

DO NOT BREAK THE SEAL OF THE BOOKLET UNTIL YOU ARE TOLD TO DO SO**QUESTION BOOKLET****SERIES I****Subjects : General English, General Knowledge and Mathematics****BOOKLET SERIAL NO.****500505****Marks : 300****Time : 2 1/2 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 Ball Pen in following three parts:
Part-A-General English : 50 questions, Part-B-General Knowledge :50 questions,
Part-C-Mathematics : 50 questions
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. Answers must be shown by completely blackening the corresponding circles in the Answer Sheet against the relevant question number by Black Ball Pen. OMR Answer Sheet without marking series/double series marking shall not be evaluated.

Example :

Supposing 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 :-

(A) (B) (C) (D)

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 Ball Point Pen only as below :-

(A) (B) (C) (D)

WHICH 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 : In question 1-10, fill in the blanks with the correct word(s) from the given alternatives.

1. She contributes a lot of money to _____ events.

- | | |
|----------------|---------------|
| a) charitables | b) charities |
| c) charity | d) charitable |

2. He was recently promoted to a _____ post.

- | | |
|-----------|------------|
| a) higher | b) highest |
| c) high | d) huge |

3. Sweety was _____ with the responsibility of looking after the children.

- | | |
|------------|--------------|
| a) entrust | b) entrusted |
| c) trust | d) trusted |

4. We must _____ to work harder next time.

- | | |
|-------------|------------|
| a) resolved | b) resolve |
| c) resolute | d) revolve |

5. He assured us that he will look _____ the problem.

- | | |
|-------|---------|
| a) in | b) by |
| c) at | d) into |

6. James was _____ of the present situation

- | | |
|-------------|-------------|
| a) assured | b) appeased |
| c) apprised | d) approved |

7. Students must learn to _____ with various problems.

- | | |
|-----------|----------|
| a) co-opt | b) copes |
| c) coped | d) cope |

8. The film was _____ for best sound and picture

- | | |
|--------------|----------|
| a) nominated | b) given |
| c) voted | d) noted |

9. Josh was _____ to her beauty

- | | |
|----------------|--------------|
| a) eager | b) keen |
| c) indifferent | d) different |

10. The Johnsons _____ a lot of debt on their investment

- | | |
|----------|-------------|
| a) incur | b) incurred |
| c) got | d) had |

Directions : In question 11-15, choose the correct word which expresses the meaning of the given word (Synonyms) :

11. TENDENCY

- | | |
|-------------|----------------|
| a) unlikely | b) inclination |
| c) trait | d) fade |

12. WITHDRAWN

- | | |
|----------------|----------------|
| a) introverted | b) extroverted |
| c) frank | d) inferior |

13. ASSERTION

- | | |
|----------------|----------------|
| a) placid | b) instruction |
| c) affirmation | d) furnish |

14. COMMITMENT

- | | |
|---------------|---------------|
| a) duty | b) accuracy |
| c) infidelity | d) allegiance |

15. ATTRIBUTE

- | | |
|---------------------|-------------------|
| a) untypical | b) characteristic |
| c) uncharacteristic | d) honour |

Directions : In question 16-20, choose the correct word which expresses the opposite meaning of the given word (Antonyms) :

16. TENTATIVE

- | | |
|--------------|---------------|
| a) uncertain | b) experiment |
| c) trial | d) definitive |

17. CAUTIOUS

- | | |
|-------------|------------|
| a) careless | b) careful |
| c) caution | d) neglect |

18. LIABILITY

- | | |
|----------|-----------|
| a) debt | b) burden |
| c) asset | d) wealth |

19. DISCLOSE

- | | |
|-------------|------------|
| a) withhold | b) expose |
| c) reveal | d) publish |

20. EXISTENCE

- a) occurrence b) nothingness
- c) appearance d) universal

Directions : In question 21-30, choose the correct answer which best expresses the meaning of the given idiom/phrase :

21. monkey business

- a) to behave politely
- b) to behave recklessly
- c) playful or deceptive activities
- d) suitable situation

22. a mixed bag

- a) a combination of different things or people
- b) a combination of similar things or people
- c) very easy work
- d) very hard work

23. to come to terms

- a) to have a free choice
- b) not able to have a choice
- c) to reach an agreement
- d) to disagree

24. to be in deep water

- a) to learn to swim
- b) to experience lack of oxygen
- c) to be in good terms
- d) to be in serious trouble

25. to fall on deaf ears

- a) eager b) ignore
- c) deaf d) difficult

26. a dog's life

- a) miserable existence
- b) good life
- c) to be full of restriction
- d) to be loyal

27. see eye to eye

- a) to fall in love
- b) to agree with each other
- c) to disagree with each other
- d) to stare at someone

28. at the eleventh hour

- a) to do something innovative
- b) to disrupt an event
- c) at the last possible moment
- d) working hard

29. to put one's foot down

- a) to try to be polite
- b) to apologize to someone
- c) to act firmly
- d) to try on new shoes

30. food for thought

- a) something to hide
- b) to prepare food
- c) to experiment with a new recipe
- d) something to consider

Directions : In question 31-35, for the given group of words, choose the correct word from the given alternative :

31. a number of ships

- a) patrol b) caravan
- c) crew d) fleet

32. a professional rider in horse races

- a) dowar b) jockey
- c) drover d) novice

33. something perfectly neat and tidy

- a) immaculate b) emulate
- c) insulate d) ineffaceable

34. a record or table showing the descent of a person or family

- a) biography b) philology
- c) genealogy d) orology

35. a person who can be cheated easily

- a) cynic b) fastidious
- c) credulous d) antagonist

Directions : In question 36-45, choose the correct pair from the given alternative which has the same relationship as the given group of word :

36. Saturday : Sunday

- a) wednesday : Friday
- b) Sunday : Tuesday
- c) Weekend : Weekday
- d) Sunday : Monday

37. Dog : Puppy

- a) Male : Female
- b) Cat : Kitten
- c) Goat : Bleat
- d) Horse : Mare

38. Epic : Poem

- a) Sonnet : Stanza
- b) Lesson : Teach
- c) Art : Artist
- d) Subject : English

39. Cricket : Pitch

- a) Crop : Produce
- b) Boxer : Ring
- c) Run : Bowler
- d) Assistant : Officer

40. Inch : Centimetre

- a) Litre : Height
- b) Pound : Weight
- c) Kilogram : Heavy
- d) Metre : Measurement

41. Wool : Knitting

- a) Stitching : Cotton
- b) Pin : Chair
- c) Thread : Crochet
- d) Woolen : Winter

42. Air : Breathe

- a) Rain : Water
- b) Time : Watch
- c) Wine : Grapes
- d) Hen : Cock

43. Engineer : Site

- a) Man : Woman
- b) Medicine : Cure
- c) Judge : Justice
- d) Doctor : Clinic

44. Apple : Orange

- a) Banana : Grape
- b) Fruit : Health
- c) Yellow : Colour
- d) Winter : Spring

45. District : State

- a) Town : Area
- b) Capital : Country
- c) City : Development
- d) Block : Village

hears, understands and remembers when listening to a speaker, when reading an announcement, or when studying a book. Few of us grasp all that a speaker says. Sometimes we miss the vital point and as a result our interpretation of the thought is hazy. Occasional "blind spots" in the senses are familiar occurrences. We look but we do not see, we listen but we do not hear. Sometimes we read something hurriedly, or in a sort of mental vacuum, without being at all impressed and later are pleasantly surprised at the thought or beauty of the passage when told of it by someone who read it "seeingly".

46. What would be an interesting experiment to determine our understanding of a speaker ?

- a) to listen
- b) to understand
- c) to ascertain
- d) to remember

47. Why should our interpretation of a thought be hazy ?

- a) we miss an important point
- b) we grasp all the points
- c) we do not listen attentively
- d) we are busy reading a book

48. What does "blind spots" mean in the passage ?

- a) when our interpretation
- b) pool
- c) weaknesses
- d) resort

49. Why are we not impressed sometimes when we read ?

- a) read hurriedly
- b) illegible
- c) extinct
- d) illegal

50. What is the meaning of "hazy" ?

- a) to be unsure
- b) to be sure
- c) to feel embarrassed
- d) to experience

Directions : In question 46-50, answer the following questions from the given passage.

It would be an interesting experiment to ascertain exactly how much or how little one

PART - B - GENERAL KNOWLEDGE

Marks : 100

Each question carries 2 marks :

51. Which country will host the FIFA World Cup 2022 ?

- a) Russia
- b) S. Korea
- c) Qatar
- d) China

52. Who is winner of FIFA World Cup 2018 ?

- a) Brazil
- b) Croatia
- c) England
- d) France

53. Dengue fever is caused by ?

- a) Bacteria
- b) Fungus
- c) Virus
- d) Protozoa

54. Who is the author of the book "The story of Kashmir through the Ages" ?

- a) Nehan Singhal
- b) Arjan Nath Chaku
- c) Amitabh Matoo
- d) Leher Sethi

55. Which Indian personality has been invited to address joint session of United States Congress ?

- a) Baba Ramdev
- b) Ratan Tata
- c) Narendra Modi
- d) Sushma Swaraj

56. The Almatti Dam is a hydroelectric project on which river ?

- a) Krishna
- b) Kaveri
- c) Godavari
- d) Tungabhadra

57. What is the India's rank in the 2018 World Press Freedom Index (WPI) ?

- a) 136th
- b) 138th
- c) 135th
- d) 137th

58. Entomology is the science that studies

- a) Behavior of human beings
- b) Insects
- c) The origin and history of technical and scientific terms
- d) The formation of rocks.

59. The Manas Wildlife Sanctuary is located in

which state of India ?

- a) Rajasthan
- b) Gujarat
- c) Assam
- d) Arunachal Pradesh

60. Film and TV institute of India is located at

- a) Pune
- b) Rajkot
- c) Pimpri
- d) Perambur

61. The ozone layer restricts

- a) Visible light
- b) Infrared radiation
- c) X-rays and gamma rays
- d) Ultraviolet radiation

62. Sumeeth Reddy is associated with which sports ?

- a) Badminton
- b) Table Tennis
- c) Hockey
- d) Tennis

63. Select the non-metal with a shiny appearance from the following :

- a) Gold
- b) Silver
- c) Iodine
- d) Sodium

64. Select the egg laying mammal from the following :

- a) Bat
- b) Platypus
- c) Ostrich
- d) Kiwi

65. Which nobel gas is used to fill the balloons used in weather forecasting ?

- a) Argon
- b) Neon
- c) Xenon
- d) Helium

66. The method of pollination by water is termed as

- a) Hydrophily
- b) Entomophily
- c) Omithophily
- d) Zoophily

67. Which of the following is an extinct bird ?

- a) Kiwi
- b) Emu
- c) Dodo
- d) Ostrich

68. Tissues are made up of

- a) Organs
- b) Cells
- c) Organ systems
- d) Fat

69. Who is the present Finance Minister of India ?

- a) Arun Jaitley
- b) Yashwant Sinha
- c) Murali Manohar Joshi
- d) Jaswant Singh

70. India's first nuclear blast at Pokhran in Rajasthan took place in

- a) 1984
- b) 1974
- c) 1964
- d) 1954

71. Which one of following is modified stem

- a) Carrot
- b) Sweet potato
- c) Coconut
- d) Potato

72. Which of the following animals breathes through the skin ?

- a) Fish
- b) Pigeon
- c) Frog
- d) Cockroach

73. Litmus, used in laboratory is typically obtained from

- a) Green algae
- b) Blue-green algae
- c) Lichen
- d) Fungi

74. The computer monitor is which type of device ?

- a) Scanning
- b) Input
- c) Software
- d) Output

75. The conductivity of a super-conductor is

- a) Infinite
- b) Small
- c) Zero
- d) Large

76. Which one of the following is not a sea port ?

- a) Paradeep
- b) Haldia
- c) Diamond Harbour
- d) Dhamra

77. Which Indian state has the largest number of cotton Textile Mills ?

- a) Madhya Pradesh
- b) Maharastra
- c) Gujarat
- d) West Bengal

78. The capital of Syria is

- a) Rabat
- b) Muscat
- c) Damascus
- d) Constantinople

79. Widening of River Valley takes place due to

- a) Corrosion
- b) Lateral erosion

- c) Alternate Flood and Drought
- d) Hydraulic action

80. The basic parameters of India's Foreign Policy were laid down by

- a) Dr. Rajendra Prasad
- b) Dr. Radhakrishnan
- c) Jawahar Lal Nehru
- d) Dr. Zakir Hussain

81. In India, planned economy is based on

- a) Gandhian system
- b) Socialist system
- c) Capitalist system
- d) Mixed Economy system

82. The largest blood vessel in the human body is

- a) Vena cava
- b) Artery
- c) Aorta
- d) Pulmonary Vein

83. Name the famous king of Kushan Dynasty ?

- a) Kanishka
- b) Pulakesin
- c) Harsha
- d) Vikramaditya

84. Who authored, India's National Song ?

- a) Rabindra Nath Tagore
- b) Subramaniam Bharati
- c) Bankim Chandra Chatterjee
- d) Mulk Ray Anand

85. Coral reefs in India can be found in

- a) The coast of Orissa
- b) Waltair
- c) Rameshwaram
- d) Trivandrum

86. For seeing objects at the surface of water from a submarine under water, the instrument used in

- a) Kaleidoscope
- b) Periscope
- c) Spectroscope
- d) Telescope

87. Who has the right to transfer any case anywhere in India ?

- a) President
- b) Supreme Court
- c) High Court
- d) Union Law Minister

88. Tropophytes can withstand

- a) High temperature
- b) Chilly climate

- c) Alternate deficit and surplus torus climatic conditions
d) None of these

- a) 1918
c) 1938
- b) 1928
d) 1948

89. The EXIM Bank of India was established in

- a) 1964
c) 1980
- b) 1976
d) 1982

100. Solid Carbon dioxide is otherwise known as

- a) Dry ice
c) Solidified
- b) Wet ice
d) Dry Carbon

90. Which of the following passes leads to Leh?

- a) Zozila
c) Chumbi Valley
- b) Shipki La
d) Banihal

91. Souring of milk is due to

- a) Protozoa
c) Virus
- b) Bacteria
d) Nematode

92. Growth in plant occur

- a) Whole life
b) For definite period
c) Growth does not takes place in plant
d) None of these

93. The nature of nerve impulse is

- a) Physical
c) Electrochemical
- b) Chemical
d) Biophysical

94. Which of the following year was celebrated as International year of Sanitation ?

- a) 2006
c) 2015
- b) 2010
d) 2008

95. Champion Trophy is associated with

- a) Football
c) Badminton
- b) Hockey
d) Chess

96. Which state has become the first Indian state to pass Land Title Bill ?

- a) Gujarat
c) Haryana
- b) Rajasthan
d) Assam

97. The Regional Conference of North Eastern States on Child Adoption has been held in which city of India ?

- a) Agartala
c) Shillong
- b) Aizawl
d) Itanagar

98. Goa was liberated from the Portugese in the year

- a) 1948
c) 1961
- b) 1965
d) 1960

99. India participated in Olympics Hockey first time in

PART - C - MATHEMATICS

Marks :100

Each question carries 2 marks :

101. The smallest value of n for which $2n + 1$ is not a prime is

- a) 1 b) 4
c) 6 d) 7

102. The difference between two numbers is 1365. When the larger number is divided by the smaller one, the quotient is 6 and the remainder is 15. The smaller number is

- a) 165 b) 240
c) 270 d) 360

103. The smallest number of five digits exactly divisible by 476 is

- a) 10000 b) 10472
c) 10476 d) 17600

104. The HCF of 48, 84 and 120 is

- a) 60 b) 48
c) 24 d) 12

105. The greatest number which on dividing 1657 and 2037 leaves remainders 6 and 5 respectively is

- a) 127 b) 223
c) 235 d) 305

106. What is the LCM of

$(x + 5)^2(x + 1)^3(x - 3)$ and $(x - 3)^2(x + 5)(x + 1)$ is

- a) $(x + 5)^2(x + 1)^3(x - 3)^2$
b) $(x + 5)^2(x + 1)^3(x - 3)$
c) $(x - 3)^2(x + 5)(x + 1)$
d) $(x + 5)^3(x + 1)^2(x - 3)$

107. If $\frac{1}{6.198} = 0.16134$, then the value

of $\frac{1}{0.0006198}$ is

- a) 0.016134 b) 0.16134
c) 16134 d) 1613.4

108. When 52416 is divided by 312, the quotient is 168. What will be the quotient when 52.416 is divided by 0.0168 ?

- a) 3.12 b) 312
c) 3120 d) 31.2

109.
$$\frac{2}{2 + \frac{2}{3 + \frac{2}{3 + \frac{2}{3}}}} + 1.22 = ?$$

- a) $\frac{1}{3}$ b) 6
c) 2 d) $\frac{1}{6}$

110. What should be added to $\frac{33}{16}$ so as to get

$\frac{73}{32}$?

- a) $\frac{3}{32}$ b) $\frac{7}{32}$
c) $\frac{3}{73}$ d) $\frac{32}{73}$

111.
$$\frac{3}{4} \left(1 + \frac{1}{3}\right) \left(1 + \frac{2}{3}\right) \left(1 - \frac{2}{5}\right) \left(1 + \frac{6}{7}\right) \left(1 - \frac{12}{13}\right) = ?$$

- a) $\frac{1}{7}$ b) $\frac{1}{6}$
c) $\frac{1}{5}$ d) 1

112. $4^7 \times 2^5 \times 8^3 \div 16^2 \div (2^2)^2 = ?$

- a) 2^7 b) 2^8
c) 4^7 d) 4^8

113. $(256)^{0.16} \times (256)^{0.09} =$

- a) 64 b) 16
c) 4 d) 256.25

114. $5^{(x+3)} = (25)^{(3x-4)}$, then find the value of x ?

- a) $\frac{1}{5}$ b) $\frac{11}{5}$
c) $\frac{11}{3}$ d) $\frac{13}{5}$

115. If $\frac{5+2\sqrt{3}}{7+4\sqrt{3}} = a+b\sqrt{3}$, then the value of a is

- a) 11 b) -6
c) -11 d) 6

116. The average weight of 20 persons living in building A of a colony is 60 kg. In the same colony, the average weight of 24 persons living in building B is 58 kg. Find the combined average weight of persons living in that colony.

- a) 59.8 kg b) 58.9 kg
c) 85.9 kg d) 95.8 kg

117. The average age of 30 students is 9 years. If the age of the teacher is included, it becomes 10 years. What is the age of the teacher ?

- a) 35 years b) 38 years
c) 40 years d) 42 years

118. A man walks from A to B at the rate of 5 km per hour and return back at the rate of 3 km per hour. What is the average speed for the whole journey ?

- a) 4 km/hr b) 3 km/hr
c) $3\frac{1}{2}$ km/hr d) $3\frac{3}{4}$ km/hr

119. If $x : y = 5 : 2$ then $(8x + 9y) : (8x + 2y)$ is

- a) 26 : 61 b) 61 : 26
c) 22 : 29 d) 29 : 22

120. Two numbers are in the ratio of 3 : 5, if 9 is subtracted from each they are in the ratio of 12 : 23. The first number is

- a) 55 b) 44
c) 33 d) 22

121. 8 out of 320 parts of the lawn is tiled. What percentage of the lawn is tiled ?

- a) 2.5 % b) 3 %
c) 4.5 % d) 5 %

122. Lucas spends 40% of his salary on food, 2% on house rent, 10% on entertainment and 10% on conveyance. If his savings at the end of a month is Rs.1500, then his monthly salary is

- a) Rs.6000 b) Rs.7500
c) Rs.8000 d) Rs.10000

123. The ratio of cost price to selling price is 4 : 5. The profit percentage is

- a) 25% b) 30%
c) 20% d) 35%

124. A sells a bicycle to B at a profit of 20%. B sells it to C at a profit of 25%. If C pays Rs.225 for it, the cost price of the bicycle for A is

- a) Rs.110 b) Rs.125
c) Rs.150 d) Rs.200

125. The price of a VCR is marked at Rs.12000. If successive discounts of 15%, 10% and 5% be allowed, then at what price does a customer buy it ?

- a) Rs.9400 b) Rs.8856
c) Rs.7289 d) Rs.8721

126. Simple interest on a certain sum is $\frac{1}{16}$ of the sum. Find the time in years, if time is numerically equal to the rate percent.

- a) 2 years b) 2.5 years
c) 3 years d) 3.5 years

127. At what rate percent per annum simple interest will a sum of money double itself in 8 years ?

- a) 12% b) 12.5%
c) 8% d) 8.5%

128. Albert invested an amount of Rs.8000 in a fixed deposit scheme for 2 years at compound interest at the rate of 5% p.a. How much amount will he get on maturity of the fixed deposit ?

- a) Rs.8600 b) Rs.8620
c) Rs.8800 d) Rs.8820

129. A sum of money invested at compound interest amounts to Rs.800 in 3 years and to Rs.840 in 4 years. The rate of interest per annum is

- a) 3% b) 4%
c) 5% d) 10%

130. The population of a town in India increases by 20% every year. If its present population is 216000, find its population 2 years ago.

- a) 150000 b) 311040
c) 200000 d) 180000

131. Vicky is 6 years older than Mary. Five years ago, Vicky was thrice as old as Mary. Find the present age of Vicky.

- a) 16 years b) 8 years
c) 14 years d) 12 years

132. A is twice as old as B and half as old as C. If sum of B's and C's age is 85 years then what is A's age (in years) ?

- a) 34 b) 36
c) 40 d) 42

133. 20 grams of salt solution has 10% water. How much water must be added to this mixture to raise the percentage of water by 25%.

- a) 5 grams b) 2 grams
c) 3 grams d) 4 grams

134. A can do a piece of work in 4 hours ; B and C together can do it in 3 hours, while A and

C together could do it in 2 hours. How long will B alone take to do it ?

- a) 24 hours b) 12 hours
c) 10 hours d) 8 hours

135. A can finish a work in 24 days, B in 9 days and C in 12 days. B and C start the work but are forced to leave after 3 days. The remaining work was done by A in :

- a) 11 days b) 10 days
c) 6 days d) 5 days

136. Two inlet pipes take 10 min and 20 min. to fill an empty tank. But they take 25 min. to fill it because of a leak. How much time will the leak take to empty a full tank (approximately).

- a) 9 min b) 18 min
c) 6 min d) 30 min

137. The distance between two cities is 800 km. A motor car starts from the first city at the speed of 30 km/hr. At the same time, another car starts from the second city towards the first at the speed of 50 km/hr. The distance of the point from the first city where both the car meets is

- a) 400 km b) 200 km
c) 300 km d) 100 km

138. A man walking at the rate of 5 km/hr crosses a bridge in 15 minutes. The length of the bridge (in metres) is

- a) 600 b) 750
c) 1000 d) 1250

139. The length of the bridge, which a train 130 m long and travelling at 45 km/hr can cross in 30 seconds is

- a) 150 m b) 245 m
c) 225 m d) 200 m

140. A person can row 1 km upstream in 20 minutes and 1 km downstream in 15 minutes. What is his speed of rowing in still water ?

- a) 2.5 km/hr b) 3.5 km/hr
c) 4 km/hr d) 4.5 km/hr

141. The length of a room is 5.5 m and width is 3.75 m. Find the cost of paving the floor by slabs at the rate of Rs.800 per sq-metre.

- a) Rs.15000 b) Rs.15550
c) Rs.16500 d) Rs.15600

142. A rectangular field is to be fenced on three sides leaving a side of 20 feet uncovered. If the area of the field is 680 sq.feet, how many feet of fencing will be required ?

- a) 40 b) 34
c) 88 d) 68

143. One of the diagonal of a rhombus is double the other diagonal. Its area is 25 sq.cm. The sum of the diagonals is

- a) 8 cm b) 10 cm
c) 12 cm d) 15 cm

144. 66 cubic cm of silver is drawn into a wire 1 mm in diameter. The length of the wire in metres will be

- a) 336 b) 168
c) 90 d) 84

145. The ratio of the volume of a cube to that of a sphere which will fit inside the cube is

- a) $6 : \pi$ b) $4 : \pi$
c) $4 : 3\pi$ d) $2 : \pi$

146. Which term of the A.P. 1, 3, 5, 7, is 55 ?

- a) 28 b) 27
c) 25 d) 21

147. $\log_2(\log_5 625)$ is equal to

- a) 15 b) 5
c) 2 d) 10

148. If 7 spiders make 7 webs in 7 days, then 1 spider will make 1 web in how many days ?

- a) 1 b) 7
c) 7.5 d) 49

149. PQ is a pole and BC is a 30 feet tall building. From P and Q, the angles of elevation of B are 30° and 45° respectively. What is the height

of the pole (in feet). Take $\sqrt{3} = 1.732$?

- a) 12.68 b) 13.78
c) 16.28 d) 18.27

150. $\sin 75^\circ - \cos 15^\circ = ?$

- a) $2 \sin 75^\circ$ b) $2 \cos 15^\circ$
c) 1 d) 0