

**DO NOT BREAK THE SEAL OF THE BOOKLET UNTIL YOU ARE TOLD TO DO SO**

**SERIES : I**

**QUESTION BOOKLET**

**Subjects : General English, General Knowledge & Aptitude and Arithmetic**

**Full Marks : 300**

**Time Allowed : 2½ Hours**

*Read the following instructions carefully before you begin to answer the questions.*

**INSTRUCTIONS TO CANDIDATES**

1. This Booklet contains **150 questions** to be answered in a separate OMR Answer Sheet using Black Ballpoint Pen in the following three Parts :  

<b>Part—A</b>	<b>: General English</b>	<b>: 50 questions</b>
<b>Part—B</b>	<b>: General Knowledge and Aptitude</b>	<b>: 50 questions</b>
<b>Part—C</b>	<b>: Arithmetic</b>	<b>: 50 questions</b>

2. All questions are compulsory.
3. You will be supplied the Answer Sheet separately by the Invigilator. You must complete the details of particulars asked for.
4. Answer must be shown by completely blackening the corresponding circle in the Answer Sheet against the relevant question number by Black Ballpoint Pen. OMR Answer Sheet without marking Series shall not be evaluated.

**Example :**

Suppose the following question is asked :

**The Capital of Meghalaya is**

- (A) Guwahati
- (B) Kohima
- (C) Shillong
- (D) Delhi

You will have four alternatives in the Answer Sheet for your response corresponding to each question of the Question Booklet as below :

Ⓐ Ⓑ Ⓒ Ⓓ

In the above illustration, if your chosen response is alternative (C), i.e., Shillong, then the same should be marked on the Answer Sheet by blackening the relevant circle with a Black Ballpoint Pen only as below :

Ⓐ Ⓑ ● Ⓓ

**The example shown above is the only correct method of answering.**

5. Answer the questions as quickly and as carefully as you can. Some questions may be difficult and others easy. Do not spend too much time on any one question.
6. There will NOT be any negative marking for wrong answers.
7. The Answer Sheet must be handed over to the Invigilator before you leave the Examination Hall.
8. No Rough Work is to be done on the Answer Sheet. Space for Rough Work has been provided in the Question Booklet.

## PART—A : GENERAL ENGLISH

( Marks : 100 )

Each question carries 2 marks :

**Directions (Q. Nos. 1-5) :** Read the following passage and answer the questions by selecting the answer choice from the alternatives given. Mark the correct answer in your answer-sheet.

For generations, companies have been selling fair skin to young Indian women, promising better marriage and employment prospects. However, over the last few years, men have become a favoured target audience. This followed the realization that the Indian alpha male, denied a choice in male-specific grooming products, had been using women's fairness creams all along. Until the mid-2000s, deodorants and shaving creams were the only grooming products advertised for men. But India's largest consumer goods companies sensed an opportunity, and launched a slew of fairness products for male consumers.

In India, as in other parts of the world, light skin is the culturally accepted and endorsed form of beauty, and children absorb this message at a young age. According to a 2015 research report by Nielsen, urban Indian men believe that fair skin can improve professional prospects. The cultural pressure to look fair, argues Kiran Khalap, branding expert and founder at communications consultancy Chlorophyll, is something inherent in our society, not manufactured by companies. "And it is certainly not restricted to India : China and Japan have had skin-whitening products for centuries, well before they met Western 'white' people," he said. However, there is a growing awareness among consumers that companies are exploiting their insecurities, and critics have taken some of the biggest fairness brands, and the celebrities who endorse them, to task for their casual discrimination.

Earlier this month, Bollywood actor Abhay Deol took to Facebook to trounce his fellow actors who earn millions from endorsing

fairness creams. This comes a few years after actress Nandita Das launched the "Dark is Beautiful" campaign to encourage Indians to embrace a wider definition of beauty. These efforts are slowly making a difference, increasing awareness and encouraging consumers to take pride in their natural skin tones. That means Indian companies will eventually have to change their approach. "My sense is that brands will wake up to the new reality, and you will see propositions reworked around clearer skin (and) glow, rather than pure fairness," Leo Burnett's Sinha said.

Rajesh Krishnamurthy, business head for the consumer product division at The Himalaya Drug Company, believes that over time the men's grooming category will evolve to include a wider range of products, including those for normal skin, just like in the women's skin care category. "Companies are increasingly realizing that you cannot continue to bullshit consumers anymore; these are educated young men who will question what you sell to them," said Shantanu Deshpande, co-founder and CEO of the male-grooming startup Bombay Shaving Company.

1. What is the central idea of the passage?
  - (A) Though people endorsed skin fairness products, they are now realizing that they are being taken for a ride by such products
  - (B) Only men ardently use whitening creams to boost their personality
  - (C) The brand marketing of fairness product companies is evolving to appease the target audience of India
  - (D) Brands are frivolous when it comes to campaigning of their beauty products

2. What were the findings of the 2015 Research Report by Nielsen?

- (A) Indian urban men would eventually question the logic behind male-grooming product advertisements
- (B) Indian urban men believed that being fair would give them better marriage and employment contracts
- (C) Indian urban men presumed that being fair enhanced their professional opportunities
- (D) Indian urban men do not endorse the concept of fairness helping them in their personal and professional life

3. What is the tone of the passage?

- (A) Didactic (B) Skeptical
- (C) Satirical (D) Descriptive

4. With reference to the passage, why exactly was "Dark is Beautiful" campaign initiated?

- (A) To motivate Indians to ditch their liking for the fair skin and accept their inherent beauty
- (B) To throw light on the sinister intentions of fairness brands
- (C) To make sure that Indians do not fall prey to misleading beauty product advertisements
- (D) To encourage Indians to be sympathetic towards people with other skin tones

5. Choose a similar word in meaning to the word 'trounce'.

- (A) Wavering (B) Impudence
- (C) Attack (D) Despicable

**Directions (Q. Nos. 6–10) : From the given alternatives choose the best alternative which expresses the closest meaning of the following idioms/phrases. Mark the correct answer in your answer-sheet.**

6. By leaps and bounds

- (A) Very slow (B) Very fast
- (C) In detail (D) Aimlessly

7. At daggers drawn

- (A) Real cause (B) To be puzzled
- (C) At enmity (D) At friendship

8. A tough nut to crack

- (A) Expensive thing
- (B) A difficult problem
- (C) A foolish search
- (D) An easy question

9. All and Sundry

- (A) Everybody without distinction
- (B) Only rich persons
- (C) Together
- (D) Selected people

10. To come clean

- (A) Cleaning a place
- (B) No idea about an incident
- (C) To deny the crime
- (D) To make an honest disclosure

**Directions (Q. Nos. 11–15) : In the following questions, out of the four alternatives, select one which is the best substitute of the given words/phrases. Mark the correct answer in your answer-sheet.**

11. A person living permanently in a certain place

- (A) Resident (B) Native
- (C) Domicile (D) Subject

12. Mania for stealing articles

- (A) Hypomania (B) Kleptomania
- (C) Logomania (D) Stelomania

13. Living for years and years  
 (A) Perennial (B) Permanent  
 (C) Annual (D) Continuous
14. The absence of government  
 (A) Misrule (B) Unruly  
 (C) Chaos (D) Anarchy
15. The murder of a man  
 (A) Genocide (B) Homicide  
 (C) Fratricide (D) Regicide

**Directions (Q. Nos. 16–20) : In the following questions, choose a word that is opposite in meaning with the given word from among the given alternatives. Mark the correct answer in your answer-sheet.**

16. Embrace  
 (A) Disobey (B) Reject  
 (C) Contradict (D) Obscure
17. Subversion  
 (A) Destabilization  
 (B) Clarity  
 (C) Compliance  
 (D) Sanity
18. Exodus  
 (A) Departure (B) Typical  
 (C) Normal (D) Stay
19. Provoke  
 (A) Insult (B) Anger  
 (C) Encourage (D) Soothe
20. Boon  
 (A) Prodigy (B) Advantage  
 (C) Hindrance (D) Annihilation

**Directions (Q. Nos. 21–25) : In the following questions, choose a word that is most similar in meaning with the given word from among the given alternatives. Mark the correct answer in your answer-sheet.**

21. Recuperate  
 (A) Rehabilitate (B) Recover  
 (C) Reimburse (D) Relocate

22. Prohibit  
 (A) Prescribe (B) Forfeit  
 (C) Forbid (D) Provide
23. Stupid  
 (A) Rude (B) Obstinate  
 (C) Illiterate (D) Dull
24. Synopsis  
 (A) Index (B) Mixture  
 (C) Summary (D) Puzzle
25. See  
 (A) Observe (B) Talk  
 (C) Stand (D) Look

**Directions (Q. Nos. 26–30) : In the following questions, a sentence is given in Direct/Indirect speech. Out of the four alternatives suggested, choose the one which best expresses the same sentence in Indirect/Direct speech. Mark the correct answer in your answer-sheet.**

26. He said to his father, "Please increase my pocket money."  
 (A) He told his father, "Please increase the pocket money."  
 (B) He pleaded his father to please increase my pocket money.  
 (C) He requested his father to increase his pocket money.  
 (D) He asked his father to increase his pocket money.
27. She said that her brother is getting married.  
 (A) She said, "Her brother is getting married."  
 (B) She said, "My brother is getting married."  
 (C) She told, "Her brother is getting married."  
 (D) He said, "My brother was getting married."

28. The boy said, "Who dared call me a thief?"
- (A) The boy enquired who dared call him a thief.  
 (B) The boy asked who called him a thief.  
 (C) The boy told that who dared call him a thief.  
 (D) The boy wondered who dared call a thief.
29. Nita ordered her servant to bring her a cup of tea.
- (A) Nita told her servant, "Bring a cup of tea."  
 (B) Nita said, "Bring me a cup of tea."  
 (C) Nita said to her servant, "Bring me a cup of tea."  
 (D) Nita told her servant, "Bring her that cup of tea."
30. "Please don't go away", she said.
- (A) She said to please her and not go away.  
 (B) She told me to go away.  
 (C) She begged that I not go away.  
 (D) She begged me not to go away.

**Directions (Q. Nos. 31-35) :** In the following questions, some sentences have errors and some do not. The underlined words are the key words where you can identify whether the sentence is erroneous or not. From the given set of choices, choose the correct alternative for the identified errors. Where there is no error, choose the specified option (D). Mark the correct answer in your answer-sheet.

31. After the winter break, most educational institutions will open in February.
- (A) begin (B) reopen  
 (C) start (D) No error
32. The river flowed smoothly underneath the bridge.
- (A) above (B) across  
 (C) on (D) No error

33. The flight from Delhi did not arrive right in schedule.
- (A) on (B) by  
 (C) over (D) No error
34. The racehorses jumped by the fences.
- (A) above (B) under  
 (C) over (D) No error
35. I am preparing for the examination since the last two months.
- (A) was (B) have been  
 (C) have (D) No error

**Directions (Q. Nos. 36-40) :** In the following questions, there are jumbled up sentence parts. Rearrange these parts, which are labeled I, II, III and IV to produce the correct sentence where the underlined part is fixed. Choose the correct sequence from the given set of alternatives. Mark the correct answer in your answer-sheet.

36. Since independence, (I) on the necessity of (II) application of Uniform Civil Code (III) we have been debating (IV) for all citizens
- (A) I-II-III-IV (B) III-I-II-IV  
 (C) I-III-II-IV (D) III-I-IV-II
37. The ruling party (I) for power than by sincere desire (II) in a democracy is obviously (III) to serve the people in a real sense (IV) guided more by lust
- (A) II-IV-I-III (B) IV-II-III-I  
 (C) II-IV-III-I (D) I-II-III-IV
38. A world without Science (I) we would still be living (II) to that of what we live today (III) would mean that (IV) in a very different way
- (A) II-III-IV-I (B) III-I-II-IV  
 (C) II-III-I-IV (D) III-I-IV-II

39. It is (I) is received, understood and (II) to make sure his message (III) acted upon in the manner he intends (IV) the communicator's responsibility

- (A) I-III-II-IV (B) III-IV-I-II  
(C) IV-II-I-III (D) II-IV-I-III

40. The Indian Constitution (I) as a basis of (II) and the State Legislative Assemblies (III) adopts universal adult franchise (IV) elections to the Lok Sabha

- (A) I-IV-II-III (B) III-I-II-IV  
(C) I-III-II-IV (D) III-I-IV-II

**Directions (Q. Nos. 41-45) : In the following cloze passage, there are blank spaces which are numbered. Against each number, choose the most appropriate alternative from the set of given alternatives. Mark the correct answer in your answer-sheet.**

In all compositions, simplicity is the most 41 virtue. You should write in a simple and 42 manner. The choice of words should be selective. Try not to use 43 words merely because they are literary. It is no longer 44 to stuff your composition with too many quotations or proverbs especially if their relevance is 45.

41. (A) described  
(B) admired  
(C) depicted  
(D) hidden

42. (A) beautiful  
(B) ornamental  
(C) straightforward  
(D) showy

43. (A) difficult  
(B) short  
(C) grammar  
(D) poetry

44. (A) fashionable  
(B) common  
(C) simple  
(D) uncommon

45. (A) doubtless  
(B) distinct  
(C) clear  
(D) doubtful

**Directions (Q. Nos. 46-50) : In the following questions, the sentences have blank spaces followed by four alternative answers. Choose the correct grammatical alternative from the given choices. Mark the correct answer in your answer-sheet.**

46. \_\_\_\_\_ there are so many things that we have to discuss.

- (A) Between you and I  
(B) Between me and you  
(C) Between I and you  
(D) Between you and me

47. The Governor of the State said that it \_\_\_\_\_ him great pleasure to be gracing the occasion.

- (A) gives (B) gave  
(C) is giving (D) was giving

48. \_\_\_\_\_ have been to the cricket match.

- (A) Neither Meban nor me  
(B) Neither I nor Meban  
(C) Neither Meban nor I  
(D) Neither me nor Meban

49. Samanbha \_\_\_\_\_ across the field one afternoon, when she heard a little boy singing.

- (A) is strolling (B) has strolled  
(C) strolled (D) was strolling

50. Larisa, who \_\_\_\_\_ chosen for the debate competition, is a clever girl.

- (A) have (B) has  
(C) was (D) were

## PART—B : GENERAL KNOWLEDGE AND APTITUDE

( Marks : 100 )

Each question carries 2 marks :

51. Who was the last king of the Mughal Empire in India?  
(A) Aurangzeb  
(B) Shah Alam  
(C) Ahmad Shah Bahadur  
(D) Bahadur Shah II
52. When did Russia officially invade Ukraine?  
(A) 24th February, 2022  
(B) 21st January, 2022  
(C) 23rd March, 2022  
(D) 19th March, 2022
53. Which company launched ChatGPT?  
(A) Microsoft (B) OpenAI  
(C) SnapAI (D) Tesla
54. Mount K2 is also known by which other name?  
(A) Mount Godwin Austen  
(B) Mount Nanga Parbat  
(C) Mount Kailash  
(D) Mount Kanchenjunga
55. What is the chemical name of baking powder?  
(A) Sodium chloride  
(B) Calcium carbonate  
(C) Sodium bicarbonate  
(D) Calcium hypochlorite
56. Which player has the highest number of runs in Indian Premiere League history as of 2023?  
(A) Chris Gayle  
(B) David Warner  
(C) AB de Villiers  
(D) Virat Kohli
57. Who won the Golden Boot in the FIFA World Cup 2022?  
(A) Kylian Mbappe  
(B) Lionel Messi  
(C) Cristiano Ronaldo  
(D) Harry Kane
58. Which country has won the most number of world cup titles in Field Hockey?  
(A) Netherlands  
(B) Pakistan  
(C) India  
(D) Germany
59. Which of the following is provided under Articles 244(2) and 275(1) of the Indian Constitution?  
(A) Freedom of expression  
(B) Protection of life  
(C) Right to education  
(D) The Sixth Schedule
60. Which Act in India provides for the establishment of National Parks?  
(A) The Indian Forest Act, 1927  
(B) The Wildlife Protection Act, 1972  
(C) The Biodiversity Act, 2002  
(D) The Environment Protection Act, 1986
61. Who was the first ever indigenous female Chief Secretary of Meghalaya?  
(A) Rebecca V. Suchiang  
(B) Rosetta M. Kurbah  
(C) Rosemary Bathew  
(D) Isawanda Laloo
62. What is the process by which the structure of a biological community evolves over time called?  
(A) Ecological succession  
(B) Ecosystem colonization  
(C) Ecological movement  
(D) Ecological invasion

63. What is the State tree of Meghalaya?  
 (A) *Pinus kesiya*  
 (B) *Shorea robusta*  
 (C) *Gmelina arborea*  
 (D) *Tectona grandis*
64. Who is known as the 'father of Economics'?  
 (A) Thomas Robert Malthus  
 (B) Francois Quesnay  
 (C) David Ricardo  
 (D) Adam Smith
65. What does the idiom 'when pigs fly' mean?  
 (A) Something that will never happen  
 (B) Something common  
 (C) Something will likely happen  
 (D) Something about to happen
66. Which of the following differentiates between velocity and speed?  
 (A) Time  
 (B) Direction  
 (C) Rate  
 (D) None of the above
67. What programme of the Government of India works to attain Universal Elementary Education?  
 (A) Pradhan Mantri Awas Yojana  
 (B) Sarva Vikash Abhiyan  
 (C) Rashtriya Uchchattar Shiksha Abhiyan  
 (D) Sarva Shiksha Abhiyan
68. Which country is the largest producer of sugar?  
 (A) India  
 (B) Brazil  
 (C) United States of America  
 (D) China
69. What is the current Syiem (King) of Hima Myllem in Meghalaya?  
 (A) Pa'iem Bor Manik Syiem  
 (B) Pa'iem Pynshai Manik Syiem  
 (C) Pa'iem Ainam Manik Syiem  
 (D) Pa'iem Synshar Manik Syiem
70. Which is the largest Naval Vessel of India?  
 (A) INS Vagir (B) INS Vikrant  
 (C) INS Vela (D) INS Karanj
71. Which of the following is **not** a computer operating system?  
 (A) Windows (B) Linux  
 (C) Google (D) Ubuntu
72. Which command is used to select the whole document in MS-Word?  
 (A) Ctrl+A (B) Ctrl+C  
 (C) Ctrl+V (D) Ctrl+X
73. In terms of accounting, debts which are to be paid in a year or less are called  
 (A) contingent liabilities  
 (B) fixed liabilities  
 (C) current liabilities  
 (D) All of the above
74. 'Science of Society is possible' is assumed by which approach?  
 (A) Humanist  
 (B) Positivist  
 (C) Functionalist  
 (D) Feminist
75. How many member States are currently part of the World Trade Organization?  
 (A) 175 (B) 128  
 (C) 164 (D) 156

76. A 360 m long train is running at a speed of 45 km/h. In what time will it pass a 140 m long bridge?  
 (A) 45 sec (B) 48 sec  
 (C) 40 sec (D) 52 sec
77. A 132 m long train passes an electric pole in 6 seconds. What speed is the train travelling at?  
 (A) 79.2 km/h  
 (B) 84.5 km/h  
 (C) 76.8 km/h  
 (D) 82 km/h
78. If 8 men can reap 80 hectares in 24 days, then how many hectares can 36 men reap in 30 days?  
 (A) 480 (B) 460  
 (C) 470 (D) 450
79. A and B can complete a work together in 4 days. If A alone can complete the same work in 12 days, then in how many days can B alone complete the work?  
 (A) 7 (B) 6  
 (C) 8 (D) 10
80. The product of the ages of Jack and Jill is 240. If twice the age of Jack is more than Jill's age by 4 years, what is Jack's age?  
 (A) 15 (B) 12  
 (C) 18 (D) 16
81. The sum of present ages of a father and his son is 60 years. 6 years ago, father's age was 5 times the age of the son. After 6 years what will be the son's age?  
 (A) 25 (B) 28  
 (C) 20 (D) 29
82. Find the missing number from the following series :  
 5, 10, 17, 26, 37, ?  
 (A) 46 (B) 50  
 (C) 52 (D) 48
83. A man divides ₹ 8,600 among 5 sons, 4 daughters and 2 nephews. If each daughter receives 4 times as much as each nephew, and each son receives 5 times as much as each nephew, how much does each daughter receive?  
 (A) ₹ 200 (B) ₹ 750  
 (C) ₹ 350 (D) ₹ 800
84. How many pieces of 85 cm length can be cut from a rod of 42.5 m long?  
 (A) 50 (B) 60  
 (C) 40 (D) 30
85. The average monthly salary of A and B is ₹ 5,050. The average monthly salary of B and C is ₹ 6,250 and the average monthly salary of A and C is ₹ 5,200. What is the monthly income of A?  
 (A) ₹ 3,400 (B) ₹ 4,500  
 (C) ₹ 4,000 (D) ₹ 4,250
86. If  $a$  and  $b$  are odd numbers, then which of the following is even?  
 (A)  $a + b$  (B)  $a + b + 1$   
 (C)  $a - b$  (D)  $ab + 2$
87. Two numbers are in the ratio 3 : 5. If 9 is subtracted from each, the new numbers are in the ratio 12 : 23. The smaller number is  
 (A) 35 (B) 33  
 (C) 45 (D) 32
88. The price of petrol rose by 25%. By how much percent must a person reduce his consumption so that the expenditure on it does not increase?  
 (A) 20 (B) 23  
 (C) 26 (D) 30

89. Three candidates contested an election and got 1136, 7636 and 11628 votes respectively. What percentage of the total votes did the winning candidate get?  
 (A) 57% (B) 65%  
 (C) 60% (D) 75%
90. A man bought a box of pencils at the rate of 7 for 9 and sold them at the rate of 8 for 11. He gained ₹ 10 from this transaction. How many pencils were there in the box?  
 (A) 100 (B) 114  
 (C) 115 (D) 112
91. A shopkeeper cheats to the extent of 10% while buying and selling, by using false weights. What is his total gain?  
 (A) 19% (B) 21%  
 (C) 20% (D) 10%
92. In a mixture of 60 litres, the ratio of milk and water is 2 : 1. If this ratio is to be 1 : 2, then how much water is to be added further?  
 (A) 55 litres (B) 40 litres  
 (C) 60 litres (D) 50 litres
93. The ratio between two numbers is 3 : 4 and their LCM is 180. What is the value of the first number?  
 (A) 50 (B) 55  
 (C) 40 (D) 45
94. What is the sum of two consecutive even numbers, the difference of whose squares is 84?  
 (A) 42 (B) 40  
 (C) 62 (D) 38
95. If the sum of two numbers is 22 and the sum of their squares is 404, then what will the product of the numbers be?  
 (A) 50 (B) 45  
 (C) 40 (D) 48
96. The difference between the simple interest received from two different sources on ₹ 1,500 for 3 years is ₹ 13.50. What is the difference between their rates of interest?  
 (A) 0.1% (B) 0.3%  
 (C) 0.2% (D) 0.4%
97. A man saves ₹ 200 at the end of each year and lends the money at 5% compound interest. How much will it become at the end of 3 years?  
 (A) ₹ 625.25 (B) ₹ 658.04  
 (C) ₹ 662.02 (D) ₹ 634.65
98. What will be the difference between the simple interest and compound interest at the rate of 10% per annum on the sum of ₹ 1,000 after 4 years?  
 (A) ₹ 40.40 (B) ₹ 32.50  
 (C) ₹ 58 (D) ₹ 64.10
99. If the radius of a circle is decreased by 50%, what will be the percentage decrease in its area?  
 (A) 40% (B) 75%  
 (C) 50% (D) 60%
100. If the perimeter of a rectangle and a square, each is equal to 80 cm and the difference of their areas is 100 sq. cm, what will be the sides of the rectangle?  
 (A) 30 cm, 10 cm  
 (B) 55 cm, 10 cm  
 (C) 34 cm, 20 cm  
 (D) 30 cm, 21 cm

**PART—C : ARITHMETIC**

( Marks : 100 )

Each question carries 2 marks :

101. The number  $4^{61} + 4^{62}$  is divisible by

- (A) 3 (B) 5  
(C) 7 (D) 11

102. The square of a real number is

- (A) always an even number  
(B) always an odd number  
(C) always positive  
(D) sometimes positive sometimes negative

103. A number when divided by 19 gives quotient 19 and remainder 19. The number is

- (A) 19 (B) 248  
(C) 380 (D) 199

104. The sum of two numbers is 97 and their difference is 37. Their product is

- (A) 8040 (B) 2010  
(C) 2128 (D) 1914

105. Three consecutive natural numbers are such that the sum of the first and the second is 32 more than the third. The numbers are

- (A) 31, 32, 33  
(B) 32, 33, 34  
(C) 33, 34, 35  
(D) 38, 39, 40

106. A number has two digits whose sum is 9. If 27 is added to the number, its digits are reversed. The number is

- (A) 36 (B) 45  
(C) 54 (D) 27

107. The numbers  $\frac{7}{2}, \frac{8}{11}, \frac{13}{12}$  in ascending order are

- (A)  $\frac{7}{2}, \frac{8}{11}, \frac{13}{12}$  (B)  $\frac{8}{11}, \frac{13}{12}, \frac{7}{2}$   
(C)  $\frac{13}{12}, \frac{8}{11}, \frac{7}{2}$  (D)  $\frac{7}{2}, \frac{13}{12}, \frac{8}{11}$

108. If  $2A = 3B$  and  $4B = 5C$ , then  $A : C =$

- (A) 1 : 1 (B) 8 : 15  
(C) 7 : 4 (D) 15 : 8

109. If  $x\%$  of  $75 = 9$  then  $x =$

- (A) 100 (B) 84  
(C) 12 (D) 37

110. The value of  $|x| + |-x|, \forall x \in \mathbb{R}$ , is

- (A) 0 (B)  $2x$   
(C)  $2|x|$  (D)  $-2|x|$

111. If  $f(x) = 3^x$ , then  $f(x+y)$  is

- (A)  $3^x + 3^y$  (B)  $3^{xy}$   
(C)  $3^x \cdot 3^y$  (D)  $3^x - 3^y$

112. The last digit of the number  $555^{555} + 3$  is

- (A) 8 (B) 5  
(C) 3 (D) 7

113. The mean of the first five even numbers is

- (A) 5 (B) 10  
(C) 6 (D) 2

114. The numbers whose LCM is 112 and sum is 30 are  
 (A) 15 and 15 (B) 10 and 20  
 (C) 14 and 16 (D) 12 and 18
115. The HCF of natural numbers  $x$ ,  $2x$ ,  $4x$  is  
 (A)  $8x$  (B)  $4x$   
 (C)  $2x$  (D)  $x$
116. If a stick  $AB$  is of length 4 m and  $C$  is a point in  $AB$  such that  $AC:BC = 1:2$ , then the length of  $BC$  is  
 (A)  $\frac{8}{3}$  m (B)  $\frac{3}{8}$  m  
 (C)  $\frac{4}{7}$  m (D)  $\frac{7}{4}$  m
117. The value of  $(x-a)(x-b)(x-c)\dots(x-z)$  is  
 (A)  $x^{26}$   
 (B)  $abcd\dots z$   
 (C) 0  
 (D) None of the above
118. If  $8^x - 2^{x^2} = 0$ , then the value of  $x$  is  
 (A) 1 or 2 (B) -1 or -2  
 (C) 0 or 3 (D) 1 or 3
119. The value of  $\log_5 125 + \log_{10} 10^{1-16}$  is  
 (A)  $\log_{15} (125 + 10^{3-16})$   
 (B) 4.16  
 (C) 8.13  
 (D)  $\log_{50} (125 \times 10^{3-16})$
120. The 10th term of the sequence 1, 1, 2, 3, 5, ... is  
 (A) 55 (B) 58  
 (C) 61 (D) 47
121. The fractional representation of 16.25% is  
 (A)  $\frac{75}{3}$  (B)  $\frac{16}{25}$   
 (C)  $\frac{68}{9}$  (D)  $\frac{65}{4}$
122. If 21 cows eat as much as 15 buffaloes, how many cows will eat as much as 35 buffaloes?  
 (A) 63 (B) 49  
 (C) 82 (D) 24
123. Which of the following is a leap year?  
 (A) 2100 (B) 1998  
 (C) 1988 (D) 1700
124. For natural numbers  $a$  and  $b$ , if  $a^2 - b^2 = 7$ , then  $a - b =$   
 (A) 3 (B) 5  
 (C) 7 (D) 1
125. Conversion of  $\frac{7}{20}$  to percent is  
 (A) 7% (B) 27%  
 (C) 35% (D) 49%
126. The angle between the minute hand and the hour hand of a clock when the time is 5 p.m. is  
 (A)  $100^\circ$  (B)  $120^\circ$   
 (C)  $135^\circ$  (D)  $150^\circ$
127. Which of the following can be sides of a triangle?  
 (A) 1, 1, 3 (B) 1, 1, 2  
 (C) 1, 1, 1.5 (D) 1, 1, 0

- 128.** If the roots of a quadratic equation in  $x$  are 4 and  $-3$ , then the coefficient of  $x$  is  
 (A)  $-1$  (B)  $-3$   
 (C)  $-4$  (D)  $1$
- 129.** The area of an equilateral triangle of side  $4\sqrt{3}$  cm is  
 (A)  $16\sqrt{3}$  cm<sup>2</sup> (B)  $12\sqrt{3}$  cm<sup>2</sup>  
 (C)  $9$  cm<sup>2</sup> (D)  $48$  cm<sup>2</sup>
- 130.** The base and height of a triangle are in the ratio  $3:2$  and its area is  $108$  cm<sup>2</sup>. Its base is equal to  
 (A)  $14$  cm (B)  $16$  cm  
 (C)  $18$  cm (D)  $20$  cm
- 131.** If the radius of a circle is doubled, its area becomes  
 (A) two times  
 (B) four times  
 (C) six times  
 (D) eight times
- 132.** The diameter of a scooter wheel is  $56$  cm. The distance covered by it in  $10$  revolutions is  
 (A)  $1760$  cm (B)  $1670$  cm  
 (C)  $560$  cm (D)  $2800$  cm
- 133.** A wire is in the form of a circle of radius  $28$  cm. If it is bent into a square, then each of its sides is of length  
 (A)  $56$  cm (B)  $28$  cm  
 (C)  $14$  cm (D)  $44$  cm
- 134.** A path  $2.5$  m wide runs around a square field of side  $45$  m. The area of the path is  
 (A)  $69.5$  m<sup>2</sup> (B)  $2.25$  m<sup>2</sup>  
 (C)  $475$  m<sup>2</sup> (D)  $225$  m<sup>2</sup>
- 135.** If  $18$  boys consume  $5$  kg of rice per day, then the amount of rice consumed by  $27$  boys per day is  
 (A)  $7.5$  kg (B)  $8$  kg  
 (C)  $27$  kg (D)  $14$  kg
- 136.** If  $8$  men can dig a well in  $18$  days,  $12$  men can dig the same well in  
 (A)  $9$  days  
 (B)  $11$  days  
 (C)  $8$  days  
 (D) None of the above
- 137.** The total wages of  $30$  labourers working equally were ₹  $3,450$  per day. If  $10$  labourers were added to them, the total wages would be  
 (A) ₹  $4,000$  (B) ₹  $4,600$   
 (C) ₹  $4,200$  (D) ₹  $4,800$
- 138.** A  $25\%$  reduction on the price of a suit equals ₹  $450$ . Its original price is  
 (A) ₹  $4,500$  (B) ₹  $3,000$   
 (C) ₹  $1,800$  (D) ₹  $1,000$
- 139.** Freddy borrowed ₹  $8,500$  from a bank at the rate of  $10\%$  per annum and returned the amount after  $3$  years. The interest paid by him in all was  
 (A) ₹  $2,000$  (B) ₹  $2,500$   
 (C) ₹  $2,550$  (D) ₹  $2,750$
- 140.** A shopkeeper purchased  $15$  dozen pens at the rate of ₹  $60$  per dozen and sold them at ₹  $6.50$  each. His profit was  
 (A) ₹  $210$  (B) ₹  $300$   
 (C) ₹  $380$  (D) ₹  $270$

141. The cost price of 15 tables is equal to the selling price of 20 tables. The loss percent is  
 (A) 18% (B) 21%  
 (C) 25% (D) 28%
142. If ₹ 420 was divided between Shem and Ham in the ratio of 3 : 4, then Shem's share was  
 (A) ₹ 180 (B) ₹ 192  
 (C) ₹ 186 (D) ₹ 210
143. In a class of 50 students, 25 take English, 16 take Sanskrit and 12 take neither of them. How many take both English and Sanskrit?  
 (A) 9  
 (B) 4  
 (C) 13  
 (D) None of the above
144. A 110 m long train running at the rate of 36 km/h crosses a bridge 132 m in length. Time taken by the train to cross the bridge is  
 (A) 24.2 seconds  
 (B) 24.7 seconds  
 (C) 24.9 seconds  
 (D) 24 seconds
145. In an examination, a student requires 40% to pass. If Sam gets 185 marks and fails by 15 marks, then the total marks is  
 (A) 600 (B) 500  
 (C) 800 (D) 700
146. The angle of elevation of the Sun when the length of the shadow of a boy is  $\sqrt{3}$  times the height of the boy is  
 (A)  $30^\circ$  (B)  $45^\circ$   
 (C)  $60^\circ$  (D)  $90^\circ$
147. The area of a square standing on the hypotenuse of a right angled triangle whose other two sides are of lengths 6 cm and 8 cm, is  
 (A)  $140 \text{ cm}^2$  (B)  $480 \text{ cm}^2$   
 (C)  $100 \text{ cm}^2$  (D)  $200 \text{ cm}^2$
148. A magical pool X doubles anything that is dipped in it. A girl dips some flowers in X and after taking them out gives some of them to A, dips the remaining and gives the same number of flowers to B as were given to A. She realizes that there were no more flowers left with her. How many flowers did she originally have and how many did she give to A?  
 (A) 6 and 9 (B) 3 and 4  
 (C) 7 and 11 (D) 1 and 5
149. From a starting point A, Merinda walks  $\frac{3}{4}$  km towards east and then  $\frac{6}{7}$  km towards west to reach point C. Where will she be now from the starting point A?  
 (A)  $\frac{6}{7}$  km west of A  
 (B)  $\frac{45}{28}$  km east of A  
 (C)  $\frac{3}{28}$  km west of A  
 (D)  $\frac{3}{7}$  km east of A
150. The value of  $3\frac{1}{2} \div 1\frac{3}{4} \times 1\frac{1}{2} + \frac{7}{8}$  is  
 (A)  $\frac{15}{8}$  (B)  $\frac{43}{4}$   
 (C)  $\frac{19}{8}$  (D)  $\frac{31}{8}$