QUANTITATIVE TECHNIQUES

- The value of π is a:

  - Variable   b) constant   c) parameter   d) none of these

- The equation, $4x^2 + 7x - 50 = 0$ is a :

  - Linear equation   b) third degree polynomial   c) quadratic equation d) identity

- The number 2.5 is a:

  - Natural number   b) integer   c) rational number   d) irrational number

- Which of the following is an infinite sequence:

  - 1,3,5,7   b) 2,6,10,14   c) 2,5,8,11…….   d) 16,8,4,2,1

- The sequence 20,15,10,5,……….. is :

  - An increasing sequence   b) a decreasing sequence   c) an oscillatory sequence d) none of the above

- Which is the sixth term of the sequence 0,15,30,45,……

  - 6   b) 60   c) 75   d) 90

- The general term of the sequence 5,8,11,14,17, 20 is

  - 5   b)11   c) 17   d) 20

- The 13th term of the sequence, 9,6,3,0, ….. is

  - 12 b) 30   c) -12 d) -27

- Which term of the AP 4,10,16,….. is 100.

  - 16 b) 17   c) 10   d) 12

- The sum of first 10 terms of the AP 50,40,30,……is

  - 150   b) – 40   c) 50   d) 120

- If the 3rd and 5th terms of an AP are 21 and 37 respectively, then the 4th term is

  - 20   b) 24   c) 29   d) 27

- If a is the first term and r is the common ratio, then the nth term in a geometric progression is

  - ar^2 b) $a + n^r$ c) ar^n -1   d) ar^{n-1}

- If three consecutive terms in a GP are 5,….,125, then the middle term is :

  - 25 b) 50   c) 100 d) 75

- If the 1st and 3rd terms of an AP are 14 and 4, then the middle term is:

  - 24 b) 10   c) 9   d) 8

- A statement of equality of two algebraic expression is called…

  - Function   b) equation   c) set   d) none of these

- The degree of the equation $3x^3$- $5x^2$ + 9x + 15 is…..

  - 9   b) 5   c) 3   d) 2

- Degree of a linear equation is,

  - 3   b)1   c) 2   d) 4

- Equations in the form of $ax^2 + bx + c$ are termed as :

  - Linear equation   b) quadratic equation c) Function   d) None of these

- Proper factors of 10 are

  - 10 and 1   b)10 and 5   c) 2 and 5   d) 1 and 5

- Trivial factors of 15 are

  - 3 and 5   b) 1 and 15   c) 3 and 15   d) 1 and 3

- Variables are those characteristics which

  - Can be directly measured   b) remains the same in all situations
        c) remains the same in given situations   d) None of these

- Income, expenditure, savings etc are examples of

  - Constant   b) Parameter   c) Variable   d) None of these

- Degree of an equation is

  - Lowest power of the unknown quantity   b) zero

  c) highest power of the unknown quantity   d) None of these

24. The degree of a linear equation is

   a) 0   b) 1   c) 2   d) None of these

25. The degree of a quadratic equation is

   a) 0   b) 1   c) 2   d) None of these

26. Numbers used for counting are

   a) Integers   b) Rational numbers   c) Natural numbers   d) None of these

27. Number 1 is

 a) Prime number   b) Composite number   c) Neither prime or composite   d) None of these

28. Numbers like 2,3,5,7,11…are

a) Prime numbers   b) Composite numbers   c) Neither prime or composite   d) None of these

29. Numbers like 4,6,8,9,10… are

a) Prime numbers   b) Composite numbers   c) Neither prime or composite   d) None of these

30. Number 2 is

a) Prime number   b) even number   c) even prime number   d) None of these

31. Rational number is

a) a variable   b) an integer   c) ratio of integers   d) None of these

32. Real numbers consist of

a) Rational numbers only   b) Irrational numbers only   c) both a &b   d) None of these

33. Zero is

a) Additive identity   b) Multiplication identity   c) both a &b   d) None of these

34. Number 1 is

a) Additive identity   b) Multiplication identity   c) both a &b   d) None of these

35. The multiplicative inverse of any real number is

a) the number itself   b) reciprocal of the number   c) zero   d) one

36. The 10th term of the series 2,5,8…..is

   a) 16   b) 29   c) 18   d) 10

37. The 13th term of the series 9,6,3,….is

   a) -10   b) -5   c) -27   d) 27

38. The 6th term of the sequence 3,6,12…..is

   a) 40   b) 56   c) 85   d) 96

39. If a,b,c are three consecutive terms in a GP, the middle term is

  a) a+c   b) a x b   c)   d) None of these

40. a^7 x a^3 x $a^2 =$

   a) a^{13} b) a^{14} c) a^{12} d) None of these

41. $27^{2/3}$ is

   a) 6   b) 3   c) 9   d) None of these

42. 5^0 is

 a) 0   b) 1   c) 5   d) None of these

43. $\log_a$ (m x n) =

 a) $\log_a$ m + $\log_a$ n   b) $\log_a$ m x n   c) zero   d) None of these

44. The interest on Rs. 1000 for 5 years at 6% is

 a) 150   b) 300   c) 450   d) 600

45. , π, are examples of

a) rational numbers   b) irrational numbers c) counting numbers   d) None of these

46. ------- is the identity element for multiplication

 a) 0   b) 1   c) 100 d) None of these

47. 2,-3, 8 are examples of

a) rational numbers   b) irrational numbers c) counting numbers d) None of these

48. Square root of negative numbers are

a) rational numbers   b) irrational numbers c) complex numbers d) None of these

49. The product of two rational numbers is

a) rational numbers   b) irrational numbers c) counting numbers d) None of these

50. The sum of two odd integers is an

a) even number   b) odd number   c) both a & b   d) Neither a nor b

51. Every integer is

a) positive   b) negative   c) both a & b   d) Neither a nor b

52. $\log_2 1 = 0$ is

  a) 2^0 b) 2^1 c) 1^2 d) None of these

53. In the function , $y = a + b\,x$, the dependent variable is

  a) y   b) a   c) b   d) x

54. First derivative of the function, $y = 2\,x^2 + 3x - 4$ is

a) $4\,x^2 + 3$ b) $4x + 3$ c) $2x + 3$ d) None of these

55. Derivative of the function, $y = 1/x$ is

  a) $1/x^2$ b) $2/x$ c) $-1/x^2$ d) $-1/x$

56. Derivative of the function, y = is:

  a)   b)   c) 2   d)

57. Derivative of the function y = log x is

  a) log x   b) 1/x   c) -1/x   d) 1

58. Derivative of the function y = e^x is:

a) 1/x   b) 1/ e^x c) e^x d) 0

59. Let y =4x^3 – 2x^2 +12 , then is

a) 12x^2 – 4x   b) 4x^2 – 2x   c) 2x- 4   d) None of these

60.The first order condition for maximum is

a) f '(x) 0   b) f '(x) 0   c) f '(x) = 0   d) f '(x) = 1

61. Necessary condition for minima is

  a) f '(x) 0   b) f '(x) 0   c) f '(x) = 0   d) f '(x) = 1

62. The second order condition for minimum is

  a) f "(x) 0   b) f "(x) 0   c) f "(x) = 0   d) f "(x) = 1

63. The second order condition for maximum is

  a) f "(x) 0   b) f "(x) 0   c) f "(x) = 0   d) f "(x) = 1

64. For the consumption function, C = 100+0.5Y, MPC is :

  a) 100   b) 0.5Y   c) 0.5   d) None of these

65. If the total revenue function is given as R= 3x^2 + 10x, MR =

a) 6x +10   b) 10 x   c) x+10   d) None of these

66. If C= 20+3x + 5x^2 is the total cost, marginal cost is :

 a) 3+10x   b) 20+3x   c) 20+5x   d) None of these

67. Derivative of a constant is

 a) 1   b) 0   c) constant itself   d) None of these

68. If the utility function of a commodity is U= 3x^3- 5x, then marginal utility is

 a) 9x^2-5   b) 3x^2-10   c) 3x^3-5   d) None of these

69. Functional relationship between inputs and output is known as

 a) Revenue function   b) Production function   c) Profit function d) None of these

70. Total revenue is a function of

 a) price b) Quantity sold c) both a &b   d) None of these

71. Consumption is a function of

 a) price b) Quantity sold c) disposable income   d) None of these

72. Saving   is a function of

 a) price b) Quantity sold c) disposable income   d) None of these

73. Demand is a function of

 a) price b) Quantity sold c) disposable income   d) None of these

74. If y = 0.5, dy/dx is

a) 1   b) 0   c) constant itself   d) None of these

75. Additive inverse of a negative real number is

 a) positive b) negative c) both   d) Neither

76. Additive inverse of a positive real number is

 a) positive b) negative c) both   d) Neither

77. Axiom of commutation states that

 a) a+b = b+a   b) ab = ba   c) both a & b   d) Neither a nor b

78. If 3x =6, x =…..

a) 1   b) 2   c) 3   d) None of these

79. If $5x^2 -125 = 0$, then x= ……

a) 1   b) -5   c) 5   d) both b& c

80. Supply is a function of

 a) price b) Quantity sold c) both a &b   d) None of these

81. The sequence, 16,8,4,2,1 is …………sequence

 a) increasing   b) decreasing c) both a & b d) Neither a nor b

82. General term of an AP is estimated as

a) a + d   b) a + n d   c) a + (n-1) d   d) None of these

83. Middle term of an AP is the ………. of the first and third terms

a) product b) sum   c) arithmetic mean   d) None of these

84. In the progression 1,3,9,27,81 common ratio is

a) 2   b) 3   c) 9   d) None of these

85. If the first and third terms of a GP are 6 and 96, the middle term is

a) 32   b) 45   c) 24   d) None of these

86. If A= {a,b,c} and B= { c,a,b}, then A and B are

a) Equal sets   b) equivalent sets c) disjoint sets   d) None of these

87. A set without any element is called

a) Power set   b) null set   c) super set   d) None of these

88. Let A= {1,2,3,5} and B = { 4,5,6,8}, then A U B =

a) {1,2,3,6}   b) {1,2,3,4,5,6,8} c) {1,5,6,8}   d) None of these

89. If A and B are two disjoint sets, A ∩ B is a

 a) proper set   b) null set   c) master set   d) None of these

90. A ………… relation is not a function

a) many to one   b) one to many   c) one to one   d) None of these

91. In the function y = f (x) , independent variable is

a) y   b) x   c) both a & b   d) None of these

92. Normally slope of the demand curve is

a) negative   b) positive   c) 0   d) None of these

93. Slope of the Average fixed cost curve is

 a) negative   b) positive   c) 0   d) None of these

94. Set A = {0} is

 a) a finite set   b) an infinite set   c) a null set   d) None of these

95. Set a ={ } is

a) a finite set   b) an infinite set   c) a null set   d) None of these

96. The sets A= {1,2,3,4} , B = {a,b,c,d} are

 a) infinite sets   b) equal sets   c) joint sets   d) equivalent sets

97. If A ={1,2,3} B = {2,4,6}, then AUB is:

 a) {2,6}   b) {1,2,3,4,6}   c) {3,4,6}   d) None of these

98. If A ={1,2,3,4} B = {3,4,5,6}, then A∩B is:

 a) {2,6}   b) {1,2,3,4,6}   c) {3,4,}   d) None of these

99. The sets A= {a,e,i,o,u} , B = {a,b,c,d} are

 a) equivalent sets   b) equal sets   c) joint sets   d) disjoint sets

100. The sets U= {1,2,3,4,5,6} , A = {2,4,6,} then

 a) A' = {1,2,3,4,5,6}   b) A'= {1,3,5}   c) A' = {4,5,6}   d) None of these

101. Total number of subsets of a set having *m* elements is

a) m b) m^2 c) 2^m d) 3^m

102. If A= {a,b,c} and B= { c,d,b}, C= { a,b,d,e} then A ∩ (B∪C) is:

a) {a,b,c}   b) {b,c,d}   c) {a,b,d,e}   d) {e }

103. Two sets A and B are disjoint if:

a) A ∩ B =   b) A U B =   c) A - B =   d) B -A =

104. Which of the following is a singleton set

a) A= {2,} , A = {1,2} c) A= {1,2,3} , A = { }

105. The function Y= X is :

a) a constant function   b) a quadratic function   c) an identity function   d) None of these

106. The inverse function of y = 2x is

a) y = x   b) x = 2y   c) x =0.5 y   d) y = x²

107. A linear function is in the form

a) y = a + bx + c x²   b) y = a +bx   c) c =axⁿ   d) y = aˣ

108. Which of the following is a quadratic function

a) y = a + bx + c x²   b) y = a +bx   c) c =a +bx +cx² + dx³   d) y = aˣ

109. Indifference curves are related to

a) production   b) consumption   c) income   d) distribution

110. A collection of indifference curves is called

a) indifference set   b) indifference group   c) indifference map d) None of these

111. The slope of an indifference curve is

  a) MRTS   b) MRS   c) price ratio   d) None of these

112. A = { 1,2,3,4,5,…………}   is an

 a) infinite set   b) finite set   c) unit set   d) singleton set

113. A = { 1,2,3,4,5}   B= {1,2,3,4}, then

   a) B is a proper subset of A   b) A is proper subset of B   c) both a &b   d) None of these

114. Given A= {1,6,8} B= { 6,1,8}, then

   a) A = B   b) A U B =   c) A - B =   d) B -A =

115. Two or more sets having exactly the same elements are called

 a) finite sets   b) null sest   c) equal sets   d) None of these

116. A set having only one element is called

 a) finite set   b) unit set   c) proper set   d) None of these

117. The collection of all the subsets of a set is called

   a) finite set   b) power set   c) proper set   d) None of these

118. If two or more sets have exactly the same number of elements, they are called

     a) equal sets   b) equivalent sets   c) proper sets   d) None of these

119. If two sets have no elements in common, they are called

a) equal sets   b) equivalent sets   c) disjoint sets   d) None of these

120. If two sets have at least one element in common, they are called

a) equal sets   b) overlapping sets   c) disjoint sets   d) None of these

121. Diagrammatic representation of sets are called

a) Cartograms   b) pictograms   c) Venn diagram   d) None of these

122. If A and B are two sets, A U B denotes

a) Union of sets   b) intersection of sets   c) difference of sets   d) None of these

123. If A and B are two sets, A ∩ B denotes

a) Union of sets   b) intersection of sets   c) difference of sets   d) None of these

124. If A and B are two sets, A - B denotes

a) Union of sets   b) intersection of sets   c) difference of sets   d) None of these

125. If U is the universal set, and A is the subset of U, then A' is

a) U – A   b) A –U   c) U +A   d)   None of these

126. The set which contains the first component of all the ordered pairs in a Cartesian product is called

 a) Range   b) domain   c) image   d) None of these

127. The set which contains the second component of all the ordered pairs in a Cartesian product is called

 a) Range   b) domain   c) image   d) None of these

128. A function is called monotone if it is

a) an increasing function   b) a decreasing function   c) both a & b   d) None of these

129. If a matrix has 5 rows and 6 columns, then order of the matrix is

   a) 6 X 5   b) 5 X 6   c) 5 X 7   d) None of these

130. A matrix having only one row is called

   a) row matrix   b) row vector   c) both a & b   d) None of these

131. A matrix having only one column is called

   a) column matrix   b) column vector   c) both a & b   d) None of these

132. If all the elements of a matrix are zero, then the matrix is called

 a) scalar matrix   b) identity matrix   c) null matrix   d) None of these

133. If the number of rows and columns of a matrix are equal, then the matrix is called

   a) scalar matrix   b) identity matrix   c) square matrix   d) None of these

134. If the number of rows and columns of a matrix are not equal, then the matrix is called

   a) scalar matrix   b) rectangular matrix   c) square matrix   d) None of these

135. A matrix in which all the elements above or below the leading diagonal are zero is

   a) scalar matrix   b) rectangular matrix   c) triangular matrix   d) None of these

136. A diagonal matrix in which all the leading diagonal elements are equal to some constant is

   a) scalar matrix   b) rectangular matrix   c) triangular matrix   d) None of these

137.A diagonal matrix in which all the leading diagonal elements are equal to unity is

a) scalar matrix   b) unit matrix   c) triangular matrix   d) None of these

138. Two matrices are said to be equal if

a) they are of same order   b) corresponding elements are equal   c) both a &b

d) Neither a nor b

139. Transpose of a matrix is obtained by

a) adding rows   b) adding columns   c) interchanging rows and columns d) None of these

140. A square matrix A is said to be symmetric if

a) $A^T = A$ b) $A^T \neq A$ c) Neither a) nor b)

141. A square matrix A is said to be skew symmetric if

a) $A^T = A$ b) $A^T \neq A$ c) $A^T = -A$ d) None of these

142. The determinant of matrix A= equals

a) 18   b) 2   c) 16   d) None of these

143. A square matrix A is said to be singular if

a) $|A| = 0$ b) $|A| = 1$ c) $|A| \neq 0$ d) None of these

144. A square matrix A is said to be non-singular if

a) $|A| = 0$ b) $|A| = 1$ c) $|A| \neq 0$ d) None of these

145. Probability of a sure event is

a) 0   b) 0.5   c) 1   d) -1

146. Probability of an impossible event is

a) 0   b) 0.5   c) 1   d) -1

147. If $P(A) = 0.7$, $P(A')$ is

  a) 0   b) 0.3   c) 1   d) -1

148. If S is the sample space of a random experiment, then

  a) $P(S) = 1$ b) $P(S) = 0$ c) $P(S)$ 1   d) $P(S)$ 1

149. Probability of getting the score 3 when a dice is thrown:

  a) 1/3   b) 1/6   c) 1/2   d) ¾

150. Probability of an event will always lie between

  a) 1 and 2   b) 0 and 1   c) – 1 and 1   d) -1 and 0

151. If A and B are equally likely events, then

  a) $P(A) = P(B)$ b) $P(A)$ $P(B)$ c) $P(A)$ $P(B)$ d) None of these

152. If two events A and B are mutually exclusive, P (AUB) is

  a) $P(A) \times P(B)$ b) $P(A)$ $P(B)$ c) $P(A)$ $P(B)$ d) None of these

153. If two events A and B are independent, P (A∩B) is

  a) $P(A) \times P(B)$ b) $P(A)$ $P(B)$ c) $P(A)$ $P(B)$ d) None of these

154. Number of sample points in a simple event is:

  a) 3   b) 2   c) 1   d) 0

155. If a coin is tossed 4 times, total number of outcome is:

a) 16   b) 8   c) 4   d) None of these

156. When a dice is thrown two times, total number of sample points is:

   a) 6   b) 12   c) 24   d) 36

157. For a binomial distribution with parameters n and p, probability of n successes is:

  a) np   b) npq   c) p^n d) q^n

158. Arithmetic mean of binomial distribution with parameters n and p is:

   a) np   b) npq   c)   d)

159. Variance of binomial distribution with parameters n and p is

   a) np   b) npq   c)   d)

160. Parameters of a normal distribution are

a) e and π b) e and μ c) μ and   d) μ and π

161. Total area under the normal curve is :

  a) 0   b) 0.25   c) 1   d) 0.5

162. In a normal distribution:

   a) AM = Median = Mode   b) AM Median Mode   c) AM Median Mode

   d) None of these

163. Skewness of a normal distribution is

   a) 0   b) - 1   c) 1   d) None of these

164. In a binomial distribution, the probability of success (p) and the probability of failure (q) are related as:

a) p=q   b) p=1+q   c) p =1- q   d) p =1/q

165. Normal curve is :

a) leptokurtic   b) mesokurtic   c) platikurtic   d) None of these

166. For a normal distribution, quartile deviation is:

a) 2/3   b) 3/4   c) 4/5   d) None of these

167. The variance of a standard normal distribution is :

a) 0   b) 2   c) 1   d) None of these

168. If two events cannot occur simultaneously, they are ……….. events.

a) Mutually exclusive   b) equally likely   c) dependent   d) None of these

169. If an event contains more than one sample point, it is a …………event

a) compound   b) equally likely   c) dependent   d) None of these

170. If a dice is thrown, probability of getting an even number is:

a) 1/2   b) 2   c) 1   d) None of these

171. If the probability of two events are same, they are……………… events.

a) Mutually exclusive   b) equally likely   c) dependent   d) None of these

172. Binomial probability function was introduced by

a) James Bernouli   b) Irving Fisher   c) Horace Secrist   d) None of these

173. Parameters of binomial distribution are:

a) n and p   b) n and q   c) μ d) π

174. Points of inflection in a normal curve are ………

 a)   b)   c) both a & b   d) None of these

175. Odd central moments in a normal distribution is equal to

 a) 0   b) 2   c) 1   d) None of these

176. The universal set which contains all of the possible outcomes of a random experiment as its elements is called

 a) Cartesian product   b) domain   c) sample space   d) None of these

177. Any subset of a sample space which contains one or more sample points is called

 a) event   b) element   c) factor   d) None of these

178. $^8C_2$ equals

 a)   38   b) 28   c) 58   d) None of these

179. From a pack of 52 playing cards one is drawn at random. The probability of getting a black card is:

 a) 1/56   b) 2/56   c) 1/2   d) None of these

180. From a class of 45 boys and 15 girls, a name is picked at random. The probability that it is a boy's name is:

a)   1/5   b) 3/4   c) 1/2   d) None of these

181. A uniform dice is thrown at random. The probability that the number on it is greater than 4 is

 a) 1/6   b) 1/3   c) 2/3   d) None of these

182. A ball is drawn at random from a box containing 6 red balls, 4 white balls and 5 blue balls. The probability that it is a red ball is

   a) 0.3   b) 0.4   c) 0.5   d) None of these

183. A normal curve is …………..shaped.

   a) parabola   b) hyperbola   c) bell   d)) None of these

184. Normal distribution is :

   a) unimodal   b) bi- modal   c) both a and b   d)) None of these

185. Mean deviation of a normal distribution is

   a) 2/3   b) 3/4   c) 4/5   d) None of these

186. Two parameters of standard normal distribution are

   a) 0 &1   b) 2&5   c) 1&2   d) None of these

187. $(-32)^{2/5}$ equals

   a) 4   b) 8   c) 12   d) None of these

188. A demand function is a

 a) continuous function   b) constant function   c) increasing function   d) decreasing function

189. If the cost function is given as C= 4x + 500, then the fixed cost is

   a) 4   b) 500   c) 504   d) None of these

190. Equilibrium price of a commodity whose supply and demand are given by Q_s = - 9+ p and Q_d = - 3 – p is

   a) 9   b) 1   c) 0   d) None of these

191. Equilibrium refers to the state of ……..

   a) demand = supply   b) demand supply   c) demandsupply   d) demand = 0

192. If A = {a, b}, its power set has ……… elements.

   a) 2   b) 4   c) 8   d) 1

193. Simultaneous equations means a set of equations in …… unknowns.

   a) 1   b) 2   c) any number of   d) None of these

194. $X^2 - 4 = 0$ implies X =…….

   a) 2   b) – 2   c) both a and b   d) None of these

195. Set of positive integers is………

   a) finite   b) infinite   c) both a and b   d) None of these

196.   If A is a square matrix, then,

      a) $|A^T| = |A|$ b) $|A^T| \neq |A|$ c) $|A^T|$ $|A|$ d) $|A^T|$ $|A|$

197. If any two rows or columns of a determinant are identical, then its value is:

   a) 0   b) 2   c) 10   d) 1

198. If A and B are two invertible matrices of same order, then:

   a) $(AB)^{-1} = B^{-1} A^{-1}$ b) $(AB)^{-1} \neq B^{-1} A^{-1}$ c) $(AB)^{-1}$ $B^{-1} A^{-1}$ d) None of these

199. If   = , then :

   a) x= 7, y = 1   b) x =10, y= 1   c) x=5, y= 1   d) None of these

200. Value of the determinant   is

a) - 19   b) – 18   c) 9   d) None of these

QUANTITATIVE TECHNIQUES

ANSWER KEYS

1. b

2. c

3. c

4. c

5. b

6. c

7. d

8. d

9. b

10. b

11. c

12. d

13. a

14. c

15. b

16. c

17. b

18. b

19. c

20. b

21. a

22. c

23. c

24. b

25. c

26. c

27. c

28. a

29.b

30. c

31. c

32. c

33. a

34. b

35. b

36. b

37. c

38. d.

39. c

40. c

41 c

42. b

43. a

44. b

45.b

46. b

47. a

48. c

49. a

50. a

51. d

52. a

53. a

54. b

55. c

56. a

57. b

58. c

59. a

60. c

61. c

62. b

63. a

64. c

65. a

66. a

67. b

68. a

69. b

70. c

71. c

72. c

73. a

74. b

75. a

76. b

77. c

78. b

79. d

80. a

81. b

82. c

83. c

84. b

85. c

86. a

87. b

88. b

89. b

90. b

91. b

92. a

93. a

94. a

95. c

96. d

97. b

98. C

99. c

100. b

101. c

102. a

103. a

104. a

105. c

106. c

107. b

108. a

109. b

110. c

111. b

112. a

113. a

114. a

115. c

116. b

117. b

118. b

119. c

120. b

121. c

122. a

123. b

124. c

125. a

126. b

127. a

128. c.

129. b

130. c

131. c

132. c

133. c

134. b

135. c

136. a

137. b

138. c

139. c

140. a

141. c

142. c

143. a

144. c

145. c

146. a

147. b

148. a

149. b

150. b

151. a

152. b

153. a

154. c

155. a

156. d

157. c

158. a

159. b

160. c

161. c

162. a

163. a

164. c

165. b

166. a

167. c

168. a

169. a

170. a

171. b

172. a.

173. a

174. c

175. a

176. c

177. a

178. b

179. c

180. b

181. b

182. b

183. c

184. a

185. c

186. a

187.a

188.d

189. b

190.d   ans =6

191.a

192.b

193. c

194.c

195. b

196. a

197.a

198. a

199. a

200.a