
  - D) Deleting or corrupting files

(Set - D)

29. Which  
A)  
B)  
C)  
D)

30. Wh  
at  
A)  
B)  
C)  
D)

31. I

32.

33

29. Which of the following is a well-known antivirus software developed by Symantec?

- A) Norton Antivirus
- B) McAfee Antivirus
- C) Avast Antivirus
- D) Avira Antivirus

30. Which feature in antivirus software is designed to protect against malicious websites and online threats?

- A) Firewall
- B) Parental controls
- C) Anti-phishing
- D) System optimization

31. Kiran Baliyan won which medal in which game, at the Asian Games 2023?

- A) Gold, Weight Lifting
- B) Silver, Shot put
- C) Bronze, Shot put
- D) Bronze, weight lifting

32. Who is the military commander of Hamas's military wing during the Israel-Hamas 2023 conflict?

- A) Mohammed Deif
- B) Ismail Haniyeh
- C) Yahya Sinwar
- D) Ayman Nofal

33. Arrobot, which has developed Unmanned Guided Vehicle (UGV) for the Indian armed forces, is

- A) A French company
- B) A Russian startup
- C) A startup incubated by IIT Bombay
- D) A joint-venture startup based in Hyderabad

34. Which of the following passes is located in Jammu and Kashmir Union Territory?

- A) Banihal Pass
- B) Changla Pass
- C) Fotu La Pass
- D) Khardung La Pass

(Set - D)

(7)

[P.T.O.]

35. Which of the following states does not share boundaries with other countries?
- A) Uttar Pradesh
  - B) Nagaland
  - C) Assam
  - D) Jharkhand
36. Which of the following state is smallest in terms of area?
- A) Rajasthan
  - B) Madhya Pradesh
  - C) Maharashtra
  - D) Uttar Pradesh
37. Which of the following is highest milk producing states in India?
- A) Rajasthan
  - B) Gujarat
  - C) Andhra Pradesh
  - D) Punjab
38. Which of the following information is NOT collected during the census in India?
- A) Marital status
  - B) Educational qualification
  - C) Salary per month
  - D) Occupation
39. Last census of India was conducted in
- A) Feb 2011
  - B) March 2014
  - C) Feb 2021
  - D) Feb 2023
40. Which of the following was NOT ruler of Jammu and Kashmir?
- A) Aurangzeb
  - B) Maharaja Ranjit Singh
  - C) Maharaja Gulab Singh
  - D) Queen Victoria

(Set - D)

with other countries?

41. Which one of the following is highest mountain range in Jammu and Kashmir?

- A) Zaskar Range
- B) Nanga Parbat Range
- C) Nur Kun Range
- D) Anamath Mountain

42. Which of the following is largest lake in Jammu and Kashmir with respect to area?

- A) Wular Lake
- B) Dal Lake
- C) Anchar Lake
- D) Ranshi

43. Which of the following is the highest Maize producing state of India?

- A) Rajasthan
- B) Madhya Pradesh
- C) Jammu and Kashmir
- D) Karnataka

44. Which of the following is a district in Jammu and Kashmir Union Territory?

- A) Kargil
- B) Reasi
- C) Gulmarg
- D) Pahalgam

45. Which of the following statement is true regarding sowing of wheat in Jammu and Kashmir and Ladakh?

- A) Wheat is sown in Oct-Nov in Kashmir and in May in Ladakh
- B) Wheat is sown in May in Kashmir and not sown in Ladakh
- C) In both Ladakh and Kashmir, wheat is sown in May
- D) What is not sown in both, Ladakh and Kashmir

46. Which among the following don't come under the purview of Right to Education?

- A) Government Schools
- B) Private Schools
- C) Madrasas
- D) Government schools funded by Private Funds

(Set - D)

(9)

[P.T.O.]

47. Which of the following constitution amendment gave one third reservations to women at panchayat level?
- A) 73<sup>rd</sup>
  - B) 106<sup>th</sup>
  - C) 103<sup>rd</sup>
  - D) 31<sup>st</sup>
48. Which of the following goods is covered under the GST bill?
- A) Cooking gas
  - B) Liquor
  - C) Petrol
  - D) Diamonds
49. A private university named "Kaushal University" is assessable under the income tax act as
- A) A individual
  - B) An artificial juridical person
  - C) A local authority
  - D) None of these
50. Which of the following is NOT the responsibility of a panchayat secretary?
- A) Recording participation and discussion during meetings of panchayat and gram sabha
  - B) Maintains the village funds-collection and disbursal
  - C) Helps in implementation of resolution of panchayat and gram sabha
  - D) Responsible for conducting election and vote counting
51. What is the minimum requirement on the number of meetings to be conducted by gram panchayat in Jammu and Kashmir.
- A) At least once a week
  - B) At least once a month
  - C) At least once in six months
  - D) At least once in a year
52. According to 2011 census, what is average literacy rate in the state of Jammu and Kashmir
- A) Less than 65%
  - B) More than 65% but less than 70%
  - C) More than 70% and less than 75%
  - D) More than 75%



53. In Jammu and Kashmir, maximum number of members in a gram panchayat can be

- A) 7
- B) 11
- C) 15
- D) 21

54. Who among the following made "Bud Musjid" in Kashmir?

- A) Shah Mir
- B) Sultan Sikandar
- C) Aurangzeb
- D) Rinchan

55. Managers set targets and decide \_\_\_\_\_ their organization can achieve them.

- A) What
- B) How
- C) Which
- D) Because

56. What are you \_\_\_\_\_ in the kitchen cupboard?

- A) Looking in
- B) Looking on
- C) Looking to
- D) Looking for

57. "Man proposes, \_\_\_\_\_ disposes". Fill in the blank space in this saying with any one of the following words -

- A) Woman
- B) God
- C) Young girl
- D) Goddess

58. She \_\_\_\_\_ the best apples from the basket.

- A) Choose
- B) Chose
- C) Was chosen
- D) Choosing

- A) Enjoyed ourself  
B) Enjoyed ourselves  
C) Played with  
D) Enjoyed
60. Choose the correctly spelt word
- A) Comittee  
B) Committe  
C) Comitteee  
D) Committee
61. Which one is the correct sentence?
- A) Mumps is common among children.  
B) Mumps are common among children.  
C) Mumps is common between children.  
D) Mumps are common between children.
62. The sergeant asked him to come to the Police station -  
Which one is the correct answer?
- A) Between 4 PM to 5 PM.  
B) Between 4 PM and 5 PM.  
C) Between 4 PM or 5 PM.  
D) Between 4 PM till 5 PM.
63. Which one is the correct sentence ?
- A) He who speaks the truth, everybody loves him.  
B) Everybody loves him who speaks the truth.  
C) Everybody who loves him speaks the truth.  
D) Everybody whom he loves speaks the truth.
64. A great man said, "If you can't fly, then run, if you can't run, then walk, if you can't walk then crawl, but whatever you do, you have to keep \_\_\_\_\_" In this quote, emphasis is on -
- A) Flying.  
B) Running.  
C) Moving.  
D) Crawling.

65. The correct form of the sentence "Did they not know who was he and where did he come from?" will be -
- A) Did they not know who was he and where he came from?
  - B) Did they not know who he was and where did he come from?
  - C) Did they not know who he was and where he came from?
  - D) Did not they know who he was and where he came from?
66. Choose the right word from below to fill in the blank in the following sentence -  
"The President gave \_\_\_\_\_ to the bill."
- A) Accent.
  - B) Ascent.
  - C) Assent.
  - D) Ascend
67. "The wise man advised us not to hate the poor". Replace the word 'hate' in the sentence with one of the following expressions:
- A) Look down.
  - B) Look against.
  - C) Look down upon.
  - D) Look down against.
68. Fill in the blank in the sentence "He studied hard lest he \_\_\_\_\_ fail" with an appropriate preposition from the following -
- A) would
  - B) should
  - C) could
  - D) might.
69. "What you told is Greek to me". In this sentence, the word 'Greek' means -
- A) The language of ancient Greece.
  - B) The language of medieval Greece.
  - C) The language of modern Greece.
  - D) Unknown.
70. Manohar is good \_\_\_\_\_ Cricket.
- A) about
  - B) in
  - C) at
  - D) of
71. Choose the Antonym of the word LOVE.
- A) Affection
  - B) Care
  - C) Like
  - D) Hate

72. Sarmistha is afraid \_\_\_\_\_ spiders.
- A) from
  - B) in
  - C) about
  - D) of
73. "He hardly tried for good luck." In this sentence, the word 'hardly' means -  
Which one is the correct answer?
- A) Almost not.
  - B) Sincerely.
  - C) In a diligent way.
  - D) Very seriously
74. "Where there is a \_\_\_\_\_ there is a way." Fill in the blank space in this sentence with any one of the following words -
- A) Will
  - B) Shall
  - C) Should
  - D) Would
75. "Yesterday Rahim as well as Karim \_\_\_\_\_ present in the meeting." Fill in the blank in this sentence with one of the following -
- A) Has been
  - B) Was
  - C) Had been
  - D) Were
76. The expression "Think out of the box" means -
- A) Come out of the box and then think.
  - B) Think in a conventional manner.
  - C) Think in an innovative manner.
  - D) Think inside the box.
77. Omnivorous animals are those who -
- A) Eat all kinds of food.
  - B) Live on vegetables.
  - C) Live in water
  - D) Live in flocks
78. That he would treat me with this kind of misbehaviour was known to me. This sentence is -
- A) Fully correct
  - B) Partially correct
  - C) Substantially incorrect
  - D) Incorrect

(Set - D)

Questions : (79-87)  
Choose the correct option to replace '?'

79. 8, 20, 36, 56, ?  
A) 80  
B) 100  
C) 64  
D) 24

80. 1, 8, 4, 27, 9, ?  
A) 8  
B) 9  
C) 64  
D) 16

81. 9, 18, 28, 27, 21, 36, 14  
A) 30  
B) 35  
C) 23  
D) 40

82. APZLI, CQYNR, ERXPP, GSWRN, ?  
A) KVBUJ  
B) JUUVK  
C) ITVTL  
D) KUUVJ

83. RAP, MAP, HOT, FUN, ?  
A) HNE  
B) PGI  
C) STN  
D) CAT

84. CWE, FOH, RDI, ?  
A) XBZ  
B) TGU  
C) MCO  
D) FUT

85. Flow : River :: Stagnant : ?  
A) Rain  
B) Stream  
C) Pool  
D) Canal

(Set - D)

86. Rupee : India :: Yen : ?  
 A) Turkey  
 B) America  
 C) Japan  
 D) China

87. Physician : Treatment :: Judge : ?  
 A) Punishment  
 B) Judgement  
 C) Lawyer  
 D) Court

**Questions : (88-90)**

In each of the following questions two statements are given and these statements are followed by two conclusions numbered (1) and (2). You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

88. **Statements:** Some actors are singers. All the singers are dancers.  
**Conclusions:**

1. Some actors are dancers.  
 2. No singer is actor.  
 A) Only (1) conclusion follows  
 B) Only (2) conclusion follows  
 C) Either (1) or (2) follows  
 D) Neither (1) nor (2) follows



89. **Statements:** All the harmoniums are instruments. All the instruments are flutes.  
**Conclusions:**

1. All the flutes are instruments.  
 2. All the harmoniums are flutes.  
 A) Only (1) conclusion follows  
 B) Only (2) conclusion follows  
 C) Either (1) or (2) follows  
 D) Neither (1) nor (2) follows



90. **Statements:** Some mangoes are yellow. Some tixo are mangoes.  
**Conclusions:**

1. Some mangoes are green.  
 2. Tixo is a yellow.  
 A) Only (1) conclusion follows  
 B) Only (2) conclusion follows  
 C) Either (1) or (2) follows  
 D) Neither (1) nor (2) follows



(Set - D)

Questions : (91 and 92)  
 In each question I and II. You have to take the conclusions to be true even if they seem to be at variance from commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows from the two given statements, disregarding commonly known facts.

91. **Statements:** All the bureaucrats are officials.  
**Conclusion:**

1. Government officials are bureaucrats.  
 2. The officials are bureaucrats.  
 A) Only (1) conclusion follows  
 B) Only (2) conclusion follows  
 C) Either (1) or (2) follows  
 D) Both (1) and (2) follow

92. **Statements:** All the scenarios are situations.  
**Conclusion:**

1. The situations are scenarios.  
 2. The scenarios are situations.  
 A) Only (1) conclusion follows  
 B) Only (2) conclusion follows  
 C) Either (1) or (2) follows  
 D) Both (1) and (2) follow

93. **Statements:** All the wells are water.  
**Conclusion:**

1. The water is wells.  
 2. The wells are water.  
 A) Only (1) conclusion follows  
 B) Only (2) conclusion follows  
 C) Either (1) or (2) follows  
 D) Both (1) and (2) follow

(Set - D)

**Questions : (91-93)**

In each question below is given a statement followed by two conclusions numbered I and II. You have to assume everything in the statement to be true, then consider the two conclusions together and decide which of them logically follows beyond a reasonable doubt from the information given in the statement.

87. **Statements:** Government has spoiled many top ranking financial institutions by appointing bureaucrats as Directors of these institutions.

**Conclusions:**

1. Government should appoint Directors of the financial institutes taking into consideration the expertise of the person in the area of finance.
  2. The Director of the financial institute should have expertise commensurate with the financial work carried out by the institute.
- A) Only (1) conclusion follows  
B) Only (2) conclusion follows  
C) Either (1) or (2) follows  
D) Both (1) and (2) follows

92. **Statements:** Population increase coupled with depleting resources is going to be the scenario of many developing countries in days to come.

**Conclusions:**

1. The population of developing countries will not continue to increase in future.
  2. It will be very difficult for the governments of developing countries to provide its people decent quality of life.
- A) Only (1) conclusion follows  
B) Only (2) conclusion follows  
C) Either (1) or (2) follows  
D) Both (1) and (2) follows

93. **Statements:** Prime age school-going children in urban India have now become avid as well as more regular viewers of television, even in households without a TV. As a result there has been an alarming decline in the extent of readership of newspapers.

**Conclusions:**

1. Method of increasing the readership of newspapers should be devised.
  2. A team of experts should be sent to other countries to study the impact of TV on the readership of newspapers.
- A) Only (1) conclusion follows  
B) Only (2) conclusion follows  
C) Either (1) or (2) follows  
D) Neither (1) nor (2) follows

(Set - D)

94. 'Meat' is related to 'Vegetarian' in the same way as 'Alcohol' is related to \_\_\_\_?
- A) Teetotaler
  - B) Smoker
  - C) Water
  - D) Dietician
95. 'Chef' is related to 'Food' in the same way as 'Choreographer' is related to \_\_\_\_?
- A) Stage
  - B) Music
  - C) Dance
  - D) Photography
96. Select the option that is related to the third number in the same way as the second number is related to the first number.  $4 : 8 :: 25 : \underline{\hspace{1cm}} ?$
- A) 100
  - B) 125
  - C) 625
  - D) 75
97. If + means  $\times$ , - means +,  $\times$  means  $\div$  and  $\div$  means  $\times$ , then what will be the value of the following expression.  $18 + 6 - 27 + 3 \times 12 = ?$
- A) 92
  - B) 105
  - C) 95
  - D) 107
98. Introducing a girl, a boy said, "She is the daughter of the mother of the daughter of my aunt." How is the girl related to the boy?
- A) Niece
  - B) Aunt
  - C) Cousin
  - D) Daughter
99. One morning, Manish and Ali were talking to each other face to face at a crossing. If Ali's shadow was exactly to the left of Manish, which direction was Manish facing?
- A) East
  - B) South
  - C) West
  - D) North

(Set - D)

(18)

100. Arrange

1. W
  2. B
  3. S
  4. I
  5. I
  6. I
- A)
  - B)
  - C)
  - D)

101. Arr

- 1.
  - 2.
  - 3.
  - 4.
  - 5.
- A
  - B
  - C
  - D

102. F

103.

(Se



3/12/15 K.S. (15)

100. Arrange the following words in a logical and meaningful order.

- 1. Writing
- 2. Book
- 3. Seller
- 4. Idea
- 5. Feedback
- 6. Reader?

- A) 4, 1, 2, 3, 6, 5
- B) 4, 1, 2, 6, 3, 5
- C) 4, 1, 3, 6, 5, 2
- D) 4, 1, 2, 6, 5, 3

101. Arrange the following in a logical and meaningful order.

- 1. World Cup Semi Final Matches
- 2. World Cup Finals Match
- 3. Organizing the World Cup
- 4. Finalizing the participating teams
- 5. Winner of the World Cup?

- A) 5, 2, 3, 1, 4
- B) 4, 1, 2, 3, 5
- C) 4, 3, 1, 2, 5
- D) 4, 1, 3, 2, 5

102. Kabir left home and ran 20 km towards South, then turned right and ran 10 km. He took rest for ten minutes at the same spot and then again turned right and ran 20 km. After this he turned left and ran 20 km to the cricket ground. How many kilometers will he have to run back to reach his home by shortest route?

- A) 15 km
- B) 20 km
- C) 25 km
- D) 30 km

103. The angles of the quadrilateral are in Ratio 4 : 5 : 10 : 11. The angles are given below:

- A)  $36^\circ, 60^\circ, 108^\circ, 156^\circ$
- B)  $48^\circ, 60^\circ, 120^\circ, 132^\circ$
- C)  $52^\circ, 60^\circ, 122^\circ, 126^\circ$
- D)  $60^\circ, 60^\circ, 120^\circ, 120^\circ$

(Set-D)

104. One fourth of one third of two fifth of a number is 15. What will be 40% of that number?
- A) 120
  - B) 350
  - C) 270
  - D) 180
105. The expression  $86.04/4000$  is equal to
- A) 0.10215
  - B) 0.02151
  - C) 0.15201
  - D) 0.21015
106. A man sells two houses at the rate of Rs. 1.995 lakhs each. On one, he gains 5% and on other he loses 5%. His gain/loss percentage in the whole transaction is
- A) Loss = 0.25%
  - B) Gain = 0.25%
  - C) Loss = 2.5%
  - D) Loss = 25%
107. A has to pay Rs. 220 to B after 1 year. B asks A to pay Rs. 110 in cash and defer the payment of Rs. 110 for 2 years. A agrees to it. If the rate of interest be 10% per annum, in this mode of payment.
- A) There is no gain or loss to any one
  - B) A gains Rs. 7.34
  - C) A loses Rs. 7.34
  - D) A gains Rs. 11
108. Bombay Express left Delhi for Bombay at 14.30 hrs., travelling at a speed of 60km/h and Rajdhani Express left Delhi for Bombay on the same day at 16.30 hrs., travelling at a speed of 80kmph. How far away from Delhi will the two trains meet?
- A) 120km
  - B) 360km
  - C) 480km
  - D) 500km

109. A and B can do piece of work in 72 days; B and C can do it in 120 days, A and C can do it in 90 days. In What time can A alone do it?

- A) 150 days
- B) 120 days
- C) 100 days
- D) 80 days

110. If  $5x^2 - 13xy + 6y^2 = 0$ , then  $x:y$  is :

- A) 5:3 or 1:2
- B) 3:5 or 2:1
- C) 2:1 only
- D) 5:3 only

111. If  $pqr = 1$ , then  $\left[ \frac{1}{1+p+q^{-1}} + \frac{1}{1+q+r^{-1}} + \frac{1}{1+r+p^{-1}} \right] = ?$

- A) 0
- B)  $\frac{1}{pq}$
- C)  $pq$
- D) 1

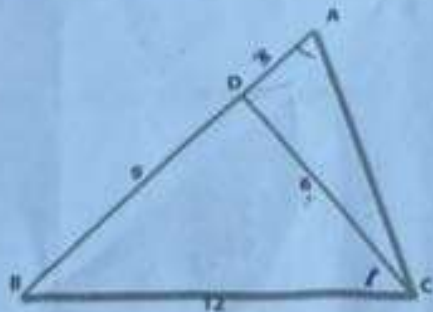
112. A certain sum of money at simple interest amounts to Rs. 1012 in  $\frac{5}{2}$  years and to Rs. 1067.20 in 4 years. The rate of interest per annum is

- A) 2.5%
- B) 3%
- C) 4%
- D) 5%

113. The linear equation  $6x - 12y = 0$  has

- A) Unique solution
- B) Two solutions
- C) Infinite solutions
- D) No solution

114. Consider triangle shown in figure where  $BC=12\text{cm}$ ,  $DB=9\text{cm}$ ,  $CD=6\text{cm}$  and  $\angle BCD = \angle BAC$ .  
What is ratio of perimeter of the triangle ADC to that of triangle BDC.



- A) 7:9  
B) 8:9  
C) 6:9  
D) 5:9
115. A person standing on the bank of river finds that the angle of elevation of the top of a tower on the opposite bank is  $45^\circ$ , then which of the following statement is correct?  
A) Breadth of a river is twice the height of the tower  
B) Breadth of a river and the height of tower are the same  
C) Breadth of a river is half of the height of the tower  
D) Height of a tower is half of the breadth of river
116. If two circles  $(x-1)^2 + (y-3)^2 = r^2$  and  $(x)^2 + (y)^2 + 8x + 2y + 8 = 0$  intersect in two distinct points, then  
A)  $2 < r < 8$   
B)  $r < 2$   
C)  $r=8$   
D)  $r > 2$

117.  $\sqrt{\frac{9.5 \times 0.0085 \times 18.9}{0.0017 \times 1.9 \times 2.1}}$  is equal to

- A) 0.15  
B) 0.5  
C) 15  
D) 250

(Set - D)

(22)

118. Find the length of the common chord of two circles of radii 12 cm and 13 cm respectively.  
A) 12 cm  
B) 24 cm  
C) 26 cm  
D) 28 cm

119. Directions: The pie chart gives Percent. Study the chart and of the family is Rs. 33,650.



- The annual savings in %  
A) 48456  
B) 48540  
C) 44856  
D) 45480

120. Study the patterns:  
 $1 \times 8 + 1 = 9$   
 $12 \times 8 + 2 = 98$   
 $123 \times 8 + 3 = 987$   
 $1234 \times 8 + 4 = 9876$   
 $12345 \times 8 + 5 = 98765$   
Write the answer for  
A) 987653, 987654  
B) 987651, 987652  
C) 987650, 987651  
D) 987654, 987655

(Set - D)

CD=6cm and

118. Find the length of the common tangent of two externally touching circles with radii 16cm and 9cm respectively.

- A) 12 cm
- B) 13 cm
- C) 24 cm
- D) 28 cm



119. Directions: The pie chart given here represents the domestic expenditure of a family in percent. Study the chart and answer the following questions if the total monthly income of the family is Rs. 33,650.



33650

The annual savings in the form of provident fund would be

- A) 48456
- B) 48540
- C) 44856
- D) 45480

120. Study the pattern:

$$1 \times 8 + 1 = 9$$

$$12 \times 8 + 2 = 98$$

$$123 \times 8 + 3 = 987$$

$$1234 \times 8 + 4 = 9876$$

$$12345 \times 8 + 5 = 98765$$

$$123456 \times 8 + 6$$

Write the answer for next two steps

- A) 987653, 9876543
- B) 987651, 9876542
- C) 987650, 9876542
- D) 987654, 9876543