SESSION – 2

Test Series: May, 2018

MOCK TEST PAPER - 1
COMMON PROFICIENCY TEST

Time Allowed – 2 Hours

Maximum Marks – 100

SECTION C: GENERAL ECONOMICS

101. What implication does resource scarcity have for the satisfaction of wants

(a) Not all wants can be satisfied
(b) We will never be faced with the need to make choices
(c) We must develop ways to decrease out individual wants
(d) The discovery of new natural resources is necessary to increase our ability to satisfy wants

102. Which of the following pairs of goods is an example of substitutes?

(a) Tea and sugar
(b) Tea and coffee
(c) Pen and ink
(d) Shirt and trousers

103. In the production of wheat, all of the following are variable factors that are used by the farmer except:

(a) the seed and fertilizer used when the crop is planted
(b) the field that has been cleared of trees and in which the crop is planted
(c) the tractor used by the farmer in planting and cultivating not only wheat but also corn and barley
(d) the number of hours that the farmer spends cultivating the wheat fields

104. Which of the following statements is correct?

(a) The public sector was given a dominant position in the newly Independent India
(b) The foreign Trade Policy post Independence allowed free trade of all goods and services
(c) Monetary Policy post Independence was the responsibility of SBI
(d) None of the above

105. What is India’s rank in the world Population

(a) First
(b) Second
(c) Third
(d) Fourth

106. Find the tax which is direct tax among the following:

(a) Personal income tax
(b) Excise duty
(c) Sales tax
(d) Service tax

107. Larger production of ________goods would lead to higher production in future.
   (a) Consumer goods
   (b) Capital goods
   (c) Agricultural goods
   (d) Public Goods

108. A horizontal supply curve parallel to the quantity axis implies that the elasticity of supply is______
   (a) zero
   (b) infinite
   (c) equal to one
   (d) greater than zero but less than one

109. _____ is the apex bank for agriculture credit.
   (a) RBI
   (b) SIDBI
   (c) NABARD
   (d) ICICI

110. A situation of employment in which a person is apparently employed but his contribution to the production is almost nil is called _______unemployment.
   (a) structural
   (b) chronic
   (c) disguised
   (d) cyclical

111. According to the planning Commission, using Mixed Recall period (MRP) ______% people were below poverty line in 2011-12.
   (a) 26.2
   (b) 25.2
   (c) 27.8
   (d) 22

112. The economic analysis expects the consumer to behave in a manner which is:
   (a) Rational
   (b) Irrational
   (c) Emotional
   (d) Indifferent
113. After reaching the saturation point, consumption of additional units of the commodity cause:
   (a) Total utility to fall and marginal utility to increase
   (b) Total utility and marginal utility both to increase
   (c) Total utility to fall and marginal utility to become negative.
   (d) Total utility to become negative and marginal utility to fall.

114. Which of the following is not, by definition, equal to National Income?
   (a) National Product
   (b) National expenditure
   (c) National output
   (d) National wealth

115. Which of the following is not an objective of Fiscal policy:
   (a) Economic growth
   (b) Economic stability
   (c) Maximization of employment level
   (d) Regulating of financial institutions

116. The main objective of the World Trade Organisation is to secure among other:
   (a) A general agreement among common market countries on technical training and mutual prices of traded goods.
   (b) The maintenance of intellectual property rights and patent rights of member countries.
   (c) An improvement in the USA's terms of trade in the next decade.
   (d) A reduction in tariffs through negotiation, elimination of export quotas and globalization of international trade.

117. Birth rate and Death rate are measured as per:
   (a) 100 population
   (b) 1000 population
   (c) 10000 population
   (d) 100000 population

118. What is Bank Rate?
   (a) The rate of interest charged by public sector banks from the general public
   (b) The rate of interest on housing loans
   (c) The rate of interest on education loan
   (d) The rate at which the RBI discounts the bills of commercial banks

119. Which of the following statements is correct?
   (a) Agriculture occupies 10 per cent population of India
(b) Nearly 5 per cent population of India is below the poverty line
(c) The production techniques are backward
(d) None of the above

120. The green revolution is also known as:
   (a) Wheat revolution
   (b) Rice revolution
   (c) Maize revolution
   (d) Forest Revolution

121. Which of the following has been specifically established to meet the requirements of credit of the farmers and villages?
   (a) ICICI Bank
   (b) Regional Rural Banks
   (c) State Bank of India
   (d) EXIM Bank

122. Per Capita national income means
   (a) NNP ÷ population
   (b) Total capital ÷ population
   (c) Population ÷ NNP
   (d) None of the above

123. Which of the following is also known as International Bank for Reconstruction and Development?
   (a) IMF
   (b) RBI
   (c) WTO
   (d) World Bank

124. Who is the official lender of the last resort in India?
   (a) SBI
   (b) PNB
   (c) RBI
   (d) OBC

125. Three steel plants in Bhilai, Rourkela and Durgapur were set up in the ________.
   (a) First plan
   (b) Second plan
   (c) Third plan
   (d) Fourth plan
126. If income elasticity for gel pen is 0.8, we can say that gel pen in economics sense is a/an
(a) Luxury Good
(b) Inferior good
(c) Normal good
(d) Nothing can be said.

127. Which of the following in not a characteristic of a “price taker”?
(a) TR = P × Q
(b) AR = Price
(c) Negatively – sloped demand
(d) Marginal Revenue = Price

128. Which cost increases continuously with the increase in production?
(a) Average cost
(b) Marginal cost
(c) Fixed cost
(d) Variable cost

129. Which of the following statements is correct?
(a) Under Zamindari system, farmers directly paid land revenue to the state
(b) At preset, income tax revenues from the agriculture sector are negligible
(c) Commercial banks are providing loans to the agriculture at zero interest rate
(d) None of the above

130. We can say Indian agriculture has become modern since:
(a) There has been an increased in the use of high yielding varieties of seeds, fertilizers, pesticides etc.
(b) There has been noticeable positive change in the attitude of farmers towards new technique of production
(c) Farmer are increasingly resorting to intensive cultivation, multiple cropping, scientific water management
(d) All of the above

131. Jet Airways and Spicejet are examples of:
(a) Private Schools
(b) Private Airlines
(c) Private Ships
(d) Private Railways

132. All of the following statements except one are correct about the foreign trade policy, 2004-09. Identify the incorrect statement:
(a) Certain thrust areas like agriculture, handlooms handicrafts etc have been identified
(b) Vishes Krishiupaj Yojana has been started
(c) ‘ Served from India’ scheme has been started
(d) The entry of FDI in India has been restricted

133. In order to encourage investment in the country, the RBI may:
(a) reduce CRR
(b) increase CRR
(c) sell securities in the open market
(d) increase Bank rate

134. Which of the following statements is incorrect?
(a) The Indian road network is one of the longest in the world
(b) The rural road network connects around 65 per cent of all weather roads
(c) Most of the State Road Transport Corporation are running on profits
(d) The national highways carry more than 40 per cent of the total road traffic

135. ________ expressed the view that “Economics is neutral between end”
(a) Robbins
(b) Marshall
(c) Pigou
(d) Adam Smith

136. On an average, one post office in India serves ________
(a) about 100 person
(b) about 1000 persons
(c) more than 7100
(d) about 5800 persons

137. ________ is the Banker’s Bank in India.
(a) SBI
(b) PNB
(c) RBI
(d) OBC

138. In a typical demand schedule, quantity demanded:
(a) varies directly with price
(b) varies proportionately with prices
(c) varies inversely with price
(d) is independent of price
139. All of the following are U shaped curved except the:
   (a) AVC curve
   (b) AFC Curve
   (c) AC curve
   (d) MC curve

140. Production may be defined as an act of ________
   (a) creating utility
   (b) earning profit
   (c) destroying utility
   (d) providing services

141. The sale of branded articles is common in a situation of
   (a) excess capacity
   (b) monopolistic competition
   (c) monopoly
   (d) pure competition

142. Supply of a commodity is a:
   (a) Stock concept
   (b) A flow concept
   (c) Both stock and flow concept
   (d) None of these.

143. Which of the following is not microeconomic subject matter?
   (a) The price of apples
   (b) The cost of producing a fire truck for the fire department of Delhi, India
   (c) The quantity of apples produced for the apple market.
   (d) The national economy's annual rate of growth.

144. SJSRY stands for
   (a) Swarna Jayanti Shahari Rozgar Yojana
   (b) Shahari Jeewan Sudhar Rashtriya Yojana
   (c) Sampoorna Jeewan Shahari Rozgar Yojana
   (d) None of the above.

145. Oil and Natural Gas Corporation, Indian Oil Corporation, Steel Authority of India, and Bharat Heavy Electricals are all examples of
   (a) Small scale units.
   (b) Private sector units
(c) Public sector units
(d) Sick units

146. Money stock in India refers to:
(a) $M_1$
(b) $M_2$
(c) $M_3$
(d) $M_4$

147. Three methods of computing national income are __________
(a) Production, outlay and income methods.
(b) Balance of payments, income and consumption methods,
(c) Saving investment and income methods
(d) Outlay, depreciation and production methods.

148. ______ is a systematic record of all the economic transactions between one country and rest of the world.
(a) Balance of trade
(b) Balance of transactions
(c) Budget
(d) Balance of payments

149. If as a result of 10% increase in the price of apples, the quantity demanded decrease by 25%, the price elasticity is
(a) 2.5
(b) .25
(c) .1
(d) can’t say

150. Which of the following is correct?
(a) Normative economics is not concerned with value judgment.
(b) A market is a process that reconciles consumer decision, production decision, and labour decisions.
(c) A mixed economy has a certain level of government intervention in the economy along with private sector ownership of the economy.
(d) Both (b) and (c)
SECTION –D: QUANTITATIVE APTITUDE
Part: A Mathematics

151. Two numbers are in the ratio 7: 8. If 3 is added to each of them, their ratio becomes 8:9. The numbers are
(a) 14, 16
(b) 24, 27
(c) 21, 24
(d) 16, 18

152. If \( \log_{10000} x = -\frac{1}{4} \), then the value of \( x \) is given by:
(a) \( \frac{1}{100} \)
(b) \( \frac{1}{10} \)
(c) \( \frac{1}{20} \)
(d) none of these

153. The four numbers \( \frac{1}{2}, \frac{1}{3}, \frac{1}{5}, \frac{1}{x} \) are proportional then \( x \) is
(a) \( \frac{6}{5} \)
(b) \( \frac{5}{6} \)
(c) \( \frac{15}{2} \)
(d) none of these

154. The value of \( \left[ 1 - \left(1 - x^2 \right)^{-1} \right]^{-\frac{1}{2}} \) is equal to
(a) \( x \)
(b) \( \frac{1}{x} \)
(c) \( 1 \)
(d) none of these

155. on simplification
\[
\frac{1}{1 + z^{a-b} + z^{a-c}} + \frac{1}{1 + z^{b-c} + z^{b-a}} + \frac{1}{1 + z^{c-a} + z^{c-b}} \]
reduces to
(a) \( \frac{1}{z^{(a+b+c)}} \)
(b) \( \frac{1}{z^{(a+b+c)}} \)
(c) \( 1 \)
(d) \( 0 \)
156. \( \log (m+n) = \log m + \log n \), \( m \) can be expressed as:

(a) \( m = \frac{n}{n-1} \)

(b) \( m = \frac{n}{n+1} \)

(c) \( m = \frac{n+1}{n} \)

(d) \( m = \frac{n+1}{n-1} \)

157. Find positive value of the equation \( k \) for which the equations \( x^2+kx+64=0 \) and \( x^2-8x+k = 0 \) will have real roots:

(a) 12

(b) 16

(c) 18

(d) 22

158. The equation of the straight line through the point of intersection of \( x+2y-5=0 \) and \( x-3y-7 = 0 \) and passing through the point (1, 0) is:

(a) \( x+12y = 1 \)

(b) \( x-12y = 1 \)

(c) \( x-12y = 11 \)

(d) none

159. A man sells 6 radios and 4 televisions for Rs. 18, 480. If 14 radios and 2 televisions are sold for the same amount, what is the price of televisions?

(a) Rs. 1848

(b) Rs. 840

(c) Rs. 1680

(d) Rs. 3360

160. The area of a triangle with vertices (1,3), (5,6) and (-3,4) in terms of square units

(a) 5

(b) 3

(c) 8

(d) 13

161. Solution space of the inequalities \( 2x+y \leq 10 \) and \( x-y \leq 5 \):

(i) includes the origin (ii) includes the point (4,3)

(a) only (i)

(b) only (ii)

(c) Both (i) and (ii)
162. The rules and regulations demand that the employer should employ not more than 5 experienced hands to 1 fresh one and this fact is represented by (Taking experienced person as $x$ and fresh person as $y$)

(a) $y \geq \frac{x}{5}$
(b) $5y \leq x$
(c) $5y \geq x$
(d) none

163. $\lim_{x \to 0} \frac{3x + |x|}{7x - |x|}$ is

(a) 0
(b) 2
(c) $\frac{1}{3}$
(d) does not exist

164. $\lim_{x \to 0} \left( \frac{u^x + v^x + w^x - 3}{x} \right)$ is

(a) $3uvw$
(b) $\frac{1}{3} (u+v+w)$
(c) 0
(d) $\log_euvw$

165. $f(x) = \begin{cases} \frac{x^2 - 16}{x - 4} & : x \neq 4 \\ 8 & : x = 4 \end{cases}$

Then $f(x)$ is

(a) discontinuous at $x = 4$
(b) continuous at $x = 4$
(c) discontinuous at $x = -4$
(d) discontinuous at $x = 0$

166. The sum of $n$ terms of the series $3 + 33 + 333 + \ldots$ to $n$ terms

(a) $\frac{1}{27} \left( 10^{n+1} - 9n - 10 \right)$
(b) $\frac{1}{81} \left( 10^{n+1} - 9n - 10 \right)$
(c) \( \left( 10^{n+1} - 9n - 10 \right) \)

(d) None of these

167. If 6 times the no. of permutations of \( n \) items taken 3 at a time is equal to 7 times the no. of Permutations of \( (n-1) \) items taken 3 at a time then the value of \( n \) will be

(a) 7
(b) 9
(c) 13
(d) 21

168. The number of arrangement of the letters of the word “COMMERCE”

(a) \( 8 \)
(b) \( \frac{8}{2 \cdot 2 \cdot 2} \)
(c) \( 7 \)
(d) None of these

169. If \( y = a.e^{nx} + b.e^{-nx} \) then \( \frac{d^2y}{dx^2} \) is equal to

(a) \( n^2y \)
(b) \( -n^2y \)
(c) \( ny \)
(d) none of these

170. The value of the integral \( \int \frac{1}{x \log x} \, dx \) is

(a) \( \frac{1}{(x \log x)^2} + c \)
(b) \( \log (x \log x) \)
(c) \( \log (\log x) + c \)
(d) none of these

171. Find the f o g for the functions \( f(x) = x^2 \), \( g(x) = x + 1 \)

(a) \( x^2(x+1) \)
(b) \( x^2 \)
(c) \( x+1 \)
(d) \( (x+1)^2 \)
172. The number of proper subsets of the set {3, 4, 5, 6, 7} is
   (a) 32
   (b) 31
   (c) 30
   (d) 25

173. On the sets of lines in a plane the Relation “is perpendicular to” is
   (a) Reflexive
   (b) Symmetric
   (c) Transitive
   (d) none of these

174. A sum of money placed at compound interest double itself in 3 years. In how many years will it amount
to four times itself?
   (a) 5 years
   (b) 6 years
   (c) 8 years
   (d) 7 years

175. If an amount is kept at Simple Interest, it earns Rs.600 in first 2 years but when kept at Compound
Interest it earns at interest of Rs.660 for the same period; then the rate of interest and principle amount
respectively are
   (a) 20%; Rs.1200
   (b) 10%; Rs.1200
   (c) 20%; Rs.1500
   (d) 10%; Rs.1500

Part B: Statistics

176. Which sample provides separate estimates for population means for different segments and also overall
estimate?
   (a) Multistage sampling
   (b) Stratified sampling
   (c) Simple random sampling
   (d) Systematic sampling

177. According to Neyman’s allocation, in stratified sampling
   (a) Sample size is proportional to the population size
   (b) Sample size is proportional to the sample SD
   (c) Sample size is proportional to the sample variance.
   (d) Population size is proportional to the sample variance.

178. from which graphical representation, we can calculate partition values?
   (a) Lorenz curve
179. The frequency of class 20-30 in the following data is

<table>
<thead>
<tr>
<th>Class</th>
<th>0-10</th>
<th>10-20</th>
<th>20-30</th>
<th>30-40</th>
<th>40-50</th>
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<tr>
<td>Cumulative Frequency</td>
<td>5</td>
<td>13</td>
<td>28</td>
<td>34</td>
<td>38</td>
</tr>
</tbody>
</table>

(a) 5  
(b) 28  
(c) 15  
(d) 13

180. Which measure of dispersion is not affected in the presence of extreme observations?

(a) Range  
(b) Mean deviation  
(c) Standard deviation  
(d) Quartile deviation

181. If \( x \) and \( y \) are related as \( 3x + 4y = 20 \) and the quartile deviation of \( x \) is 12. Then the Quartile deviation of \( y \) is:

(a) 16  
(b) 14  
(c) 10  
(d) 9

182. Two variables \( x \) and \( y \) satisfy the relation \( 3x - 2y - 25 = 0 \) the mode of \( x \) is 25. Then the mode of \( y \) is:

(a) 25  
(b) 30  
(c) 37.5  
(d) \( \frac{52}{3} \)

183. In the year 2010 the monthly salary was Rs. 24,000. The consumer price index number was 140 in the year 2010 which rises to 224 in the year 2016. If he has to be rightly compensated what additional monthly salary to be paid to him

(a) Rs. 14,400  
(b) Rs. 38,400  
(c) Rs. 7,200  
(d) None of these  
(d) None

184. Purchasing power of money is

(a) Reciprocal of price index number  
(b) Equal to price index number
185. If \( R_x \) and \( R_y \) denote ranges of \( x \) and \( y \) respectively where \( x \) and \( y \) are related \( 3x + 2y + 10 = 0 \), what would be the relation between \( x \) and \( y \)?

(a) \( R_x = R_y \)
(b) \( 2. R_x = 3.R_y \)
(c) \( 3. R_x = 2.R_y \)
(d) \( R_x = 2.R_y \)

186. Two dice are thrown together. Find the probability of getting multiple of 2 on one dice and multiple of 3 on the other.

(a) \( \frac{2}{3} \)
(b) \( \frac{1}{6} \)
(c) \( \frac{1}{3} \)
(d) none of these

187. Which of the following regression equations represent regression equation line \( y \) on \( x \):

\[ 7x + 2y + 15 = 0 \] and \[ 2x + 5y + 10 = 0 \]

(a) \( 7x + 2y + 15 = 0 \)
(b) \( 2x + 5y + 10 = 0 \)
(c) Both (a) and (b)
(d) None of these

188. Geometric Mean of three observations 40, 50 and \( x \) is 10. The value of \( x \)

(a) 2
(b) 4
(c) \( \frac{1}{2} \)
(d) none of these

189. A parameter may be defined as a characteristic of a population based on _____

(a) Sample units
(b) All the units
(c) Few units
(d) Any of the above

190. If a variate \( X \) has, Mean > Variance, then its distribution will be

(a) Binomial
(b) Poisson
(c) Normal
(d) t-distribution
191. If \( x \) is a poison variate with \( P(x=0) = P(x=2) = \)

(a) \( \frac{1}{6e} \)

(b) \( \frac{e}{6} \)

(c) \( \frac{1}{2e} \)

(d) \( \frac{e}{3} \)

192. The distribution of demand as follows.

<table>
<thead>
<tr>
<th>Demand</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability</td>
<td>0.05</td>
<td>0.1</td>
<td>0.3</td>
<td>0.4</td>
<td>0.1</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Then mean is given by

(a) 7.55

(b) 7.85

(c) 1.25

(d) 8.35

193. Sampling error is ____Proportional to the square root of the number of times in the sample.

(a) Inversely

(b) Directly

(c) Equally

(d) None

194. If Ram and Sita are applied for 2 vacancies in the post. The probability that brother will select is 1/7 and that of Sita is 1/5 then then the probability that (i) Both will select (ii) one will select and (iii) none of them will select.

(a) \( \frac{1}{35}, \frac{10}{35}, \frac{24}{35} \)

(b) \( \frac{24}{35}, \frac{7}{35}, \frac{14}{35} \)

(c) \( \frac{3}{35}, \frac{24}{35}, \frac{11}{35} \)

(d) \( \frac{24}{35}, \frac{6}{35}, \frac{20}{35} \)

195. The criteria for an ideal estimator are

(a) Unbiasedness, consistency, efficiency and sufficiency

(b) Unbiasedness, Expectation, sampling and estimation
196. If the Population of SD is known to be 5 for a population containing 80 units, then the standard error of sample mean for a sample size of 25 without replacement is.

(a) 5  
(b) 0.20  
(c) 1  
(d) 0.83

197. If the profits of a company remain the same for last ten months, then the standard deviation of profits for these ten months would be?

(a) Positive  
(b) Negative  
(c) Zero  
(d) (a) or (c)

198. If the S.D of X is 3, what is the variance of (5 - 2x)?

(a) 36  
(b) 6  
(c) 1  
(d) 9

199. What is the number of trials with parameter 15 and 1/3, what is the value of the mode of the distribution.

(a) 5 and 6  
(b) 5  
(c) 5.50  
(d) 6

200. If the mean deviation of normal variable is 16, what is the quartile deviation.

(a) 10.00  
(b) 13.50  
(c) 15.00  
(d) 12.05