

SESSION - 2

Test Series: June, 2019

**MOCK TEST PAPER - 2
COMMON PROFICIENCY TEST**

Time Allowed – 2 Hours

Maximum Marks – 100

SECTION C: GENERAL ECONOMICS (50 Marks)

101. Population growth rate in India was negative in
- (a) 1901-11
 - (b) 1911-21
 - (c) 1921-31
 - (d) 1931-41
102. Which one of the following resources is the most crucial input in India's new agricultural technology, responsible for the Green Revolution?
- a) Fertilizers
 - (b) HYV seeds
 - (c) Agricultural Machinery
 - (d) Irrigation
103. Location of sugar industry in India is influenced by :
- (a) the market
 - (b) raw material
 - (c) labour and entrepreneurial factors
 - (d) none of the above
104. Net National Income at market prices is equal to
- (a) Gross National Income at market prices minus depreciation
 - (b) Net Domestic Product at factor price plus or minus earnings from abroad
 - (c) Gross Domestic Product minus indirect taxes and subsidies
 - (d) Gross National Product at factor price plus or minus depreciation
105. Which one of the following assumptions is not necessary for the cardinal utility theory ?
- (a) Rationality of the consumer
 - (b) Constant marginal utility of money
 - (c) Perfectly competitive market
 - (d) Additivity of utility
106. Dumping involves
- (a) selling at a price in another market which is lower than the price or cost in your home market
 - (b) price discrimination between the two markets

- (c) surplus production at lower cost
 - (d) none of the above
107. Demand deposits with banks are considered as money because they are:
- (a) generally acceptable as a means of payment
 - (b) more liquid than cash
 - (c) held by the government
 - (d) managed efficiently by bank managers
108. Which one of the following sources of Central revenue belongs to the category of indirect taxes?
- (a) Corporation tax
 - (b) Customs
 - (c) Wealth tax
 - (d) Interest Receipts
109. In the case of two perfect substitutes, the indifference curve will be :
- (a) straight line
 - (b) L-shaped
 - (c) U-shaped
 - (d) C-shaped
110. A consumer is at equilibrium when :
- (a) slope of the price line is equal to indifference curve
 - (b) he saves 10% of his income
 - (c) borrows an amount equal to his income from the bank
 - (d) none of the above
111. The 'Hindu rate of growth'
- (a) refers to growth of Hindu population
 - (b) is the term used by Raj Krishna to represent the nature of the growth of the Indian economy at around 3.5% per year
 - (c) is the term coined by Amartya Sen to represent the nature of the growth of the Indian economy at around 3.5% per year
 - (d) is the term coined by V.K.R.V. Rao to decide the nature of the growth of the Indian economy at around 4%
112. Disguised unemployment in India is maximum in :
- (a) agricultural sector
 - (b) secondary sector
 - (c) tertiary sector
 - (d) none of the above

113. Unemployment rate in India is defined as the ratio of number of persons unemployed to total
- (a) Population
 - (b) Population excluding children
 - (c) Labour force
 - (d) Population excluding the aged
114. If the Indian economy aimed at an annual growth rate of 8 per cent in national income, assuming as incremental capital – output ratio of 3.5:1 what would be the required rate of investment as percent of national income?
- (a) 28.0
 - (b) 24.5
 - (c) 10.5
 - (d) 3.5
115. In 1991, foreign exchange reserves were sufficient to finance imports of ___ weeks.
- (a) 36
 - (b) 16
 - (c) 24
 - (d) 3
116. Which one of the following agencies in India is responsible for computation of national income?
- (a) NCAER
 - (b) CSO
 - (c) NSS
 - (d) RBI
117. The total area under the demand curve of a good measures:
- (a) marginal utility
 - (b) total utility
 - (c) consumers surplus
 - (d) producers' surplus
118. The meaning of the word 'Economic' is most closely connected with the word :
- (a) Extravagant
 - (b) Scarce
 - (c) Unlimited
 - (d) Restricted
119. Average variable cost curve :
- (a) slopes downwards at first and then upwards
 - (b) slopes upwards, the remains constant and the falls
 - (c) slopes downwards

- (d) none of the above
120. Price elasticity of demand is defined as
- (a) $\frac{\text{Change in quantity demanded}}{\text{Change in price}}$
- (b) $\frac{\text{Proportionate change in quantity demanded}}{\text{Change in price}}$
- (c) $\frac{\text{Change in quantity demanded}}{\text{Proportionate change in price}}$
- (d) $\frac{\text{Proportionate change in quantity demanded}}{\text{Proportionate change in price}}$
121. Consumer stops purchasing the additional units of the commodity when -
- (a) marginal utility starts declining
- (b) marginal utility become zero
- (c) marginal utility is equal to marginal utility of money
- (d) total utility is increasing
122. The 'substitution effect' takes place due to change in
- (a) income of the consumer
- (b) prices of the commodity
- (c) relative prices of the commodities
- (d) all of the above
123. Under income effect, consumer
- (a) moves along the original indifference curve
- (b) moves to higher or lower indifference curve
- (c) always purchases higher quantities of both the commodities
- (d) none of the above.
124. In a perfect competitive market :
- (a) firm is the price-giver and industry the price taker
- (b) firm is the price taker and industry the price giver
- (c) both are the price takers
- (d) none of the above
125. Which of the following influences most the price level in the very short-run period?
- (a) demand
- (b) supply
- (c) cost
- (d) production

126. By imperfect monopoly, we mean
- (a) It is possible to substitute the monopolized product with another monopolized product
 - (b) Entry of new firms is possible to produce the same product
 - (c) The amount of output produced is very small
 - (d) None of the above
127. The degree of monopoly power is measured in terms of difference between
- (a) Marginal cost and the price
 - (b) Average cost and average revenue
 - (c) Marginal cost and average cost
 - (d) Marginal revenue and average cost
128. A monopoly producer usually earns _____ even in the long run
- (a) super normal profits
 - (b) only normal profits
 - (c) losses
 - (d) none of the above
129. Price discrimination is not possible :
- (a) under monopoly situation
 - (b) under any market form
 - (c) under monopolistic competition
 - (d) under perfect competition
130. A firm under monopolistic competition advertises :
- (a) as it has no control over the price of its product
 - (b) to lower its cost of production
 - (c) to increase its sales and profit
 - (d) because it cannot raise price
131. In long-run, all firms in monopolistic competition
- (a) earn super normal profits
 - (b) earn normal profits
 - (c) incur losses
 - (d) may earn super normal profit, normal profit or in incur losses
132. Differentiated oligopoly is one where there are
- (a) many sellers producing homogeneous product
 - (b) few sellers producing homogenous product
 - (c) many sellers producing differentiated product
 - (d) few sellers producing differentiated product

133. Which one of the following is not a cause of poverty in India?
- (a) abundant population
 - (b) abundant natural resources
 - (c) abundant inequalities to distribution of income
 - (d) abundant surplus manpower in agriculture
134. The most important remedy to the problem of poverty in India is :
- (a) changes in the ownership pattern
 - (b) higher productivity
 - (c) re-distribution of income through fiscal, pricing and other measures
 - (d) all of the above
135. Growth rate of population can be measured by
- (a) division of death rate by birth rate
 - (b) multiplication of death rate by birth rate
 - (c) addition of death rate and birth rate
 - (d) subtraction of death rate from birth rate
136. Infant mortality rate refers to :
- (a) the number of children dying before reaching the school going age
 - (b) the number of children dying before reaching 3 years of age
 - (c) the proportion of children dying within a year of their birth
 - (d) none of the above
137. Occupational structure refers to the
- (a) number of people living in a country
 - (b) size of working force in a country
 - (c) distribution of working force among the different occupations
 - (d) occupations available in a country
138. The real determinant of the size of market in a country is the
- (a) income of its population
 - (b) geographical area
 - (c) size of its population
 - (d) income of the government
139. The LAC curve
- (a) falls when the LMC curve falls
 - (b) rises when the LMC curve rises
 - (c) goes through the lowest point of the LMC curve
 - (d) falls when $LMC < LAC$ and rises when $LMC > LAC$

140. At shut down point :
- (a) price is equal to AVC
 - (b) total revenue is equal to TVC
 - (c) total loss of the firm is equal to TFC
 - (d) all of the above
141. The incidence of taxes refers to :
- (a) the level and rate of taxation
 - (b) who ultimately bears the money burden of the tax.
 - (c) the growth of taxation
 - (d) the way in which a tax is collected
142. The main objective of fiscal policy in developing countries is to:
- (1) promote economic growth
 - (2) mobilise resources for economic growth
 - (3) ensure economic growth and distribution
 - (4) increase employment opportunities
- (a) only 1 and 2 are correct
 - (b) only 2 and 3 are correct
 - (c) only 2 and 4 are correct
 - (d) 1, 2, 3 and 4 are correct
143. A Government budget is defined as:
- (a) a description of the fiscal policies of the government and the financial plans
 - (b) a financial plan describing estimated receipts and proposed expenditures and disbursement under various heads
 - (c) neither of the above
 - (d) both (a) and (b) above
144. Human Development Index (HDI) is a composite index of :
- (a) Health, literacy and employment
 - (b) National income, size of population and general price level
 - (c) National income, per capita income and per capita consumption
 - (d) Physical resources, monetary resources and population size
145. The marginal farmer in India is defined as a cultivator who :
- (a) does not own any land
 - (b) works on a land holding of less than one hectare
 - (c) works on a land holding for wages
 - (d) keeps shifting between agriculture and non-agriculture jobs

146. The main objective of the Regional Rural Bank is to
- (a) provide Credit and other facilities to small and marginal farmers, agricultural labours and artisans in rural areas
 - (b) provide credit to the common people in rural areas
 - (c) take over the functions of Agricultural Refinance Corporation of India
 - (d) supplement scheduled commercial banks
147. The second plan's programme of industrialisation was based on the _____ model
- (a) British
 - (b) V.V. Bhatt
 - (c) P.C. Mahalanobis
 - (d) Vera Anstey
148. In both the Chamberlin and kinked demand curve models, the oligopolists
- (a) recognize their independence
 - (b) do not collude
 - (c) tend to keep prices constant
 - (d) all of the above
149. The demand for a factor of production is said to be a derived demand because
- (a) it is a function of the profitability of an enterprise
 - (b) it depends on the supply of complementary factors
 - (c) its stems from the demand for the final product
 - (d) it arises out of means being scarce in relation to wants
150. Export led growth strategy does not include :
- (a) outward oriented growth
 - (b) export promotion
 - (c) import restrictions
 - (d) emphasising comparative advantage

SECTION –D: QUANTITATIVE APTITUDE (50 Marks)

PART: A MATHEMATICS

151. The equation of the line parallel to the line joining (7,5) and (2,9) and passing through the point (3, –4) is
- (a) $4x + 5y + 8 = 0$
 - (b) $4x - 5y + 8 = 0$
 - (c) $4x - 5y - 8 = 0$
 - (d) None of these
152. Rs. 10,000 is invested at annual rate of interest of 10% p.a. The amount after two years at annual compounding is
- (a) Rs. 21100
 - (b) Rs. 12100
 - (c) Rs. 12110
 - (d) None of these
153. There are 7 routes from station X to station Y. In how many ways one may go from X to Y and return, if for returning one can make a choice of any of the routes?
- (a) 49
 - (b) 17
 - (c) 42
 - (d) 35
154. The sum of the series $1, \frac{1}{3}, \frac{1}{3^2}, \frac{1}{3^3}, \dots$ to ∞ is
- (a) $\frac{4}{3}$
 - (b) $\frac{3}{2}$
 - (c) $\frac{1}{3}$
 - (d) None of these
155. The number of subsets of the set {2, 4, 6, 8} is
- (a) 8
 - (b) 15
 - (c) 16
 - (d) 4
156. If $A = \{1, 3, 5, 7, 9\}$, $B = \{2, 4, 6, 8, 10\}$ then $A \cap B$ is
- (a) $\{0\}$
 - (b) ϕ

- (c) {1,2,3,4,5,6,7,8,9,10}
- (d) None of these
157. $\lim_{x \rightarrow 3} \frac{x^2 - 9}{x - 3}$
- (a) Does not exist
- (b) 6
- (c) 1
- (d) None of these
158. If $f(x) = \frac{x^2 - 25}{x - 5}$, then the value of $f(x)$ at $x = 5$, i.e. $f(5)$ is equal to
- (a) 10
- (b) Undefined
- (c) 1
- (d) None of these
159. If $y = ax^3 + bx^2 + cx + d$, then $\frac{dy}{dx}$ is equal to
- (a) $3ax^2 + 2bx + c$
- (b) $\frac{ax^4}{4} + \frac{bx^3}{3} + \frac{cx^2}{2} + dx$
- (c) 0
- (d) None of these
160. $\int \frac{\log x}{x} dx$ is equal to
- (a) $\frac{1}{2} \log x + k$
- (b) $\frac{1}{2} (\log x)^2 + k$
- (c) $\frac{1}{2} x^2 + k$
- (d) None of these
161. $\int 10 \left(\frac{e^x + e^{-x}}{e^x - e^{-x}} \right) dx$ is equal to
- (a) $10 \log |e^x - e^{-x}| + k$
- (b) $10 \log |e^x + e^{-x}| + k$
- (c) $\log(e^x - e^{-x})$

(d) None of these

162. The value of $\frac{2^{16} \times 3^{10} \times 5^4}{2^{12} \times 3^6 \times 5^3}$ is equal to

- (a) 2160
- (b) 6480
- (c) 648
- (d) 3240

163. The value of $y^{a-m} \times y^{m-n} \times y^{n-a}$ is equal to

- (a) 1
- (b) 0
- (c) -1
- (d) y

164. The value of $\log(1+2+3+\dots+n)$ is equal to

- (a) $\log 1 + \log 2 + \dots + \log n$
- (b) $\log n + \log(n+1) - \log 2$
- (c) 0
- (d) 1

165. The roots of the equation $x^3 - 3x^2 + 2x = 0$ are

- (a) 1, 2
- (b) 0, 1
- (c) 0, 1, 2
- (d) 1, 2, 3

166. The roots of the equation $x^2 - x + 1 = 0$ are

- (a) Imaginary and unequal
- (b) Real and unequal
- (c) Real and equal
- (d) Imaginary and equal

167. Interest earned on Rs. 3000 at 5% p.a. simple interest for three years is _____

- (a) Rs. 540
- (b) Rs. 450
- (c) Rs. 45
- (d) Rs. 54

168. The inequalities $x < 0, y > 0$ indicates _____

- (a) Third quadrant
- (b) First quadrant

- (c) Second quadrant
 (d) Fourth quadrant
169. A function $f(x)$ is an even function, if
- (a) $-f(x) = f(x)$
 (b) $f(-x) = f(x)$
 (c) $f(-x) = -f(x)$
 (d) None of these
170. Number of arrangement that can be made by word 'APPLE' is _____
- (a) 50
 (b) 40
 (c) 60
 (d) 120
171. For a 10 year deposit, what interest rate payable annually is equivalent to 5% interest payable quarterly?
- (a) 5.1%
 (b) 4.9%
 (c) 6.0%
 (d) None of these
172. If the value of a car gets depreciated by 20% per year, estimated value at the end of five years is _____, if its present value is Rs. 24,000.
- (a) Rs.7864.32
 (b) Rs.7684.23
 (c) Rs.8764.32
 (d) Rs.6789.32
173. If 3 times of Ramesh's age 6 years ago be subtracted from twice his present age, the result would be equal to his present age. Find Ramesh's age
- (a) 15
 (b) 9
 (c) 16
 (d) 8
174. The sum and product of the equation $3x^2 - 2x - 6 = 0$ are
- (a) $2/3, -2$
 (b) $-2/3, 2$
 (c) $2, -2/3$
 (d) $-2, -2/3$
175. If $1176 = 2^p \cdot 3^q \cdot 7^r$ Find the value of p, q, r.
- (a) 1, 2, 3

- (b) 1, 3, 2
- (c) 3, 1, 2
- (d) 1, 3, 5

PART B : STATISTICS

176. If one of the regression coefficient is greater than unity, then other is less than unity.
- (a) True
 - (b) False
 - (c) Both
 - (d) None of these
177. Age of person is
- (a) An attribute
 - (b) A discrete variable
 - (c) A continuous variable
 - (d) A variable
178. For open end classification, which of the following is the best measure of central tendency?
- (a) A.M.
 - (b) G.M.
 - (c) Median
 - (d) Mode
179. If an unbiased coin is tossed once, then the two events head and tail are
- (a) Mutually exclusive
 - (b) Exhaustive
 - (c) Equally likely
 - (d) All these
180. If AM and Coefficient of variation of x are 10 and 40 respectively. What is the variance of $(15-2x)$
- (a) 8
 - (b) 9
 - (c) 10
 - (d) 11
181. A bag contains 20 discs numbered 1 to 20. A disc is drawn from the bag. The probability that the number on it is a multiple of 3 is _____
- (a) $5/10$
 - (b) $2/5$
 - (c) $1/5$
 - (d) $3/10$

182. The median of the following items, 6, 10, 4, 3, 9, 11, 22, 18 is _____
- (a) 10
 - (b) 9
 - (c) 9.5
 - (d) 10.5
183. The marks obtained by 10 students in an examinations were as follows:
70, 65, 68, 70, 75, 73, 80, 70, 83, 86. Find mean deviation about the mean?
- (a) 5.3
 - (b) 5.4
 - (c) 5.5
 - (d) 5.6
184. For a set of 100 observations, taking assumed mean as 4, the sum of the deviations is -11 cm and the sum of squares of these deviations is 257 cm². Find the coefficient of variation?
- (a) 41.13%
 - (b) 14.13%
 - (c) 25.13%
 - (d) 52.13%
185. The coefficient of rank correlation of marks obtained by 10 students in English and Economics was found to be 0.5, it was later discovered that the difference in ranks in the two subjects obtained by one student was wrongly taken as 3 instead of 7. Find correct coefficient of rank correlation.
- (a) 0.514
 - (b) 0.26
 - (c) 0.15
 - (d) None of these
186. The mean of normal distribution is 500 and 16% of the values are greater than 600. What is the S.D. of the distribution.
- (a) 50
 - (b) 100
 - (c) 150
 - (d) 200
187. A population comprises 3 numbers 2, 6, 4. Find all possible number of samples of size two with replacement.
- (a) 27
 - (b) 6
 - (c) 9
 - (d) None of these

188. A random sample of 100 articles taken from a large batch of articles contains 15 defective articles. What is the estimates of the proportion of defective articles in the entire batch.
- (a) 0.15
 - (b) 0.020
 - (c) 0.212
 - (d) None of these
189. G.M. is defined only when
- (a) All observation have the same sign and none is zero.
 - (b) All observation have the different sign and none is zero
 - (c) All observation have same sign and one is zero
 - (d) All observation have the different sign and one is zero
190. A card is drawn at random from a well shuffled pack of 52 cards. Find the probability of getting a two of heart or one of diamond.
- (a) $1/26$
 - (b) $2/51$
 - (c) $2/26$
 - (d) $1/52$
191. If the probability of a defective bolt is 0.1, find the standard deviation for the distribution of defective bolt in a total of 500.
- (a) 7.6
 - (b) 7.5
 - (c) 6.5
 - (d) 6.7
192. If the A.M. of two numbers is 6 and G.M. is 6, then find the two numbers?
- (a) 6, 6
 - (b) 10, 8
 - (c) 10, 6
 - (d) 9, 2
193. There are four hotels in a certain city. If 3 men check into hotels in a day, what is the probability that they each are into a different hotels.
- (a) 0.050
 - (b) 0.375
 - (c) 0.675
 - (d) 0.525
194. Fisher's ideal index is
- (a) Arithmetic mean of Laspeyre's and Paasche's index.
 - (b) Median of Laspeyre's and Paasche's index.

- (c) Geometric mean of Laspeyre's and Paasche's index.
- (d) None of these.

195. Given the following equations as $3x + y = 10$ and $3x + 4y = 15$, which is the regression equation x on y ?

- (a) 1st equation
- (b) 2nd equation
- (c) Both the equation
- (d) none of these

196. The two lines of regression are given by $8x + 10y = 25$ and $16x + 5y = 12$ respectively. If the variance of x is 25, what is the standard deviation of y ?

- (a) 16
- (b) 8
- (c) 64
- (d) 4

197. The Probability of a random variable x is given below:

x	1	2	4	5	6
p	0.15	0.25	0.20	0.30	0.10

What is the standard deviation of x ?

- (a) 1.49
- (b) 1.56
- (c) 1.69
- (d) 1.72

198. The criteria for ideal estimator are

- (a) Unbiasedness, Consistency, efficiency and sufficiency
- (b) Unbiasedness, expectation, efficiency and sufficiency
- (c) Estimation, Consistency, sufficiency and efficiency
- (d) Estimation, Expectation, unbiasedness and sufficiency

199. Consumer price index number from the year 2010 year to year 2015 changed from 100 to 200. The salary of an employee has changed from Rs.300

- (a) Rs.350
- (b) Rs.250
- (c) Rs. 600
- (d) Rs.450

200. Find the sample size such that the proportionality of the sample mean differing from the population by not more than $1/10$ of its SD is 0.95

- (a) 225
- (b) 375
- (c) 395
- (d) 384