

50/2025

Question Booklet
Alpha Code

A

Question Booklet
Serial Number

Total Number of questions : 100

Time : 1 Hour 15 Minutes

Maximum Marks : 100

INSTRUCTIONS TO CANDIDATES

1. The question paper will be given in the form of a Question Booklet. There will be four versions of question booklets with question booklet Alpha Code viz. A, B, C & D.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the question booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a question booklet where the Alpha Code does not match to the allotted Alpha Code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your question booklet is un-numbered, please get it replaced by new question booklet with same Alpha Code.
6. The question booklet will be sealed at the middle of the right margin. Candidate should not open the question booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the question booklet supplied to him/her contains all the 100 questions in serial order. The question booklet does not have unprinted or torn or missing pages and if so, he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same Alpha Code. This is most important.
8. A blank sheet of paper is attached to the question booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices (A), (B), (C) and (D) having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

A

DO NOT WRITE HERE

1. The last Lodi dynasty ruler of Delhi Sultanate.
(A) Bahlul Lodi
(B) Ibrahim Lodi
(C) Sikandar Lodi
(D) Jalal Khan Lodi
2. Stamp Act and Townshend Act were related to which of the following?
(A) French Revolution
(B) American War of Independence
(C) Russian Revolution
(D) Chinese Revolution
3. Which of the following climate type is common to southern California, central Chile and southern tip of Africa?
(A) Sudan type climate
(B) Temperate continental climate
(C) China type climate
(D) Mediterranean climate
4. Below are the horizons of a mature soil profile. Arrange them in the proper sequence from surface to bed rock. (i) A-Horizon, (ii) O-Horizon, (iii) B-Horizon, (iv) E-Horizon, (v) C-Horizon, (vi) R-Horizon
(A) (ii) – (i) – (iv) – (iii) – (v) – (vi)
(B) (i) – (ii) – (v) – (iii) – (iv) – (vi)
(C) (vi) – (iii) – (iv) – (i) – (v) – (ii)
(D) (iv) – (i) – (ii) – (iii) – (vi) – (v)
5. Among the following, which is the correct answer in national income estimation?
(A) $\text{NNP at Market Price} - \text{Net Indirect Taxes} = \text{NNP at Factor Cost}$
(B) $\text{NNP at Market Price} + \text{Depreciation} = \text{NNP at Factor Cost}$
(C) $\text{GNP at Market Price} - \text{Net Indirect Taxes} = \text{NNP at Factor Cost}$
(D) $\text{GNP at Market Price} - \text{Depreciation} = \text{NNP at Factor Cost}$

6. Among the following, which was the central objective of the 12th Five Year Plan?
- (A) Sustainable development
 - (B) High rate of growth, social justice and self-reliance
 - (C) Growth, modernization, self-reliance and social justice
 - (D) Faster, more inclusive and sustainable growth**
7. Who served as the Chief Guest at the Republic Day celebrations in India in 2025?
- (A) Jair Bolsonaro
 - (B) Emmanuel Macron
 - (C) Prabowo Subianto**
 - (D) Abdel Fattah El-Sisi
8. Consider the following statements regarding the Advisory Jurisdiction of the Supreme Court of India.
1. Section 213(1) of the Government of India Act, 1935 allowed the Federal Court to give advisory opinions to the Governor-General.
 2. The Supreme Court has advisory jurisdiction on matters referred by the President under Article 143 of the Constitution.
 3. The ruling of the Supreme Court is advisory and the President has the option to follow or not follow it.
 4. The Supreme Court may choose to offer or refuse its opinion to the President on disputes arising from pre-Constitution treaties, agreements or covenants.

Select the correct answer using the codes given below:

- (A) 1, 2 and 3**
- (B) 1, 2 and 4
- (C) 1, 3 and 4
- (D) 2, 3 and 4

9. Consider the following statements related to the Declaration of National Emergency in India.
1. The fundamental rights provided in Article 19 are automatically suspended.
 2. Article 358 addresses the suspension of Article 19, while Article 359 pertains to the suspension of other fundamental rights.
 3. Articles 20 and 21 (Right to life and personal liberty) cannot be suspended.
 4. Other rights may be suspended by the President through a separate order issued to that effect.

Which of the statements given above is/are correct?

- (A) 1, 2 and 3
(B) 1, 2 and 4
(C) 1, 3 and 4
(D) All of the above are correct
10. Who is known as the Father of All-India Services?
- (A) Jawaharlal Nehru
(B) Lord Cornwallis
(C) Lord Macaulay
(D) Sardar Vallabhbhai Patel
11. The following are the titles of four famous novels written by M.T. Vasudevan Nair with the names of the central character noted against each. Identify the wrongly paired one among these.
- (A) *Randamoozham* – Bhima
(B) *Asuravithu* – Govindankutty
(C) *Naalukettu* – Kunhunni
(D) *Kaalam* – Sethu
12. Gukesh Dommaraju became the FIDE World Chess Champion in 2024 by defeating which of the following players?
- (A) Magnus Carlsen
(B) Ding Liren
(C) Hikaru Nakamura
(D) Garry Kasparov

13. Which of the following statements about operating system functions is NOT correct?
- (A) Process management in an operating system includes scheduling, execution and termination of processes.
 - (B) Memory management ensures optimal allocation and deallocation of RAM to running processes.
 - (C) The primary function of an operating system is to translate high-level programming code into machine code.
 - (D) An operating system provides an interface between the user and the hardware.
14. Which of the following is NOT an example of a search engine?
- (A) Google
 - (B) Bing
 - (C) Mozilla Firefox
 - (D) Yahoo
15. Which of the following satellite was launched by ISRO to support television broadcasting and weather forecasting services?
- (A) IRNSS-1A
 - (B) GSAT-24
 - (C) INS-1C
 - (D) INS-2TD
16. Identify the singular noun in the below sentence:
The child plays in the park every evening.
- (A) child
 - (B) plays
 - (C) park
 - (D) evening
17. Choose the correct plural form of the word "goose":
- (A) geoses
 - (B) goosies
 - (C) geese
 - (D) goosen

18. Which of the following is an auxiliary verb?
- (A) Run
 - (B) Will**
 - (C) Happy
 - (D) Quickly
19. Identify the past perfect tense in the sentence:
- (A) She finished her work early.
 - (B) He had already left when I arrived.**
 - (C) They are playing football.
 - (D) I will call you later.
20. Which sentence correctly uses a possessive pronoun?
- (A) This book is mine.
 - (B) The cat licks it tail.
 - (C) Hers is a beautiful painting.
 - (D) Both (A) and (C)**
21. Find the correctly spelled word:
- (A) Recieve
 - (B) Definatly
 - (C) Accommodate**
 - (D) Ocassion
22. Identify the countable noun from the list:
- (A) Water
 - (B) Rice
 - (C) Chair**
 - (D) Happiness
23. Choose the correct form of reported speech:
- He said, "I am reading a book".
- (A) He said he is reading a book.
 - (B) He said that he was reading a book.**
 - (C) He said he read a book.
 - (D) He says he was reading a book.

A

24. Select the correct sentence in active voice:

- (A) The letter was written by John.
- (B) The cake was eaten by the children.
- (C) The teacher explains the lesson.
- (D) The door was opened by the guard.

25. Choose the correct phrasal verb to complete the sentence:

The firemen were able to _____ the fire before it spread.

- (A) put up
- (B) put out
- (C) put on
- (D) put down

26. Which sentence contains an adjective?

- (A) She drives carefully.
- (B) The tall building is visible from here.
- (C) He wrote a letter.
- (D) They arrived early.

27. Identify the irregular verb from the options:

- (A) Walk
- (B) Buy
- (C) Laugh
- (D) Talk

28. Choose the correct sentence using a preposition:

- (A) He is waiting since two hours.
- (B) She was angry on me.
- (C) I am interested in learning French.
- (D) They are married with five years.

29. Identify the sentence with a correctly used idiom:
- (A) She hit the roof when she heard the news.
- (B) He pulled my leg literally.
- (C) The exam was a piece of cake, but I failed.
- (D) I am feeling under the sky today.
30. Choose the correctly jumbled sentence:
- (A) Always park the in evening I.
- (B) In the park, I always walk in the evening.
- (C) Evening in I the park walk always.
- (D) Walk in evening always the I park.
31. Which of the following statement is/are true about a journal?
- (i) Journal is the book of prime entry.
- (ii) Journal is prepared to classify business transactions.
- (iii) Business transactions are recorded in the journal only after being recorded in the ledger.
- (A) Only (i)
- (B) Only (ii)
- (C) Only (i & iii)
- (D) Only (ii & iii)
32. "Distribution of goods as samples" is recorded in the books of accounts by
- (i) Debiting 'Purchases Account' and Crediting 'Cash Account'.
- (ii) Debiting 'Advertising Account' and Crediting 'Purchases Account'.
- (iii) Debiting 'Drawings Account' and Crediting 'Purchases Account'.
- (A) Only (i)
- (B) Only (ii)
- (C) Only (iii)
- (D) None of the above

33. Which among the following is/are not an objective of 'Trial Balance'?
- (i) To show the financial position of the business.
 - (ii) To check the correctness of book-keeping work.
 - (iii) To ascertain the profit or loss of the business.
- (A) Only (i)
- (B) Only (i & ii)
- (C) Only (iii)
- (D) Only (i & iii)**
34. Which among the following is the correct statement as regards a Trading Account and a Profit and Loss Account?
- (A) Trading account shows net profit, and profit & loss account shows gross profit.
- (B) Trading account deals with direct expenses & revenue, and the profit & loss account deals with indirect expenses.**
- (C) Trading account shows liabilities, and profit & loss account shows assets.
- (D) None of the above
35. The stock of uninsured goods destroyed by fire is
- (A) Debited to Trading Account and credited to Profit and Loss Account
- (B) Debited to Profit and Loss Account and taken to the Balance Sheet as a liability
- (C) Debited to Trading Account and taken to the Balance Sheet as a liability
- (D) Credited to Trading Account and debited to Profit and Loss Account**
36. The prepaid insurance at the beginning of an accounting year will be adjusted in the books by
- (A) Crediting Insurance Account and debiting Prepaid Insurance Account.
- (B) Debiting Insurance Account and crediting Prepaid Insurance Account.**
- (C) Debiting Profit and Loss Account and crediting Insurance Account.
- (D) None of the above.

37. Which among the following is not a cause of depreciation?
- (A) Continuous usage
 - (B) Obsolescence
 - (C) Market trend
 - (D) Passage of time
38. Choose the correct statement from the following:
- (A) Provisions are charge against profit generally created for meeting a specific liability in future.
 - (B) Provisions are debited to Profit and Loss Appropriation Account.
 - (C) The amount transferred to the General Reserve Account can be deducted from profit for arriving at the taxable profit.
 - (D) General Reserve is taken to the asset side of the Balance Sheet.
39. Which of the following statements about secret reserves is correct?
- (A) Secret reserves are considered unethical as they conceal the true financial position of a company.
 - (B) Accounting standards recommend secret reserves to improve transparency.
 - (C) Secret reserves are disclosed in financial statements under "Other Reserves".
 - (D) Secret reserves are easily identifiable and transparent in financial audits.
40. Choose the most appropriate statement from the following:
Endorsement is
- (A) The process of signing a negotiable instrument.
 - (B) The process of transfer of a negotiable instrument.
 - (C) The process of honouring a negotiable instrument on the due date.
 - (D) The process of signing on the back of a negotiable instrument for negotiation.
41. Which among the following is not a characteristic feature of a Bill of Exchange?
- (A) It is an instrument in writing.
 - (B) It contains an unconditional promise.
 - (C) It is signed by the maker.
 - (D) It directs a certain person to pay a certain sum of money.

A

42. An additional piece of paper attached to a negotiable instrument to provide space for endorsements when the original document has insufficient space is
(A) Allonge
(B) Addendum
(C) Appendix
(D) Annex
43. The expenses associated with procuring and utilizing fuel to power a vessel's engines during maritime operations is
(A) Brokerage
(B) Freight
(C) Bunker Cost
(D) Port Charges
44. Choose the correct statement/s connected to Voyage Accounts from the following:
(i) Primage is the additional freight collected in a voyage, which is credited to the Voyage Account.
(ii) Address Commission is the amount payable to the agents for procuring cargo, which is credited to the Voyage Account.
(iii) Stevedoring Charges are related to loading and unloading cargo and are debited to the Voyage Account.
(iv) Passage Money is collected from the passengers who travel, which is debited to the Voyage Accounts.
(A) Only (i & ii)
(B) Only (ii & iii)
(C) Only (iii & iv)
(D) Only (i & iii)
45. If a voyage is incomplete at the end of the accounting year, how should the freight related to the incomplete voyage be treated?
(A) Credited to Voyage Account and debited to Voyage-in-progress Account.
(B) Debited to Voyage Account and credited to Voyage-in-progress Account.
(C) Debited to Profit & Loss Account.
(D) Ignored while preparing the Voyage Account.

46. In a self-balancing ledger system, the total of the Purchases Ledger Adjustment Account should match with the total of which ledger?
- (A) General Ledger
(B) Sales Ledger
(C) Purchase Ledger
(D) Cash Book
47. Why are self-balancing ledgers useful in large organizations?
- (A) They eliminate errors in transactions
(B) They make it easier to detect errors and fraud
(C) They remove the need for accounting software
(D) They replace financial statements
48. Statement 1 : Errors in a self-balancing ledger can be identified quickly.
Statement 2 : A separate trial balance is prepared for each ledger, making error detection easier.
- (A) Statement 1 is Correct, Statement 2 is False
(B) Statement 1 is False, Statement 2 is Correct
(C) Both Statements are Correct
(D) Both Statements are False
49. Match Transactions with Accounting Treatment.

	Transactions		Accounting Treatment
1	Purchase of Land	A	Charged to P/L account
2	Cost of installing new machinery	B	Capitalized in the Balance Sheet
3	Advisement of cost of new brand	C	Added to Asset cost
4	Repairing of machinery	D	Treat as Deferred Revenue Expenditure

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

50. Statement 1 : Capital expenditure is treated as a long-term investment and is charged as an expense in the Profit & Loss Account.
Statement 2 : Revenue expenditure is treated as long term investment and is charged as expense in the Profit & Loss Account.
- (A) Statement 1 is Correct, Statement 2 is False
(B) Statement 1 is False, Statement 2 is Correct
(C) Both Statements are Correct
(D) Both Statements are False
51. Which statement is true about the Receipts & Payments Account and Income & Expenditure Account?
- (A) Both are prepared on an accrual basis
(B) Both include only revenue items
(C) Receipts & Payments Account records cash transactions, while Income & Expenditure Account records accrual transactions
(D) Both are used to determine surplus or deficit
52. The formula for calculating cost of production is
- (A) Prime Cost + Office & Administration Overheads
(B) Prime Cost + Factory Overheads
(C) Factory Cost + Selling & Distribution Overheads
(D) Factory Cost + Office & Administration Overheads
53. If the selling price per unit is ₹200 and the total cost per unit is ₹160, then what is the profit percentage on cost?
- (A) 20%
(B) 25%
(C) 40%
(D) 50%
54. Which of the following statements is correct?
- (A) Prime cost includes all direct and indirect costs
(B) Factory cost is also known as cost of goods manufactured
(C) Selling overheads are added to cost of production to get factory cost
(D) Financial charges are included in a cost sheet

55. If a worker under the Rowan Plan saves 4 hours on a job, which was allowed 10 hours and the hourly wage rate is ₹60, then what will be the worker's total earnings?
- (A) ₹600
(B) ₹720
(C) ₹840
(D) ₹900
56. Total factory overheads are ₹1,20,000. If direct wages are ₹80,000 and factory overheads are absorbed based on a percentage of direct wages, then what is the overhead absorption rate?
- (A) 50%
(B) 100%
(C) 150%
(D) 75%
57. A contract has a total cost of ₹7,50,000 and the total contract price is ₹10,00,000. The contractor receives 75% of work certified which is ₹7,50,000. What is the retention money?
- (A) ₹5,62,500
(B) ₹1,87,500
(C) ₹2,50,000
(D) ₹3,00,000
58. Which financial statement in the Double Account System provides details of the fixed assets and how they were financed?
- (A) Capital Account
(B) General Balance Sheet
(C) Profit & Loss Account
(D) Cash Flow Statement
59. Which of the following is NOT a limitation of the Double Account System?
- (A) Complexity in preparation
(B) Difficulty in determining true profitability
(C) It does not provide separate treatment for capital and revenue items
(D) Not suitable for all types of businesses

A

60. Which of the following is NOT a limitation of the Double Account System?
- (A) It is complex and time-consuming
 - (B) It does not provide a true financial position
 - (C) It is difficult to apply in non-utility sectors
 - (D) It allows easy comparison of financial performance
61. What is the least number which when divided by 8, 9, 12, 15 leaves remainder as 1 in each case?
- (A) 181
 - (B) 359
 - (C) 179
 - (D) 361
62. Find the sum of the factors of 3240.
- (A) 10890
 - (B) 11000
 - (C) 10800
 - (D) 10190
63. The graph of a polynomial intersects the Y-axis at one point and the X-axis at two points. The number of zeros of this polynomial are
- (A) 1
 - (B) 2
 - (C) 3
 - (D) 4
64. If the sum of zeros of the quadratic polynomial $3x^2 - kx + 6$ is 3, then the value of k is
- (A) 4
 - (B) 5
 - (C) 7
 - (D) 9

65. If α and β are the roots of the quadratic equation $x^2 - x - 1 = 0$, then the equation whose roots are $\frac{\alpha}{\beta}$ and $\frac{\beta}{\alpha}$ is
- (A) $x^2 + 3x - 1 = 0$
- (B) $x^2 + x - 1 = 0$
- (C) $x^2 - x + 1 = 0$
- (D) $x^2 + 3x + 1 = 0$
66. The nature of the roots of quadratic equation $(x + 12)(x + 6) = 4^2$. Satisfy the following.
- (A) Both roots are irrational
- (B) Both roots are negative and rational
- (C) One of the roots is positive and the other is negative
- (D) None of the above
67. When the equation is multiplied or divided by same non-zero number on both sides, the solution of the equation
- (A) Remains the same
- (B) Increases
- (C) Changes when multiplied only
- (D) Changes when divided only
68. The cost of 2 tables and 4 chairs is Rs. 16,000 while the cost of one table is equal to the cost of 6 chairs. Find the cost of 9 chairs.
- (A) 9000
- (B) 12000
- (C) 6000
- (D) None of the above
69. $2 \times 3 \times 7$ is the prime factorization of a particular number. Which among the following is the square of that number?
- (A) 1664
- (B) 1864
- (C) 1764
- (D) 1964

70. What should come in the place of question mark $\frac{90}{?} = \left(\sqrt{\frac{64}{729}} \right)^{-\frac{1}{3}}$
- (A) 45 (B) 30
(C) 60 (D) 90
71. S_n denotes the sum of first n terms of an AP. If $S_{40} = 1030$ and $S_{12} = 57$, then $S_{30} - S_{10}$ is equal to
- (A) 510
(B) 515
(C) 525
(D) 505
72. The sum of first three terms of an AP is 30 and sum of the last three terms is 36. If the first term is 9, then the number of terms is
- (A) 10 (B) 6
(C) 13 (D) 5
73. A trader mixes 26 Kg of rice at Rs. 20 per Kg with 30 Kg of rice of other variety at Rs. 36 per Kg and sells the mixture at Rs. 30 per Kg. His profit percentage is
- (A) No profit, No loss
(B) 5%
(C) 8%
(D) 10%
74. The percentage profit earned by selling an article for Rs.1920 is equal to the percentage loss incurred by selling the same article for Rs.1280. At what price should the article be sold to make 25% profit?
- (A) 2000
(B) 2200
(C) 2400
(D) 2600
75. $u : v = 4 : 7$ and $v : w = 9 : 7$. If $u = 72$, then what is the value of w ?
- (A) 98 (B) 77
(C) 63 (D) 49

76. The ratio of Rahul's and Remya's present age is 9:10. After 4 years, the ratio of their ages becomes 11:12. What is Rahul's present age?
- (A) 27 yrs
(B) 20 yrs
(C) 18 yrs
(D) 16 yrs
77. Two numbers are less than a third number by 30% and 37% respectively. How much percent is the second number less than the first?
- (A) 7%
(B) 10%
(C) 4%
(D) 3%
78. A number is first decreased by 20% and then increased by 15%. The number so obtained is 64 less than the original number. The original number is
- (A) 700
(B) 800
(C) 850
(D) 600
79. The difference of compound interest and simple interest on a principal amount for two years at 4% per annum is Rs.20. The principal is
- (A) Rs.13,000
(B) Rs.13,500
(C) Rs.12,000
(D) Rs.12,500
80. A man borrowed some money and agreed to pay off by paying Rs.3150 at the end of first year and Rs.4410 at the end of second year. If the rate of compound interest is 5% per annum, then the amount borrowed is
- (A) 7000
(B) 5000
(C) 6500
(D) 9200

A

81. If A_n is the set of first n prime numbers, then the number of elements in $\bigcup_{n=2}^5 A_n$ is
(A) 2 (B) 3
(C) 4 (D) 5
82. If $A = \{(x, y) ; x^2 + y^2 \leq 1, x, y \in \mathbb{R}\}$ and $B = \{(x, y) ; x^2 + y^2 \leq 4, x, y \in \mathbb{R}\}$, then
(A) $A - B = \phi$
(B) $B - A = \phi$
(C) $A - B = A$
(D) $B - A = B$
83. The mean of the first n odd natural number is $\frac{n^2}{125}$, the value of n is
(A) 125
(B) 50
(C) 25
(D) 5
84. The arithmetic mean of 12 observations is 20. If two observations 15 and 25 are removed, then the arithmetic mean of the remaining observations is
(A) 18 (B) 20
(C) 22 (D) 24
85. If the centroid of a triangle with vertices $(1, x)$, $(2, y)$ and $(x + y, 2)$ lies on x -axis, then
(A) $x + y = 1$
(B) $x + y = -1$
(C) $x + y = 2$
(D) $x + y = -2$
86. Bisectors of the angle between the lines $|x| = |y|$ is/are
(A) $y = x, x = -y$
(B) $y = \frac{1}{2}, x = \frac{1}{2}$
(C) $y = 0, x = 0$
(D) None of these

87. Two hills are of same height. The distance between top of these hills is $\sqrt{675}$ meter. A tower of height 15 meter is situated on the top of one of these hills. Then the angle of elevation from the top of other hill to the top of the tower is
- (A) 30° (B) 45°
(C) 60° (D) 90°
88. The minimum and maximum values of $6 \sin x \cos x + 4 \cos 2x$ are respectively,
- (A) 5, -5 (B) -5, 5
(C) 3, 2 (D) -3, 2
89. Which of the following is not true?
- (A) diagonals of a parallelogram bisect each other
(B) diagonals of a rhombus bisect each other at right angles
(C) a quadrilateral is a parallelogram if the opposite sides are equal
(D) a quadrilateral will be a parallelogram if the two diagonals bisect each other at right angles
90. ABC and BDE are two equilateral triangles such that D is mid-point of BC. Ratio of the areas of triangles ABC to BDE is
- (A) 2 : 1 (B) 1 : 2
(C) 4 : 1 (D) 1 : 4
91. The least number of square tiles required to pave the floor of a room, 15 meter 17 centimetre long and 9 meter 2 centimetre broad is
- (A) 814 (B) 820
(C) 840 (D) 844
92. The volume of two spheres are in the ratio 64 : 27. If the sum of their radii is 7, then the difference of their surface area is $\left(\pi \approx \frac{22}{7}\right)$
- (A) 44 sq.cm
(B) 88 sq.cm
(C) 22 sq.cm
(D) 176 sq.cm

A

93. A red light flashes 3 times per minute and a green light flashes 5 times in two minutes at regular intervals. If both lights start flashing at the same time, then how many times do they flash together within half an hour?
- (A) 15 (B) 30
(C) 45 (D) 60
94. A man makes a trip by automobile at an average speed of 60 km/hr. He returns over the same route at an average speed of 48 km/hr. His average speed for the entire trip is
- (A) $51\frac{1}{3}$ (B) $53\frac{1}{3}$
(C) $56\frac{1}{3}$ (D) $58\frac{1}{3}$
95. The difference between simple interest and compound interest on Rs.1200 for one year at 10% per annum reckoned half-yearly is
- (A) 2 (B) 3
(C) 4 (D) 5
96. If selling price is doubled, the profit triples. Then the profit percent is
- (A) 25% (B) 50%
(C) 75% (D) 100%
97. Two equal circles in the same plane cannot have the following number of common tangents
- (A) 1 (B) 2
(C) 3 (D) 4
98. The radius of the first circle is 1 cm, that of the second is $\frac{1}{2}$ cm, that of the third is $\frac{1}{4}$ cm and so on indefinitely. The sum of the areas of the circles is
- (A) $\frac{4\pi}{3}$ (B) $\frac{5\pi}{3}$
(C) 2π (D) $\frac{7\pi}{3}$

99. The sides of a right triangle are a , $a + d$ and $a + 2d$ with a and d are positive. The ratio of a to d is
- (A) 3 : 1
(B) 1 : 3
(C) 2 : 3
(D) 3 : 2
100. The sides of a rectangle not a square are whole numbers. What must be their length such that the perimeter of the rectangle is numerically equal to the area?
- (A) 5, 4
(B) 7, 2
(C) 3, 9
(D) 6, 3



SPACE FOR ROUGH WORK

