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Economics

Last Minute Suggestion

[500 Most Important Key Points]

1. In a two-commodity economy X and Y, if X be Giffen good, the following conditions must be satisfied in case of good Y: $\frac{d_y}{dp_y} < 0$

2. Two commodities are considered to be perfect substitutes for each other if the elasticity of substitution is: **Infinite**

[For perfect complements elasticity of substitution is: **Zero**]

3. Given the consumer's utility function $U = X_1^2 X_2^3$ and the budget constraint $M = P_1 X_1 + P_2 X_2$, the demand function for X_2 will be: $\frac{3M}{5P_2}$

4. The concept of 'Ordinal Utility' was first developed by: **the Russian scholar Slutsky, in 1915.**

[A detailed discussion about Indifference Curve Approach was done by **Prof. Hicks and Allen in 1928**]

5. The law of Diminishing Marginal Utility was introduced by: **Marshall**

[If TU is increasing $\rightarrow TU_2 > TU_1 \rightarrow MU_X > 0 \rightarrow$ **Under Saturation**

If TU is constant $\rightarrow TU_2 = TU_1 \rightarrow MU_X = 0 \rightarrow$ **Perfect Saturation**

If TU is decreasing $\rightarrow TU_2 < TU_1 \rightarrow MU_X < 0 \rightarrow$ **Over Saturation**]

6. The Law of Equi-Marginal Principle in a two commodity world X and Y, the condition must be fulfilled: $\frac{MU_X}{P_X} = \frac{MU_Y}{P_Y} = \infty = \mathbf{MUM}$

[If there exists 'n' number of products, then the equilibrium condition will be, $\frac{MU_1}{P_1} = \frac{MU_2}{P_2} = \dots = \frac{MU_n}{P_n} = \infty = \mathbf{MUM}$]

7. When MRS_{XY} is decreasing, the shape of Indifference curve is: **Convex to the origin**

[**MRS is diminishing \rightarrow the slope of IC is diminishing \rightarrow IC must be convex to the origin**

MRS is constant \rightarrow the slope of IC is constant \rightarrow IC must be a straight line

MRS is increasing \rightarrow the slope of IC is increasing \rightarrow IC must be concave to the origin]

8. When PCC_X is negatively sloped then price elasticity of demand is: $e_p^x > 1$

[PCC_X is horizontal or parallel to X-axis $\rightarrow e_p^x = 1$

PCC_X is positively sloped $\rightarrow e_p^x < 1$

PCC_X is vertical or parallel to Y-axis $\rightarrow e_p^x = 0$

PCC_X is backward bending $\rightarrow e_p^x > 0 \rightarrow X$ is Giffen good]

9. When ICC is negatively sloped then income elasticity of demand is: $e_M^x > 0, e_M^y > 0 \rightarrow$

Both products are NORMAL

[ICC is horizontal or parallel to X-axis $\rightarrow e_M^x > 0, e_M^y = 0$

ICC is vertical or parallel to Y-axis $\rightarrow e_M^x = 0, e_M^y > 0$

ICC is backward bending towards X-axis $\rightarrow e_M^x > 0, e_M^y < 0$

ICC is backward bending towards Y-axis $\rightarrow e_M^x < 0, e_M^y > 0]$

10. If ICC is negatively sloped then Engel Curve will be: **Concave to the M-axis**

[ICC is vertical \rightarrow EC will be Vertical

ICC is backward bending \rightarrow EC is negatively sloped]

11. Consumer's Surplus was first introduced by: **Marshall**

12. For backward bending labour supply curve the correct statement is: **Substitution effect will be lower than Income effect**

13. "Production will mean putting utility into goods": **FRASER**

14. "Production is an activity directed to the satisfaction of other peoples' wants through exchange": **HICKS**

15. Homothetic functions are functions whose marginal rate of technical substitution is: **Homogeneous of degree zero**

16. The elasticity of substitution of Cobb-Douglas production function is: **Equal to 1**

17. The elasticity of substitution of CES production function is: **Equal to $\frac{1}{1-\rho}$**

18. When both products are 'NORMAL' then the Expansion Path will be: **Positively sloped**

19. If one product is 'INFERIOR' then the Expansion Path will be: **Backward Bending**

20. When AP_L is rising the AVC must be: **Falling**

[When AP_L is maximum \rightarrow **AVC must be minimum**

When AP_L is falling \rightarrow **AVC must be rising**]

21. According to the modern theory of cost the shape of short run Average Cost curve must be: **Saucer shape**

22. According to the modern theory of cost the shape of long run Average Cost curve must be: **Horizontal stretch over a considerable range**

23. The long run Average Cost curve is called: **Planning Curve**

24. When total revenue is increasing then price elasticity of demand will be: **> 1**

[If TR is decreasing $\rightarrow e_p < 1$

If TR is constant $\rightarrow e_p = 1$]

25. The basic difference between 'Pure' and 'Perfect' competition: **Perfect knowledge and perfect mobility of factors**

26. Under perfect competition firms are not organized like: **OPEC**

27. When $P > AC$ then the firm can enjoy: **Super normal profit**

[When $P = AC$ then the firm can enjoy \rightarrow **Normal profit**

When $P < AC$ then the firm can enjoy \rightarrow **Negative profit or earn Loss**]

28. The break even condition is: **$P = AR = MR = SRAC = SRMC$**

29. At equilibrium under monopoly: **Total expenditure and price are inversely related**

30. The Lerner's Index of Monopoly Power: $\frac{P-MC}{P}$

31. The correct statement about degree of Monopoly Power and elasticity of demand is: **The lower (higher) the elasticity of demand the higher (lower) the degree of monopoly power**
32. Imposition of Lump Sum Tax by the Govt. to the monopolist: **Profit will reduce**
33. Imposition of per unit tax by the Govt. to the monopolist: **Per unit and total profit will reduce**
34. When the monopolist is selling the same product in two markets where one is perfectly competitive and other is monopoly market: **Local Discrimination or Dumping**
35. Group behavior is a characteristics of: **Monopolistic competition and Oligopoly**
36. Excess capacity under monopolistically competitive market: **Ideal output – Actual output**
37. When an enterprise owner is the sole purchaser in input market and seller in a perfectly competitive market. This is the case of: **Monopsonistic exploitation**
38. If the product is 'homogeneous' or 'perfect substitute' then it will be called: **Pure Oligopoly**
 [If the product is 'differentiated' or 'close substitute' then it will be called → **Differentiated Oligopoly**]
39. Kinked demand curve was introduced by: **Paul M. Sweezy**
40. The first oligopoly model: **Cournot Model in 1838**
41. Under Cournot duopoly model, each firm supplies: $\frac{1}{3}$ of the market
 [Total duopoly output will be → $(\frac{1}{3} + \frac{1}{3}) = \frac{2}{3}$ of the market]
42. Bilateral monopoly means: **A monopolist facing a monopsonist**
43. Clark-Wicksteed product exhaustion theorem says that: **Given a linearly homogeneous production function, the product is exhausted**
44. The name is associated with 'The model of Managerial Enterprise': **R. Marris**
45. Monopolistic exploitation occurs when: **The factor market is monopsonistic**

46. Modern theories of imperfect competition were inspired by: **Sraffa**
47. The kinked demand model explained: **Price Rigidity**
48. In the Stackelberg model of duopoly the cournot behavior assumption is applied to: **The follower**
49. The Adding Up Theorem under constant returns to scale holds when the factors of production are paid according to their: **Marginal productivities**
50. Rent earned by a factor of production equals to: **The difference between what this factor is currently earning and what it can earn in its next best use**
51. While analyzing the marginal productivity theory of distribution, Clark gave more emphasis to: **Demand for labour**
52. The concept of 'Reserve Army of Labour' was introduced by: **Karl Marx**
53. In Schumpeter's view an entrepreneur is: **An inventor of new products and processes**
54. Frank H. Knight regards profits as: **The payments received by an entrepreneur for his risk-taking and activities in which some elements of uncertainty are involved.**
55. Interest is a reward for parting with liquidity': **J. M. Keynes**
56. The advocate of the Loanable Fund Theory of interest is: **Robertson**
- [**The Loanable Fund Theory lays emphasis on the interplay of → both monetary as well as real factors**
- Loanable Fund Theory is called → Neo-classical theory of Rate of Interest]**
57. The classical theory of interest lays more emphasis on: **Real factors**
58. In the classical theory, the rate of interest is determined by: **The interaction between supply of saving curve and investment demand curve**
59. Interest is 'Price paid for the use of capital in any market'. This view of interest has been expressed by: **Marshall**

60. First of all the term 'Quasi-rent' was used by: **Marshall**

[The 'Quasi-rent' is → **Short period phenomenon**

'Quasi-rent' is → **Price - AVC**]

61. Transfer earnings are: **The maximum payment necessary to retain the factor in its employment**

62. Under conditions of monopsony in the labour market, the trade unions can succeed in achieving higher wage rates: **(i) without decreasing employment (ii) with increasing employment and (iii) with unemployment**

63. With perfect competition in the labour market and monopoly in the product market the monopolistic exploitation of labour is equal to the difference between: **VMP and MRP**

64. When there is monopsony in the labour market and monopoly in the product market, total of monopsonistic and monopolistic exploitation is the difference between: **VMP and AW**

65. The writer of 'Economics of Welfare' is: **A. C. Pigou**

66. For external economies of production:

(i) Social marginal benefits > Private marginal benefits

(ii) Private costs > Social costs

67. For external diseconomies of production:

(i) Social marginal benefits < Private marginal benefits

(ii) Private costs < Social costs

68. For external economies of consumption: **(i) Social benefits > Private benefits**

(ii) Social costs < Private costs

69. For external diseconomies of consumption: **(i) Social benefits < Private benefits**

(ii) Social costs > Private costs

70. Neo-classicals and earlier economists defined social welfare as a sum total of: **Cardinally measurable utilities of different members of the society**

71. Marginal Conditions of Pareto Optimality: (i) $MRS_{x,y}^A = MRS_{x,y}^B$

$$(ii) MRTS_{L,K}^X = MRTS_{L,K}^Y$$

$$(iii) MRPT_{X,Y} = MRS_{x,y}^A = MRS_{x,y}^B$$

72. Pareto optimal solution is: **Non-unique solution**

73. The theory of 'The Theory of Second Best' is associated with the name: **Lipsey and Lancaster**

74. The 'COMPENSATION CRITERIA' in welfare economics: **Kaldor and Hicks**

[According to Kaldor's welfare criterion → If a certain change in economic organization or policy makes some people better off and other worse off, then that change will increase social welfare if those who gain could compensate the losers and still be better off than before]

According to Hicks welfare criterion → A change is an improvement if the losers in the changed situation cannot profitably bribe the gainers not to change from the original situation]

75. The person who was the first to point out the paradoxical result in Kaldor-Hicks criterion: **Scitovsky**

76. Under the Keynesian system, a fall in money wage rate will lead to: **A fall in the interest rate.**

77. If there is to be large oscillation in the path of income through the interaction of multiplier and accelerator then: **The value of marginal propensity to save must be less than the value of accelerator.**

78. Match List-I and List-II:

List-I

List-II

$C = 4 + 0.6Y$ → **Consumption Function**

$I = 80 - 5i$ → **Investment Function**

$0.3Y - 20I - 150 = 0$ → **LM Function**

$0.3Y + 20I - 150 = 0$ → **IS Function**

79. Neutrality of money implies that a given increase in money supply will: **Not change prices at all**

80. Given the total investment expenditure, an increase (decrease) in the propensity to save will lead to: **A fall (rise) in income**

81. If the consumption function is $C = 28 + 0.75 Y$, then the value of investment multiplier is:

4
 $[C = 28 + 0.75 Y \rightarrow \text{MPC} = 0.75$
Investment multiplier (K) = $\frac{1}{1-\text{MPC}}$

$$K = \frac{1}{1-0.75} = \frac{1}{0.25} = 4]$$

82. In the classical concept, the Aggregate Supply is: **Perfectly inelastic with respect to the price level**

[→ This means that changes in the price level have no effect on the aggregate supply

→ AS curve is vertically parallel]

83. In the classical concept, the Aggregate Supply is: **Perfectly inelastic with respect to the price level**

84. According to the Classical economists, the full employment equilibrium is based on: **(i) Say's law of market and (ii) Wage-price flexibility**

[In the classical model of employment, changes in money wages and real wages are directly related and are proportional]

85. Consumption theories and authors:

- | | |
|-----------------------------------|------------------------------|
| Absolute Income Hypothesis | → Keynes |
| Relative Income Hypothesis | → J. S. Duesenberry |
| Life Cycle Hypothesis | → Modigliani and Ando |
| Relative Income Hypothesis | → Milton Friedman |

86. The concept of multiplier was first developed by: **Richard F. Kahn in 1931**

87. 'Acceleration Principle' was first introduced by: **J. M. Clark in 1917**

88. 'Super Multiplier' was first introduced by: **Hicks.**

89. In Friedman's Permanent Income Hypothesis, transitory income can be positive or negative, which occurs on account of: **Temporary and unanticipated changes in current income**

90. When investment is perfectly interest inelastic then the IS curve will be: **Vertical**

[When investment is perfectly interest elastic then the IS curve will be → **Horizontal**]

91. If government increases (decreases) IS curve will shift: **Rightward (Leftward)**

92. If tax increases (decreases) IS curve will shift: **Leftward (Rightward)**

93. According to Keynes demand for money arises due to: **Three motives:**

- (i) **Transaction demand for money [$D_t = f(Y)$; $D'_t > 0$]**
- (ii) **Precautionary demand for money [$D_P = f(Y)$; $D'_P > 0$]**
- (iii) **Speculative demand for money [$I = I(r)$; $I'(r) < 0$]**

94. When speculative demand for money is perfectly interest inelastic then the LM curve will be: **Horizontal**

[When speculative demand for money is perfectly interest inelastic then the LM curve will be → **Vertical**]

95. Fiscal policy has no effect in: **Classical range**

[Fiscal policy is more effective in → **Keynesian range**]

96. Monetary policy has no effect in: **Keynesian range**

[Fiscal policy is more effective in → **Classical range**]

97. Crowding out effect is zero in: **Liquidity trap situation**

98. The strength of government expenditure multiplier or balanced budget multiplier in simple Keynesian model than in complete Keynesian model is: **Greater**

99. In IS-LM model an increase (decrease) in money supply leads to: **Rightward (Leftward) shift of LM curve**

100. Okun's law postulates: **A negative relationship between unemployment and real gross domestic product**

101. Money multiplier is the ratio between: **Quantity of primary money and quantity of secondary money**

102. According to the quantity theory of money, the price level rises if: **The velocity of circulation of money rises**

103. If $I = 5 + 0.2Y$; $S = -15 + 0.3Y$ and $\bar{G} = 5$ the value of equilibrium level of national income is: **200**

[$I = 5 + 0.2Y$; $S = -15 + 0.3Y$ → **At equilibrium, $S = I$**

$$-15 + 0.3Y = 5 + 0.2Y$$

$$0.3Y - 0.2Y = 20$$

$$0.1Y = 20$$

$$Y = 200]$$

104. When investment is negatively related to the rate of interest, the equilibrium output in the commodity market is: **Inversely related to the rate of interest**

105. 'The propensity to consume of an individual with respect to his disposable income and wealth depends on his age', the statement refers to: **Life cycle hypothesis**
106. When income falls, the liquidity preference curve: **Shifts to the left**
107. Stagflation refers to situation which is characterized by: **Inflation and rising unemployment**
108. When the intrinsic value of money and its face value of money are equal the it is called: **Full-bodied money**
109. The Keynesian view of an increase in government spending results in an increase in interest rate and income. However, the money stock remains unchanged with velocity of money: **Increasing**
110. In real business cycle models, real, not monetary, factors are responsible for fluctuations in output and employment. If at all monetary policy is considered, it focuses on: **Controlling inflation and maintaining stability**
111. The distinctive feature of the New Classical Model is that the aggregate supply and labour supply schedule depend on: **Rational expectations on monetary and fiscal policy variables along with oil prices and other supply side factors**
112. The New Keynesian models explain involuntary unemployment through real rigidities arising out of: **Wage and price setting process**
113. In the labour demand-supply framework, at the employment level below the equilibrium employment, there is incentive for firm/employer to put more workers to work as: **Marginal product of labour exceeds the real wage**
114. Baumol's Inventory Theoretic Approach: **The demand for real transactions balances is proportional to the square root of the volume of transactions and inversely proportional to the square root of the rate of interest.**
115. 'Liquidity Preference as Behaviour Towards Risk': **Tobin's portfolio selection model**
116. Friedman's restatement of quantity theory of money: **Points out that the quantity theory is a theory of demand for money. It is not a theory of output, money incomes or prices**

117. For generations economists have been engaged in answering the questions: what causes changes in the price level or the volume of money?

- (i) **Davanzatti and Jean Bodin: 16th century**
- (ii) **David Hume: 1752**
- (iii) **Simon Newcomb: 1886**
- (iv) **Knut Wicksell: 1898**
- (v) **Irving Fisher: 1911**
- (vi) **A. C. Pigou: 1917**
- (vii) **Alfred Marshall: 1923**
- (viii) **Keynes: (1930-1936)**
- (ix) **Patinkin: 1948**
- (x) **Friedman: 1957**

118. The quantity theory of money implies that an increase (decrease) in the price level will associated with: **An increase (decrease) in money supply**

119. High powered money is: **Currency held by public and reserves with Central Bank**

120. Four concepts of money supply:

- (i) **M₁ or Narrow Money: Currency with public + Demand deposits of banks + Other deposits of the RBI**
- (ii) **M₂: M₁ + Saving deposits with post office saving banks**
- (iii) **M₃ or Broad Money: M₁ + Net time deposits of the banks**
- (iv) **M₄: M₃ + Total deposits of post office saving organization**

121. Determinants of the money supply:

First view: The money supply is determined exogenously by the central bank

Second view: The money supply is determined exogenously by changes in the economic activity which affects people's desire to hold currency relative to deposits, rate of interest, etc.

122. The deposit multiplier: **The ratio of change in total deposits to a change in reserves is called the deposit multiplier which depends on cash reserve ratio. The value of deposit multiplier is the reciprocal of CRR**

$$[d_m = \frac{1}{r}]$$

If CRR is 10% of deposits, then

$$d_m = \frac{1}{0.10} = 10$$

Thus, deposit multiplier of 10 shows that for every Rs. 100 increase in cash reserves with the banks, there will be expansion in demand deposits of the banks by Rs. 1000]

123. Calculation of the value of Money Multiplier: **We can obtain the value of money multiplier if we know the values of desired currency deposits ratio (K) of the public and desired reserve ratio (r) of the banks.**

Suppose K = 0.4 and r = 0.2. We can then obtain the value of multiplier:

$$m = \frac{1+K}{r+K} = \frac{1+0.4}{0.2+0.4} = \frac{1.4}{0.6} = 2.33$$

124. Process of Credit Creation: **Total deposits created by banking system is: $\frac{1}{r} \cdot D$**

[If a bank has Rs. 1000 in deposits and its legal minimum ratio or the required cash reserve ratio (r) is 20% ; it can create to the extent of Rs. 5000.

$$\frac{1}{r} \cdot D = \frac{1}{0.20} \cdot 1000 = 5000$$

Deposits created by the banking system is: Rs. 5000 – Rs. 1000 = Rs. 4000]

125. Inflationary Gap: **Inflationary gap arises when consumption and investment spending together is greater than the full employment GNP level. This means that people are demanding more goods and services than can be produced.**

[The amount by which the actual aggregate demand exceeds the level of national income corresponding to full employment is known as: **Inflationary Gap**]

126. Deflationary Gap: **Deflationary gap represents the difference between the actual aggregate demand and the aggregate demand which is required to establish the equilibrium at full employment level of income.**

127. Stagflation: **It refers to a situation when a high rate of inflation occurs simultaneously with a high rate of unemployment.**

128. Phillips Curve: **Trade-off between unemployment and money wages.**

[Phillips curve is negatively sloped]

129. The shape of long run Phillips Curve is: **Vertical (According to Friedman)**

130. The probability of drawing a 'spade' from a well shuffled packet of cards is: $\frac{1}{4}$

[Total card = 52, Total number of 'spade' = 13, Thus, probability of drawing a 'spade' = $\frac{13}{52} = \frac{1}{4}$]

131. The coefficient of correlation between two series X and Y is found to be 0.80. If all the values of X and Y are reduced by 50 percent, then the correlation coefficient will be: **0.20**

132. For a Poisson's distribution with $n = 200$, $p = 0.02$, then the mean is: **4**

133. The value of χ^2 in a 3×4 contingency table is computed as 4.0. The null hypothesis that then no association ship will be accepted at 5% level of significance, if this computed value is less than or equal to the value of χ^2 from the table at the degrees of freedom: **6**

[Degrees of Freedom = (Number of frequencies) – (Number of independent constraints on them)]

$$v = n - k$$

Thus if we are given n frequencies subject to the linear constraint, then for the application of χ^2 test, $v = n - 1$

For $r \times s$ contingency table, the total number of frequencies is $n = r \times s = rs$ and the number of independent constraints is $k = r + s - 1$

Hence for $r \times s$ contingency table, DF is: $v = n - k = rs - (r + s - 1) = rs - r - s + 1$

$$= (r-1) \times (s-1)$$



Hence for 3×4 contingency table DF = $(3-1) \times (4-1)$
 $= 2 \times 3 = 6$

134. The significance of the difference between two means of the populations, when σ^2 values are known and equal. Then it is tested by: **Z-test**

135. The portion of the total area covered in a normal curve under $\bar{X} \pm 2.58 \sigma$ is: **99%**

α	0.05	0.025	0.01	0.005
τ_α	1.645	1.960	2.326	2.576

136. If A and B are independent events, then: $P(A/B) = \frac{P(A).P(B/A)}{P(A)}$

137. If for a sample data: Mean < Median < Mode, the distribution is: **Skewed to the left**

138. Let $x = \frac{9-U}{3}$ and $y = V - 4$ and the correlation coefficient between U and V is - 0.93.

Then the correlation coefficient between x and y will be: **- 0.93**

[Correlation coefficient is independent of change of origin and scale]

139. If the Karl Pearson coefficient of correlation between x and y is 0.3, then the coefficient of correlation between - x and 2y is: **- 0.3**

140. Historically the first index number was constructed in: **1764**

141. The 'ideal' formula for constructing index number is: **Fisher's Ideal Index**

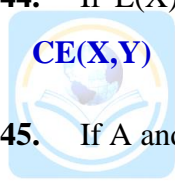
142. The most widely used method of measuring seasonal variations is: **Ratio – to – moving average method**

143. The most important factors causing seasonal variations are: **Weather and Social customs**

144. If $E(X)$ is the mathematical expectation of the variable X and C is constant then:

$CE(X,Y)$

145. If A and B are mutually exclusive events, then the value of $P(AB)$: **Zero**



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146. The probability that the throw of two dice yields a total of 5 or 8 is: **1/4**

[Let us list the number of possible outcomes as follows:

(1, 1) (1, 2) (1, 3) **(1, 4)** (1, 5) (1, 6)

(2, 1) (2, 2) **(2, 3)** (2, 4) (2, 5) **(2, 6)**

(3, 1) **(3, 2)** (3, 3) (3, 4) **(3, 5)** (3, 6)

(4, 1) (4, 2) (4, 3) **(4, 4)** (4, 5) (4, 6)

(5, 1) (5, 2) **(5, 3)** (5, 4) (5, 5) (5, 6)

(6, 1) (6, 2) (6, 3) (6, 4) (6, 5) (6, 6)]

Hints: **Total of 5 (mentioned by green colour; 4 outcomes)**

Total of 8 (mentioned by blue colour; 4 outcomes)

Thus, probability that the throw of two dice yields a total of 5 or 8 is: **1/4**]

147. If an event cannot take place, probability will be: **Zero**

148. Two cards are drawn from a well-shuffled pack of 52 cards. Then find the probability that they are both aces if the first is replaced. **$\frac{1}{169}$**

149. In case of normal distribution $\bar{X} \pm 2\sigma$ covers: **95.45%**

[Area between $\bar{X} \pm \sigma$ is: **68.27%**

Area between $\bar{X} \pm 2\sigma$ is: **95.45%**

Area between $\bar{X} \pm 3\sigma$ is: **99.73%**]

150. In a normal distribution the point of inflexion occurs at: **$\bar{X} + \sigma$**

151. In statistical hypothesis testing, a 'Type I' error occurs when there happens: **Incorrect rejection of a true null hypothesis**

152. In statistical hypothesis testing, a 'Type II' error occurs when there happens: **Failure to reject a false null hypothesis (Incorrect acceptance of a false null hypothesis)**

153. Fisher's ideal index number is equal to: $\sqrt{\frac{\sum p_n q_n}{\sum p_0 q_n} \times \frac{\sum p_n q_0}{\sum p_0 q_0}}$
154. If the standard deviation of a variable x is 10, the value of standard deviation of $50 + 5x$ would be: **50**
155. In moving average method we cannot find trend values of: **Starting period and ending period**
156. When both population mean and variance are not known, for the comparison of two sample means, the correct testing procedure is: **Student t-test**
157. If one regression coefficient is greater than 1, the other must be: **Less than 1**
158. Let the coefficient of determination (R^2) computed be 0.65 in a problem involving one independent variable and one dependent variable. This result means that: **65% of total variation in dependent variable is explained by the independent variable**
159. The following hypothesis are tested by a regression function:
- (i) **Inter-relation between two or more variables is significantly different from zero**
 - (ii) **The degree and direction of inter relations between two or more variables are non-zero and goodness of fit of the regression function is satisfactory**
 - (iii) **Degree of influence exercised by systematic explanatory factors is greater/lesser/equal to the influence exercised by random factors**
160. In the presence of heteroscedasticity, the following statements are correct:
- (i) **Heteroscedasticity does not alter the unbiasedness and consistency properties of OLS estimators**
 - (ii) **BLUE estimators are provided by the method of weighted least squares**
 - (iii) **'t' and 'F' tests based on standard assumptions of classical linear regression model may not be reliable**

161. Correlation coefficient between X and Y is 0.3 and correlation coefficient of P and Q is 0.6, the strength of correlation between P and Q is higher than between X and Y by: **Four times**

162. For a regression model given below:

$$Y = \beta_0 + \beta_1 X + U$$

$$Y = 20 + 2X$$

$$SE: 0.46$$

To test $H_0: \beta_1 = 2.1$ against $H_1: \beta_1 \neq 2.1$, the test statistic $|t|$ is equal to: **0.217**

163. For the regression model:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k + e$$

The degrees of freedom of test statistic $|t|$, with n observations is: **$n - k - 1$**

164. Suppose that observations are available on the monthly bond prices of 100 companies for five years. These types of data are called: **Panel Data**

165. The estimation techniques are available for the estimation of an over identified system of simultaneous equations are: **(i) Two stage least square method and (ii) Instrumental variable**

166. For identification problem the order condition of simultaneous equation system is: **A necessary condition but not sufficient condition**

167. Let the two regression lines be given as:

$$3x = 10 + 5y$$

$$4y = 5 + 15x$$

Then the correlation coefficient between x and y is: **0.40**

168. The estimated regression equation of the form $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + e$ is
 $Y = -6.79 + 1.79 (X_1) + 0.97 (X_2)$ and $SE (\beta_0) = 1.32$, $SE (\beta_1) = 0.41$ and $SE (\beta_2) = 0.53$.
 To test $H_0: \beta_1 \neq 2.1$, the test statistic $|t|$ is equal to: **4.366**
169. To test the stationarity of the series in time series analysis, the test technique is: **Unit root test**
170. In the context of simultaneous equations econometric models, consider the following statements:
- (i) **Identification is a problem to be dealt with before estimation**
 - (ii) **Order condition is necessary but not sufficient condition of identification**
 - (iii) **Under indirect least square method, least square method is applied to the reduced form equations**
171. The relation between 't' and 'F' in the context of statistical test of hypothesis for two variable linear regression model is: **$t^2 = F$**
172. The correct form of model to test the stationarity of a time series through Dicky-Fuller test is: **$Y_t = \lambda Y_{t-1} + \mu_t$**
173. The term 'BEST' in the best linear unbiased estimator (BLUE) implies: **Minimum variance of the estimator**
174. Following statements are true for a recursive model:
- (i) **The parameters can be validly estimated using separate application of OLS to each equation**
 - (ii) **An application of 2SLS would lead to unbiased but inefficient parameter estimates**
175. In a multiple regression the regression coefficients are to be tested. The correct test technique is: **t-test**
176. For testing the significance of overall regression the test techniques is: **F-test**

177. Unit Root Test	Dickey-Fuller Test
Contingency Table	χ^2-test
Regression Coefficient	Student's t-test
Autocorrelation	Durbin-Watson Test
Forecasting	Box-Jenkins Method
Causality	Granger Test
Heteroscedasticity	Goldfeld-Quandt Test, Glejser's Test, Spearman's Rank Correlation Test

178. Sources of autocorrelation:

- (i) **Omissions of the explanatory variables**
- (ii) **Misspecification of the true mathematical form of the model**
- (iii) **Interpolations in the statistical observations**
- (iv) **Misspecification of the true random term U**

179. Consequences of autocorrelation:

- (i) **Unbiased property holds**
- (ii) **The variance of the estimated coefficients are very high**
- (iii) **The variance of the parameter estimates are under estimated**
- (iv) **The predictions based on OLS estimates in the presence of autocorrelation are inefficient**

180. Reasons of heteroscedasticity:

- (i) **Measurement problems of the error term**
- (ii) **Omitted the explanatory variables**

181. Structural form of simultaneous equation model:

- (i) It is a complete system of equations which describe the structure of relationship of the variables.
- (ii) It expresses the endogenous variables as functions of the other endogenous variables, predetermined variables and random variables (disturbances)

182. Structural form of simultaneous equation model: **The reduced form of a structural model is the model in which endogenous variables are expressed as a function of the predetermined variables only**

183. For seemingly unrelated equation, each endogenous variable appears: **On the one equation.**

184. The order condition for identification problem: **$K - k \geq g - 1$;**

G: No of endogenous variables of all simultaneous equations

K: No of predetermined variables of all simultaneous equations

G: No of endogenous variables of a particular equation

K: No of predetermined variables of a particular equation

185. The rank condition for identification problem: **$\text{Rank}(\Delta) = G - 1$**

186. Some Lag Variable models and their Inventor:

Adaptive Expectation Model **P Cagon**

Partial Adjustment Model **Nerlov**

Geometric Lag Model **Koyck**

187. The value of APC and MPC in Harrod-Domar model is: **Same**

188. In Solow's model of growth, the output per capita is a function of: **Labour-Capital ratio**

189. For Hick's technical progress, the correct statements are:
- (i) **The capital labour ratio is constant**
 - (ii) **It occurs in short run**
 - (iii) **It can only be neutral**
190. The obstacles of economic development are:
- (i) **Low rate of capital formation**
 - (ii) **Vicious circle of poverty**
 - (iii) **Social cultural barriers**
191. The classical model of economic development emphasizes on: **Laissez-Fair policy and Capital accumulation**
192. Entrepreneurship is most closely associated with: **Innovations**
193. Lewis theory explains the process of development considering a sector economy:
Two
194. 'A country is poor because it is poor' are the words of: **Nurkse**
195. According to Kuznets, during the process of economic development the income inequalities tend to: **Increase first and then decrease (inverted U-shape curve)**
196. A technical change which permits more output to be produced from unchanged inputs is considered to be: **Disembodied Technical change**
197. An under developed economy is generally characterized by the: **Coexistence of underutilized labour will unexploited national and other resources**
198. The correct statement that defines the term Natural Rate of Growth: **It is the maximum rate at which output can be advanced at full employment level**
199. In the Lewis model of economic development, the capitalist sector generates and reinvests surplus and in turn, absorbs labour withdrawn from the subsistence sector. The process continues till: **MPL in the capitalist sector is greater than wage rate in that sector and MPL in the subsistence sector is now positive**

200. Now the concept of 'Economic Growth' is: **Multi-dimensional incorporating non-economic aspects also**
201. Now a days we talk about 'Sustainable Development' which relates to: **Development for sufficiency and efficiency which is bio-friendly**
202. The best indicator of 'economic development' is: **Rising levels of standard of living**
203. Growth in developed countries is now mostly the result of: **Innovation and Technology**
204. In Harrod-Domar model, 'over production' is a condition where: **All producers are producing higher than the warranted output**
205. In Domar's model investment is needed to increase: **Demand as well as Supply**
206. The development process under capitalism has been described as 'creative destruction' by: **J Schumpeter**
207. In Harrod model of economic growth inflation will occur when: **The actual growth rate is higher than the warranted growth rate**
208. In Domar's model investment is the solution for: **Both Inflation and Deflation**
209. In Harrod model, investment demand is a function of: **National income**
210. 'The behavior of population as an obstacle to economic growth in initiating the process of economic growth': **H. Leibenstein**
211. A number of indivisibilities hinder the process of economic growth in the initial stage. This view was emunciated by: **R. N. Rosenstein Rodan**
212. Development process has been viewed as a 'chain of disequilibria' by: **A. O. Harschman**
213. The growth of population has a bearing on the: **Natural rate of growth**
214. Nurkse was of the opinion that developing countries will have serious and adverse effect on their balance of payments due to: **Backwash Effect**
215. Who said that a growing economy is essentially unstable? **T. Swau**

216. In developing economies, investment is limited due to insufficiency of demand. Who criticized this view? **R. Nurkse**
217. In developing economies, surplus labour exists in the sense that each labour is working for hours less than the normal working hours. This view has been expressed by: **A. K. Sen**
218. In Harrod's model of economic growth, G_a is actual growth rate, G_w is warranted growth rate and G_n is natural growth rate. Steady rate of growth is ensured when: **$G_w = G_n$**
219. 'Theory of Circular Causation' is developed by: **G. Myrdal**
220. The 'Big Push' strategy of development was first advocated by: **Rosenstein Rodan**
221. The formula of the concept of organic composition of capital developed by Marx is:

$$\frac{C}{C+V}$$
 [C is constant capital and V is variable capital]
222. Human Development Index is a composite index of: **Health, Literacy and Employment**
 [Since 1990, the UNDP has been publishing every year a Human Development Report.
 $HDI = 1/3(LEI + EAI + SLI)$
 Where, LEI = Life expectancy index, EAI = Educational attainment index and SLI = Standard of living index
 $EAI = 2/3ALR + 1/3CER$
 Where, ALR = Adult literacy rate and CER = Combined enrolment ratio

$$\text{Dimension Index} = \left[\frac{\text{Actual value} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}} \right]$$
223. According to Harrod-Domar model, the warranted rate of growth, given the incremental capital output ratio, depends on: **Saving-income ratio**
224. According to J. R. Hicks, technical progress is said to be neutral if it raises: **The marginal physical productivity of labour and capital in the same proportion**
225. Perfectly elastic supplies of labour play a crucial role in: **Lewis model of growth**

226. 'Development is a continuous and spontaneous change in the stationary state which forever alters and displace the equilibrium state previously existing; while growth is a gradual and steady change in the long run which comes about by a gradual increase in the rate of saving and population', is well-known definition of development and growth attributed to: **J. A. Schumpeter**
227. In Rostow's 'stages of growth' the Drive to Maturity stage: **Follows take-off stage**
228. Capital deepening is a process in which: **Technology changes with an increase in output per worker**
229. According to the Friedrich List, the different stages of development follow the sequence: **Saving → Pastoral → Agriculture → Agricultural Manufacturing → Commerce**
230. Economic Drain theory was popularized by: **Dadabhai Naoroji**
231. Assuming capital-output ratio to be 3:1 and population grown to be 2.5% per annum, a 10.5% increase in investment will lead to an increase in per capita income to the extent of: **1.0 percent**
232. According to Fisher-Clark thesis the sequence of shift of resources from one sector to other for the continuity of development is: **Agriculture → Manufacturing → Services**
233. The 'Hindu Rate of Growth': **Is the term used by Raj Krishna to represent the nature of the growth of Indian economy at around 3.5 percent per year**
234. Investment projects should be capital intensive because they would lead to greater saving and investment in future advocated by: **M. Leibenstein and W. Galenson**
235. According to Solow, the long run rate of growth on an advanced economy equals Harrod's: **Natural rate of growth**
236. 'Under developed countries are the slums of the world economy' is the statement given by: **Cairncross**

237. Fei-Renis theory of economic development is based on:

- (i) **Balanced growth during the take-off process**
- (ii) **Importance of agricultural product in capital accumulation in under developed countries**
- (iii) **Dualistic approach to development**

238. In the Harrod-Domar equation $g = \frac{s}{v}$, v is defined as: **The ratio of the country's capital stock to its output**

239. Based on Mankiew, Romar and Weil (1992), with conditional convergence, holding fertility rates, education and government spending as a share of GDP constant: **Income per capita in poor countries grows faster than in rich countries**

240. Kendrick measure is used to calculate:

- (i) **Total factor productivity**
- (ii) **Multifactor productivity**

241. Industrial location theory has been developed by: **Weber**

242. The industrial sector in India consists of the following subsectors: **Manufacturing, Electricity, Gas and Water supply**

243. The field of sustainable development can be conceptualized as: **Environmental, Economic and Sociopolitical sustainability**

244. Environmental Audit is the procedure to: **Analyze the use of natural resources by industry and also assess the impact of industrial operations on environment**

245. Physical Quality of Life Index (PQLI) is a composite index of: **Life expectancy (LE), Infant mortality (IM) and Basic literacy (BL)**

[PQLI was introduced by David Morris]

$$PQLI = 1/3(LEI + IMI + BLI)$$

$$\text{Dimension Index} = \left[\frac{\text{Actual value} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}} \right]$$

246. Gender Related Development Index (GDI): While the HDI measures the average achievement, the GDI adjusts the average achievement to reflect the inequalities between men and women in the following dimensions:

- (i) A long and healthy life, as measured by life expectancy at birth
- (ii) Knowledge, as measured by the adult literacy rate and combined primary, secondary and higher gross enrolment ratio
- (iii) A decent standard of living as measured by estimated earned income (PPP \$)

$$\text{Dimension Index} = \left[\frac{\text{Actual value} - \text{Minimum value}}{\text{Maximum value} - \text{Minimum value}} \right]$$

247. Social Progress Indicate (SPI): SPI refers to social progress defined at the individual level in three dimensions:

- (iv) Longevity or potential life time
- (v) Consumption of private goods
- (vi) Access to public goods such as clean water, sanitation, safety, transport etc.

248. Genuine Progress Indicator (GPI): It includes more than 20 aspects of our economic life that the GDP ignores. The values of activities that add to human progress are added and those which reduce progress are subtracted from the measure. The later set of activities includes crime, defence expenditure, degradation and depletion of resources, contributions of household economy, voluntary work, etc.

249. Green Index: The World Bank's environmentally sustainable development division has developed a new index called Green Index. This new indicator attaches a dollar value to each of the three components:

- (i) Produced assets
- (ii) Natural resources
- (iii) Human resources

250. Amartya Sen's measure of welfare: $W = \mu (1 - G)$

Where, W is welfare, μ is per capita income and G is a measure of inequality

251. Some theories of growth and development and their inventors:

Theory of Unlimited Supplies of Labour	Lewis
Critical Minimum Effort Theory	H. Leibenstein
Low Level Equilibrium Trap	Nelson
Big Push Theory	N. Rosenstein Rodan
Vicious Circle of Poverty	R. Nurkse
Theory of Balanced Growth	Rosenstein Rodan / R. Nurkse
Theory of Unbalanced Growth	Hirshman
Dualistic Development Theory:	
Social Dualism	J. H. Boeke
Technological Dualism	Higgins
Financial Dualism	Myint
Two Gap Model	Hollis Chenery
Neutral Technical Change	Hicks / Harrod
Disembodied Technical Change	Abramkovity
Embodied Technical Change	Solow

252. The book entitled 'The Accumulation of Capital' has been written by: **J. Robinson**

253. Cannon of equity in taxation is generally considered to be satisfied by: **Progressive taxation**

254. The principle of Maximum Social Advantage is concerned with: **Taxation and public expenditure**

255. Tobin tax is a tax on: **Transactions in foreign exchange**

256. Given a proportional income tax structure and balanced budget, an autonomous increase in investment will increase the level of equilibrium income and the budget will: **Still be in balance**
257. Provision of social goods possess problem because: **Such goods tend to be non-rival in consumption**
258. The imposition of a selective sales tax will raise the price of the taxed product by equal amount if it is produced under: **Constant cost**
259. Fiscal and monetary policies are intended to combat: **Cyclical unemployment**
260. If the supply is perfectly inelastic, then the short run impact of a specific sales tax would be to shift the tax burden entirely on the: **Producers**
261. Octrio is levied and collected by:
- (i) **Centre**
 - (ii) **State Governments**
 - (iii) **Local bodies**
262. The one rupee currency note bears the signature of the: **The Minister of Finance**
263. The effect of deficit financing is: **Always inflationary unless accompanied by effective counteracting measures**
264. The economist on whose suggestions the Wealth tax, Gift tax and Expenditure tax were introduced in India is: **Kaldor**
265. Agricultural Income Tax is: **Levied and collected by the Union, but given over to the respective states**
266. The MODVAT scheme of taxation benefits: **Those manufacturers who are importing technology**
267. Indirect tax are objectionable because they: **Do not raise enough revenue**
268. All the revenues received, loans raised and money received in repayment of loans by the Union Government go into: **Public Account of India**



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269. Loans of public enterprises is a part of: **Capital Account**
270. Interest payment is an item of: **Revenue Expenditure**
271. In India, the states get maximum income from: **Sales Tax**
272. In order to reduce inequalities, the government should adopt: **Progressive system of taxation**
273. Market borrowings of the Central Government are included in: **Capital receipts**
274. Who appoints the Finance Commission? **Speaker of the Lok Sabha**
275. Excise duties, which are the biggest source of revenue of the Union Government, are levied on: **Sales of goods**
276. If the supply is perfectly inelastic and demand is highly elastic, then in the short run the incidence of specific sales tax will be: **Entirely on the sellers**
277. Provision of social goods poses problems because:
- (i) **Such goods tend to be non-rival in consumption**
 - (ii) **Individual consumer preferences with respect to these goods is not revealed**
 - (iii) **Market mechanism is not well suited for the provision of such goods**
278. The concept of Zero-Based-Budget (ZBB) was given by: **Peter A. Pyhr**
279. The tax multiplier is generally: **Less than government expenditure multiplier**
280. Public good: (i) **A pure public good is defined as a good that one person's consumptions of the goods does not reduce the amount available to others** (ii) **Consumption of public good is non-rival**
281. Social wants: **Social wants are those wants which are satisfied by services that must be consumed in equal amount by all**
282. Merit goods: **Goods for which it is thought that consumption should be engaged are called merit goods**

283. Buoyancy of Taxation: **If a tax revenue increases with the growth of its base, but without an extension of the tax coverage or an upward revision of the tax rates, then the tax is said to be buoyant**

284. Equal Absolute Sacrifice: **Implies that different tax payers are made to sacrifice the same amount of utility by way of taxes.**

[The utility of income before tax and the utility of income after tax is the same for every tax payers]

285. Equal Proportional Sacrifice: **Implies that each tax payer is supposed to sacrifice the same percentage of the total satisfaction which he would have derived from his income**

[The satisfaction lost in terms of tax payment bears the same proportion to the satisfaction from the pre-tax income in each case]

286. Equal Marginal Sacrifice: **The tax burden should be apportioned in such a way that the marginal utility of income left after tax with any tax payer would be the same**

[Edgeworth and later Pigou concluded that least aggregate sacrifice is the superior principle of tax distribution, not because it is equitable, but because it is derived directly from the basic utilitarian principle of maximum happiness]

287. Wagner's Law of Increasing State Activities: **During the course of economic development, government expenditure increases more than proportionally with per capita community output**

[The income elasticity of demand for government expenditure is more than one]

Wagner distinguished three types of activities which cause an increase in government expenditure:

- (i) Maintenance and enforcement of law and order, internally and externally
- (ii) Participation in material production
- (iii) Provision of social services]

288. Wiseman-Peacock Hypothesis: **The main idea is that public expenditure does not increase in a smooth and continuous manner, but in jerks or step like fashion**

[The movement from the older level of expenditure and taxation to a new and higher level is the '*displacement effect*']

The inadequacy of the revenue as compared with the required public expenditure creates an '*inspection effect*']

289. Repudiation of Public Debt: **One simple way of ending the debt obligations is to repudiate the debt. Repudiation means refusal to pay a debt by the government, as was done by the Soviet Government in 1917**

290. Refunding: **If a government sells its bonds to pay its floating obligations, the debt is said to be funded**

[It is the process by which the government raises new bonds to pay off the maturing bonds. Thus the government takes a fresh loan to repay an old debt]

291. Zero-Based-Budget (ZBB): **While evaluating every programme the government must not think in terms of increases or decreases in spending but start from a zero base so that it must be justified firstly.**

292. In the presence of repercussion effect, a shift in the pattern of expenditure towards more of imports will result in: **Deteriorating balance of trade and lower domestic output**

293. The Foreign Trade Policy 2015-20 focuses on two special schemes to promote exports. These include: **Merchandise Exports from India Scheme (MEIS) and Service Exports from India Scheme (SEIS)**

294. In the Heckscher-Ohlin framework, at the free trade world equilibrium price: **Quantity of the good that the Home exports is same as the quantity of that good the Foreign imports**

295. Stolper-Samuelson theorem states that, under free-trade, the real income: **Raises for the factor used relatively intensively in exporting industry and falls for the factor used relatively intensively in the import competing industry**

296. In the presence of increasing returns, if both countries participating in international trade specialize in the same commodity then: **There will be no trade among the two participating countries and overall welfare for each country will fall**
297. As a measure of protection, voluntary export restraint (VER) is equivalent to import quota, except that: **The quota rent is effectively ceded to the foreign exporter**
298. The value of the foreign trade multiplier is: $\frac{1}{mpm+mps}$
299. The devaluation according to Marshall and Learner conditions will not be helpful, if the sum of the elasticities of exports and imports is: **Less than one**
300. Under the system of fluctuation exchange rates regime, the adjustment in the balance of payments is brought about by the changes in: **Prices and Income**
301. The members of the NAFTA are: **USA, Canada, Mexico**
302. Consider a Ricardian economy that is endowed with 45 units of labour. It can produce two goods: Gajar-Halua and Kulfi. One unit of labour can produce 4 kilos of Gajar-Halua or 6 kilos of Kulfi. The international price of Gajar-Halua in terms of Kulfi is 2. In free trade, this country will produce: **180 kilos of Gajar-Halua**
303. If protection is given to a small import competing industry, consumer surplus and domestic profits will, respectively: **Fall and Rise**
304. India is large exporter of tea and a small exporter of bicycles. In this context, the true conclusion is that: **An export subsidy to bicycles would improve India's terms of trade in the world bicycle market**
305. There are two countries, Sugarland and Saltland. Each country produces sugar and salt. The former exports sugar and the latter, salt. Starting from a free trade equilibrium, a tariff on salt by sugarland would affect the offer curves and the relative price of sugar from sugarland's perspective in the following way: **Shift the offer curve of sugarland, increase the price of sugar**
306. The country can improve balance of payments by devaluation when the sum of elasticities of demand for exports and imports is: **Greater than unity**

307. The Purchasing Power Parity (PPP) theory of the exchange rate implies that the currency of a country A would depreciate against that of country B if: **The inflation rate in A exceeds that in B**
308. In a freely floating exchange rate system: **Exchange rate is determined by market forces**
309. In a flexible exchange rate system, an increase in the domestic interest rate would tend to: **Worsen the current account and improve the capital account**
310. In the current international monetary system the Indian rupee is pegged to: **A basket of currencies**
311. For a large trading country, the optional tariff argument is based on the proposition that a tariff on imports: **Improves the country's terms of trade**
312. Suppose, a country has adopted a freely floating exchange rate system. Then, ceteris paribus, if the price level in the country rises, it leads to: **Fall in the demand for the country's currency and the currency depreciates**
313. The terms of trade refer to: **The ratio between export prices and prices**
314. India is a net exporter of hand-made carpets and an importer of high-tech products like computer memory chips and printers. This pattern of Indian trade is explained by: **The Heckscher-Ohlin Theory**
315. Presently, India's exchange rate policy towards current account and capital account transactions is that the rupee is: **Fully convertible for current account transactions, but not for capital account transactions**
316. Suppose that the world economy consists of two countries, 'Home' and 'Foreign'. A tariff imposed by the 'Home' on its imports from the Foreign shifts: **Home's offer curve to the left**
317. In the context of a small, competitive currency, an increase in import tariff causes: **A trade gain since the amount imported decreases**

318. In the two-good Ricardian trade model, complete specialization in production occurs in free trade equilibrium because: **The production possibility frontier satisfies constant opportunity cost**
319. Special Drawing Rights (SDRs) is the currency of IMF. This is in the form of: **Book-keeping entry**
320. The Brettonwoods conference led to the establishment of: **IMF and IBRD**
321. A deficit in a country's balance of payments refers to the difference between: **Autonomous receipts and autonomous payments**
322. The treaties was covered by the Uruguay Round Negotiations are:
- (i) **General agreement on trade in services**
 - (ii) **Trade-related intellectual property rights**
 - (iii) **Trade-related investment measures**
323. The Heckscher-Ohlin theory of trade pattern assumes: **Perfect competition in both product and factor market**
324. List-I List-II

IMF	→ To reduce the degree of balance of payments disequilibrium of the member countries
UNCTAD	→ To promote harmony between developed and developing countries on trade related developmental issues
World Bank	→ To promote socio-economic development of the member countries
WTO	→ To promote viable and durable multilateral trading system

325. List-I

List-II

Forward Exchange	→ A contract to buy and sell foreign against another currency at some fixed rate in the future at a price agreed upon now
Hedging	→ A device of covering exchange risk against the price rise of foreign currency
Arbitrage	→ A mechanism makes two markets that are physically separate, into a single market in the economic sense
Specie Points	→ The movement of exchange rate between two limits set by the cost of moving gold from one country to another

326. The non-debt flow of capital between countries is: **Portfolio investment**

327. Gains from trade results from: **The fact that exchange brings both specialization and reallocation of greater output and the increased welfare in each country**

328. The correct statements about balance of payments of a country are:

- (i) **The surplus on current account in the balance of payments must be equal to the deficit on capital account and vice versa**
- (ii) **If in the actual balance of payments, the credit and debit do not balance, the balance is usually achieved by adding one item 'errors and omissions'**
- (iii) **The balance of payments of a country must always balance in the accounting sense**

329. In Heckscher-Ohlin theory of international trade, the most important source of difference in relative commodity prices between nations is a difference in: **Factor endowments**

330. The scope of international trade and division of labour is limited by: **The size of the international market**

331. List-I (Assumption)

List-II (Implication)

No transport cost in trade → **Commodity prices is same in the two countries**

Perfect competition in factor market → **Optimal allocation of factors**

Factor intensities differ between goods → **Techniques of production is different for two goods**

Production functions same in both countries → **Techniques of production is same in the two countries**

332. The tariff which maximizes a country's economic welfare is called: **Protective tariff**

333. List-I (Theory)

List-II (Inventor)

Classical theory of comparative cost advantage → **David Ricardo**

Vent for surplus theory → **Adam Smith**

Theory of opportunity cost → **G Haberler**

Theory of reciprocal demand with Technology → **J. S. Mill**

Real cost theory of international trade → **Bastable and Alfred Marshall**

334. A country is said to be relatively well-endowed with capital if: **The per capita amount of investment in the country has shown a rising trend**

335. The transactions represent a credit entry in the current account of a country's balance of payment: **Expenditure of foreign tourists in a country**

336. The optimum tariff is at a point where the elasticity of the offer curve is: **Greater than unity but less than infinity**

337. List-I

List-II

Free trade area	→ Trade is free and no customs duties
Customs union	→ No customs duties; duties on non-members
Common market	→ No restrictions on trade and factor movement
Economic union	→ Advanced stage of integration

338. List-I

List-II

Unrequited receipts	→ Gifts, reparations receipts from foreigners
Accommodating finance	→ Currency transfer by monetary authority
Transfer items	→ Commercial imports and exports
Autonomous items	→ Lending, borrowing and gold transfer

339. The Singer-Prebisch theory maintains that: **Less developed countries always gain in trade when they trade with developed countries**

340. Denoting the price of capital and labour by P_K and P_L respectively and countries by A and B, if $(\frac{P_K}{P_L})_A > (\frac{P_K}{P_L})_B$ then: **Country A is relatively labour abundant**

341. The terms of trade for a country will improve as a result of currency devaluation (where, S_x = export elasticity of supply, S_m = import elasticity of supply, D_x = export elasticity of demand, D_m = import elasticity of demand) if: **$D_x D_m > S_x S_m$**

342. Commodity or Net Barter Terms of Trade: **The commodity or net barter terms of trade is the ratio between the prices of country's export goods and import goods**

343. Gross Barter Terms of Trade: **The gross barter terms of trade is the ratio between the quantities of country's import goods and export goods**

344. Income Terms of Trade: **The income terms of trade is the net barter terms of trade of a country of a country multiplied by its export volume index**
345. Single Factor Terms of Trade: **It is calculated by multiplying the commodity terms of trade which index by an index of productivity changes in domestic export industries**
346. Double Factor Terms of Trade: **It takes into account productivity changes both in the domestic export sector and foreign export sector producing the country's imports**
347. Real Cost Terms of Trade: **It is calculated by multiplying the single factor terms of trade with reciprocal of an index of the amount of disutility per unit of productive resources used in producing export commodities**
348. Utility Terms of Trade: **It is obtained by multiplying the real cost terms of trade index with the index of relative desirability or utility of imports and of domestic commodities forgone that could have been produced for home consumption with those factors of production which are now used in the production of export goods**
349. Factors affecting terms of trade: **The major factors which affect the terms of trade of a country are:**
- (i) **Economic growth**
 - (ii) **Shifts in the demand for exports and/or imports**
 - (iii) **Tariff**
 - (iv) **Devaluation**
 - (v) **Availability of substitutes**
350. Ad Valorem Tariff: **The most common type of import duty is the ad velorem tariff. Ad Velorem import duty is imposed as a percentage of the value of the imported commodity. The import duty is a fixed percentage of the C.I.F (cost, insurance and freight) value of commodity**
351. Specific Duty: **Specific import duty is imposed by the government on the basis of number of units imported.**

352. Compound Tariff: **A specific import duty is imposed on each unit of the commodity plus a percentage of ad valorem also.**
353. Sliding Scale Tariff: **Sliding tariff is imposed on ad valorem basis or on specific basis. Sliding import duties vary with the prices of commodities imported.**
354. Effective Rate of Protection: **The effective rate of protection is a measure of the total effect of the entire tariff structure on the value added per unit of output in each industry when both intermediate and final goods are imported**
355. Classical Theory of Balance of Payments: **This theory explains disequilibrium in the balance of payments of a country in terms of relative costs and price structure. A country is likely to have an adverse balance of payment e effective rate of protection is a measure of the total effect of the entire tariff structure on the value added per unit of output in each industry when both intermediate and final goods are imported**
356. The condition of economic viability and technological feasibility of Leontief's static model: **Hawkins - Simon Condition**

357. If the production function is $Y = AL^\beta K^\alpha$; $\alpha, \beta > 0$

List I	List II
i) Decreasing returns to scale	$(\alpha + \beta) < 1$
ii) Increasing returns to scale	$(\alpha + \beta) > 1$
iii) output elasticity with respect to L	α
iv) Output elasticity with respect to K	β

358. The production function $Q = A [\beta K^{-a} + \alpha L^{-a}]^{-1/a}$ is homogeneous of degree: **One**

359. Given the total cost function $C = 7Q^2 + 26Q + 5$; MC at $Q = 5$ is: **96**

$$[C = 7Q^2 + 26Q + 5]$$

$$MC = \frac{dc}{dq} = 14Q + 26$$

$$[MC]_{Q=5} = 14 \times 5 + 26 = 70 + 26 = 96]$$

360. A firm operating in perfectly competitive product input markets. Maximizes its total profit when: $\frac{MP_a}{P_a} = \frac{MP_b}{P_b} = \frac{1}{MC_x} = \frac{1}{P_x}$

361. Shadow price refers to: **Change in value of objective functions per unit change in any one of the constraints.**

362. In an economy of two individuals (A and B) and two commodities (X and Y) general equilibrium of exchange is reached when: **$(MRS)^{A_{XY}} = (MRS)^{B_{XY}}$**

363. Herfindahl-Hirschmann Index of market concentration for the following industry:

Share of firms	1	2	3	4	5	6
Industry	30	25	15	15	10	5

The value of the index is: **2100**

$$[\sum \text{share of firms} \times \sum \text{Industry}]$$

$$= (1+2+3+4+5+6) \times (30+25+15+15+10+5)$$

$$= 21 \times 100 = 2100]$$

364. Given the Harrod's Growth Model as under,

$$S(t) = \alpha Y(t)$$

$$I(t) = \beta[Y(t) - Y(t-1)]$$

$$S(t) = I(t)$$

$$\alpha, \beta > 0$$

In this model sustained growth is indicated by satisfying the condition: **$(\frac{\beta}{\beta-\alpha}) > 1$**

365. Cobb-Dauglas production function $Q=AL^\alpha K^{1-\alpha}$ does possess the characteristics of:

- i) **Constant returns to scale**
- ii) **Unit elasticity of substitution**
- iii) **Linear homogeneity**

366. The input-output model which has endogenous final demand vector is known as: **Closed input-output model.**

367. The total cost function and the market demand function of a competitive firm are $C = \frac{1}{3}x^3 - 10x^2 + 9x + 1000$ and $x = (12-P)/9$ respectively.

The level of output at which profits will be maximized is: **3**

368. In CES production function $Q=M[\alpha X_1^{-P}+(1-\alpha)X_2^{-P}]^{-1/P}$

Elasticity of substitution is: $\frac{1}{(1+P)}$

369. In linear programming problem involving two variables, multiple optimal solutions are obtained when one of the constraints is: **The objective function should be parallel to constraints that forms boundary of the feasible reason.**

370. In an open economy model of input-output analysis, if A is the input coefficients matrix and (I-A) is technology matrix, the viability condition to be satisfied is: **All principle minors of the (I-A) matrix must be positive.**

371. For the Cobb-Douglas Production function $Q=AL^\alpha K^{1-\alpha}$, the elasticity of substitution is: **One**

372. The input coefficients/ elements are interpreted as inputs required directly and indirectly per unit of final demand is: **(I-A)⁻¹**

373. The concept of 'learning by doing' was given by: **Kenneth Arrow.**

374. In Joan Robinson's growth model, capital accumulation depends on: **Profit- wage relation and labour productivity.**

375. In the equation $C = C_0 + C_1 Y_d$, where C is planned consumption expenditure, Y_d is disposable income C_0 is intercept or autonomous consumption and C_1 is MPC. Then the endogenous variable is: **$C_1 Y_d$.**

376. The Lok Sabha passed the **International Financial Services Centres Authority Bill: 11th December, 2019**

[The bill proposes setting of an authority to develop and regulate the financial services market in the International Financial Services Centres (IFSCs) in India]

377. RBI Fifth Monetary Policy 2019-20:

(i) RBI's Monetary Policy Committee decides to keep the Repo Rate unchanged at 5.15 percent

(ii) The Reverse Repo rate stands at 4.9 percent

[Repo rate and reverse repo rate: The repo rate has been cut by 25 bps to 5.15 percent. The reverse repo rate has been cut by 4.9 percent. The bank rate continues to stand at 5.4 percent]

378. The MPC will continue with its **accommodative stance**, which it had adopted during the second bi-monthly policy 2019-20, departing from its earlier neutral stance. The accommodative stance will remain as long as necessary to revive growth while ensuring inflation remains within target.

379. GDP growth forecast: **The GDP growth forecast has been cut from 6.9 percent to 6.1 percent for the ongoing fiscal year 2019-20**

380. Consumer Price Index: **The Consumer price index (CPI) forecast has been retained for the second half of the fiscal year 2019-20 at 3.5-4 percent**

381. Weak rural and urban demand: **The MPC noted that the slump in real GDP growth in Q2 was followed by weaker demand**

[The committee highlighted that the government has announced several measures in the last two months to revive demand. Overall, the RBI Governor Shaktikanta Das stated that the global economy has lost momentum]

382. Inflation: **Households expect inflation to rise by 40 basis points over a 3-month ahead horizon and 20 basis points over a one-year ahead horizon.**

383. Global Economy Loses Momentum: **The RBI said that the September 2019 inflation expectations survey indicates that households expect inflation to rise by 40bps over a 3-month ahead horizon and 20bps over a one-year ahead horizon.**

384. Agriculture: **The RBI said that agriculture in India is well-positioned to lead the recovery in domestic demand. Vegetable prices, however, may continue to remain elevated in the coming months but are likely to moderate as winter supplies enter the market.**

385. Surplus Liquidity: The RBI noted that the liquidity remained in surplus during August and September despite the expansion in the currency in circulation.

386. India's population growth during the 20th century can be classified into five phases:

- 1901-1921:** Stagnant population
- 1921-1951:** Steady growth of population
- 1951-1981:** Rapid high growth of population
- 1981-2001:** High growth with definite signs of slowing down
- 2001- :** Rapidly declining fertility

387. Birth Rate and Death Rate in India: The rate of growth of population is a function of birth rate and death rate. The growth of population was held in check by high birth rate and high death rate prevalent in India before 1921. From 1951 to 2000 there has been some decline in birth rate. In 2000, it was just 8.7

388. Crude Birth Rate: Number of births per 1000 population in a given year

389. Crude Death Rate: Number of deaths per 1000 population in a given year

390. Natural Growth Rate: The difference between birth rate and death rate in a given year

391. Infant Mortality Rate: It is calculated as a ratio of the number of deaths among the 1000 born children before they reach their first birthday.

392. Neonatal Infant Mortality Rate: Refers to deaths within one month after birth

393. Post-Neonatal Infant Mortality Rate: Refers to deaths of infants after the first month

394. Child Mortality Rate: Number of deaths of children in the age group 0-4 years per 1000 infants in a given year

395. Maternal Mortality Rate: Number of maternal deaths per 1 lakh live births in a given year

396. Couple Protection Rate: **Percentage of couples in their productive age and using some contraceptive**
397. Life Expectancy at Birth: **Expected average life of children born during a specified period**
398. **Literacy Rate: Percentage of population in the age-group of 7 years and above, which can read, write and understand a language**
399. **Sex Ratio: Number of females per 1000 males**
400. **Population Density: Population per square kilometer in an area**
401. **Work Participation Rate: Percentage of working population in the total population**
402. Demographic Transition: **In the word of E G Dolan, 'Demographic transition refers to a population cycle that begins with a fall in the death rate, continues with a phase of rapid population growth and concludes with a decline in the birth rate'**
403. Stages of Demographic Transition:
- (i) **First Stage: Stage of high birth rate and high death rate**
 - (ii) **Second Stage: Stage of high birth rate and low death rate**
 - (iii) **Third Stage: Stage of declining birth rate and low death rate**
 - (iv) **Fourth Stage: Stage of low birth rate and low death rate**
404. Classification of Growth of Population in India:
- (i) **Period of Stable Population: 1891 – 1921**
 - (ii) **Period of Growth of Population: 1921 – 1951**
 - (iii) **Period of Population Explosion: 1951 – 1981**
 - (iv) **Period of High Growth but with Signs of Slowing Down: 1981 – 2001**
405. State with Highest Density of Population in India is: **West Bengal**
406. State with Lowest Density of Population in India is: **Arunachal Pradesh**

407. UT with Highest Density of Population in India is: **Delhi**
408. UT with Lowest Density of Population in India is: **Andaman and Nicobar Islands**
409. State with Highest proportion of Urban Population is: **Goa**
410. State with Lowest proportion of Urban Population is: **Himachal Pradesh**
411. UT with Highest proportion of Urban Population is: **Delhi**
412. UT with Lowest proportion of Urban Population is: **Dadra Nagar Haveli**
413. State with Highest Sex ratio in India is: **Kerala**
414. State with Lowest Sex ratio in India is: **Haryana**
415. UT with Highest Sex ratio in India is: **Delhi Puducherry**
416. UT with Lowest Sex ratio in India is: **Daman and Diu**

417. State and UT wise Census Data (2011) in India:

Area (States):

Highest	Lowest
Rajasthan	Goa

418. Area (UTs):

Highest	Lowest
Andaman and Nicobar Islands	Lakshadweep

419. Literacy Rate (States):

Highest	Lowest
Kerala	Bihar

420. Female Literacy Rate (States):

Highest	Lowest
Kerala	Rajasthan

421. Population Share:

Highest	Lowest
Uttar Pradesh	Lakshadweep

422. The list of Finance commissions of India:

Finance Commission	Chairman	Operational Duration
First	K. C. Neogy	1952–57
Second	K. Santhanam	1957–62
Third	Ashok Kumar Chanda	1962–66
Fourth	P. V. Rajamannar	1966–69
Fifth	Mahaveer Tyagi	1969–74
Sixth	K. Brahmananda Reddy	1974–79
Seventh	J.M. Shelat	1979–84
Eighth	Y. B. Chavan	1984–89
Ninth	N.K.P. Salve	1989–95
Tenth	K.C. Pant	1995–2000
Eleventh	A. M. Khusro	2000–2005
Twelfth	C. Rangarajan	2005–2010
Thirteenth	Dr. Vijay L. Kelkar	2010–2015
Fourteenth	Yaga Venugopal Reddy	2015–2020

423. The purchasing power of a currency refers to the quantity of the currency needed to purchase a given unit of a goods, or common basket of goods and services. It is clearly determined by the relative cost of living and inflation rates in different countries. Purchasing power parity (PPP) means equalising the purchasing power of two currencies by taking into account these cost of living and inflation differences. **According to the recent data, in terms of PPP dollars, India is the third largest economy in the world.**

424. The **ease of doing business index** is an index created jointly by Simeon Djankov and Gerhard Pohl, two leading economists at the Central and Eastern Europe sector of the World Bank Group. **India's present rank in Ease of Doing Business is 63 (New Zealand holds first rank).**

425. The purpose of Inter-Creditor Agreement signed by Indian banks and financial institutions recently: **To aim at faster resolution of stressed assets of Rs. 50 cores or more which are under consortium lending.**

426. The Services Area Approach was implemented under the purview of **Lead Bank Scheme.**

[Lead Bank Scheme is a Service Area Approach under which villages are identified and assigned to bank branches based on their proximity and contiguity]

427. The Reserve Bank of India's recent directives relating to 'Storage of Payment System Data', popularly known as Data Diktat, command the payment system providers so **that they shall ensure that entire date relating to payment systems operated by them are stored in a system only in India.**

428. The first Indian bank to link up with China's National Advance Payment System (CNAPS) is: **State Bank of India**

429. Jyske Bank, which has launched world's first negative interest rate mortgage, is associated to which country? **Denmark**

430. What is the India's rank in the Global Innovation Index (GII) 2019? **52nd**

[The GII rankings are published annually by Cornell University, INSEAD and the UN World Intellectual Property Organisation (WIPO) and GII Knowledge Partners. Now in its 12th edition, the GII ranks 129 economies based on 80 indicators, ranging from intellectual property filing rates to mobile-application creation, education spending and scientific and technical publications. Sweden holds the first rank in GII]

431. Recently, RBI has launched three years road map for the improvement of regulation and supervision, is named **UTKASHA 2022**.

[The framework has been launched to achieve the excellence in performance of RBI's mandates and strengthening the trust of citizen and other institutions]

432. As per Fitch Solutions, India's GDP growth rate in FY20 is **6.4%**.

[Fitch Solutions has revised its GDP growth rate prediction for India in FY20 (2019-20) to 6.4% from 6.8%. Fitch Ratings Inc. is one of the "Big Three credit rating agencies", the other two being Moody's and Standard & Poor's]

433. The Reserve Bank of India has constituted a six-member committee to review the ATM interchange fee structure. VG Kannan, Chief Executive Officer of the Indian Banks' Association, will lead the review panel. The name of this committee is **VG Kannan Committee**.

434. Recently, RBI has decided to confer the title of schedule commercial bank upon: **Fincare Small Finance Bank and Kookmin Bank**.

435. The institute which generally published report, named "Benchmarking India's Payment System", is **RBI**.

436. The financial institution which started a new initiative "Bank on Wheels" to popularize banking among commoners is **India Overseas Bank**.

437. According to the report published by FICCI, GDP of India shall be in the year 2019-2020: **7.1%**

438. Two famous regulatory authority of Reserve Bank of India are going to start Sand Box Policy: **SEBI and IRDAI**

439. **Dena Bank and Vijaya Bank merged with Bank of Boroda**.

[With a total business of about ₹15 trillion, the merged entity is now become the third-largest lender in India. This is also India's first-ever three-way consolidation of banks in India]

440. In its bid to create "Next Gen banks", the finance ministry has decided to merge 10 public sector banks into four. **The merger of United Bank of India (UBI) and Oriental Bank of Commerce (OBC) with Punjab National Bank (PNB) will give birth to India's second largest public sector bank after the State Bank of India (SBI).** The PNB merger, which will make the bank bigger than Bank of Baroda (BoB), will come into effect from 1st April 2020, according to a recent PTI report.

441. On 30 August 2019, Finance Minister Nirmala Sitharaman announced that **Canara Bank** would be merged with: Ans. **Syndicate Bank.**

[The proposed merger would create the fourth largest public sector bank in the country with assets of ₹15.20 lakh crore (US\$220 billion) and 10,324 branches]

442. In the wake of the government announcing direct income support of ₹6,000 per year for small and marginal farmers in the interim Budget on February 1, 2019, the Reserve Bank of India raised the limit for collateral-free agriculture loans to farmers from ₹1 lakh to: **1.6 lakh**

443. The Reserve Bank of India (RBI) Thursday decided to raise the criteria for 'bulk deposits' for banks from Rs 1 crore to: **Rs 2 crore**

It is to provide more operational freedom to lenders to raise funds. The proposal was mooted by the National Federation of Urban Cooperative Banks and Credit Societies Ltd.

444. The World Bank, the Small Industries Development Bank (SIDBI) and the UN Women announced to launch a new social impact bond to offer credit to rural women entrepreneurs. The name of the project is: **Women's Livelihood Bond (WLB)**

[This is going to ensure that the credit cost to the women entrepreneurs will not be more than 13 percent and the ticket size will be Rs 50,000 to Rs 3 lakh]

445. The finance ministry announced to pump in **Rs 48,239 crore** in 12 public sector banks in this fiscal to help them maintain regulatory capital requirements and finance growth plans.

446. The RBI, in consultation with the government, had constituted a committee to review the extant economic capital framework of the RBI and to transfer the surplus capital of 1.76 crore to central govt. Who is the head of the committee: **Bimal Jalan, Former RBI Governor**

447. RBI has appointed panel for strengthening digital payments ecosystem and has set a target to achieve a ten-fold volume growth in digital payments over the next three years through customer-friendly pricing mechanisms and broadening access infrastructure. The head of the panel is: **Nandan Nilekani**
448. RBI has constituted a panel to examine the issue related to offshore rupee market and recommend the policy measures to ensure the stability of external value of domestic currency. Who is the Chairperson of the committee: **Usha Thorat**
449. Unified Payments Interface (UPI) is an instant real-time payment system developed by: **National Payments Corporation of India**
- [The interface (UPI) is regulated by the Reserve Bank of India and works by instantly transferring funds between two bank accounts on a mobile platform]
450. The first central bank in the Asia-Pacific region to begin an explicit interest rate easing cycle buoyed by benign food inflation and easier global financial condition is: **The Reserve Bank of India (RBI)**
451. According to an RBI report, the gross Non-Performing Asset (NPA) ratio of banks may increase from 9.3 per cent in September 2019 to: **To 9.9 per cent by September 2020**
452. India's fiscal deficit at the halfway mark in 2019-20 stood at 92.6% of budgeted estimates, lower than 95.3% in April-September, 2018-19, helped by transfers from the RBI. With muted tax revenues, the government decided to undertake spending cuts to achieve **FY20 fiscal target of 3.3% of GDP**
453. According to the Morgan Stanley report, the GDP growth rate for India for the year 2019-2020 is: **7.5%**
454. The National Company Law Tribunal has approved the merger of which bank with Bharat Financial Inclusion: **Indusland Bank**
455. The Indian state which has been levied 1% cess on calamity is **Kerala**
456. According to IDFC institute, a think-tank, Indian cities are more urban than recognised and contribute between **59% and 70%** of India's gross domestic product (GDP)

457. Rating agency CRISIL cuts India's fiscal year 2020 GDP growth forecast to **6.3%** from its earlier forecast of **6.9%**, after the economy grew 5% in the first quarter, it's slowest in almost 6 years.
458. **Maharashtra** reported 233 cases of ATM fraud in 2018-19, the highest in the entire country, as per the data revealed by RBI. The data showed that Delhi grabbed the second spot with 179 cases, followed by Tamil Nadu with 147 cases of ATM fraud.
459. The government will kick off a massive exercise aimed to get a complete count of all economic units in the country-the **Seventh Economic Census**- from July 29, 2019 from the north eastern state of **Tripura**.
[The census is conducted by Ministry of Statistics and Programme Implementation (MOSPI), will be held this year after a gap of five years.]
460. The Reserve Bank of India (RBI) allowed which foreign bank to offer regular banking services in India. **Bank of China**
461. The Indian state which produced the Tax-free Deficit Budget for 2019-20 on March, 2019, is: **Meghalay**
462. Foreign direct investment (FDI) equity inflows rose 28% in the first quarter of 2019-20 to \$16.3 billion from \$12.7 billion. Singapore continued to be the top source of FDI at \$5.3 billion, followed by Mauritius (\$4.6 billion). **In 2018, most of the FDI inflow came from Mauritius.**
463. The Reserve Bank (RBI) has exited the National Housing Bank (NHB) and the National Bank for Agriculture & Rural Development (NABARD), by selling its entire stakes to government for **Rs 1,450 crore and Rs 20 crore, respectively**, making them fully government-owned now.

464. Key features of Budget 2019-20:

- **Vision for \$5 trillion economy driven by investment**
- **Transforming rural lives**
- **New Jal Shakti Mantralaya to ensure Har Ghar Jal**
- **Enhancing ease of direct and indirect taxation**
- **Strengthening connectivity**
- **Gandhipedia to sensitize society**
- **India's soft power**
- **Harnessing India's space abilities**

465. The FY20 fiscal deficit target has been cut to: **3.3% from 3.4%**

466. Vision for the decade: **From 1.85 trillion dollars in 2014, the economy has reached 2.7 trillion US dollars in five years. The government's commitment is to make India a \$5 trillion economy by 2024.**

467. **100% FDI will be permitted for insurance intermediary.**

468. Credit Guarantee Enhancement Corporation will be set up in 2019-20: **Action plan to deepen markets for long-term bonds with a specific focus on infra sector to be put in place.**

469. Limit on foreign portfolio investment (FPI) in a company increased to: **24%**

470. **India saw a 6% y-o-y growth in foreign investment - Global FDI fell to \$1.3 billion from \$1.5 trillion, but inflows in India remained strong at \$54.37 billion, a growth of 6%.**

471. RBI to regulate Housing Sector: **Govt. proposes to return the regulation authority over housing finance sector from National Housing Board to the RBI. • RBI is also the regulator of NBFCs.**

472. PSU Bank recapitalization: **The government has proposed to allocate Rs 70,000 crore for PSU Bank recapitalization**

473. Non-performing Assets (NPAs) of commercial banks have reduced by: **over Rs 1 lakh crore over the last year**
474. **Reducing the no. of PSBs to 8 –**
[The government has smoothly carried out consolidation, reducing the number of PSBs (Public sector banks) by 8]
475. **Record recovery of over Rs 4 lakh crore due to IBC (Insolvency code) have been effected in the last four years**
476. **Revision coverage ratio is at its highest in 7 years and credit growth has improved to over 13%**
477. For purchase of high-rated pooled assets of financially sound NBFCs amounting to a total of: **Rs 1 lakh crore, govt will provide a one-time six-month partial credit guarantee to PSBs for first loss up to 10%**
478. India's sovereign external debt to GDP is among the lowest globally at: **less than 5%**
479. New coin series to be launched soon: **A new series of coins for Re 1, Rs 2 Rs 5, Rs 10, Rs 20 to be minted so that the visually impaired can easily identify them**
480. **Pension Fund Regulatory Authority to be separated from the National Pension Scheme Trust.**
481. Divestment target: **The FY20 divestment target has been hiked to Rs 1.05 trillion (1.05 lakh crore) from Rs 90,000 crore**
482. **Govt. to continue with strategic divestment of select Central Public Sector Enterprises (CPSEs).**
483. **Govt. to modify present policy of retaining 51% stake in PSUs.**
484. Income Tax slabs remain unchanged: **Taxation for low income groups remain unchanged**

485. Surcharge increased for high income groups: **Those individuals in highest income bracket need to contribute more to national development. Propose to enhance surcharge on individual income of Rs 2-5 crore by 3 % and over Rs 5 crore by 7%**
486. To promote digital payments: **2% tax levied on cash withdrawal over Rs 1 crore per year - The government has proposed to levy TDS of 2% on cash withdrawal exceeding Rs 1 crore a year from a bank account**
487. Taxpayers with annual turnover of **less than Rs 5 crore to have to file only quarterly**
488. Custom duty on gold and other precious metals increased by **2.5% from 10% to 12.5%.**
- [Custom duty on imported books increased by 5%]
489. Business establishments with annual turnover of: **Rs 50 crore will offer low-cost digital mode of payments to customers and no charges or merchant discount rates shall be imposed on customers as well as merchants**
490. No change on digital payment: **MDR charges waived on cashless payment - No charges or merchant discount rates shall be imposed on customers or the merchants. RBI and banks will absorb these costs**
491. GST to be further simplified to a **single monthly return**
492. Customs duty being exempted on certain parts of **Electric Vehicle (EVs)**
493. Excise Duty on petrol, diesel hiked by 1%: **FM proposed to increase special additional duty and road and infrastructure cess on diesel and petrol by Re 1**
494. Direct tax revenue is increased by 78%: **The direct tax revenue has increased by 78% to Rs 11.37 lakh crore to 201819 from 6.37 lakh crore from 2013-14**
495. Govt slashes corporate tax rates: **Currently, only 25% tax rate is applicable to companies with an annual turnover of Rs 250 crore.**

[This has been extended to companies with turnover of up to Rs 400 crore]

This will bring in 99.3 percent of all companies into the tax net and leave out only 0.4 percent companies]

496. GST rate on electric vehicles already proposed to be **lowered to 5%**.

[Additional income tax deduction of ₹1.5 lakh on interest on loans taken to purchase electric vehicles]

497. Propose to extend period of exemption of capital gains arising from sale of residential house for investment in startups to **31 March 2021**

498. Affordable housing: **Propose to allow an additional tax deduction of Rs 1.5 lakh on interest paid on housing loans for self-occupied house owners. This means those purchasing affordable house will get tax relief up to Rs 3.5 lakh on interest paid**

499. Interchangeability of PAN and Aadhaar card to be allowed: **For ease and convenience to taxpayers.**

[ITR can be filed without PAN by quoting Aadhaar]

500. Incentives to National Pension System (NPS) subscribers: **It is proposed to increase the limit of exemption from the current 40% to 60% of payment on final withdrawal from NPS – - allow a deduction for employer's contribution up to 14% of salary from the current 10%, in the case of Central Government employee - allow deduction under section 80C for the contribution made to Tier II NPS account by Central Government employees**

Previous Year Questions Analysis with Proper Explanation

1. Under non-cooperative games, it is

- A. Essential to understand one's opponent's point of view
- B. Not essential to understand one's opponent's point of view
- C. Essential to understand one's opponent's point of view and to deduce the likely responses accordingly
- D. Essential to understand one's opponent's likely responses

Ans: C

Explanation: The outcome of the game will depend on the acts of all the players. A fundamental characteristic of non-cooperative games is that it is not possible to sign contracts between players. That is, there is no external institution (for example, courts of justice) capable of enforcing the agreements.

2. Which of the following statements are true regarding Cobb-Douglas production function?

- a) It is long period production function
- b) It is short period production function
- c) It is based on increasing returns to scale
- d) Output elasticities with respect to factors are constant

Select the correct option:

- A. (a) & (c)
- B. (a) & (d)
- C. (b) & (c)
- D. (c) & (d)

ANS: B

3. Which of the following methods of selecting strategies is consistent with risk averting behavior?

- A. If two strategies have the same expected profit, select the one with smaller standard deviation
- B. If two strategies have the same standard deviation, select the one with smaller expected profit
- C. If two strategies have the same standard deviation, select the strategy with larger coefficient of variation the strategy with larger coefficient of variation.
- D. If two strategies have different expected profits, select the one with the larger standard deviation

ANS: A

Explanation: In economics and finance, risk aversion is the behavior of humans (especially consumers and investors), who, when exposed to uncertainty, attempt to lower that uncertainty.

4. Match the following

List – I	List – II
(a) Various combinations that a consumer can purchase	(i) Indifference map
(b) Various combinations of two commodities providing equal satisfaction to consumer	(ii) Indifference curve
(c) A set of indifference curves	(iii) Budget line
(d) Point of tangency of a budget line on an indifference curve	(iv) Consumer's equilibrium

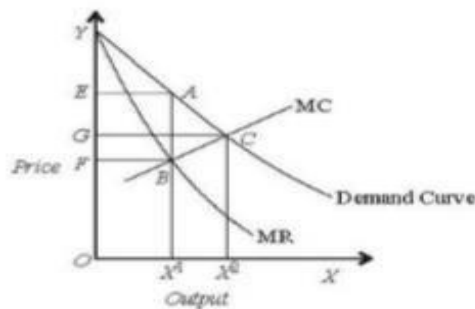
Choose the correct option from those given below:

- A. a-i, b-ii, c-iv, d-iii
- B. a-iv, b-iii, c-I, d-ii
- C. a-ii, b-iii, c-iv, d-i
- D. a-iii, b-ii, c-i, d- iv

ANS: D

Direction : Go through the following paragraph and diagram and answer the questions given below :

Monopoly charges a price above marginal cost, not all consumers who value the good at more than its cost, buy it. Thus, the quantity produced and sold by a monopoly is below the socially efficient level. The deadweight loss represented by the area of the triangle between the demand curve and the marginal cost curve.



Questions 5, 6 & 7

5. Which of the socially efficient level of production?

- A. OX1
- B. OX2
- C. AX1
- D. CX2

ANS: B

6. Deadweight loss is represented by the area of

- A. X1X2ca
- B. X1BCX2
- C. OX1AE
- D. BAC

ANS: D

7. What price will be charged under monopoly?

- A. OF
- B. X2C
- C. OE
- D. OG

ANS: C

8. The inconsistency of which one of the following criteria is labeled as Scitovsky Paradox?

- A. Little criterion
- B. Pareto criterion
- C. Bergson criterion
- D. Kaldor-Hicks criterion

ANS: D

9. General equilibrium analysis determines

- A. Prices & quantities in all markets simultaneously
- B. Prices & quantities in all markets simultaneously and explicitly takes feedback effects into account
- C. Feedback effects
- D. Prices in all markets

ANS: B

Explanation: General equilibrium analyzes the economy as a whole, rather than analyzing single markets like with partial equilibrium analysis. General equilibrium shows how supply and demand interact and tend toward a balance in an economy of multiple markets working at once

10. The firms are competitive and profit maximizing the demand curve for labour is determined by

- A. The opportunity cost of workers' time
- B. The value of marginal product of labour
- C. Offsetting income and substitution effect
- D. The value of marginal product of capital

ANS: B

Explanation: Firms may choose to demand many different kinds of inputs. The two most common are labor and capital. The demand and supply of labor are determined in the labor market. The participants in the labor market are workers and firms. Workers supply labor to firms in exchange for wages. Firms demand labor from workers in exchange for wages.

The firm's demand for labor is a derived demand; it is derived from the demand for the firm's output. If demand for the firm's output increases, the firm will demand more labor and will hire more workers. If demand for the firm's output falls, the firm will demand less labor and will reduce its work force. When the firm knows the level of demand for its output, it determines how much labor to demand by looking at the marginal revenue product of labor. The marginal revenue product of labor (or any input) is the additional revenue the firm earns by employing one more unit of labor. The marginal revenue product of labor is related to the marginal product of labor. In a perfectly competitive market, the firm's marginal revenue product of labor is the value of the marginal product of labor.

11. Pareto's marginal condition for efficiency in composition of output (product-mix) requires

1. $MRTS_{L,K}^X = MRTS_{L,K}^Y = MRTS_{L,K}^Z$
2. $MRS_{X,Y}^A = MRS_{X,Z}^A = MRS_{X,Z}^B$
3. $MRT_{P_{X,Y}} = MRS_{X,Y}^A = MSR_{X,Y}^B$
4. $MRTS_{L,K}^Y = MRS_{X,Y}^A = MRS_{X,Y}^B$

ANS: C

Explanation: For the attainment of Pareto-efficient situation in an economy, three marginal conditions must be satisfied.

These are:

- (i) Marginal condition for efficiency in the allocation of factors among firms (efficiency in production);
- (ii) Marginal condition for efficiency of distribution of commodities among consumers (efficiency in consumption); and
- (iii) Marginal condition for efficiency in the allocation of factors among commodities (efficiency in product-mix or composition of output).

A composition of output or product-mix is Pareto-efficient if it is impossible to increase the utility of one individual without reducing the utility of the other by reallocating the factors among the commodities, leading to a different product-mix.

The marginal condition for a Pareto-efficient product-mix states that the marginal rate of product transformation (MRPT) of Q2 into Q1 must be the same as the marginal rate of substitution (MRS) of Q1 for Q2, for each consumer.

Here, the MRPT of Q2 into Q1 is equal to the quantity by which the production of Q2 has to be reduced in order to produce one more (or the marginal) unit of Q1 and, as such, it is equal to the numerical slope of the economy's production possibility curve or frontier (PPC or PPF). We write the marginal condition for the Pareto-efficient product-mix or composition of output as

MRPT_{Q2 into Q1} = MRS_{Q1,Q2} of consumer I = MRS_{Q1,Q2} of consumer II

12. Why do individuals act in riskier ways after being insured?

- A. Due to the problem of adverse selection
- B. Due to the problem of false confidence
- C. Due to the problem of moral hazard
- D. Due to the problem of screening costs

ANS: C

Direction: Read the passage given below and answer the questions that follow it:

Suppose that for a particular economy for some time period, investment was equal to 100, government expenditure was equal to 75t, net taxes were fixed at 100 and consumption (C) was given by the consumption function: $C = 25 + 0.8 YD$

Where YD is disposable income and Y is GDP. (Questions 13-15)

13. What is the value of tax multiplier ($\Delta Y/\Delta T$)?

- A. -3
- B. -2
- C. -5
- D. -4

ANS: D

Explanation: tax multiplier (k) = $\frac{-MPC}{MPS}$

In this questions $MPC = 0.8$ and $MPS = 1 - MPC = 1 - 0.8 = 0.2$

$$k = \frac{-0.8}{MPS 0.2} = 0.4 \text{ (Ans: D)}$$

14. What is the value of government expenditure multiplier ($\Delta Y/\Delta G$)?

- A. 5
- B. 4
- C. 6
- D. 3

ANS: A

Explanation: government expenditure multiplier (K) = $1/1 - MPC$

Or, $1/1 - 0.8 = 1/0.2 = 5$ (Ans: A)

15. What is the level of equilibrium income (Y)?

- A. 700
- B. 600
- C. 850
- D. 800

ANS: B

Explanation: We know that, $Y = C + I + G$ and $Y_d = Y - T$

$$Y = 25 + 0.8 Y_d + 100 + 75$$

$$\text{or, } Y = 25 + 0.8(Y - T) + 100 + 75$$

$$\text{or, } Y = 25 + 0.8Y - 0.8T + 100 + 75$$

$$\text{or, } 0.2Y = 25 - 80 + 175$$

$$\text{or, } 0.2Y = 120, \text{ Or, } Y = 1200/2 = 600 \text{ (Ans: B)}$$

16. Which of the following is an example of a public good?

- A. Residential building
- B. National defence
- C. Restaurant meals
- D. Swimming pool of a house

ANS: B

Explanation: In economics, a public good refers to a commodity or service that is made available to all members of a society. Examples of public goods include law enforcement, national defence, and the rule of law. Public goods also refer to more basic goods, such as access to clean air and drinking water.

17. The excess supply of a commodity above the no-trade equilibrium price given one nation's?

- A. Import demand for the commodity
- B. Export supply and import demand for the commodity
- C. Export supply of the commodity
- D. Import supply of the commodity

ANS: C

Explanation: The excess supply of a commodity above the no-trade equilibrium price gives one nation export supply of the commodity. On the other hand, the excess demand of a commodity below the no-trade equilibrium price gives the other nation import demand for the commodity.

18. As income falls, consumption declines but proportionately less than the decrease in income because the consumer desires to sustain previous standard of living. This is called?

- A. Ratchet effect
- B. Wealth effect
- C. Demonstration effect
- D. Income effect

ANS: A

Explanation: The ratchet effect, a Keynesian theory, states that once prices have risen in lockstep to a rise in aggregate demand, they do not always reverse when that demand falls.

19. Which one is NOT axioms of inequality measures?

- A. Principles of scale invariance
- B. Principle of equity
- C. Principles of translation invariance
- D. Axiom of decomposability

ANS: B

Explanation: Axioms, in inequality measurement, are desirable properties of inequality measures. Using axioms may help to choose among inequality indexes. When an inequality index is chosen because it respects some desirable properties, it is said that inequality measurement follows an axiomatic approach.

Five main axioms will be considered:

- the principle of transfers (also known as the Pigou-Dalton principle)
- scale invariance
- translation invariance
- the principle of population
- decomposability

20. The concept of fiscal deficit implies which of the following?

- A. Revenue and interest receipts minus revenue expenditures
- B. Revenue receipts and recovery of loans and other receipts minus total expenditure
- C. Receipts minus disbursement in capital account
- D. Total receipts minus total expenditure

ANS: B

Explanation: A fiscal deficit is a shortfall in a government's income compared with its spending. The government that has a fiscal deficit is spending beyond its means. A fiscal deficit is calculated as a percentage of gross domestic product (GDP), or simply as total dollars spent in excess of income.

21. Liquidity approach is also known by the name

- A. Gurley – Shaw approach
- B. Radcliffe approach
- C. Traditional approach
- D. Monetarist approach

ANS: B

Explanation: The latest approach in this respect, which has become popular after Keynes is the “Liquidity Theory of Money”. This approach became popular in UK after the suggestions of Radcliffe Committee published in July 1959. As a result of the Radcliffe Committee’s Report on the Working of the Monetary System in Great Britain and the views of some contemporary European monetary economists like R.S. Sayers of England, Schmolders of Germany and J.G. Gurley and E.S. Shaw of United States, a new theory has been developed, concerning the role of liquid assets on the supply of money and general economic activity popularly called the ‘Liquidity Theory of Money’.

22. Vertical equity in taxation means that

- A. People in different income groups should be taxed equally
- B. People in different income groups should be taxed differently
- C. People in different groups should be charged proportionately
- D. Unequal people should be treated equally

ANS: B

Explanation: Vertical equity is a method of collecting income tax in which the taxes paid increase with the amount of earned income. The driving principle behind vertical equity is that those who have the ability to pay more taxes should contribute more than those who are not. This can be contrasted with horizontal equity, whereby individuals with similar income and assets should pay the same amount in taxes.

23. The commodity or Net Barter Terms of trade are represented by the formula

A. $\frac{\text{quantity of exports}}{\text{quantity of imports}} * 100$

B. $\frac{\text{price} * \text{quantity of exports}}{\text{price} * \text{quantity of imports}} * 100$

C. $\frac{\text{volume of exports}}{\text{volume of imports}} * 100$

D. $\frac{\text{Price index of export}}{\text{Price index of import}} * 100$

ANS: D

Explanation: In the contemporary world, the concept of net barter terms of trade was introduced by F.W. Taussig. This concept was called as commodity terms of trade by Jacob Viner. It is defined as ratio of export prices to import prices. It can be expressed as: $TC = PX/PM$

Here TC = commodity terms of trade or net barter terms of trade, PX = export price, PM = import price. If the net barter terms of trade are to be applied to more than one export and import commodities and the changes in terms of trade over a given period are to be computed, the index numbers of export and import prices rather than prices of individual commodities are taken into account.

24. The long-term chronic unemployment arising from imbalance between the skills and other characteristics of workers in the market and the need of employers is known as

- A. Cyclical unemployment
- B. Frictional unemployment
- C. Structural unemployment
- D. Seasonal unemployment

ANS: C

Explanation: Structural unemployment is a longer-lasting form of unemployment caused by fundamental shifts in an economy and exacerbated by extraneous factors such as technology, competition, and government policy. Structural unemployment occurs because workers' lack the requisite job skills or workers live too far from regions where jobs are available and cannot move closer. Jobs are available, but there is a serious mismatch between what companies need and what workers can offer.

25. According to Marshall – Lerner condition for the foreign exchange market to be stable, the sum of the elasticities of demand for imports and the demand for exports should be

- A. Less than 1
- B. Equal to zero
- C. Equal to 1
- D. More than 1

ANS: D

Explanation: The Marshall–Lerner condition (after Alfred Marshall and Abba P. Lerner) is satisfied if the absolute sum of a country's export and import demand elasticities (demand responsiveness to price) is greater than one.

26. In J. Robinson's growth model, capital accumulation depends on

- A. Savings- income ratio
- B. Profit-wage relation and labour productivity
- C. Profit- income ratio and capital productivity
- D. Savings- investment ratio

ANS: B

Explanation: In Harrod-Domar model, the capital accumulation depends upon saving ratio and capital productivity but in Robinson Model, it depends upon the profit wage relation and labour productivity bringing her theory closer to a real market economy.

27. Which of the following is NOT the method of debt redemption?

- A. Refunding
- B. Repudiation
- C. Sinking fund
- D. Capital levy

ANS: B

Explanation:

Redemption of debt refers to the repayment of a public loan. Although public debt should be paid, debt redemption is desirable too. In order to save the government from bankruptcy and to raise the confidence of lenders, the government has to redeem its debts from time to time. Sometimes, the government may resort to an extreme step, such as repudiation of debt. This extreme step is, of course, violation of the contract. Use of repudiation of debt by the government is economically unsound.

Some important method of debt redemption as follows: Refunding, Conversion, Sinking Fund, Capital Levy, Terminal Annuity, Budget Surplus, Additional Taxation, Compulsory Reduction in the Rate of Interest.

28. A tax is said to be direct, when

- A. Impact and incidence fall upon the same person
- B. Only incidence falls upon the same person
- C. Impact is shifted to another person
- D. Person escapes from paying tax

ANS: A

Explanation: A direct tax is a tax an individual or organization pays directly to the imposing entity. A taxpayer, for example, pays direct taxes to the government for different purposes, including real property tax, personal property tax, income tax, or taxes on assets.

29. In the Balance of Payment Account, the transfer payments are included in which one of the following?

- A. Capital Account
- B. Service Account
- C. Current Account
- D. Official Reserve Account

ANS: C

Explanation: The balance of payments divides transactions in two accounts: the current account and the capital account. Sometimes the capital account is called the financial account, with a separate, usually very small, capital account listed separately. The current account includes transactions in goods, services, investment income, and current transfers.

30. Which one of the following items is included in the Capital Account of the balance of payment of a country?

- A. Investment income
- B. Invisibilities
- C. Commercial borrowings
- D. Private transfer

ANS: C

Explanation: The capital account of a country consists of its transaction in financial assets in the form of short-term and long-term lending and borrowings and private and official investments. There are two types of transactions in the capital account-private and government. Private transactions include all types of investments-direct and portfolio and short-term. Government transactions consist of loans to and from foreign official agencies.

31. Which of the following factors is NOT the cause for 'market failure'?

- A. Asymmetric information
- B. Public good
- C. Externality
- D. Lack of demand

ANS: D

Explanation: Reasons for market failure include: positive and negative externalities, environmental concerns, lack of public goods, underprovision of merit goods, overprovision of demerit goods, and abuse of monopoly power.

32. 'Immiserizing growth' is the term given by

- A. Amartya Sen
- B. N Kaldor
- C. Paul Krugman
- D. Jagdish Bhagwati

ANS: D

Explanation: Immiserizing growth is a theoretical situation first proposed by Jagdish Bhagwati, in 1958, where economic growth could result in a country being worse off than before the growth. If growth is heavily export based it might lead to a fall in the terms of trade of the exporting country.

33. In efficiency wage model, the real wage is set to

- A. Minimize the efficiency of worker per rupee of real wages received
- B. Clear the labour market
- C. Not to clear the labour market
- D. Maximize the efficiency of workers per rupee of real wages received

ANS: D

34. Which of the following is NOT the function of a capital market?

- A. Mobilizing savings into investment
- B. Channelizing funds from less profitable to more profitable
- C. Mobilizing funds from surplus units to deficit units
- D. Providing better returns to direct investors

ANS: D

Explanation: Functions of Capital Market:

- It acts in linking investors and savers
- Facilitates the movement of capital to be used more profitably and productively to boost the national income
- Boosts economic growth
- Mobilization of savings to finance long term investment
- Facilitates trading of securities
- Minimization of transaction and information cost
- Encourages a massive range of ownership of productive assets
- Quick valuations of financial instruments
- Through derivative trading, it offers insurance against market or price threats
- Facilitates transaction settlement
- Improvement in the effectiveness of capital allocation
- Continuous availability of funds

35. Which one of the following growth models takes technology as exogenous variable?

- A. Solow model
- B. Robinson model
- C. Lucas model
- D. Todaro model

ANS: A

Explanation: In Solow Model, Technological Progress is exogenous because it is determined outside the model, not as a consequence of agents actions. Usually g is a parameter denoting the exogenous rate of technological progress.

36. Three pillars of the Asia–Pacific Economic Cooperation (APEC) are

- (a) Trade and investment liberalization
- (b) Business facilitation
- (c) Economic and technical cooperation
- (d) Military cooperation Choose the correct option:

- A. a,b,d
- B. a,b,c
- C. a,c,d
- D. b,c,d

ANS: B

Explanation: The Three Pillars of APEC's agenda focus on:

1. Trade and Investment Liberalization: APEC members take actions to reduce tariff and non-tariff barriers to trade and investment that boosts job creation, incomes and growth. Collaboration is guided by APEC's Regional Economic Integration agenda and includes the advancement of bilateral and regional trade agreements and the long-term goal of a Free Trade Area of the Asia-Pacific (FTAAP).

2. Business Facilitation: APEC members pursue measures to reduce the time, cost and uncertainty of doing business in the region and open new economic opportunities including for small firms, women and youth. APEC's Structural Reform agenda supports the development and harmonization of policies that improve market access and efficiency, and uphold public interest such as the safeguarding of health and safety.

3. Economic and Technical Cooperation (ECOTECH): ECOTECH builds the technical capacity of APEC's diverse members to promote trade, investment and robust, secure and sustainable economic growth that widely benefits the region's people. Priorities include strengthening anti-corruption, cross-border education and skills training, emergency preparedness, energy security, environmental protection, defense against pandemics and infrastructure development, among others.

37. During recession which of the following measures is initiated?

- A. Cutting taxes and boosting government spending
- B. Increasing taxes and decreasing government spending
- C. Keeping tax rates constant and increasing government spending
- D. Increasing tax rates and keeping government spending constant

ANS: A

Explanation: Recessions generally occur when there is a widespread drop in spending (an adverse demand shock). This may be triggered by various events, such as a financial crisis, an external trade shock, an adverse supply shock, the bursting of an economic bubble, or a large-scale natural or anthropogenic disaster (e.g. a pandemic). There was basically need to Increasing tax rates and keeping government spending constant.

38. A toll tax is a tax based on which of the following?

- A. The benefit principles
- B. Horizontal equity
- C. Vertical equity
- D. Tax progressively

ANS: A

Explanation: The benefit principle is a concept in the theory of taxation from public finance. It bases taxes to pay for public-goods expenditures on a politically-revealed willingness to pay for benefits received. The principle is sometimes likened to the function of prices in allocating private goods

Here are a few of the public services that are currently funded, in some part, on the basis of the benefit principle...

l Public college tuition (only paid by the people who attend public colleges)

l National park admission fees (only paid by the people who visit public parks)

l Fuel taxes (only paid by the people who purchase fuel)

l Bus fares (only paid by the people who take the bus)

l Bridge tolls (only paid by people who use the bridge)

39. Calculate the rate of effective protection by using the formula

$$g = \frac{t - a_i t_i}{1 - a_i} \quad \text{if } g=0.3, a_i = 0.8 \text{ and } t_i = 0, \text{ then the value of } t \text{ is}$$

- A. 0.2
- B. 0.3
- C. 0.1
- D. 0.4

ANS: NA

$$\text{Explanation: } 0.3 = \frac{t - 0.8 \times 0}{1 - 0.8} = t/0.2$$

(Values are given)

$$t = 0.2 \times 0.3 = 0.06 \text{ (Correct Answer)}$$

40. Match the following

List – I

- a) Theory of big push
- b) Warranted rate of growth
- c) Social dualism
- d) Endogenous growth theory

List – II

- i) J H Boeke
- ii) Paul Romer
- iii) Rosenstein Rodan
- iv) R F Harrod

Choose the correct option

- A. a-ii, b-iii, c-iv, d-i
- B. a-iii, b-I, c-iv, d-ii
- C. a-iii, b-iv, c-I, d-ii
- D. a-iv, b-ii, c-iii, d-i

ANS: C

41. By 'financial crowding out' economist mean

- A. Credit rationing
- B. What the government borrows cannot be used for private investment
- C. Government borrowings drive up interest rate
- D. Reserve bank of India controls on commercial bank lendings

ANS: C

Explanation: A situation when increased interest rates lead to a reduction in private investment spending such that it dampens the initial increase of total investment spending is called crowding out effect.

Description: Sometimes, government adopts an expansionary fiscal policy stance and increases its spending to boost the economic activity. This leads to an increase in interest rates. Increased interest rates affect private investment decisions. A high magnitude of the crowding out effect may even lead to lesser income in the economy.

With higher interest rates, the cost for funds to be invested increases and affects their accessibility to debt financing mechanisms. This leads to lesser investment ultimately and crowds out the impact of the initial rise in the total investment spending. Usually the initial increase in government spending is funded using higher taxes or borrowing on part of the government.

42. Direct credit programmes introduced

- A. Security – oriented credit
- B. Development – oriented credit
- C. Purpose- oriented credit
- D. Welfare- oriented credit

ANS: C

43. Which of the following is NOT part of Wiseman and Peacock hypothesis?

- A. Concentration effect
- B. Displacement effect
- C. Inspection effect
- D. Taxation effect

ANS: D

Explanation: Peacock and Jack Wiseman advanced the study of growth of public expenditure through Peacock Wiseman Hypothesis by their study of public expenditure at Great Britain during 1890 to 1955.

Peacock Wiseman Hypothesis focused on the pattern of public expenditure and stated that public expenditure does not follow a smooth or continuous trend but the increase in public expenditure takes place in jerks or steps. They gave separate concepts to justify the hypothesis, they are:

- 1 Displacement Effect
- 1 Inspection Effect
- 1 Concentration effect

44. Which consideration a commercial bank does NOT keep in mind to manage its assets and liabilities?

- A. Liquidity
- B. Profitability
- C. Solvency
- D. Equity

ANS: D

Explanation: A commercial bank has to manage its assets and liabilities with three considerations in mind, namely, liquidity, profitability, and solvency.

45. External drains leave which type of impact on commercial bank?

- A. Lowers the reserves of bank
- B. Increase further deposits
- C. Increase credit creation
- D. Creates demand deposits

ANS: A

Explanation: The most important factor, according to Whittlesey, which restricts credit expansion, is "external drain". As we have seen, on the basis of the excess reserve, commercial banks can expand their credit by creating demand deposits. Some of the borrowers from these banks are likely to withdraw part of their deposits in currency. Every rupee in cash that is withdrawn from the banking system lowers the reserves of the banks, and thus checks further deposit expansion.

46. Assumes that an economy begins in macroeconomic equilibrium, then taxes are significantly decreased. As a result of this change

- A. There is expansion and deflation in the economy
- B. There is recession and deflation in the economy
- C. There is expansion and deflation in the economy
- D. There is stagflation in the economy

ANS: C

Explanation: Tax rate cuts may encourage individuals to work, save, and invest, but if the tax cuts are not financed by immediate spending cuts, they will likely also result in an increased federal budget deficit, which in the long-term will reduce national saving and raise interest rates.

47. An increase in money supply will increase the demand for goods and services by

- A. Reducing government spending
- B. Lowering the interest rate so that investment spending increases
- C. Raising interest rate so that investment spending reduces
- D. Increasing government spending on goods and services

ANS: B

Explanation: The increase in the money supply is mirrored by an equal increase in nominal output, or Gross Domestic Product (GDP). In addition, the increase in the money supply will lead to an increase in consumer spending. This increase will shift the aggregate demand curve to the right.

48. The provision under the membership clause of the IMF is that any country can become a member if

- A. The country is willing to be a member of the World bank and willing to pay
- B. The country is willing to be a member of the WTO and willing to pay all subscriptions is glod
- C. The country is willing to be a member of the World bank and willing to pay subscription
- D. The country is willing to be a member of UNO and willing to pay subscription

ANS: C.

Explanation: When a country borrows from the IMF, its government agrees to adjust its economic policies to overcome the problems that led it to seek financial aid. These policy adjustments are conditions for IMF loans and serve to ensure that the country will be able to repay the IMF. This system of conditionality is designed to promote national ownership of strong and effective policies.

49. Match the following

List- I

- (a) ICICI
- (b) IRBI
- (c) IFCI
- (d) IDBI

List-II

- (i) 1971
- (ii) 1964
- (iii) 1955
- (iv) 1948

Choose the correct option

- A. a-i, b-ii, c-iii, d-iv
- B. a-ii, b-iii, c-iv, d-i
- C. a-iii, b-i, c-iv, d-ii
- D. a-iii, b-ii, c-I, d-iv

ANS: C

50. An increase in fiscal spending leads to

- A. A shift of Phillips curve to the left
- B. A shift of Phillips curve to the right
- C. Movement along the Phillips curve such that unemployment rises inflation also rises
- D. Movement along the Phillips curve in such a way that shows the decline in employment rate with every increase in inflation rate

ANS: D

51. A foreign exchange risk involves the transaction exposure, the accounting exposure and

- A. The translation exposure
- B. The flexibility exposure
- C. The rigidity exposure
- D. The economic exposure

ANS: A

Explanation: Growth of international business has led to an increasing exposure to foreign exchange risk for many companies. Foreign exchange dealing results in three major kinds of exposure including transaction exposure, economic exposure and translation exposure.

52. Which is NOT the main objective of credit control?

- A. Stabilization of general price level
- B. Promoting economic growth
- C. Ensuring adequate flow of credit to productive sectors
- D. Promoting economic welfare

ANS: D

Explanation: In recent years, the principal objective of credit control is to have growth with stability. The aim of credit control is to help in achieving full employment and accelerated growth with stability in the economy without inflationary pressures and balance of payments deficits.

53. Match the following List-I

List-I

- a) Accelerator and multiplier interaction
- b) Cambridge approach
- c) Life cycle hypothesis
- d) Efficiency wage model

List-II

- i) Modigliani, Ando and Brumberg
 - ii) Akerlof and Yellen
 - iii) Paul Samuelson
 - iv) Alfred Marshal and A C pigou
- Choose the correct option

- A. a-i, b-iv, c-ii, d-iii
- B. a-iii, b-iv, c-i, d-ii
- C. a-ii, b-i, c-iii, d-ii
- D. a-iv, b-iii, c-ii, d-i

ANS: B

54. According to Marxian analysis the surplus value depends upon

- A. Surplus and necessary labour time
- B. Necessary labour time only
- C. Surplus labour time only
- D. Nominal wage rate

ANS: A

Explanation: Surplus value is a central concept in Karl Marx's critique of political economy. Marx's solution was to distinguish between labor-time worked and labor power. A worker who is sufficiently productive can produce an output value greater than what it costs to hire him. Although his wage seems to be based on hours worked, in an economic sense this wage does not reflect the full value of what the worker produces. Effectively it is not labour which the worker sells, but his capacity to work. Thus according to Marxian analysis the surplus value depends upon surplus and necessary labour time.

55. The liquidity aggregates are classified as

- A. L1, L2 and L3
- B. M1, M2 and M3
- C. NM3
- D. M1, M2, M3 and M4

ANS: A

Explanation: Aggregate liquidity refers to the ease of execution for financial transactions for everyone in the entire market which is highly dependent on the availability of credit in the markets and the size of the money supply in a country. The following Liquidity aggregates have been formulated for monitoring the state of liquidity in an economy.

$L1 = M3 + \text{Postal Deposits (excluding National Saving Certificate)}$

$L2 = L1 + \text{Term Money Borrowings, Certificate of Deposits and Term Deposits of Financial Institutions like IDBI, IFCI, Exim Bank, NABARD, SIDBI etc.}$

$L3 = L2 + \text{Public Deposit with non-banking financial institutions.}$

56. During a depression which of the following policy instruments should be used?

- A. Taxes should be increased
- B. Taxes are kept unchanged and public expenditure is increased
- C. Public expenditure is reduced
- D. There should be a balanced budget

ANS: B

Explanation: During a depression, a deficit budget can be created in the following ways:

- (i) The level of public expenditure is kept unchanged but the taxation rates are reduced.
- (ii) Taxation rates are kept unchanged but public expenditure is increased.

The second method is regarded as more significant as an anti-depressionary measure. This excess of expenditure may be financed through public borrowings plus deficit financing, i.e., creation of new money.

57. Which one of the following does NOT determine the amount of years of schooling demanded by an individual to qualify for modern job?

- A. The wage or income differential
- B. The probability of success in finding modern sector employment
- C. Opportunity cost of schooling
- D. Expansion of health care infrastructure in urban sector

ANS: D

Explanation: Expansion of healthcare infrastructure in urban sector is depended on Government allocation and its different central schemes and the amount of years of schooling demanded by an individual to qualify for modern job.

58. Who among the following is not associated with the endogenous growth theory?

- A. Robert Solow
- B. Paul Romer
- C. Rebelo
- D. Robert Lucas

ANS: A

Explanation: In the mid-1980s, a group of growth theorists became increasingly dissatisfied with common accounts of exogenous factors determining long-run growth. They favored a model that replaced the exogenous growth variable (unexplained technical progress) with a model in which the key determinants of growth were explicit in the model. The work of Kenneth Arrow (1962), Hirofumi Uzawa (1965), and Miguel Sidrauski (1967) formed the basis for this research. Paul Romer (1986), Robert Lucas (1988), Sergio Rebelo (1991) and Ortigueira and Santos (1997) omitted technological change; instead, growth in these models is due to indefinite investment in human capital which had a spillover effect on the economy and reduces the diminishing return to capital accumulation.

59. Under which system the central bank is authorized by law to issue a fixed amount of notes against government securities and any excess is to be fully backed by gold/silver?

- A. Maximum fiduciary system
- B. Minimum reserve system
- C. Fixed Fiduciary system
- D. Maximum and minimum fiduciary system

ANS: C

Explanation: Under the fixed fiduciary system, the central bank is authorised to issue only a fixed amount of currency notes against government securities. All notes issued in excess of this limit should be fully backed by gold and silver reserves. Fiduciary issue means the issue of currency notes without the backing of gold and silver. This system was first introduced in England under the Bank Charter Act of 1844 and still prevails there. India followed this system between 1862 to 1920.

60. The rational expectations hypothesis suggests that the forecasts that people make concerning future inflation rates

- A. Consistently over estimates the actual rate of inflation in the future
- B. Are always correct
- C. Consistently underestimates the actual rate of inflation in the future
- D. Are correct on an average but are subject to errors that are distributed randomly

ANS: D

Explanation: Rational expectations – an economic theory that states – when making decisions, individual agents will base their decisions on the best information available and learn from past trends. Rational expectations suggest that although people may be wrong some of the time, on average they will be correct. In particular, rational expectations assumes that people learn from past mistakes.

Direction: Consider the following table that given the monthly per capital consumption expenditure (MPCE) of eight households and answer the question given below table:

State	MPCE (in Rs) of 8 Household							
	1	2	3	4	5	6	7	8
State-A	950	1100	1000	975	750	775	790	1400
State-B	1250	1150	1400	1100	550	600	490	1200

The value Z (Poverty line MPCE cut off) is Rs. 800

Questions 61,62,63

61. Estimate of head count ratio in state –A and state – B are

- A. State A: 0.375; B: 0.375
- B. State A: 0.475; B: 0.375
- C. State A: 0.575; B: 0.575
- D. State A: 0.385; B: 0.425

ANS: A

62. From the table calculate the estimates of Square Poverty Gap Ratio (SPGR) and then show that the SPGR in state A is

- A. Same as in state B
- B. Higher than that in state B
- C. Lower than that in state B
- D. Significantly different from zero

ANS: C

63. From the table calculate the estimates of Poverty Gap Ratio (PGR) for state A and state B and select the correct option

- A. State A: 0.133; B: 0.0119
- B. State A: 0.153; B: 0.0135
- C. State A: 0.0133; B: 0.119
- D. State A: 0.0153; B: 0.135

ANS: C

64. In an open economy input output model, the viability is examined by

- A. Hawkins- Simon conditions
- B. Kuhn – Tucker conditions
- C. Dickey – fuller test
- D. Goldfeld Quandt test

ANS: A

Explanation: The Hawkins-Simon condition refers to a result in mathematical economics, attributed to David Hawkins and Herbert A. Simon, that guarantees the existence of a non-negative output vector that solves the equilibrium relation in the input-output model where demand equals supply. More precisely, it states a condition for $[I - A]$ under which the input-output system

$$[I - A].x = d$$

has a solution for any. Here I is the identity matrix and A is called the input-output matrix or Leontief after Wassily Leontief, who empirically estimated it in the 1940s.

The Hawkins-Simon Condition therefore is to check for the Viability of an Open Economy.

65. When the null hypothesis is there as an equality the level of significance is the probability of making

- A. Type –II error
- B. Type – I error
- C. Type I & II errors
- D. Type I & III errors

ANS: B

Explanation:

Null Hypothesis (H_0): Statement of zero or no change. If the original claim includes equality (\leq , $=$, or \geq), it is the null hypothesis. If the original claim does not include equality ($<$, not equal, $>$) then the null hypothesis is the complement of the original claim. The null hypothesis always includes the equal sign. The decision is based on the null hypothesis.

Alternative Hypothesis (H_1 or H_a): Statement which is true if the null hypothesis is false. The type of test (left, right, or two-tail) is based on the alternative hypothesis.

Type I error

Rejecting the null hypothesis when it is true (saying false when true). Usually the more serious error.

Type II error

Failing to reject the null hypothesis when it is false (saying true when false).

Significance level (α): The probability of rejecting the null hypothesis when it is true. $\alpha = 0.05$ and $\alpha = 0.01$ are common. If no level of significance is given, use $\alpha = 0.05$. The level of significance is the complement of the level of confidence in estimation.

66. In 2011 the proportion of urban population was more than 40% in the states of

- A. Tamil Nadu, Punjab, Andra Pradesh, Gujarat
- B. Tamil Nadu, Haryana, Gurajat, Maharastra
- C. Tamil Nadu, Kerala, Andra Pradesh, West Bengal
- D. Tamil Nadu, Kerala, Maharastra, Gujarat

ANS: D

Explanation: People in Tamil Nadu have moved from rural to urban areas the last 10 years compared to other states, according to the 2011 Census data. Tamil Nadu tops the list of urbanised states with 48.45% of its population living in urban areas, followed by Kerala, Maharashtra and Gujarat

67. A Linear programming problem can be solved by using

- A. ARIMA techniques
- B. Simplex method
- C. Unit root method
- D. None of the above

ANS: B

68. Which age structure is important for demographic dividend?

- A. 0-14
- B. 15-59
- C. 60 and above
- D. 0-14 and 60 and above

ANS: B

Explanation: Demographic dividend, as defined by the United Nations Population Fund (UNFPA) means, "the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger, and 65 and older)".[1] In other words, it is "a boost in economic productivity that occurs when there are growing numbers of people in the workforce relative to the number of dependents." UNFPA stated that, "A country with both increasing numbers of young people and declining fertility has the potential to reap a demographic dividend.

69. The correct relationship among Arithmetic Mean (AM), Geometric Mean (GM) and Harmonic Mean (HM) is

- A. $GM = AM + HM$
- B. $AM < HM$
- C. $(GM)^2 = HM * AM$
- D. $AM = GM - HM$

ANS: C

70. In a two variable (X and Y) regression analysis, the regression coefficient is $b_{xy} = 0.6$ and $b_{yx} = 0.8$. If y is dependent variable and x is independent variable, what is the percentage of variations in Y explained by X?

- A. 47%
- B. 48%
- C. 49%
- D. 36%

ANS: B

Explanation: Coefficient of correlation is "r" value, $r = \sqrt{b_{xy} \times b_{yx}}$.

In our case, $b_{xy} = 0.6$, $b_{yx} = 0.8$,

Therefore, $r = \sqrt{b_{xy} \times b_{yx}}$

$$= \sqrt{0.6 \times 0.8}$$

$$= \sqrt{0.48}$$

$$r = 0.6928$$

R square (R^2) is also called coefficient of determination. Multiply R times R to get the R square value. In other words Coefficient of Determination is the square of Coefficient of Correlation.

R square or coefficient of determination shows percentage variation in y which is explained by all the x variables together. Higher the better. It is always between 0 and 1.

$$\text{Therefore, } R^2 = (0.6928)^2 = 0.48$$

$$R^2 \times 100 \text{ expresses the variation in percentage term. } R^2 \times 100 = 48\%$$

Therefore, the percentage of variation in y explained by x is 48%

71. The RBI made Indian rupee fully convertible in current account transactions related to goods and services in the year

- A. 1985
- B. 2002
- C. 1994
- D. 2011

ANS: C

Explanation: Prior to the First World War the whole world was having gold standard under which the currency in circulation was allowed to get converted either in gold or other currencies based on the gold standard. But after the failure of Bretton woods system in 1971 this system changed. Presently convertibility of money implies a system where a country's currency becomes convertible in foreign exchange and vice versa. Since 1994, Indian rupee has been made fully convertible in current account transactions.

72. Standard Error (SE) of sample mean in random sampling from an infinite population or in random sampling with replacement is given by

$$1. SE = \frac{\sigma}{\sqrt{n}} \text{ Where } \sigma \text{ is the population Standard deviation}$$

$$2. SE = \frac{\sigma}{\sqrt{n^2}} \text{ Where } \sigma \text{ is the population Standard deviation}$$

$$3. SE = \frac{\sigma^3}{\sqrt{n^2}} \text{ Where } \sigma \text{ is the population Standard deviation}$$

$$4. SE = \frac{\sigma}{\sqrt{n}} \text{ Where } \sigma \text{ is the population Standard deviation}$$

ANS: 4

Explanation: The standard deviation of the sampling distribution of a statistic is referred to as the standard error of that quantity. For the case, where the statistic is the sample mean, and samples are uncorrelated, the standard error is: $SE = \sigma / \sqrt{n}$ Where σ is the population Standard deviation, Where, s is the standard deviation of the population distribution of that quantity and n is the sample size (number of items in the sample).

73. The IRR is the discount rate that equates the project NPV to _ and benefit- cost ratio to _.

- A. 1,0
- B. 0,1
- C. 0,0
- D. 1,1

ANS: B

Explanation: The internal rate of return (IRR) of a project is the discount rate that would yield a net present value (NPV) of zero, i.e., the rate of interest which makes the present value of the estimated cash inflow equal to the present value of the cash outflow required by the investment. Profitability Index (PI) is a capital budgeting technique to evaluate the investment projects for their viability or profitability. Discounted cash flow technique is used in arriving at the profitability index. It is also known as a benefit-cost ratio. Calculation of profitability index is possible with a simple formula with inputs as – discount rate, cash inflows, and outflows. PI greater than or equal to 1 is interpreted as a good and acceptable criterion. Hence, the correct answer is NPV should be 0 and benefit-cost ratio 1.

74. Difference equation is concerned with

- A. Discrete changes
- B. Continuous changes
- C. Both of the above
- D. None of the above

ANS: A

75. Multiplicative Decomposition model is used to

- A. Deseasonalise the time series data
- B. Build cost of living index
- C. Test a hypothesis
- D. Estimate probability

ANS: A

Explanation: Choose Between Additive and Multiplicative Decompositions as

- i) The additive model is useful when the seasonal variation is relatively constant over time.
- ii) The multiplicative model is useful when the seasonal variation increases over time.

76. Match the following table

Type –I		Type –II	
a)	Thomas Doubleday	i)	Destiny theory
b)	Thomas Sadler	ii)	Biological theory
c)	Leibenstein	iii)	Diet theory
d)	Herbert Spencer	iv)	Motivation theory of population growth

Choose the correct option

- A. a-i, b-ii, c-iii, d-iv
- B. a-iii, b-I, c-iv, d-ii
- C. a-iv, b-iii, c-ii, d-i
- D. a-iv, b-ii, c-I, d-iii

ANS: B

77. “Education as investment in human resources plays an important role among the factors which contribute to economic growth”. This statement was given by

- A. New Education policy, 1985
- B. Education Commission, 1966
- C. NCERT
- D. Supreme Court of India

ANS: B

78. Under TRIPS protection for copyrights is for

- A. 20 years after the death of the author
- B. 30 years after the death of the author
- C. 40 years after the death of the author
- D. 50 years after the death of the author

ANS: D

Explanation: TRIPS requires member states to provide strong protection for intellectual property rights. For example, under TRIPS: Copyright terms must extend at least 50 years, unless based on the life of the author.

79. Second National Commission on labour has recommended a three-tier system including

- A. Lok adalats, labour courts and labour commissions
- B. Lok adalats, labour courts and labour relations commissions
- C. Lok adalats, labour courts and judicial courts
- D. Lok adalats, labour courts and labour inspectors

ANS: B

Explanation: The Second National Commission has recommended a three-tier system of Lok Adalats, Labour Courts and the Labour Relation Commission. While the Lok Adalats and Labour Courts deal with individual grievances and complaints, the Labour Relations Commission has been empowered to deal with both individual problems and those of collective bargaining a settlement cannot be reached through bilateral negotiations.

80. The ‘Hedonic Price’ method measures the value of environmental assets through

- A. Using ‘existence’ of an environmental asset
- B. Using linkages between variations of Inhouse prices
- C. Using WTP to value of environmental assets
- D. Using WTA TO value of environmental assets

ANS: B

Explanation: The hedonic pricing method is used to estimate the value of environmental amenities that affect prices of marketed goods. Most applications use residential housing prices to estimate the value of environmental amenities. The method is based on the assumption that people value the characteristics of a good, or the services it provides, rather than the good itself.

81. Assertion (A): The share of the non-commodity sector in the national income has been increasing in India

Reason (R): Industry and agriculture have been growing at a relatively slower pace in India

A. Both (A) and (R) are true and R explains (A)

B. Both (A) and (R) are true but R does not explain (A)

C. (A) is true but (R) is false

D. (A) is false but (R) is true

ANS: A

82. Market failure occurs in case of most of the environmental goods, because

A. Environmental goods are rival products

B. Environmental goods are excludable products

C. Environmental goods are non-rival in production

D. Environmental goods are non-rival and non-excludable in consumption

ANS: D

Explanation: Market failure arises when the outcome of an economic transaction is not completely efficient, meaning that all costs and benefits related to the transaction are not limited to the buyer and the seller in the transaction. Individual consumers will often purchase goods with an environmental component to make up for their inability to directly purchase environmental goods, thus revealing the value they hold for certain aspects of environmental quality. For example, someone may buy a cabin on a lake in order to enjoy not only the home itself but also the lake's pristine environment. If the individual could exclusively capture the environmental benefits that result from owning the cabin, the demand for cabins would reflect the full value of both the home and the environmental goods it provides, and the market for cabins would be efficient. Unfortunately, in the case of environmental goods, markets often fail to produce an efficient result, because it is rare that any one individual can incur the full benefit, as well as the cost, of a particular level of environmental quality.

83. Which of the following is NOT an instrument of capital market with special reference to India

A. Equity share

B. Debenture

C. Gold ETF

D. Commercial paper

ANS: D

Explanation: Commercial Paper (CP) is an unsecured money market instrument issued in the form of a promissory note. Hence, Commercial Paper being a money market instrument is not a instrument of capital market which the others are.

84. Match the following

List-I

- a) Gauss – Markov
- b) Coefficient of determination
- c) $H_0 : B_2 = 0, H_1: B_2 \neq 0$
- d) Heteroscedasticity

Choose the correct option

- A. a-iv, b-i, c-ii, d-iii
- B. a-I, b-ii, c-iv, d-iii
- C. a-ii, b-iii, c-i, d-iv
- D. a-iii, b-I, c-ii, d-iv

ANS: A

List-II

- i) R^2
- ii) One sided test
- iii) Goldfeld – Quandt test
- iv) BLUE

85. Which of the following items completes the life table?

AGE	l_x	dx	L_x	T_x	E_x^0
7	90000	500	89750	48,50,000	?

- A. 50.50
- B. 54.00
- C. 53.89
- D. 51.31

ANS: C

86. If $AR = 15$ $MR = 5$, the price elasticity of demand is

- A. 2.3
- B. 1.5
- C. 1.75
- D. 1

ANS: B

Explanation: We Know that for price elasticity of demand

$MR = AR (1 - 1/e)$, or, $5 = 15 (1 - 1/e)$ [value of AR and MR given]

or, $1 = (3 - 3/e)$, or, $e = 3e - 3$

or, $e = 3/2 = 1.5$ (Ans: B)

87.

In a binomial distribution, the probability of x successes in n trials in any order is given

1. $p(x) = {}^nC_x p^x \cdot q^{n-x}$

2. $p(x) = {}^nC_x p^{2x} \cdot q^{n-1}$

3. $p(x) = {}^nC_x p^2 \cdot q^{n-1}$

4. $p(x) = {}^nC_x p^x \cdot q^{n-2}$

ANS: 1

88. The cost function of a monopolist is $C = 40 + 12X$. Write the demand function as $P = 60 - 3X$. What is his profit maximizing output level?

- A. 12
- B. 11
- C. 8
- D. 9

ANS: C

Explanation: $C = 40 + 12X$, $P = 60 - 3X$, $MC = 12 (= MR)$

$TR = P \cdot Q = 60X - 3X^2$, Or, $MR = 60 - 6X$

Or, $12 = 60X - 6X$, or, $6X = 48$, or, $X = 8$ (Ans: C)

89. "Under some conditions, it makes no difference to efficiency whether the polluter has a right to pollute or the victim has a right to clean air". This statement is related to the work of:

- A. G Hardin
- B. R Coase
- C. N Kaldor
- D. Julian Simon

ANS: B

Explanation: Consider two people, a polluter and a victim. Morally, it seems that responsibility for cleaning up the pollution should fall on the factory. Can we use economic efficiency arguments to reach this same conclusion? This subtle issue of who should have rights, the polluter or the victim, was raised in 1960 by Ronald Coase in an important paper that contributed to his winning the Nobel Memorial prize in economics.

Coase (1960) asks whether it is logical to assign rights to one or the other of these parties-the victims or the polluter. One of Coase's conclusions is that under some conditions, it makes no difference to efficiency whether the polluter has a right to pollute or the victim has a right to clean air (although it will make a great deal of difference to each of the two parties).

90. Applying OLS to simultaneous equations results in the parameters being

- A. Inefficient
- B. Inconsistent
- C. Biased
- D. Biased and Inconsistent

ANS: D

Explanation: Ordinary least squares (OLS) regression applied to a single equation from a system of simultaneous equations will produce biased, that is, systematically wrong, parameter estimates (inconsistent). Furthermore, the bias from OLS does not decrease as the sample size increases. Estimating parameters from a simultaneous equation model requires advanced methods, of which the most popular today is two-stage least squares (2SLS).

91. Match the following

List –I

- a) World environment day
- b) World wildlife day
- c) World water day
- d) World population day

A. a- i, b-ii, c-iii, d- iv

B. a-iii, b-i, c-iv, d-ii

C. a-iv, b-iii, c-ii, d-i

D. a-ii, b-iii, c-iv, d-i

ANS: D

List –II

- i) 11th July
 - ii) 5th June
 - iii) 3rd March
 - iv) 22nd March
- Choose the correct option

92. If, $A = \begin{vmatrix} 6 & 5 & 5 \\ 3 & -11 & -5 \\ 3 & -5 & -2 \end{vmatrix}$

Then $|A|$ is equal to

A. 15

B. 16

C. 27

D. 20

ANS: C

Explanation: $|A| = 6(22-25) - 5(-6+15) + 5(-15 + 33)$
 $= 6 * (-3) - 5 * 9 + 5 * 18 = -18 - 45 + 90 = 90 - 63 = 27$ (Ans: C)

93. Which of the following is NOT correct with reference to the service sector of Indian economy?

- A. Service sector has the largest share in the GDP
- B. Service sector has the largest share in employment
- C. Service sector's growth has been higher than growth of agriculture sector
- D. Productivity per worker in service sector is highest

ANS: B

Explanation: As per 2018, Agriculture employed 50% of the Indian work force and contributed 17-18% to country's GDP. The services sector with a share of 55.2 per cent in India's gross value added continued to be the key driver of India's economic growth contributing almost 72.5 per cent of gross value-added growth in 2017-18. However, what is striking is that, despite the presence of unorganised services, the share of the services sector in total employment was relatively low, and despite the expansion of services, the growth of employment in this sector has been limited. Between 1999-00 and 2004-05, employment in the tertiary sector increased by only 22 per cent, whereas GDP at constant prices contributed by the services sector expanded by 44 per cent. According to The Economic Survey 2016-17: "Among the top 15 services producer countries, the services sector accounts for more than two-thirds of total employment in 2016 in most of them except India, China and Mexico where the shares are low. India has the lowest share of 28.6 per cent." An examination of the sectoral composition of the workforce across the quinquennial surveys of the National Sample Survey Organisation reveals that the share of services in employment increased by far less than the huge increase in its share in GDP.

94. A simultaneous equation model is exactly identified, if

- A. Unique numerical values of structural parameters can be obtained
- B. More than one numerical value can be obtained for some of the parameters of the structural equation
- C. Unique solution of all structural coefficients is not possible
- D. Structural coefficient cannot be estimated

ANS: A

Explanation: A function belonging to a system of simultaneous equations is identified if it has a unique statistical form. This means that there must be no other model in the system, or formed by algebraic manipulation of other equations within the system, which contains the same variables as the function in question. Hence, the correct answer is 1

95. National Food Security law covers

- A. 65% of rural population
- B. 70% of rural population
- C. 75% of rural population
- D. 80% of rural population

ANS: C

Explanation: Government of India enacted National Food Security Act (NFSA) in July, 2013 which gives legal entitlement to 67% of the population (75% in rural areas and 50% in urban areas) to receive highly subsidized foodgrains. ... Coverage under the Act is based on the population figures of Census, 2011.

96. Which of the following is NOT part of the “PM Kisan Samman Nidhi” scheme as announced on 1-02-2019?

- A. All farmers having land holdings up to 2 hectares are eligible under the scheme
- B. The scheme will be applicable from 1st April, 2019
- C. The government will transfer Rs. 6000 per annum in to the bank account of eligible beneficiaries
- D. The money will be given in three equal installments of Rs. 2000 each

ANS: B

Explanation: PM KISAN is a Central Sector scheme with 100% funding from Government of India. It has become operational from 1.12.2018. Under the scheme an income support of Rs.6000/- per year in three equal installments (Rs 2000 per installments) will be provided to small and marginal farmer families having combined land holding/ownership of upto 2 hectares. Therefore, the correct answer is 2 as the scheme was operational from 1.12.2018 and not from 1st April, 2019.

97. For a moderately skewed distribution, the value of mode is 10 and value of median is 20. Then the mean is

- A. 15
- B. 30
- C. 25
- D. 35

ANS: C

Explanation: If the pattern of data distribution is a bit skewed, instead being normal; the relationship $3 \text{ Median} = 2 \text{ Mean} + \text{Mode}$ holds.

Therefore, using the above formula,

$$\text{Or, } 3(20) = 2(\text{Mean}) + 10$$

$$\text{Or, } 60 = 2(\text{Mean}) + 10$$

$$\text{Or, } 50 = 2(\text{Mean})$$

$$\text{Or, Mean} = 50/2 = 25$$

98. Who propounded optimum theory of population?

- A. Robbins
- B. Dalton
- C. Cannan
- D. Carr Saunders

ANS: C

Explanation: The optimum theory of population was propounded by Edwin Cannan in his book Wealth published in 1924 and popularised by Robbins, Dalton and Carr-Saunders. Unlike the Malthusian theory, the optimum theory does not establish relationship between population growth and food supply.

99. What is the equation of corrected birth rate?

$$\text{A. Corrected birth rate} = \frac{\text{Registered births in one year} + \text{possible birth}}{\text{mid year population}} * 1000$$

$$\text{B. Corrected Birth rate} = \frac{\text{Live births in one year}}{\text{mid year population}} * 1000$$

$$\text{C. Corrected birth rate} = \frac{\text{number of female births}}{\text{mid year populations}} * 1000$$

$$\text{D. Corrected birth rate} = \frac{\text{Registered births} + \text{possible births}}{\text{Mid year female population}} * 1000$$

ANS: A

100. Match the following

List – I

- a) Skewness
- b) Variance
- c) Earthquake
- d) F –test

A. a-iii, b-iv, c-i, d-ii

B. a-iv, b-I, c-ii, d-iii

C. a-i, b-iii, c-iv, d-ii

D. a-ii, b-I, c-iv, d-iii

ANS: B

List – II

- i) Dispersion
 - ii) Random Variations
 - iii) Ratio of variances
 - iv) Lack of symmetry
- Choose the correct option

December, 2019

1. Harrod's growth model is given as under

$$S_t = aY_t \quad 0 < a < 1$$

$$I_t = b(Y_t - Y_{t-1}) \quad b > 0$$

$$S_t = I_t$$

In the model, Growth conditions is

1. $b/(b-a) > 0$
2. $b/(b-a) < 0$
3. $a/b-a > 0$
4. $a/b-a < 0$

Ans: 1

Explanation:

$S_t = I_t$ from this equilibrium condition we can write that,

$$aY_t = I_t = b(Y_t - Y_{t-1})$$

$$\text{or, } Y_t / Y_t - Y_{t-1} = b/(b-a)$$

Now, growth is possible when $b/(b-a) > 0$.

2. Arrange in chronological order the following economists in relation to the contribution to the theory of consumer behaviour.

Choose the correct answers

1. A. Marshall, R Stone, P Samuelson, J R Hicks, and R G D Allen
2. R Stone, P Samuelson, J R Hicks and R G D Allen and A Marshall
3. P Samuelson, J R Hicks and R G D Allen, R Stone and A Marshall
4. A Marshall, J R Hicks, R G D Allen, P Samuelson and R Stone

Ans. 4

Explanation:

A. Marshall (1931) has developed the theory of cardinal utility measure, which implies that utility is a measurable and quantifiable entity. The breakthrough occurred when a theory of ordinal utility was put together by **John Hicks and Roy Allen** in 1934. They have tried to measure utility by the Indifference curve analysis. **P. Samuelson and R. Stone** have developed Revealed Preference Theory in 1948, Which postulate that Consumer theory depends on the existence of preferences which materialise into utility functions.

3. Assertion (A): For certain goods, the expenditure by the consumer decreases.

Reason (R): For such goods, the income elasticity of demand is high

1. Both (A) and (R) are true and (R) is the correct explanation of (A)
2. Both (A) and (R) are true, (R) is not the correct explanation of (A)
3. (A) is true but (R) is false
4. (A) is false but (R) is true

Ans. 4

Explanation:

Income elasticity of demand measures the responsiveness of demand for a particular good to changes in consumer income. The higher the income elasticity of demand in absolute terms for a particular good, the bigger consumers' response in their purchasing habits—if their real income changes.

4. Assertion (A): CES production function covers large class of production functions

Reason (R): CES production function has the property of constancy of elasticity of factor substitution

1. Both (A) and (R) are true and (R) is the correct explanation of (A)
2. Both (A) and (R) are true, (R) is not the correct explanation of (A)
3. (A) is true but (R) is false
4. (A) is false but (R) is true

Ans: 1

Explanation:

Arrow, Chenery, Minhas and Solow in their new famous paper of 1961 developed the Constant Elasticity of Substitution (CES) function. $Q = A [aC^{-\theta} + (1-a)L^{-\theta}]^{-1/\theta}$, where Q is the total output, C is capital, and L is labour. A is the efficiency parameter indicating the state of technology and organisational aspects of production.

Properties of CES:

- 1) The CES production function is homogeneous of degree one.
- 2) The elasticity of substitution is constant but not necessarily equal to unity.
- 3) The parameter (θ) in the CES production function determines the elasticity of substitution. In this function, the elasticity of substitution, $\sigma = 1 / 1 + \theta$

This shows that the elasticity of substitution is a constant whose magnitude depends on the value of the parameter θ . If $\theta = 0$, then $\sigma = 1$. If $\theta = \infty$, then $\sigma = 0$. If $\theta = -1$, then $\sigma = \infty$. This reveals that when $\sigma = 1$, the CES production function becomes the Cobb-Douglas production function. So, the elasticity of substitution ranges from 0 to ∞ .

- The last property reveals that CES function is large class of function which determine by the Parameter θ with constancy of elasticity of factor substitution.

5. Which of the following is the correct sequence in the ascending order of the magnitude?

1. Repo rate, Reverse Repo rate, Statutory Liquidity rate (SLR) and Marginal Standing Facility Rate (MSFR)
2. SLR, MSFR, Repo rate, Reverse Repo rate
3. Repo rate, SLR, MSFR, Reverse Repo rate
4. Reverse Repo rate, Repo rate, MSFR, SLR

Ans: 4

Explanation:

Repo Rate was introduced in Dec. 1992, by RBI. It is the rate, at which RBI lends short-term money to the Banks against securities.

Reverse Repo Rate is the interest rate at which the RBI borrows money from banks for the short term is defined as Reverse Repo Rate. Which generally determine by the basic of Repo Rate and its always lower then Repo Rate. It was introduced in Nov. 1996.

MSFR (Marginal Standing Facility Rate) Scheme came into effect in 2011. It was very short-term borrowing scheme for scheduled commercial banks. MSFR is the rate which these banks can borrow funds overnight from RBI against government securities. The MSF rate is pegged 100 basis points or a percentage point above the repo rate.

SLR (Statutory Liquidity Rate) Statutory Liquidity Ratio (SLR) is the govt term for the reserve demand that commercial banks are required to maintain in the form of cash, gold reserves and Reserve Bank of India (RBI) approved securities before giving credit to the customers. SLR is always high with compared to above mention three rate.

6. Match the following

List I

- (a) Forward exchange
- (b) Hedging
- (c) Arbitrage
- (d) Specie Point

List II

- (i) A device of covering exchange risk against the price rise of foreign currency
- (ii) A contract to buy and sell foreign exchange against another currency at some fixed rate in the future at a price agreed upon now.
- (iii) The movement of exchange rate between two limits set by the cost of moving gold from one country to another
- (iv) A mechanism which makes two markets that are physically separate, a single market in economic sense

Choose the correct option

1. (a) – ii, (b) – i, (c) – iv, (d) – iii
2. (a) – ii, (b) – iii, (c) – iv, (d) – i
3. (a) – iv, (b) – i, (c) – ii, (d) – iii
4. (a) – iv, (b) – iii, (c) – ii, (d) – i

Ans: 1

Explanation:

Forward Exchange involves an agreement today to buy or sell a specified amount of a foreign currency at a specified future date at a rate agreed upon today, this is called forward rate.

Arbitrage: This refers to the purchase of a currency in the monetary center where it is cheaper, for immediate resale in the monetary center where it is more expensive, in order to make a profit. The exchange rate between any two currencies is kept the same in different monetary centers by arbitrage.

Hedging: Foreign exchange risk is the threat of financial loss as a result of changes to foreign exchange rates. The risk can occur when a financial transaction takes place using a currency that's different to the base currency of the company or individual, and value is lost before the transaction is completed. Hedging is refers to the avoidance of a foreign exchange risk, or the covering of an open position.

Specie Point: The movement of exchange rate between two limits set by the cost of moving gold from one country to another

7. The 'Compensation Criterion' which says that state A is socially preferable to state B, if those who gain from the change can compensate the looser and yet end up with surplus welfare gain is attributed to:

1. W Pareto
2. N Kaldor
3. T Scitovsky
4. Bergson

Ans: 2

Explanation:

In welfare economics, compensation criteria or the compensation principle is known as a rule of decision for selecting between two alternative states. According to **Kaldor** compensation principle, Two states will be compared; if one state provides an improvement for one part but causes deterioration in the state of the other, it will be chosen if the winner can compensate the loser' losses until they situation is at least as good as in the initial situation.

8. Which amongst the following market forms leads to most efficient allocation of resources?

1. Monopolistic Competition
2. Monopoly
3. Oligopoly
4. Perfect Competition

Ans: 4

Explanation:

Allocative efficiency: Allocative efficiency occurs when the value consumers put on the good or service equals the cost of producing the product or service. In other words, when price = marginal cost or $P = MC$. This condition only possible in perfect competitive market.

9. For oil importing countries, the increase in oil prices in 1970's and mid 2000 contributed to which of the following:

- (a) Improving terms of trade
- (b) Balance of trade deficits
- (c) Price inflation
- (d) Constrained economic growth

Choose the correct option

- 1. (a) (b) and (c) only
- 2. (b) (c) and (d) only
- 3. (c) (d) and (a) only
- 4. (a) and (d) only

Ans: 2

Explanation:

In the post-World War II period there have been two major oil crises. The first occurred in 1973, when Arab members of OPEC (Organization of the Petroleum Exporting Countries) decided to quadruple the price of oil to almost \$12 a barrel. Oil exports to the United States, Japan, and Western Europe, which together consumed more than half the world's energy, were also prohibited. OPEC's decision was made in retaliation for Western support of Israel against Egypt and Syria during the Yom Kippur War (1973) and in response to a persistent decline in the value of the U.S. dollar (the denominated currency for oil sales), which had eroded the export earnings of OPEC states. With the global capitalist economy already experiencing difficulties, these actions precipitated a steep recession accompanied by rising inflation. This forced capitalist countries to embark on a process of economic restructuring in order to reduce their dependency on oil and prompted fears that the United States might take military action in order to secure free access to its energy supplies. Although the oil embargo was lifted in 1974, oil prices remained high, and the capitalist world economy continued to stagnate throughout the 1970s.

Another major oil crisis occurred in 1979, a result of the Iranian Revolution (1978–79). High levels of social unrest severely damaged the Iranian oil industry, leading to a large loss of output and a corresponding rise in prices. The situation worsened following the outbreak of the Iran-Iraq War (1980–88), which further added to the level of instability throughout the region. In 1981 the price of oil was stabilized at \$32 per barrel. By 1983, however, major capitalist economies had adopted more-efficient methods of production, and the problems of the 1970s had been transformed into a relative oversupply of oil rather than a shortage.

10. Match the following

List I

- (a) Head count ratio
- (b) Poverty Gap
- (c) Square of poverty gap
- (d) Multi dimensional poverty index

List II

- (i) Extent of poverty
- (ii) Depth of poverty
- (iii) Poverty as deprivation
- (iv) Severity of poverty

Choose the correct answer:

- 1. (a) – ii, (b) – i, (c) – iv, (d) – iii
- 2. (a) – iii, (b) – ii, (c) – i, (d) – iv
- 3. (a) – i, (b) – iii, (c) – ii, (d) – iv
- 4. (a) – i, (b) – ii, (c) – iv, (d) – iii

Ans: 4

Explanation:

By far the most widely-used measure is the headcount index, which simply measures the proportion of the population that is counted as poor.

The poverty gap (PG) is defined as the extent to which individuals on average fall below the poverty line, and expresses it as a percentage of the poverty line, or, in other words, the average difference between poor households' income and the poverty line.

To construct a measure of poverty that takes into account inequality among the poor, some researchers use the squared poverty gap index. This is simply a weighted sum of poverty gaps (as a proportion of the poverty line), where the weights are the proportionate poverty gaps themselves.

The Multidimensional Poverty Index (MPI) identifies multiple deprivations at the household and individual level in health, education and standard of living.

11. The phenomenon of 'Demographic Dividend' is related to which of the following?

- 1. An increase in sex rate
- 2. An increase in the share of female population
- 3. A decline in TFR
- 4. An increase in the share of working age population

Ans: 4

Explanation:

According to United Nations Population Fund (UNFPA), demographic dividend means, "the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is larger than the non-working-age share of the population (14 and younger, and 65 and older)".

12. Heckscher - Ohlin trade model maintains that:

1. Comparative advantage determines the distribution of gains from trade
2. A country exports goods for which its resource endowments are most suited
3. Absolute Advantage Theory determines the distribution of the gains from trade
4. The division of labour is limited by the size of the world market

Ans: 2

Explanation:

Heckscher– Ohlin theorem as follows: A nation will export the commodity whose production requires the intensive use of the nation's relatively abundant and cheap factor and import the commodity whose production requires the intensive use of the nation's relatively scarce and expensive factor. In short, the relatively labor-rich nation exports the relatively labor-intensive commodity and imports the relatively capital-intensive commodity.

Now, Nation 1 exports commodity X because commodity X is the L-intensive commodity and L is the relatively abundant and cheap factor in Nation 1. Conversely, Nation 2 exports commodity Y because commodity Y is the K-intensive commodity and K is the relatively abundant and cheap factor in Nation 2.

The H–O theorem isolates the difference in relative factor abundance, or factor endowments, among nations as the basic cause or determinant of comparative advantage and international trade. For this reason, the H–O model is often referred to as the factor-proportions or factor-endowment theory. That is, each nation specializes in the production and export of the commodity intensive in its relatively abundant and cheap factor and imports the commodity intensive in its relatively scarce and expensive factor.

13. Which among the following is not associated with the Optimum Theory of Population?

1. T R Malthus
2. H Dalton
3. E Cannon
4. Carr – Saunders

Ans: 1

Explanation:

The optimum theory of population was propounded by **Edwin Cannan** in his book *Wealth* published in 1924 and popularised by **Robbins, Dalton** and **Carr-Saunders**. The optimum population is the ideal population which combined with the other available resources or means of production of the country will yield the maximum returns or income per head.

14. Arrange the following events in chronological order
- (a) First phase of nationalization of commercial banks
 - (b) Establishment of Narashiman committee on banking system
 - (c) Enactment of FEMA act
 - (d) Establishment of EXIM bank of India

Choose the correct option:

1. a c d b
2. a d b c
3. a c b d
4. a d c b

Ans: 2

Explanation:

In India, Nationalization of banks was done in 2 phases. The first phase of nationalization commenced in the year 1955 when the former Imperial Bank of India became the State Bank of India with the Act of parliament.

The Narasimham Committee submitted its report in November, 1991 and the report was placed before the parliament on December 17, 1991. In its report the Narasimham Committee has acknowledged the success of the public sector banks in respect of branch expansion, deposit mobilization in household sector, priority sector lending and removal of regional disparities in banking.

In the budget of 1997-98, the government had proposed to replace FERA-1973, by FEMA (Foreign Exchange management act). FEMA was proposed by the both house of the parliament in Dec. 1999. After the approval of president, FEMA 1999 has come into force in June, 2000. Under the FEMA, provisions related to foreign exchange have been modified and liberalized so as to simplify foreign trade. Government hopes that the FEMA will make favourable development in the foreign money market.

Export-Import Bank of India (EXIM Bank) is a specialized financial institution, wholly owned by Government of India, set up in 1982, for financing, facilitating and promoting foreign trade of India.

15. On which date and year GST become effective in India?

1. 1st April 2017
2. 1st January 2017
3. 1st July 2017
4. 1st March 2018

Ans: 3

Explanation:

GST implemented in India from 1st July 2017 GST, which was publicised as 'one nation, one tax' by the government, aims to provide a simplified, single tax regime in line with the tax framework applicable in several major economies across the Globe. This single tax has helped streamline various indirect taxes and brought in more efficiencies in business. GST law in India is a comprehensive, multi-stage, destination-based tax that is levied on every value addition.

The GST rate in India for various goods and services is divided under 4 slabs; these are 5% GST, 12% GST, 18% GST, and 28% GST.

16. For Cobb - Douglas production function $Q = 100 L^{0.7} K^{0.3}$. Which of the following is not true?

1. It is a linear homogenous function
2. It is characterized by constant returns to scale
3. It is having zero elasticity of factor substitution
4. It is characterized by unit elasticity of substitution

Ans: 3

Explanation:

The Cobb-Douglas production function is based on the empirical study of the American manufacturing industry made by Paul H. Douglas and C.W. Cobb. It is a linear homogeneous production function of degree one which takes into account two inputs, labour and capital, for the entire output of the manufacturing industry.

$Q = AL^a C^\beta$, where Q is output and L and C are inputs of labour and capital respectively. A , a and β are positive parameters where, $a > 0$, $\beta > 0$.

If, $a + \beta = 1$ then it is constant return to scale. Here, $0.3 + 0.7 = 1$, therefore, above mention C-D function is belongs to CRS.

Homogenous production function means when factor of production double up then output also doubled. Due to CRS this production function is homogenous.

Elasticity of substitution (σ) = $s = [(b/a) \cdot \{(a/b) \cdot (L/K)\}]/(L/K) = 1$. It is unit elasticity.

So, the 3rd option is not possible in this case.

17. Choose the correct option for which the allocation of inputs is technically efficient?

- (a) Output of one good cannot be decreased without increasing the output of another good
- (b) Consumption of one good cannot be increased without decreasing the consumption of another good
- (c) Consumer attains maximum satisfaction Choose the correct option:
 1. (b) only
 2. (a) only
 3. Both (a) and (c)
 4. Both (b) and (c)

Ans: 2

Explanation:

Technical efficiency is the effectiveness with which a given set of inputs is used to produce an output. A firm is said to be technically efficient if a firm is producing the maximum output from the minimum quantity of inputs, such as labour, capital, and technology. This concept is solely associate with the production process therefore, option b and c is not sustained. This is the situation a firm is producing the maximum output. So, output of one good cannot be decreased without increasing the output of another good

18. Which among the following are the main pillars of the BASEL III norms?

- (a) Minimal capital requirements
- (b) Supervisory review process
- (c) Market discipline
- (d) Maximizing return on capital

Choose the correct option:

- 1. a, b and c only
- 2. a and d only
- 3. b and c only
- 4. b c and d only

Ans: 1

Explanation:

Basel III or Basel 3 released in December, 2010 is the third in the series of Basel Accords. These accords deal with risk management aspects for the banking sector.

Basel III measures aim to:

- 1) Improve the banking sector's ability to absorb ups and downs arising from financial and economic instability
- 2) Improve risk management ability and governance of banking sector
- 3) Strengthen banks' transparency and disclosures

19. The elements given below are some of the parts of the M₄ money supply of Indian economy

- (a) Broad money (M₃)
- (b) All deposits with the post office savings bank
- (c) National savings certificate

Choose the correct option which constitute M₄

- 1. Only a and b
- 2. Only b and c
- 3. Only a and c
- 4. a, b, and c

Ans:1

Explanation:

- 1) Reserve Money (M₀): It is also known as High-Powered Money, monetary base, base money etc.

$M_0 = \text{Currency in Circulation} + \text{Bankers' Deposits with RBI} + \text{Other deposits with RBI}$

It is the monetary base of economy.

- 2) Narrow Money (M₁):

$M_1 = \text{Currency with public} + \text{Demand deposits with the Banking system (current account, saving account)} + \text{Other deposits with RBI}$

- 3) $M_2 = M_1 + \text{Savings deposits of post office savings banks}$

- 4) Broad Money (M₃)

$M_3 = M_1 + \text{Time deposits with the banking system}$

- 5) $M_4 = M_3 + \text{All deposits with post office savings banks}$

20. Which trade policy results in the government levying both a specific tariff and an advalorem tariff on imported goods?

1. Effective tariff
2. Revenue tariff
3. Compound tariff
4. Nominal tariff

Ans: 3

Explanation:

Types of Tariff

The following types of tariff duties are levied: (i) ad valorem tariff, (ii) specific tariff. (iii) compound tariff, and (iv) sliding scale tariff

(i) Ad Valorem Tariff: The most common type of import duty is the ad valorem tariff. Ad valorem import duty is imposed as a percentage of the value of the imported commodity. The import duty is a fixed percentage of the C.I.F. (cost, insurance and freight) value of commodity.

(ii) Specific Duty: Specific import duty is imposed by the government on the basis of number of units imported. In other words, specific duty is levied per physical unit of the imported commodity.

(iii) Compound Tariff: Compound import duty is a combination of the ad valorem and the specific duties. In this case, a specific duty is imposed on each unit of the commodity plus a percentage of ad valorem also.

(iv) Sliding Scale Tariff: Sliding tariff is imposed on ad valorem basis or on specific basis. Sliding import duties vary with the prices of commodities imported.

21. Kaldor's growth model incorporates some of the following assumptions

- (a) Total savings include savings out of wages and savings out of profits
- (b) Marginal propensity to save out of wages is equal to the marginal propensity to save out of profits
- (c) Output consists of wages and profits
- (d) There is less than full employment

Choose the correct option

1. a and b
2. b and c
3. c and d
4. a and c

Ans: 4

Explanation:

Assumption of Kaldor growth model:

1. There are two factors of production capital and labour (K and L) and thus only two types of income profits and wages (P and W). All profits are saved and all wages are consumed.
2. There are constant returns to scale and production function remains unchanged over time. Capital and labour are complementary.
3. There is perfect competition as such the rates of wages and profits are same over different places.
4. The marginal propensity to consume of workers is greater than that of capitalists.
5. The investment-income (output) into (I/Y) is an independent variable.

6. There is a state of full employment so that total output or income (Y) is given.
7. There is an unlimited supply of labour at a constant wage in terms of wage goods.

22. Assertion (A): Intellectual Property Rights were brought into the Uruguay Round Trade Negotiations

Reason (R): International trade restrictions can be used to discourage the violation of intellectual property rights

1. Both (A) and (R) are true and (R) is the correct explanation of (A)
2. Both (A) and (R) are true, (R) is not the correct explanation of (A)
3. (A) is true but (R) is false
4. (A) is false but (R) is true

Ans: 2

Explanation:

The WTO's **Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)**, negotiated during the 1986-94 in Uruguay Round, introduced intellectual property rules into the multilateral trading system for the first time. Violation of intellectual property rights briefly discussed in Doha round.

23. Incidence of tax refers to

1. Whether a tax is progressive, proportional or regressive
2. An authority which collects the tax
3. The person or group who ultimately pays the tax
4. How a tax is collected

Ans: 3

Explanation:

Tax incidence (or incidence of tax) is an economic term for understanding the division of a tax burden between stakeholders, such as buyers and sellers or producers and consumers.

24. Which is correct chronological order of Economists contributing to input - output analysis?

1. Hawkins – Simon, Leontief, Karl Marx, Quesnay
2. Karl Marx, Quesnay, Leontief, Hawkins - Simon
3. Quesnay, Karl Marx, Leontief , Hawkins – Simon
4. Leontief, Hawkins-Simon, Karl Marx, Quesnay

Ans: 3

Explanation:

The preliminary version of input- output analysis was attributed by Francois Quesnay 1758. He had developed a cruder version of this technique called Tableau économique. Wassily Leontief's (1936) work in the input–output model was influenced by the works of the classical economists Karl Marx (1885) and Jean Charles Léonard de Sismondi. Karl Marx's economics provided an early outline involving a set of tables where the economy consisted of two interlinked departments.

Hawkins – Simon(1949) prescribed a specific criterion on Leontif Input – output model. This is popular as a Hawkins – Simon condition.

25. Consider the following statements

- (I) Preferring to a certain income to a risky income with the same level of expected value lead to a risk averse behaviour
- (II) Being indifferent between a certain income and uncertain income with the same level of expected value leads to risk averse behaviour

Which of the statements is/are true?

- 1. Both I and II
- 2. Neither I nor II
- 3. Only I is true
- 4. Only II is true

Ans: 3

Explanation:

A risk averse investor is an investor who prefers lower returns with known risks rather than higher returns with unknown risks. In other words, among various investments giving the same return with different level of risks, this investor always prefers the alternative with least interest. Therefore, risk averse people always prefer certain income.

26. Arrange in chronological order of the following contributions of economists in theory of consumer behaviour. Choose the correct answer

- 1. Linear expenditure system, Revealed preference theory, cardinal theory, ordinal theory
- 2. Cardinal theory, ordinal theory, revealed preference theory, linear expenditure system
- 3. Cardinal theory, revealed preference theory, ordinal theory, Linear expenditure system
- 4. Revealed preference theory, cardinal theory, linear expenditure theory, ordinal theory

Ans: 2

Explanation:

Cardinal theory: It has developed by the A. Marshal (1931), which implies that utility is a measurable and quantifiable entity.

The Ordinal Utility approach is based on the fact that the utility of a commodity cannot be measured in absolute quantity, but however, it will be possible for a consumer to tell subjectively whether the commodity derives more or less or equal satisfaction when compared to another. John Hicks and Roy Allen in 1934 have tried to measure utility in this way by the Indifference curve analysis.

Revealed Preference Theory has developed by P. Samuelson and R. Stone in 1948, postulate that Consumer theory depends on the existence of preferences which materialise into utility functions.

A linear Expenditure System model was suggested by R. Stone in 1954 which deals with groups of commodities rather than individual commodities.

27. The whole burden of tax will be borne by the consumer if

1. The demand for commodity is perfectly elastic and supply is perfectly inelastic
2. The elasticity of demand for a commodity is same as the elasticity of supply of the commodity
3. The demand for a commodity is inelastic and supply is perfectly elastic
4. The elasticity of demand for a commodity is less than the elasticity of supply of that commodity

Ans: 3

Explanation:

Typically, the incidence, or burden, of a tax falls both on the consumers and producers of the taxed good. But if we want to predict which group will bear most of the burden, all we need to do is examine the elasticity of demand and supply.

If demand is more inelastic than supply, consumers bear most of the tax burden. But, if supply is more inelastic than demand, sellers bear most of the tax burden.

For example, when the demand is inelastic, consumers are not very responsive to price changes, and the quantity demanded remains relatively constant when the tax is introduced.

In the case of smoking, the demand is inelastic because consumers are addicted to the product. The seller can then pass the tax burden along to consumers in the form of higher prices without much of a decline in the equilibrium quantity.

28. Given the saving function $S = -20 + 0.2Y$ and autonomous investment (I) = Rs. 100 million, the equilibrium of level of consumption would be

1. 500
2. 600
3. 400
4. 700

Ans: 1

Explanation:

Now, the equilibrium condition, $S = I$

So, $-20 + 0.2Y = 100$ or, $Y = 600$

Form the national income identity we can find that, $C = Y - I$

Therefore, $C = 600 - 100 = 500$.

29. Arrange the following books in correct chronological order

- (a) Das Capital
 - (b) Value and Capital
 - (c) Capital and Growth
 - (d) Accumulation of capital Choose the correct option:
1. d b c a
 2. a b d c
 3. a d b c
 4. b a d c

Ans: 3

Explanation:

Das Capital was written by Karl Marx in the year 1867.

Value and Capital was written by John Hikes in 1939.

Capital and Growth was also written by John Hikes in 1965.

Accumulation of Capital was written by Rosa Luxemburg in 1931

30. Match the following

List – I

- (a) E Cannon
- (b) Frank Netstein
- (c) Brundtland
- (d) Ronald Coase

List – II

- (i) Optimum population
- (ii) Transaction costs
- (iii) Demographic transition
- (iv) Sustainable development

Choose the correct option

1. (a) – i, (b) – ii, (c) – iii, (d) – iv
2. (a) – ii, (b) – i, (c) – iv, (d) – iii
3. (a) – i, (b) – iii, (c) – iv, (d) – ii
4. (a) – iii, (b) – iv, (c) – ii, (d) – i

Ans: 3

Explanation:

The optimum theory of population was propounded by Edwin Cannan in his book Wealth published in 1924. It implies that Optimum population is that which gives the maximum income per head.

The transaction cost approach to the theory of the firm was created by Ronald Coase. Transaction cost refers to the cost of providing for some good or service through the market rather than having it provided from within the firm.

The demographic transition theory is a generalised description of the changing pattern of mortality, fertility and growth rates as societies move from one demographic regime to another.

The term was first coined by the American demographer Frank W. Notestein in the mid-twentieth century.

Sustainable development is a concept that appeared for the first time in 1987 with the publication of the Brundtland Report, Sustainability is development that satisfies the needs of the present generation without compromising the capacity of future generations.

31. Match the test with their purpose

List – I

- (a) Dickey Fuller test
- (b) Box – Jenkins test
- (c) Glejser test
- (d) Granger test

List – II

- (i) Heteroscedasticity
- (ii) Causality
- (iii) Forecasting
- (iv) Stationarity

Choose the correct option

1. (a) – iii, (b) – i, (c) – ii, (d) – iv
2. (a) – ii, (b) – iv, (c) – i, (d) – iii
3. (a) – iv, (b) – iii, (c) – i, (d) – ii
4. (a) – i, (b) – ii, (c) – iii, (d) – iv

Ans: 3

Explanation:

In statistics, the Dickey–Fuller test tests the null hypothesis that a unit root is present in an autoregressive model. The alternative hypothesis is different depending on which version of the test is used, but is usually stationarity or trend-stationarity. It is named after the statisticians David Dickey and Wayne Fuller, who developed the test in 1979.

The Box-Jenkins Model is a mathematical model designed to forecast data ranges based on inputs from a specified time series. The Box-Jenkins Model can analyze many different types of time series data for forecasting.

In statistics, the Glejser test for heteroscedasticity, developed by Herbert Glejser, regresses the residuals on the explanatory variable that is thought to be related to the heteroscedastic variance.

The Granger causality test is a statistical hypothesis test for determining whether one time series is useful in forecasting or not, first proposed in 1969.

32. Autonomous investment could be attributed to

- (a) Level of technology
- (b) Expectation
- (c) Level of national income

Choose the correct option

- 1. a and c only
- 2. b and c only
- 3. a and b only
- 4. a b and c

Ans: 4

Explanation:

The autonomous investment is made for the welfare of the society and not for generating profits out of such investments. These investments are independent of the level of income or profit, and hence, any change in the income or profit levels will have no effect on the autonomous investment. The firms can make these investments with the purpose of introducing new technology, new inventions or increasing the demand potential (expectation of demand) in case of an economic recession and unemployment, etc. Generally, these investments are made by the government in the form of construction of roads, buildings, flyovers, etc. On other way, government expenditure is based upon the level of national income.

33. In which of the following products, problem of adverse selection is encountered?

- 1. Market of insurance
- 2. Market of credit
- 3. Neither 1 nor 2
- 4. Both 1 and 2

Ans: 4

Explanation:

Adverse selection occurs when there is asymmetric (unequal) information between buyers and sellers. This unequal information distorts the market and leads to market failure.

For example, buyers of insurance may have better information than sellers. Those who want to buy insurance are those most likely to make a claim. Therefore firms are reluctant to sell insurance.

Similarly, in market of credit, the debtor has more information about himself rather than creditor.

34. The total cost function of a firm is

$C = 1/10 q^3 - 3q^2 + 50q + 300$ where C = total cost, q = output, Marginal cost at $q = 10$ is

1. 20
2. 10
3. 30
4. 50

Ans: 1

Explanation:

$$MC = \frac{dC}{dq} = 3/10 q^2 - 6q + 50 = 3/10 * 100 - 6*10 + 50 = 30 - 60 + 50 = 20$$

35. Consider the following statements

- (a) India's trade policy review (TPR) is carried out every four years
- (b) WTO has a mechanism for regular review of the trade policies of member countries

Which of the following statements is/are correct?

1. Only a
2. Only b
3. Both a and b
4. Neither a nor b

Ans: 3

Explanation:

The Sixth Trade Policy Review of India by the WTO was held in Geneva on 2nd and 4th June, 2015, as a part of the WTO's Trade Policy Review Mechanism that aims at achieving greater transparency in and understanding of the trade policies and practices of WTO members. India's trade policy review takes place once every 4 years, as determined in terms of its share in world trade.

36. Consider the following statements about the social cost - benefit analysis for viability of projects. Which of the following statements are true for this analysis?

- (a) IRR should be greater than Social Discount Rate
- (b) NPV should be equal to zero
- (c) Shadow prices are used for the calculation of benefits and costs

Choose the correct option

1. a and c
2. a and b
3. b and c
4. a only

Ans: 1

Explanation:

The Net Present Value (NPV): NPV is equal to the present value of benefit minus the present of operating and maintenance cost minus initial outlay.

$$\text{NPV} = (\text{Gross present Value of benefit} - \text{Gross present value of cost})$$

So, $\text{NPV} > 0$, then the project is valuable.

$\text{NPV} = 0$, this is indifferent situation.

$\text{NPV} < 0$, then project is not valuable.

Internal Rate of Return (IRR): The Internal Rate of Return (IRR) is the discount rate that makes the net present value (NPV) of a project zero. In other words, it is the expected compound annual rate of return that will be earned on a project or investment.

$\text{IRR} > \text{Discount rate}$ then, $\text{NPV} > 0$

$\text{IRR} = \text{Discount rate}$ then, $\text{NPV} = 0$

$\text{IRR} < \text{Discount rate}$ then, $\text{NPV} < 0$

For the viability of project have should be $\text{IRR} > \text{discount rate}$.

Shadow prices reflect true values for factors and products for the calculation or estimations of prices in social cost-benefit analysis. J. Tinbergen defines them, "Shadow prices are prices indicating the intrinsic or true value of a factor or product in the sense of equilibrium prices. These prices may be different for different time periods as well as geographically separate areas and various occupations (in the case of labour). They may deviate from market prices."

37. Assertion (A): Disguised unemployment is present in India

Reason (R): Agricultural productivity at margin is close to zero

1. Both (A) and (R) are true and (R) is the correct explanation of (A)
2. Both (A) and (R) are true, (R) is not the correct explanation of (A)
3. (A) is true but (R) is false
4. (A) is false but (R) is true

Ans: 1

Explanation:

Disguised unemployment is primarily traced in the agricultural and the unorganised sectors of the economy. As the primary sector of the Indian economy, Agriculture provides employment to almost 51% of the total population. However, the sector's contribution to the country's GDP is just 12-13%. This data has shown that in India having huge level of disguised unemployment. Disguised unemployment is a kind of unemployment where some people seem to be employed but are not. This usually occurs when there is over-employment in a particular sector. In agriculture sector in India huge level of disguised unemployment implies that productivity of labour is close to zero.

38. Analysis of variance is carried out by using:

1. t- test
2. Z- test
3. χ^2 – test
4. F – test

Ans: 4

Explanation:

t-test is used to investigate the significance of the difference between an assumed population mean and sample mean when population variance is unknown.

Z-test is used to investigate the significance of the difference between an assumed population mean and sample mean when population variance is known.

χ^2 – test is used to investigate the significance of the difference between sample variance and population variance.

F – test is the ration of two χ^2 , to investigate the significance of the difference between two population variances.

Analysis of variance (ANOVA) is used to determine whether there are any statistically significant differences between the means of three or more independent (unrelated) groups. This is basically based on variance of the population, therefore have used F-test for the ANOVA analysis.

39. Match the Economists with their field of contribution in Mathematical economics

List I

- (a) Slutsky
- (b) Arrow
- (c) Leontief
- (d) Dantzig

List II

- (i) Linear programming
- (ii) Input - output analysis
- (iii) Consumer behaviour analysis
- (iv) CES production function

Choose the right combination

1. (a) – ii, (b) – iv, (c) – i, (d) – iii
2. (a) – iii, (b) – iv, (c) – ii, (d) – i
3. (a) – i, (b) – ii, (c) – iv, (d) – iii
4. (a) – iv, (b) – i, (c) – iii, (d) – ii

Ans: 2

Explanation:

During 1946–1947, George B. Dantzig independently developed general linear programming formulation to use for planning problems in the US Air Force.

In economics, an input–output model is a quantitative economic model that represents the interdependencies between different sectors of a national economy or different regional economies. (1906–1999) is credited with developing this type of analysis and earned the Nobel Prize in Economics for his development of this model.

John Hicks and Eugene Slutsky have greatly contributed to western economics as a whole and more specifically the understanding of consumer behaviour/consumer choice in microeconomics. John Hicks created the Hicksian Demand Function and Slutsky created the Slutsky equation, which linked both Hicksian demand with Marshallian demand.

Arrow, Chenery, Minhas and Solow in their new famous paper of 1961 developed the Constant Elasticity of Substitution (CES) function. $Q = A [aC^{-\theta} + (1-a)L^{-\theta}]^{-1/\theta}$. where Q is the total output, C is capital, and L is labour. A is the efficiency parameter indicating the state of technology and organisational aspects of production.

40. Who among the following economists are associated with the ‘Balanced Growth’ doctrine?

- (a) W A Lewis
- (b) H W singer
- (c) R Nelson
- (d) Ragnar Nurkse

Choose the correct option

- 1. a and d
- 2. c and d
- 3. a and b
- 4. b and c

Ans: 1

Explanation:

Balanced Growth concept was endorsed by **Rosenstein Rodan** in one of his articles titled “Problems of Industrialisation of Eastern and South Eastern Europe.” **Prof. Nurkse, Prof. Lewis** and **Stovasky** have examined this concept of balance of growth on different bases. It implies that, Planning with balanced growth indicates that all sectors of the economy will expand in same proportion, so that consumption, investment and income will grow at the same rates

41. Assertion (A): Parties to a dispute over property rights will be able to negotiate an economically optimal solution

Reason (R): There are efficient, competitive markets and there are no transactions cost

1. Both (A) and (R) are true and (R) is the correct explanation of (A)
2. Both (A) and (R) are true, (R) is not the correct explanation of (A)
3. (A) is true but (R) is false
4. (A) is false but (R) is true

Ans: 1

Explanation:

This question is based on Coase Theorem. Coase Theorem is a legal and economic theory developed by economist Ronald Coase that affirms that where there are complete competitive markets with no transactions costs, an efficient set of inputs and outputs to and from production-optimal distribution will be selected, regardless of how property rights are divided. Further, the Coase Theorem asserts that if conflict arises over property rights under these assumptions, then parties will tend to settle on the efficient set of inputs and output.

42. When the market rate of interest falls which one of the following will happen?

1. Bond price and bond yield, both will rise
2. Bond price and bond yield, both will fall
3. Bond price will rise and bond yield will fall
4. Bond price will fall and bond yield will rise

Ans: 3

Explanation:

Bond yield is the return an investor realizes on a bond. Bond Yield is a function of the bond's price and its coupon or interest payment, which will be more accurate than the coupon yield if the price of the bond is different than its face value.

43. Assertion (A): Geometric mean is theoretically considered as the best average to construct index numbers

Reason (R): Geometric mean is used if the ranges of observations are extremely large

1. Both (A) and (R) are true and (R) is the correct explanation of (A)
2. Both (A) and (R) are true, (R) is not the correct explanation of (A)
3. (A) is true but (R) is false
4. (A) is false but (R) is true

Ans: 2

Explanation:

The best average for construction of index number is Geometric mean. Index number is a statistical tool that helps in measuring change in data over a period of time. It may be change in price of commodity, quantity etc. Geometric mean is better than arithmetic mean for calculation of index number because it is calculated by taking Nth root of the multiplied

values and hence is a better representative of the data. On the other hand arithmetic average is simply calculated by finding sum of the observation and then dividing it by total number of observation.

44. The elasticity of substitution (σ) of the production function which admits of both Hicks and Harrod neutral technical progress would be:

1. $\sigma=0$
2. $\sigma=1$
3. $\sigma=\infty$
4. $0 < \sigma < 1$

Ans: 2

Explanation:

A technical change is said to be neutral if it is neither capital saving nor labour saving i.e. it is neutral in its effect in the sense that neither of the two factors become more or less important at the margin. There are two definitions of neutrality. One is given by Prof. Hicks and the other by Prof. Harrod.

A. Hicks views on Neutrality. According to Prof. Hicks, a technical change is neutral if the ratio of the marginal product of capital to that of labour remains unchanged at a constant capital-labour ratio. According to Harrod, neutral technical progress is one which leaves capital output ratio unchanged, provided that rate of profit remains constant.

Elasticity of substitution is the elasticity of the ratio of two inputs to a production function with respect to the ratio of their marginal products.

$$\text{Elasticity of substitution} = \frac{\% \text{ changes in Capital}}{\% \text{ changes in Labour}} = \frac{\text{marginal productivity of Capital}}{\text{marginal productivity of Labour}}$$

Now, in the above mention definition it is clear that marginal product of capital to labour is constant. So, the elasticity of substitution is neutral production function is always 1.

45. Assertion (A): In classical model investment demand is regarded as autonomous of changes in income or employment

Reason (R): It is wage price flexibility which brings full employment in the classical model

1. Both (A) and (R) are true and (R) is the correct explanation of (A)
2. Both (A) and (R) are true, (R) is not the correct explanation of (A)
3. (A) is true but (R) is false
4. (A) is false but (R) is true

Ans: 4

Explanation:

In the classical model investment is depend on national level income and full employment level. So, assertion is false.

The classical theory proposes that all markets reequilibrate because of adjustments in prices and wages which are flexible. For instance, if an excess in the labor force or products exist, the wage or price of these will adjust to absorb the excess.

46. Two series are given as under

(a) $1 - 1/2 + 1/4 - 1/8 + 1/16 - 1/32 + \dots$ upto ∞

(b) $2 + \sqrt{2} + 1 + 1/\sqrt{2} + 1/2 + 1/2\sqrt{2} + \dots$ Upto ∞

Choose the correct option:

1. (a) is convergent while (b) is divergent series
2. Both (a) and (b) are convergent series
3. (a) is divergent while (b) is convergent series
4. None of (a) and (b) are convergent

Ans: 2

47. Which of the following statements is/are true concerning a triangular or recursive system?

- (a) The parameters can be validly estimated using separate applications of OLS to each equation
- (b) The independent variables may be correlated with the error terms in other equation
- (c) The application of two - stage least squares would lead to unbiased but inefficient parameter estimation
- (d) The independent variables may be correlated with the error terms in the equation in which they appear as independent variables

Choose the correct option:

1. a and d only
2. a and c only
3. a b and c only
4. a b c and d

Ans: 3

Explanation:

A system of equations is recursive rather than simultaneous if there is unidirectional dependency among the endogenous variables such that, for given values of exogenous variables, values for the endogenous variables can be determined sequentially rather than jointly. Due to the ease with which they can often be estimated and the temptation to interpret them in terms of causal chains, recursive systems were the earliest equation systems to be used in empirical work in the social sciences.

48. Three statements are given as under

- (a) Generalized least square (GLS) method is capable of providing BLUE in situations where OLS fails
- (b) GLS is OLS on the transformed variables that satisfy the standard least squares assumptions
- (c) GLS method is suitable for dealing with multicollinearity problem

Choose the correct option:

- 1. a and b are correct but c is not correct
- 2. a and c are correct but b is not correct
- 3. a is correct but b and c are not correct
- 4. a is not correct but b and c are correct

Ans: 1

Explanation:

Statement a and b are general condition both are correct. GLS and OLS both satisfy the BLUE property and the Gauss Markov least square assumption. GLS method is more suitable for heteroscedasticity and auto-regressive.

49. 'Displacement effect' in the Peacock- Wiseman Hypothesis implies:

- 1. An upward displacement of public expenditure according to higher economic growth
- 2. The movement from older level of public expenditure and taxation to a newer and higher level
- 3. Public expenditure increases at steady rate and reaches higher level
- 4. Government undertakes more and newer activities and hence public expenditure rises steeply upwards

Ans: 2

Explanation:

Peacock and Wiseman hypothesis focused on the pattern of public expenditure and stated that public expenditure does not follow a smooth or continuous trend but the increase in public expenditure takes place in jerks or steps. They gave three separate concepts to justify the hypothesis, they are:

- Displacement effect
- Inspection effect
- Concentration effect

Displacement effect: When social disturbance occurs the government raises taxes to increase revenue and increase public expenditure to meet the social disturbance. This creates displacement effect by which low taxes and expenditure are replaced by higher tax and expenditure levels. However, after the disturbance ends, the newly emerged level of tax tolerance makes people willing to support higher level of public expenditure since it is capable of bearing heavier tax burden than before. As a result, the new level of public expenditure by another new disturbance which causes another displacement effect.

50. Which amongst the following is not the source of the income of RBI?

1. Interest on government bonds held for conducting open market operations
2. Income from investment in foreign currency assets
3. Retained earnings net of dividend paid to government of India
4. Dividend on the shares of private equity held with the bank

Ans: 4

Explanation:

The RBI earns money in a variety of ways.

1. Open market operations, wherein a central bank purchases or sells bonds in the open market in order to regulate money supply in the economy, are a major source of income for the RBI.
2. Apart from the interest received from these bonds, the RBI may also profit from favourable changes in bond prices.
3. Dealings in the foreign exchange market that the RBI engages in may also contribute to the bank's profits. The RBI, for instance, may buy dollars cheaply and sell them dear in the future to pocket profits.

It should be noted, however, that unlike commercial banks, the primary mandate of the RBI is not to earn profits but to preserve the value of the rupee.

51. Who is the author of the book 'freedom as development'?

1. Gunnar Myrdal
2. F A Von Hayek
3. Amartya Sen
4. Paul A Samuelson

Ans: 3

Explanation:

Development as Freedom (1999) is a popular summary of economist Amartya Sen's work on development. In it he explores the relationship between freedom and development, the ways in which freedom is both a basic constituent of development in itself and an enabling key to other aspects.

52. If in a given situation, $P_x=170$, $P_m=190$ and $Z_x=152$, then which of the following will be the value of Single Factorial Terms of Trade (T_s):

1. 136
2. 148
3. 84
4. 116

Ans: 1

Explanation:

Single Factorial Terms of Trade: Prof. Viner has developed the concept of Single Factorial Terms of Trade which allows changes in the domestic exports sector. It is calculated by multiplying the commodity terms of trade index by an index of productivity changes in domestic export industries. It can be expressed by

$$T_s = \frac{P_x}{P_m} * Z_x$$

Where, P_x = Price of Export, P_m = Price of Import and Z_x = Productivity index of exports industries

So, $T_s = (170/190) \times 152 = 136$

53.

Inverse of matrix $\begin{bmatrix} 2 & 0 & 0 & 0 \\ 0 & 4 & 0 & 0 \\ 0 & 0 & 5 & 0 \\ 0 & 0 & 0 & 1 \end{bmatrix}$ is

(1) $\begin{vmatrix} 0.25 & 0 & 0 & 0 \\ 0 & 0.5 & 0 & 0 \\ 0 & 0 & 0.2 & 0 \\ 0 & 0 & 0 & 1 \end{vmatrix}$

(2) $\begin{vmatrix} 0.2 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 \\ 0 & 0 & .25 & 0 \\ 0 & 0 & 0 & 0.5 \end{vmatrix}$

⊗

(3) $\begin{vmatrix} 0.5 & 0 & 0 & 0 \\ 0 & 0.25 & 0 & 0 \\ 0 & 0 & 0.2 & 0 \\ 0 & 0 & 0 & 1 \end{vmatrix}$

(4) $\begin{vmatrix} 0.5 & 0 & 0 & 0 \\ 0 & 0.25 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0.4 \end{vmatrix}$

Ans: 3

54. Under which article of the constitution of India, President is empowered to appoint The Finance Commission

1. 279
2. 280
3. 281
4. 282

Ans: 2

Explanation:

Under article 280, president of India appoints the finance commission for every five years. Thus, FCI is a constitutional body. The main function of the finance commission in India is to maintain the financial relations between the state and the center.

55. Among normal cost curves which one of the following curve does not have a minimum point?

1. Average cost
2. Marginal cost
3. Average variable cost
4. Average fixed cost

Ans: 4

Explanation:

Average cost, Marginal cost and Average Variable cost can be described in three phases along with quantity increase. In the first phase when quantity increases, the cost curve sharply goes down. 2nd phase is the minimum point of the cost curve and 3rd phase describes as if quantity increases then cost increases.

On the other hand, Average fixed cost (i.e. fixed cost/quantity) continuously falls with the quantity of production increase because this cost is fixed in production.

56. Which one of the following institutions is related with the Green/Blue Box Subsidies?

- (a) United Nations
- (b) World Bank
- (c) World Tourism Organisation
- (d) World Trade Organization

Choose the correct option:

- 1. a and d
- 2. b and d
- 3. only d
- 4. only b

Ans: 3

Explanation:

The subsidies provided by the government to the agricultural sector are termed by the WTO as Aggregate Measure of Support (AMS). But subsidies can be distorted free trade situation. Therefore, the specific reason WTO gives permission to a country for subsidies. The agriculture subsidies in the WTO terminology have in general been identified by 'boxes' which have been given the colours of the traffic lights—green (means permitted), amber (means slow down, i.e., to be reduced) and red (means forbidden). The WTO provision on agriculture has nothing like red box subsidies.

Amber Box: All subsidies which are supposed to distort production and trade fall into the amber box.

Blue Box: This is the amber box with conditions. The conditions are designed to reduce distortions. Any subsidy that would normally be in the amber box, is placed in the blue box if it requires farmers to go for a certain production level.

Green Box: The agricultural subsidies which cause minimal or no distortions to trade are put under the green box.⁷⁰ They must not involve price support.

Social And Development Box: Other than the above-discussed highly controversial boxes of agricultural subsidies, the WTO provisions have defined yet another box, i.e., the Social and Development Box (S & D Box).⁷⁵ It allows the developing countries for some subsidies to the agriculture sector under certain conditions. These conditions revolve around human development issues such as poverty, minimum social welfare, health support, etc.

57. Which of the following is not an example of 'market failure'?

1. Monopolies
2. Asymmetric information
3. Economies of scale
4. Externalities

Ans: 3

Explanation:

Market Failure – This occurs when there is an inefficient allocation of resources in a free market. Market failure can occur due to a variety of reasons, such as monopoly (higher prices and less output), negative externalities (over-consumed and costs to third party) and public goods (usually not provided in a free market)

Types of market failure

- a) Positive externalities – Goods/services which give benefit to a third party, e.g. less congestion from cycling.
- b) Negative externalities – Goods/services which impose a cost on a third party, e.g. cancer from passive smoking.
- c) Public goods – Goods which are non-rival and non-excludable – e.g. police, national defence. Public goods are often not provided in a free market.
- d) Monopoly Power – when a firm controls the market (with high market share) and can set higher prices.
- e) Inequality – unfair distribution of resources in free market, e.g. some experiencing poverty and homelessness
- f) Information failure – where there is a lack of information to make an informed choice.

58. Which one of the following is an example of positive externality?

1. Public immunizations
2. Increase of corporate taxes
3. Issuing extra permits for pollutions
4. Monitoring the hazards caused by industries

Ans: 1

Explanation:

A positive externality exists if the production and consumption of a good or service benefits a third party not directly involved in the market transaction. For example, education directly benefits the individual and also provides benefits to society as a whole through the provision of more informed and productive citizens.

When government provide the vaccine for free in all individual then it have obviously help the common people who are not involve in the direct market transaction. So, a public immunization is an example of positive externality.

59. Consider an economy with a linear homogeneous Cobb – Douglas production function with two inputs – capital and labour. The share of capital and labour are, respectively, $1/3$ and $2/3$. The rates of growth of capital and labour are, respectively 6% and 3% per annum. If the rate of growth of output is 6% per annum, what is the rate of growth of output due to Total Factor Productivity (TFP)?

1. 1%
2. 2%
3. 3%
4. 4%

Ans:2

Explanation:

Total factor productivity (TFP) is a measure of productivity calculated by dividing economy-wide total production by the weighted average of inputs i.e. labor and capital.

The most widely used production function is the Cobb-Douglas function which is as follows:

$$Q = A * K * L$$

$$\text{Total factor productivity growth } \left(\frac{\Delta Q}{Q}\right) = \frac{\Delta K}{K} * \alpha + \frac{\Delta L}{L} * \beta + \frac{\Delta A}{A}$$

Now, the cobb-douglas function is $Q = A * K^{1/3} + L^{2/3}$

$$\text{Then, TFP, } 6\% = 6\% * 1/3 + 3\% * 2/3 + \frac{\Delta A}{A}$$

$$\text{Therefore, } \frac{\Delta A}{A} = 2\%$$

So, the total factor productivity growth is 2%.

60. Match the following

List- I

- (a) Treasury bill
- (b) Commercial papers
- (c) Repo rate
- (d) SDRs

List – II

- (i) RBI
- (ii) IMF
- (iii) Government
- (iv) Private companies

Choose the correct option:

1. (a) – iv, (b) – iii, (c) – ii, (d) – i
2. (a) – iii, (b) – iv, (c)- ii , (d) – i
3. (a) – iii, (b) – iv, (c) – i, (d) – ii
4. (a) – iv, (b) – iii, (c) – i, (d) – ii

Ans: 3

Explanation:

Treasure bill: When the government is going to the financial market to raise money, it can do it by issuing two types of debt instruments – treasury bills and government bonds. Treasury bills are issued when the government need money for a shorter period.

Commercial Paper: Commercial paper, also called CP, is a short-term debt instrument issued by companies to raise funds generally for a time period up to one year.

Repo Rate: It was introduced in Dec. 1992, by RBI. It is the rate, at which RBI lends short-term money to the Banks against securities.

SDRs: The SDR is an international reserve asset, created by the IMF in 1969 to supplement its member countries' official reserves.

61. The inventory approach to the transaction demand suggests that the transaction component of demand for money is:

1. Negatively related to real wealth
2. Negatively related to real income
3. Negatively related to nominal income
4. Negatively related to interest rate

Ans: 4

Explanation:

The transactions demand for money arises from the medium of exchange function of money in making regular payments for goods and services. According to Keynes, transaction demand for money purely depends on income level.

Two post-Keynesian economists William J. Baumol and James Tobin have shown that the rate of interest is an important determinant of transactions demand for money. They have also pointed out that the relationship between transactions demand for money and income is not linear and proportional. This is known as inventory approach for transaction demand for money.

It postulates that if rate of interest is high then people willing to hold money in bank rather than in hand and vice versa.

62. A tax of Rs. 20 per unit of imported cheese would be an example of a/an:

1. Compound tariff
2. Specific tariff
3. Effective tariff
4. Ad valorem tariff

Ans: 2

Explanation:

Specific tariff is the fixed amount of money per physical unit or according to the weight or measurement of the commodity imported or exported. Such duties can be levied on goods like wheat, rice, fertilisers, cement, sugar, cloth etc.

63. For an exactly identified equation, the order condition that should be fulfilled is that equation must:

1. Exclude one less than the total number of endogenous variables in the model
2. Include one less than the total number of endogenous variables in the model
3. Include only one of the endogenous variables in the model
4. Exclude two or more endogenous variables

Ans: 1

64. Identify the correct chronological order of the following

- (a) Hayek theory of investment
- (b) Fisher theory of investment
- (c) Jorgenson's theory of investment
- (d) Markowitz theory of investment

Select the correct option:

1. b a d c
2. d b c a
3. c a b d
4. a c d b

Ans: 1

Explanation:

Irving Fisher's theory of capital and investment was introduced in his Nature of Capital and Income (1906) and Rate of Interest (1907), although it has its clearest and most famous exposition in his Theory of Interest (1930).

Hayek was given his theory in 1941.

Markowitz was provides his theory in 1952.

Jorgenson was introduced neo-classical model of investment in 1963.

65. Which one of the following statements is not correct for the textile sector in India?

1. India's textile and clothing sector currently employs 35 million people
2. After agriculture, it is second largest provider of employment
3. Textile sector has a tendency to shrink as the GDP and economy grow
4. Textile sector is a major absorber of low skilled labour

Ans: 3

Explanation:

The Indian textile industry is second largest in the world with a massive raw material and textiles manufacturing base. Our economy is largely dependent on the textile manufacturing and trade in addition to other major industries. About 27% of the foreign exchange earnings are on account of export of textiles and clothing alone. The textiles and clothing sector contributes about 14% to the industrial production and 3% to the gross domestic product of the country. Around 8% of the total excise revenue collection is contributed by the textile industry. So much so, the textile industry accounts for as large as 21% of the total employment generated in the economy. Around 35 million people are directly employed in the textile manufacturing activities. Indirect employment including the manpower engaged in agricultural based raw-material production like cotton and related trade and handling could be stated to be around another 60 million.

66. Assertion (A): Inclusive growth is a must for a country like India

Reason (R): India is an open economy with a significant external sector

1. Both (A) and (R) are true and (R) is the correct explanation of (A)
2. Both (A) and (R) are true, (R) is not the correct explanation of (A)
3. (A) is true but (R) is false
4. (A) is false but (R) is true

Ans: 2

Explanation:

Inclusive growth means economic growth that creates employment opportunities and helps in reducing poverty. It means having access to essential services in health and education by the poor. It includes providing equality of opportunity, empowering people through education and skill development.

The agenda for inclusive growth was envisaged in the Eleventh Plan document which intended to achieve not only faster growth but a growth process which ensures broad-based improvement in the quality of life of the people, especially the poor, SCs/STs, other backward castes (OBCs), minorities and women and which seeks to provide equality of opportunity to all.

The External Sector Report of the International Monetary Fund (IMF) has found that India's Net International Investment Position had slightly improved with the deficit coming down from \$438 billion in 2017-18 to \$431 billion in 2018-19. India's overall international reserves, though stood at \$411.9 billion at the end of March this year, down from March last year by \$12.5 billion. The report said that the reserve level is adequate for "precautionary purposes relative to various criteria".

India external sector have significant impact in overall macroeconomics. So, both statements are correct but they have not direct interlinked.

67. Match the following

List –I

- (a) CAPART
- (b) SIDO
- (c) NAFED
- (d) AGMARK

List – II

- (i) Agricultural marketing
- (ii) Quality guarantee
- (iii) Small industries
- (iv) Rural technology

Choose the correct option:

1. (a) – i, (b) – ii, (c)- iii, (d) – iv
2. (a) – iv, (b) – iii, (c) – ii, (d) – i
3. (a) – iv, (b) – ii, (c) – iii, (d) – i
4. (a) – ii, (b) – iv, (c) – i, (d) – iii

Ans: 2

Explanation:

CAPART (Council of Advancement of People's Action and Rural Technology) was formed by amalgamating two agencies the 'Council for Advancement of Rural Technology' (CART) and 'People's Action for Development India' (PAD). CAPART is an autonomous body registered under the Societies Registration Act 1860, and is functioning under the agencies of the Ministry of Rural Development, Government of India.

SIDO (Small Industries Development Organization) is a subordinate office of the Department of SSI & Auxiliary and Rural Industry (ARI). It is an apex body and nodal agency for formulating, coordinating and monitoring the policies and programmes for promotion and development of small-scale industries.

NAFED (National Agricultural Cooperative Marketing Federation of India Ltd) is an apex organization of marketing cooperatives for agricultural produce in India. It was founded on the birthday of Mahatma Gandhi on 2 October 1958 to promote the trade of agricultural produce and forest resources across the nation

AGMARK (Agricultural Marketing) is a certification mark employed on agricultural products in India, assuring that they conform to a set of standards approved by the Directorate of Marketing and Inspection, an agency of the Government of India

68. Match the following

List A

- (a) Quasi rent
- (b) Planned sales curve
- (c) Monopoly power
- (d) Strong ordering of preferences

List B

- (i) A P Lerner
- (ii) P A Samuelson
- (iii) A Marshall
- (iv) F Chamberlin

Choose the correct option:

1. (a) – iii, (b) – iv, (c) – i, (d) – ii
2. (a) – iii, (b) – iv, (c) – ii, (d) – i
3. (a) – iv, (b) – iii, (c) – i, (d) – ii
4. (a) – iii, (b) – i, (c) – iv, (d) – ii

Ans: 1

Explanation:

Quasi-rent: The concept of quasi-rent was given by Alfred Marshall. He defined quasi rent as surplus earnings generated by the factors of production, except land.

Planned Sales Curve: Concept of planned sales curve discussed by Chamberlin to explain monopolistic competition among the firm.

Monopoly power: Economist Abba Lerner developed this relationship in his article “The Concept of Monopoly and the Measurement of Monopoly Power”, 1934. This was Lerner’s first major article on welfare economics, in which he introduced the idea that monopolies are a matter of degree, stating that their power depend on the excess of price over marginal costs. Lerner index is –

$$L = (P - MC)/P$$

Strong ordering of preference: Strong ordering implies that there is definite ordering of various combinations in consumer’s scale of preferences and therefore the choice of a combination by a consumer reveals his definite preference for that over all other alternatives open to him. Thus, under strong ordering, relation of indifference between various alternative combinations is ruled out. This concept is elaborately discussed by P. A. Samuelson in revealed preference theory.

69. Match the following

List – I

- (a) Fiscal deficit
- (b) Budget deficit
- (c) Revenue deficit
- (d) Primary deficit

List – II

- (i) Excess of total expenditure over total receipts
- (ii) Excess of revenue expenditure over revenue receipts
- (iii) Excess of total expenditure over total receipts less borrowings
- (iv) Excess of total expenditure over total receipts less borrowing and interest payments

Choose the correct option:

1. (a) – iii, (b) – i, (c) – ii, (d) – iv
2. (a) – i, (b) – iii, (c) – ii, (d) – iv
3. (a) – iii, (b) – i, (c) – iv, (d) – ii
4. (a) – iv, (b) – iii, (c) – ii, (d) – i

Ans: 1

Explanation:

Revenue deficit = Total revenue expenditure – Total revenue receipts.

Fiscal deficit = Total expenditure – Total receipts excluding borrowings.

Primary deficit = Fiscal deficit-Interest payments.

Budget deficit = Total expenditure – total receipts.

70. Friedman's modern Quantity Theory of Money concludes that changes in aggregate spending are primarily determined by changes in

1. The money supply
2. Interest rate
3. The velocity of money
4. Government spending and taxes

Ans: 1

Explanation:

In Friedman's modern quantity theory of money, the supply of money is independent of demand for money. The aggregate spending solely depends on money supply which is determined by the government authority. On the other way, the money supply is exogenously given outside in the economy.

71. Under Normal Probability Curve the area within the range of $\mu - 1.96\sigma$ & $\mu + 1.96\sigma$ (where μ =mean, σ =standard deviation) is:

1. 90%
2. 95%
3. 75%

4. 99%

Ans: 2



Text with Technology

72. In solvency and bankruptcy code is primarily entrusted with which of the following

1. Facilitating the recovery of government dues and debt
2. Facilitating recovery of debt given by foreign banks to Indian companies
3. Facilitating banks recover higher amount of bad loans than they recovered earlier
4. Facilitating banks recover their dues from the priority sector

Ans: 3

Explanation:

Insolvency and Bankruptcy Code 2016 was implemented through an act of Parliament. It got Presidential assent in May 2016. The law was necessitated due to huge pile-up of non-performing loans of banks and delay in debt resolution. It provides for a time-bound process to resolve insolvency. When a default in repayment occurs, creditors gain control over debtor's assets and must take decisions to resolve insolvency. Under IBC debtor and creditor both can start 'recovery' proceedings against each other.

73. Identify the method not being used for unemployment estimation by the NSSO of India

1. Current monthly status
2. Current daily status
3. Current weekly status
4. Usual principal and subsidiary status

Ans: 1

Explanation:

The National Sample Survey Organization (NSSO), since its inception in 1950, does the measurement of employment / unemployment in India.

The National Sample Survey Organization (NSSO) provides three different estimates of employment and unemployment based on different approaches / reference periods used to classify an individual's activity status. These are the

Usual status approach, with a reference period of 365 days preceding the date of survey. The activity status on which a person spent relatively longer time (major time criterion, >180) is considered the Usual Principal Status. Besides the usual principal activity status, a person could have pursued some economic activity for a smaller period, not less than 30 days. This is defined as Subsidiary status.

Current weekly status approach, with a reference period of seven days preceding the date of survey.

Current daily status approach, with each day of the seven days preceding date of survey as the reference period.

74. Arrange the following theories of international trade in chronological order

- (a) Theory of opportunity cost
- (b) Theory of comparative cost
- (c) Factor price equalisation theorem
- (d) Theory of absolute cost

Identify the correct order:

1. d b a c
2. c b d a
3. b d a c
4. a c d b

Ans: 1

Explanation:

Theory of absolute cost was established by Adam Smith in the year 1776.

Theory of Comparative cost was introduced by David Ricardo 1817.

Theory of Opportunity cost was given Haberler in the year 1936.

Factor Price Equalisation theory concept was given by Paul Samuelson in 1948.

75. Which one of the following is not a feature of contingent valuation method?

1. It is an economic non – market based valuation method
2. It is based on the maximum willingness to pay by the consumers
3. It is used only in case of air pollution
4. It is used under the condition of market failure

Ans: 3

Explanation:

The contingent valuation method (CVM) is used to estimate economic values for all kinds of ecosystem and environmental services. It can be used to estimate both use and non use values, and it is the most widely used method for estimating non-use values. It is also the most controversial of the non-market valuation methods.

The contingent valuation method involves directly asking people, in a survey, how much they would be willing to pay for specific environmental services. In some cases, people are asked for the amount of compensation they would be willing to accept to give up specific environmental services. It is called “contingent” valuation, because people are asked to state their willingness to pay, contingent on a specific hypothetical scenario and description of the environmental service.

The contingent valuation method is referred to as a “stated preference” method, because it asks people to directly state their values, rather than inferring values from actual choices, as the “revealed preference” methods do. The fact that CV is based on what people say they would do, as opposed to what people are observed to do, is the source of its greatest strengths and its greatest weaknesses.

76. Boot strapping technique is used to:

1. Test for specification bias
2. Obtain sampling distribution of parameters
3. Test for auto-correlation
4. Test for normality of error terms

Ans: 2

Explanation:

The bootstrap method is a re-sampling technique used to estimate statistics on a population by sampling a dataset with replacement. It can be used to estimate summary statistics such as the mean or standard deviation.

77. Which amongst the following is the function of SEBI?

1. Regulation of money market
2. Regulation of public debt
3. Regulation of commodity market
4. Regulation of primary and secondary security market

Ans: 4

Explanation:

The functions and powers of SEBI have been listed in the SEBI Act, 1992. SEBI caters to the needs of three parties operating in the Indian Capital Market (primary and secondary market). These three participants are mentioned below:

- a) Issuers of the Securities: Companies that issue securities are listed on the stock exchange. They issue shares to raise funds. SEBI ensures that the issuance of Initial Public Offerings (IPOs) and Follow-up Public Offers (FPOs) can take place in a healthy and transparent way.
- b) Protects the Interests of Traders & Investors: It is a fact that the capital markets are functioning just because the traders exist. SEBI is responsible for safeguarding their interests and ensuring that the investors do not become victims of any stock market fraud or manipulation.
- c) Financial Intermediaries: SEBI acts as a mediator in the stock market to ensure that all the market transactions take place in a secure and smooth manner. It monitors every activity of the financial intermediaries, such as broker, sub-broker, NBFCs, etc
 - Money Market is regulated by RBI.
 - Forward Markets Commission (FMC) is a regulatory authority for Commodity Markets in India.
 - In India public debt regulated by RBI.

78. Consider the following statements about the correct order of the stages of demographic transition associated with economic development:

- (a) Low birth rate with low death rate
- (b) High birth rate with high death rate
- (c) High birth rate with low death rate

Choose the correct option:

- 1. b c a
- 2. c b a
- 3. a b c
- 4. c a b

Explanation:

Demographic transition theory (Frank Notestein in 1945) suggests that future population growth will develop along a predictable four- or five-stage model.

In stage one, pre-industrial society, death rates and birth rates are high and roughly in balance.

In stage two, that of a developing country, the death rates drop rapidly due to improvements in food supply and sanitation, which increase life spans and reduce disease.

In stage three, birth rates fall. Birth rates decrease due to various fertility factors such as access to contraception, increases in wages, urbanization, a reduction in subsistence agriculture, an increase in the status and education of women, a reduction in the value of children's work, an increase in parental investment in the education of children and other social changes. Population growth begins to level off.

In stage four, both low birth rates and low death rates. Birth rates may drop to well below replacement level.

Ans: 1

79. The problem relating to burden of public debt has been dealt by

- (a) A P Lerner
- (b) E D Domar
- (c) A C Pigou
- (d) A H Hansen

Choose the correct answer:

- 1. a and b
- 2. b and c
- 3. a and d
- 4. b and d

Ans: 2

Explanation:

Prof. Evsey. D. Domar states that the burden of the debt or the average tax rate covering the interest charges, equals, roughly speaking, the ratio of the interest charges to income; or the ratio of the debt to income multiplied by the interest rate paid on bonds.

A. C. Pigou discussed the burden of public debt on the view point of welfare.

80. In which of the following models 'Knife – edge' problem occur?

- 1. Kaldor
- 2. Solow
- 3. Harrod
- 4. Swan

Ans: 3

Explanation:

The 'Knife-edge' problem associate with Harrod – Domar model, which simple implies that if we deviated from the equilibrium condition of H-D model, creates a troublesome.

81. Which one of the following is correct for the money supply measure – M_1 ?

- 1. Currency with the public + demand deposits of Commercial banks + other deposits at a point of time
- 2. Currency with the public + demand deposits of banks + other deposits over one year
- 3. Currency with the public + all bank deposits at a point of time
- 4. Currency with the public + post office deposits + other deposits at a point of time

Ans:1

Explanation:

Narrow Money (M_1):

M_1 = Currency with public + Demand deposits with the Banking system (current account, saving account) + Other deposits with RBI

82. For which of the following consumption function the value of the income multiplier $K=4$?

1. $C = 100 + 0.5Y$
2. $C = 50 + 0.8Y$
3. $C = 200 + 0.75Y$
4. $C = 50 + 0.4Y$

Ans: 3

Explanation:

Income Multiplier (K) = $1/1-MPC$

Then, $1/1-MPC = 4$, $MPC = 1 - \frac{1}{4} = \frac{3}{4} = 0.75$

If, $MPC = 0.75$ then the equation $C = 200 + 0.75Y$ is most suitable for consumption function.

83. Assertion (A): In order to control inflationary tendencies, RBI raises the Repo rate

Reason (R): By so doing, RBI wishes to control consumption demand.

1. Both (A) and (R) are true and (R) is the correct explanation of (A)
2. Both (A) and (R) are true, (R) is not the correct explanation of (A)
3. (A) is true but (R) is false
4. (A) is false but (R) is true

Ans: 3

Explanation:

In inflationary situation, central banks increase repo rate as this acts as a disincentive for banks to borrow from the central bank. This ultimately reduces the money supply in the economy and thus helps in arresting inflation

The Reserve Bank of India's decision to hike the repo rate by 25 bps has direct consequences on various sectors of our economy. While the most observable impact can be felt in sectors such as housing, whose growth is dependent on the availability of loans in the market and the interest rates, there are other consequences too.

Reserve Bank of India's decision to hike the repo rate by 25 bps has direct consequences on various sectors of our economy. While the most observable impact can be felt in sectors such as housing, whose growth is dependent on the availability of loans in the market and the interest rates, there are other consequences too. The increased interest rate will impact allied sectors, such as steel, iron and cement.

The increases of repo rate have not direct control over the consumption. Therefore, the reason is not true.

84. Under which of the following approaches Phillips curve analysis hold good?

- (a) Adaptive expectations
- (b) Rational expectations

Choose the correct option:

- 1. Only a
- 2. Only b
- 3. Both a and b
- 4. Neither a nor b

Ans: 4

Explanation:

The Phillips curve shows the inverse relationship between unemployment and inflation in an economy. Since its 'discovery' by New Zealand economist AW Phillips, it has become an essential tool to analyze macro-economic policy.

Adaptive expectations is an economic theory which gives importance to past events in predicting future outcomes. A common example is for predicting inflation. Adaptive expectations state that if inflation increased in the past year, people will expect a higher rate of inflation in the next year.

The Rational expectations states, when making decisions, individual agents will base their decisions on the best information available and learn from past trends.

The rational expectations theory is a concept and modelling technique that is used widely in macroeconomics. The theory posits that individuals base their decisions on three primary factors: their human rationality, the information available to them, and their past experiences. Under rational expectations, the Phillips curve is inelastic in the short-term because people can correctly predict the inflationary impact of public policy. According to rational expectations, there is no trade-off – even in the short run.

85. In linear programming each problem (called primal) has a dual. About duality in Linear Programming following statements are given:

- (a) If a linear programming problem is maximizing type, then its dual is minimizing type
- (b) Both primal and dual have same optimum value
- (c) Dual of dual of a linear programming problem is primal problem
- (d) If maximizing linear programming problem is with 'less than' type constraints, the dual of this problem will have 'more than' type constraints

Choose the correct option:

- 1. Only a and b are correct
- 2. Only c and d are correct
- 3. a b and c are correct
- 4. a b c and d are correct

Ans: 4

Explanation:

Linear programming problems are optimization problems in which the objective function and the constraints are all linear. In the primal problem, the objective function is a linear combination of n variables. There are m constraints, each of which places an upper bound on a linear combination of the n variables. The goal is to maximize the value of the objective function subject to the constraints. A solution is a vector (a list) of n values that achieves the maximum value for the objective function.

In the dual problem, the objective function is a linear combination of the m values that are the limits in the m constraints from the primal problem. There are n dual constraints, each of which places a lower bound on a linear combination of m dual variables.

86. In terms of their contribution to Econometrics which is correct chronological order

1. L R Klein, H Theil, A L Nagar, T Haavelmo
2. A L Nagar, T Haavelmo, L R Klein, H Theil
3. T Haavelmo, L R Klein, H Theil, A L Nagar
4. H Theil, L R Klein, A L Nagar, T Haavelmo

Ans: 3

Explanation:

Trygve Magnus Haavelmo (13 December 1911 – 28 July 1999), born in Skedsmo, Norway, was an economist whose research interests centered on econometrics.

Lawrence Robert Klein (September 14, 1920 – October 20, 2013) was an American economist. For his work in creating computer models to forecast economic trends in the field of econometrics.

Henri (Hans) Theil (October 13, 1924 – August 20, 2000) was a Dutch econometrician. Theil is most famous for his invention of the widely used two-stage least squares (2SLS) method in 1953.

Anirudh Lal Nagar (4 October 1930 – 4 February 2014) was an Indian econometrician notable for his work on the finite-sample inference in econometrics.

87. Consider the following statements:

- (a) The main objective of the National Agricultural Insurance Scheme (NAIS) is to protect the farmers against losses suffered by them due to crop failure on account of national calamities
- (b) The National Agricultural Insurance Scheme (NAIS) is available to all the farmers both loanee and non - loanee irrespective of their size of holding

Which of the statements given above is/are correct?

1. Only a
2. Only b
3. Both a and b
4. Neither a nor b

Ans: 3

Explanation:

National Agricultural Insurance Scheme (NAIS) is the Government sponsored crop insurance scheme under implementation in the country since Rabi 1999-2000 season as part of risk management in agriculture with the objective of providing financial support to the farmers in the event of failure of crops as a result of natural calamities, pests and diseases.

88. Match the following

List –I

- (a) Marginalist Revolution
- (b) Multiplier- Accelerator model
- (c) IS-LM curves
- (d) Real business cycle

List –II

- (i) Samuelson
- (ii) J R Hicks
- (iii) Jevons
- (iv) Robert J Borro

Choose the correct option

1. (a) – iii, (b) – i, (c) – ii, (d) – iv
2. (a) – ii, (b) – iv, (c) – i, (d) iii
3. (a) – iii, (b) – ii, (c) – iv, (d) – i
4. (a) – i, (b) – iv, (c) – iii, (d) – ii

Ans: 1

Explanation:

Marginalism is a method of analysis used in microeconomics, which seeks to explain economic phenomena through mathematical functions (production, consumption, etc..). The term “marginal” was first used by Johann H. von Thünen in his “The Isolated State”, in 1826. The Marginal revolution, which took place a few decades later, around 1870, brought the prevailing classical view of value theory to an end. Indeed, thanks to the work of three economists: W. S. Jevons, Carl Menger and M.-E.-Léon Walras. Even though these economists worked independently, they shared a few ideas which made their work the beginning of the utility theory

Professor Samuelson has built a model of multiplier- accelerator interaction. He could show that the interaction of the accelerator with the multiplier is capable, under certain circumstances, of generating continuous cyclical fluctuations.

The IS-LM (Investment Savings-Liquidity preference Money supply) model focuses on the equilibrium of the market for goods and services, and the money market. It basically shows the relationship between real output and interest rates. It was developed by John Hicks.

89. Arrange the following in chronological order

- (a) The Indirect Tax Enquiry Committee (Jha Committee)
- (b) Tax Reforms Committee (R J Chellaiah committee)
- (c) Taxation enquiry Commission (Mathur Committee)
- (d) The Direct Tax Enquiry Committee (Wanchoo Committee)

Choose the correct option:

- 1. c b d a
- 2. c a d b
- 3. b c a d
- 4. c d a b

Ans: 4

Explanation:

1974 LK Jha Committee suggests introduction of value added tax (VAT) in India.

The Government appointed a Tax Reforms Committee under Prof Raja Chelliah to lay out agenda for reforming India's tax system. This TRC came up with three reports in 1991, 1992 and 1993 with several measures.

To examine the possibility of the constitution of a Special Investigation Team (SIT) for reinvestigation of the 1984 anti-Sikh riot cases.

Wanchoo Committee Report 1970 headed by Mr. Justice K.N. Wanchoo- to go into the details of the problem of direct taxes with special reference to the problems of tax evasion & black money.

90. Arrange the following in the chronological order in which these happened:

- (a) Paris Climate Agreement
- (b) Rio Earth Summit
- (c) Brundtland commission
- (d) Kyoto Protocol

Choose the correct option:

- 1. a b c d
- 2. b d a c
- 3. d b c a
- 4. c b d a

Ans: 4

Explanation:

The Paris Agreement is the first truly global commitment to fight the climate crisis. In 2015, 195 countries and the European Union signed on to a single, sweeping agreement that aims to keep global warming to well below 2°C (3.6°F)—and make every effort to go above 1.5°C (2.7°F).

Rio Convention relates to the following three conventions, which are results of the Earth Summit held in Rio de Janeiro in June, 1992.

Brundtland Report, also called Our Common Future, publication released in 1987 by the World Commission on Environment and Development (WCED) that introduced the concept of sustainable development and described how it could be achieved.

The Protocol was linked to the United Nations Framework Convention on Climate Change (UNFCCC). It was adopted in Kyoto, Japan on December 11, 1997, and became international law on February 16, 2005.

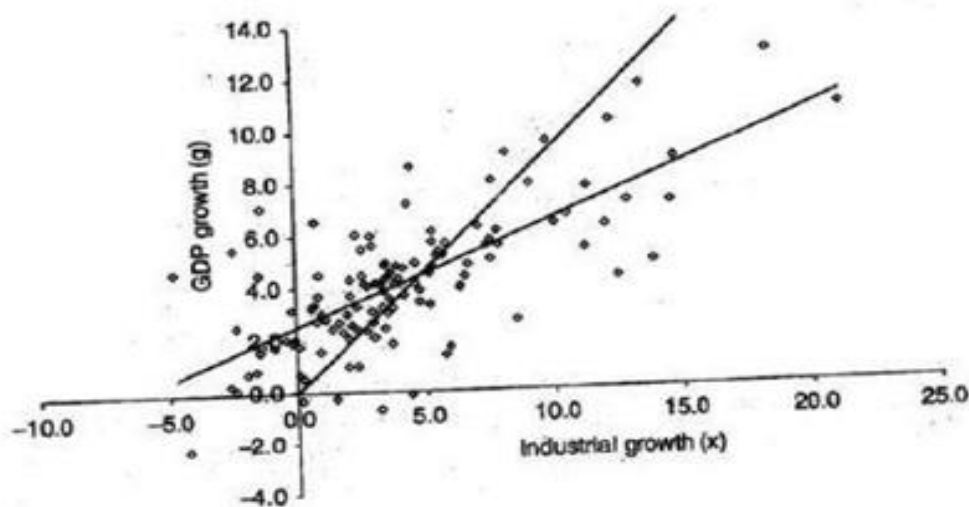
Read the passage and answer the questions from Q91-Q95

Industrialization and growth

From the global perspective, there seems to be a close association across countries between living standards and the share of resource devoted to industrial activities, at least up to a certain point. In very poor countries there is virtually no industrial activity at all, while the middle- and high-income countries devote 20-40 per cent of resources to industry. Only three countries in the world have become rich on agriculture alone : Australia, New Zealand and Canada. In all other countries, living standards have risen rapidly only as resources have shifted out of agriculture into industry and sophisticated services.

Furthermore, research also shows a close association across countries between the growth of industry and the growth of GDP; or more precisely, that GDP growth is faster the greater the excess of industrial growth relative to GDP growth; that is, when the share of industry in total GDP is rising the fastest. Figure shows this relationship across 131 developing countries over GDP is rising the fastest. Figure shows this relationship across 131 developing countries over the period 2000-2005, with GDP growth measured on the vertical axis and the growth of industry.

Association between growth of industry and growth of GDP



on the horizontal axis. The scatter points represents the individual country observations. A regression line through the points with a slope less than unity shows that the greater the industrial growth over GDP growth, the faster GDP seems to be. The point where the regression line cuts the 45-degree line gives the average growth rate that divides countries into those where the shares of industry is falling and are growing slowly, and those where the shares of industry is rising and are growing fast. A linear equation fitted to the scatter plot in Figure gives the following regression result :

$$g = 2.529 + 0.394x \quad r^2 = 0.507$$

The equation says that the country with industrial growth one percentage point above the average for all countries will have GDP growth of 0.394 percentage points above the average. The point where the regression line cuts the 45-degree line is approximately 4.5%. This rate of industry growth separates the slow-growing countries from the faster growing countries.

The question is : what is special about industry, and particularly manufacturing in which accounts for these empirical associations, and which makes industry 'the engine of growth'? Since differences in the growth of GDP are largely accounted for by differences in the rate of growth of labour productivity, there must be an association between the growth of industry and the growth of labour productivity. This is to be expected for two main reasons. First, if there are increasing returns to scale in industry, both static and dynamic, a relationship is to be expected between the growth of industrial output and the growth of labour productivity. Static economies of scale refer to the economies of large-scale production whereby the mass production of commodities allows them to be produced at a lower cost. Dynamic economies of scale refer to the induced effect that output growth through capital accumulation and the embodiment of new technical progress in capital equipment, productivity also increases as output growth through 'learning by doing'. Second, if resources are drawn from outside industry, such as agriculture and petty services, are subject to diminishing returns, with the marginal product of labour less than the average product, then if resources are drawn from these activities into industry as industry expands, the average product will rise in non-industrial activities.

- These relationships between industrial growth, productivity growth and GDP growth are known in the growth and development literature as Kaldor's Growth Laws, named after the famous Cambridge economist (Lord) Nicholas Kaldor, who first enunciated them in the 1960s (Kaldor, 1966, 1967).

91. Which of the following statement is correct?

1. There is a positive relation between living standard and resources denoted to industrial activity in few countries
2. There is a close association between living standards and resources utilized
3. The relation between the living standards and resources denoted to industrial activity is globally true
4. There is little association between living standards and resources utilized

Ans: 3

92. Dynamic economies of scale do not include which one of the followings

1. Induced effect of output growth on capital accumulation
2. Improvement in quality of capital due to new technology
3. The labour intensive sector will experience increasing returns will growth of output
4. A shift from less productive to more productive sector will lead to a rise in the average product of labour

Ans: 3

93. Consider the following statements:

- (a) The association between growth of industry and growth of GDP, make industry the 'engine of growth'
- (b) Differences in GDP growth do not account for growth in labour productivity
- (c) GDP growth rate are reflected in the growth rate of labour productivity
- (d) The growth of industry is subject to increasing returns

Choose the correct option:

1. a b and c
2. a and c
3. b c and d
4. b and d

Ans: 2

94. Which one of the following statement is not correct for middle and highly developed countries?

1. These devote on an average 30% of the resources to industrial activity
2. Growth of industrial activity involves shift of resources from agriculture to industry
3. Shift of resources is uniform between agriculture industry and higher order services for higher growth
4. Australia, Canada, and New Zealand have developed due to growth of agriculture alone

Ans: 3

95. Consider the following statements in relation to the figure.

- (a) The 45° line would indicate equal correspondence between industrial growth rate and GDP growth rate
- (b) GDP growth rate is the cause of industrial growth rate
- (c) The excess of industrial growth rate over GDP growth rate is fuelling more GDP
- (d) The dividing line of slow and fast-growing economies is the industrial growth rate of 3.9%

Choose the correct option:

- 1. Only a and c are true
- 2. Only a and b are true
- 3. Only a b and d are true
- 4. Only b and d are true

Ans:1

96. Which is the range of the SDG Index score for states in India?

- 1. 42-69
- 2. 57-68
- 3. 42-57
- 4. 42-68

Ans: 1

97. Which of the following is not correct about the SDGs Index constructed by NITI Aayog?

- 1. It include 13 SDGs
- 2. It has 62 indicators
- 3. Goals 12,14 are excluded from it
- 4. The range of the index is 0 to 1

Ans: 4

98. Which of the following is not true for the Sustainable Development Goals (SDGs)

- 1. Poverty and inequality
- 2. Climate change
- 3. Millennium Development Goals
- 4. Sustainable consumption

Ans: 3

99. The SDG Index of NITI Aayog classifies the states/UTs into different categories. Match the category with the respective score:

Category

- (a) Performers
- (b) Aspirants
- (c) Front-Runners
- (d) Achievers Score
- (i) 50-64
- (ii) ≥ 65
- (iii) 100
- (iv) < 50

Choose the correct option:

1. (a) – iv, (b) – i, (c) – iii, (d) – ii
2. (a) – ii, (b) – iii, (c) – i, (d) – iv
3. (a) – i, (b) – iv, (c) – ii, (d) – iii
4. (a) – iii, (b) – ii, (c) – iv, (d) – i

Ans: 3

100. Which of the following Government of India's schemes contribute to India's progress towards the SDGs?

- (a) Swachh Bharat Mission
- (b) Pradhan Mantri Ujjwala Yojana
- (c) Pradhan Mantri Saubhagya Yojana
- (d) Pradhan Mantri MUDRA Yojana

Choose the correct option:

1. a and b
2. a and c
3. c and d
4. b and d

Ans:1