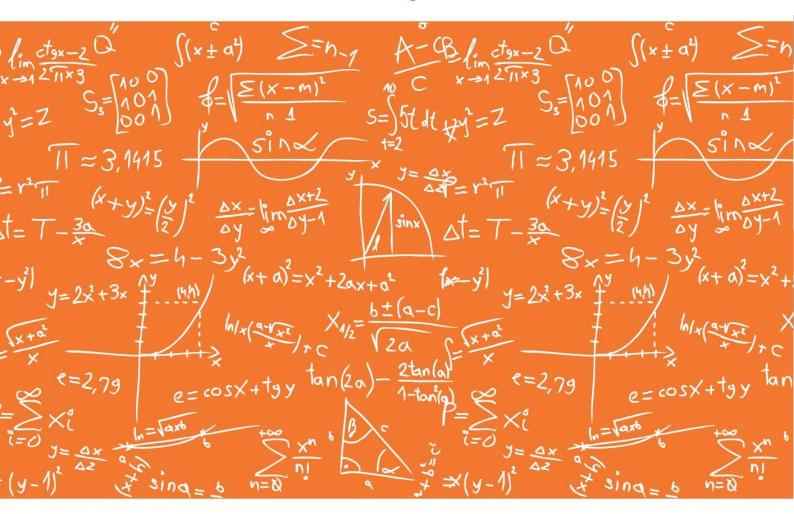


RIT JAM RECONOMICS

Past Year Questions



www.ecoholics.in

Ecoholics Team +91-7880107880

Follow us on











MICROECONOMICS

| Question – 1 | A monopoly canteen serves packed meals to two groups of consumers, group X and group Y . The demand for packed meals for X and Y are given by, $QX = 200 - 4P$ and $QY = 300 - P$, where P is the uniform price per unit. The unit cost of producing each meal is Rs. 50. The value of P (in Rs.) that maximizes the canteen's profit is |
|--------------|---|
| (A) | 75 |
| (B) | 50 |
| (C) | 125 |
| (D) | 175 |

| Question – 2 | The utility from wealth (w) for an individual is given by $u(w) = \forall w$. The individual owns a risky asset that is equally likely to yield either Rs. 400 or Rs. 900. The risk premium of the asset (in Rs.) is |
|--------------|---|
| (A) | 5 |
| (B) | 25 |
| (C) | 625 |
| (D) | 650 |

| Question – 3 | There are only two firms in an industry producing a homogenous product and having identical production technology. The cost function of firm i is $Ci(qi) = qi2$, for $i = 1,2$; where qi is the quantity produced by firm i . The market demand for the product is $p = 100 - q$, where p is the unit price and $q = q1 + q2$ is the aggregate quantity. Assuming the firms are price takers, the competitive equilibrium solution of p and q in this market is |
|--------------|---|
| (A) | <i>p</i> = 80, <i>q</i> = 20 |
| (B) | p = 20, q = 80 |
| (C) | p = 200 3, q = 100 3 |
| (D) | p = 50, q = 50 |

| Question – 4 | A monopolist is facing a downward sloping linear market demand. His variable cost of production is zero. The profit maximizing price will |
|--------------|---|
| (A) | lie in the strictly inelastic region of the demand curve |
| (B) | lie in the strictly elastic region of the demand curve |
| (C) | be at the unitary elastic point of the demand curve |
| (D) | be equal to the marginal cost of production |



| Question – 5 | An amateur singer has just recorded his first music album with a recording company. The demand for his album is given by $Q = 40000 - 800P$, where Q is the number of albums sold and P is the price of each album. Furthermore, per unit cost of producing each album is given by Rs. 8. A profit maximizing recording company has offered the following contract options to the singer (i) 20% of the revenue from the sales of the album (ii) Rs. 2 per album sold (iii) A fixed fee of Rs. 32,000 Which of the following is/are correct? |
|--------------|--|
| (A) | Contract (i) yields the highest payment to the singer |
| (B) | Contract (ii) yields the highest payment to the singer |
| (C) | Contract (iii) yields the highest payment to the singer |
| (D) | Contract (ii) and (iii) yield the same payment to the singer |

| Question – 6 | There are two firms in an oligopolistic industry competing in prices and selling a homogenous product. Total cost of production for firm i is $Ci(qi)=10qi, i=1,2$ |
|--------------|--|
| | Where qi is the quantity produced by firm i . Suppose firm i sets price |
| | pi and firm j sets price pj . The market demand faced by firm i is given |
| | by |
| | $100 - p_i; if p_i < p_j$ |
| | $q_i(n, n_i) = 0; if p_i > p_i$ |
| | $q_i(p_i, p_j) = \frac{0; if p_i > p_i}{\frac{100 - p_i}{2}; if p_i = p_j}$ |
| | 2 |
| | For all $i,j=1,2$ and $i\neq j$. Price can only take integer values in this market. |
| | Nash equilibrium/equilibria is/are given by |
| (A) | <i>p</i> 1 = 10, <i>p</i> 2 = 10 |
| (B) | p1 = 12, p2 = 12 |
| (C) | <i>p</i> 1 = 40, <i>p</i> 2 = 40 |
| (D) | p1 = 11, p2 = 11 |

| Question – 7 | A consumer always spends 50% of his monthly income on food. The introduction of value added tax on food items has led to a 20% increase in food prices while his monthly income remained unchanged. The consumer's price elasticity of demand for food is (in integer) |
|--------------|--|
| Answer | -1 |



| Question – 8 | The utility function of a consumer from consumption of x1 and x2 is given by u $(x1, x2) = x1 + 2\sqrt{x2}$. At the current prices and income, the consumer's optimal consumption bundle is given by $(x1 = 10, x2 = 10)$. The consumer's optimal choice of x2, if his income increases by 50% but prices remain unchanged, is (In integer) |
|--------------|---|
| Answer | 10 |

| Question – 9 | Amar has an endowment of food FA = 2 and water FB = 5. Barun has an endowment of food FB = 8 and water WB = 5. Amar'; s utility function is given by $U_A(F_A, w_A) = f_A^2 W_A;$ |
|--------------|--|
| | where f_A and f_B are his consumption of food and water, respectively. Barun's utility function is given by |
| | $U_B(f_B,W_B)=(min\{f_B,W_B\};$ where f_B and WB are his consumption of food and water, respectively. They exchange food and water at prices pf and pw, respectively, to maximize their utilities. In the competitive equilibrium, pf/pw equals(in integer). |
| Answer | 2 |

| Question – 10 | The supply and demand curves of a vaccine are $q = 14 + 5p$ and $q = 329$ |
|---------------|---|
| | -5p, respectively, where p is price per unit of vaccine and q is quantity |
| | of vaccine. The government decides that the maximum price of the |
| | vaccine would be Rs. 25 per unit. To avoid any shortage in supply at |
| | the ceiling price, the government also decides to subsidize the sellers |
| | so that the market clears. Subsidy is given on per unit basis. The total |
| | expenditure of the government in providing the subsidy is Rs. |
| | (in integer) |
| | |
| Answer | 2652 |

| Question – 11 | A firm has two manufacturing plants, 1 and 2 to produce the same product. The total costs of production are given by $TC1 = 500 + 30Q1$ and $TC2 = 1500 + 20Q2$ in plants 1 and 2, respectively, where $Q1$ and $Q2$ are the respective quantities. The demand for the product is given by $Qd = 150 - P/3$, where P is the price per unit. The value of $Q1$ that maximizes the profit of the firm is (in integer). |
|---------------|---|
| Answer | 70 |



MACROECONOMICS

| Question - 1 | When the expected future marginal product of capital increases, then the IS |
|--------------|---|
| | curve |
| (A) | shifts up and to the right |
| (B) | shifts down and to the left |
| (C) | becomes steeper |
| (D) | becomes flatter |

| Question - 2 | An unanticipated inflation would cause |
|--------------|--|
| (A) | redistribution of wealth from lenders to borrowers |
| (B) | redistribution of wealth from borrowers to lenders |
| (C) | gains for both borrowers and lenders |
| (D) | losses for both borrowers and lenders |

| Question - 3 | According to John Maynard Keynes, which one of the following statements is correct for a closed economy operating at less than the full employment level of output? |
|--------------|---|
| (A) | Savings determines investment |
| (B) | Investment determines savings |
| (C) | Changes in the money supply have no impact on output |
| (D) | Speculative demand for money is determined by the output level |

| Question - 4 | 4 X pays Rs. 5 lakhs to a person to transport fake currency worth Rs. 50 lakh | |
|--------------|---|--|
| | The Police department pays Rs. 5 lakhs to a detective to investigate the crime. | |
| | The detective's income is taxed at 10 %. If the above transactions happen in | |
| | the same year and within the boundary of a country, the contribution of these | |
| | transactions to GDP (in Rs. lakhs) is | |
| (A) | 5.5 | |
| (B) | 5 | |
| (C) | 10 | |
| (D) | 4.5 | |

| Question - 5 | In the context of Expectations Augmented Phillips Curve (EAPC), which of the |
|--------------|--|
| | following statements is/are correct? |
| (A) | An increase in the natural rate of unemployment shifts EAPC to the left. |
| (B) | An increase in the expected inflation shifts EAPC up and to the right. |
| (C) | If actual unemployment rate equals the natural rate of unemployment, the |
| | unanticipated inflation equals zero. |
| (D) | As long as actual unemployment rate exceeds the natural rate of |
| | unemployment, the actual inflation rate exceeds the expected inflation. |



| Question - 6 | Consider an economy where the full employment output is 1 trillion Rupees and the natural rate of unemployment is 6 %. If actual unemployment rate is 8 %, then according to Okun's law, the absolute gap between the full employment output and actual output (in billion Rupees) will be (in integer) |
|--------------|---|
| Answer | -40 |

| Question - 7 | The following data relate to a country's GDP in 2012-13(in local currency). |
|--|---|
| Item | Value |
| GDP | 59,816 |
| Private sector investment | 17,811 |
| Exports | 14,498 |
| Investment expenditure by the government | 5,087 |
| Net Factor Income from Abroad | 125 |
| Consumption expenditure by the government | 6,620 |
| Private sector consumption | 35,695 |
| The value of this country's imports (in local currency) in 2012-13 is (in integer) | |
| Answer | 19895 |

| Question - 8 | Individuals in a country start earning and consuming at the age of 18 years, |
|--------------|---|
| | retire at the age of 60 years and die at the age of 90 years, without leaving any |
| | debt and bequests. The income of an individual at age t (in years) is given by |
| | the expression 100t - t2. The price level is constant, and the interest rate is |
| | zero. According to the life cycle theory of consumption, the average annual |
| | consumption of an individual is (in integer) |
| | |
| Answer | 1302 |

| Question - 9 | The IS-LM model for a closed economy is given below, where Y is the output, C is the consumption, I is the investment, T is the income tax, Md is the money demand, P is the price level, r is the real interest rate, πe is expected inflation rate and G is the government expenditure. $C = 200 + 0.8$ ($Y - T$) – $500 rI = 200 - 500 rT = 20 + 0.25 YMdP = 0.5 Y - 250 (r + \pi e)$ If $G = 196$, $\pi e = 0.1$, the nominal money supply equals 9890 and the full employment output equals 1000, the full employment equilibrium price level in the economy is (in integer) |
|--------------|---|
| Answer | 23 |

| Question - 10 | The aggregate production function for a country is, $Y = 10N - 0.005N2$, where N is the quantity of labor input. The aggregate labor supply function is $N = 55 + 5w$, where w is the real wage rate. Assuming perfectly competitive labor and product markets, the equilibrium real wage is (in integer) |
|---------------|---|
| Answer | 9 |

STATISTICS

| Question - 1 | Let $\{x1, x2, \dots, xn\}$ be the realization of a randomly drawn sample of size n with sample mean \overline{x} , and k be a real number other than \overline{x} . Let S1 and S2 be the sums of squared deviations defined as $S_1 = \sum_{i=1}^n (x_i - \overline{x})^2 \text{ and } S_2 = \sum_{i=1}^n (x_i - k)^2$ |
|--------------|---|
| (A) | S1 > S2 |
| (B) | S1 > S2 only if x̄< k |
| (C) | S1 < S2 |
| (D) | S1 > S2 only if \overline{x} > k |

| Question - 2 | Let $\hat{\alpha}$ 1 and $\hat{\alpha}$ 2 be two independent unbiased estimators of the parameter |
|--------------|---|
| | α with standard errors σ 1 and σ 2, respectively, with σ 1 \neq σ 2. The linear |
| | combination of $\hat{\alpha}$ 1 and $\hat{\alpha}$ 2 that yields an unbiased estimator of α with |
| | th <mark>e minimum</mark> variance is |
| (A) | $\left(\frac{\sigma_1}{\sigma_1 + \sigma_2}\right) \hat{\alpha}_1 + \left(\frac{\sigma_2}{\sigma_1 + \sigma_2}\right) \hat{\alpha}_2$ |
| (B) | $\left(\frac{\sigma_2}{\sigma_1 + \sigma_2}\right) \hat{\alpha}_1 + \left(\frac{\sigma_1}{\sigma_1 + \sigma_2}\right) \hat{\alpha}_2$ |
| (C) | $\left(\frac{\sigma_1^2}{\sigma_1^2 + \sigma_2^2}\right)\hat{\alpha}_1 + \left(\frac{\sigma_2^2}{\sigma_1^2 + \sigma_2^2}\right)\hat{\alpha}_2$ |
| (D) | $\left(\frac{\sigma_{2}^{2}}{\sigma_{1}^{2} + \sigma_{2}^{2}}\right)\hat{\alpha}_{1} + \left(\frac{\sigma_{1}^{2}}{\sigma_{1}^{2} + \sigma_{2}^{2}}\right)\hat{\alpha}_{2}$ |

| Question - 3 | Let X be a uniformly distributed random variable in $[0, b]$. If the critical region for testing the null hypothesis $H0$: $b = 2$ against the alternative hypothesis HA : $b \neq 2$ is $\{x \leq 0.1 \text{ or } x \geq 1.9\}$, where x is the value of a single draw of the random variable X , then the probability of Type-I error is |
|--------------|---|
| (A) | 0.2 |
| (B) | 0.1 |
| (C) | 0.05 |
| (D) | 0.01 |



| Question - 4 | Let X be a uniformly distributed random variable in $[a, b]$. The values of an independently drawn sample of size five from X are given by $\{1.3, 0.8, 9.5, 20.2, 8.2\}$. Let \hat{a} and \hat{b} denote the Maximum Likelihood Estimates for the parameters a and b , respectively. Then, |
|--------------|---|
| (A) | $\hat{a} = 0.8; \hat{b} = 20.2$ |
| (B) | $\hat{a} = 1.3; \hat{b} = 9.5$ |
| (C) | $\hat{a} = 1.3; \hat{b} = 8.2$ |
| (D) | $\hat{a} = 0; \hat{b} = 21$ |

| Question - 5 | Let X and Y be two independent random variables with the cumulative distribution functions FX (x) = 1 – (3/4) x , x = 1,2,3, GY (y) = 1 – (2 / 3) y , y = 1,2,3,, respectively. Let Z = min { X , Y }. Then, the probability P (Z \geq 6) is |
|--------------|---|
| (A) | 1/64 |
| (B) | 1/32 |
| (C) | 63/ 64 |
| (D) | 31/32 |

| Question - 6 | Let X and Y be two random variables with the joint probability density |
|--------------|---|
| | function $fX, Y(x, y) = \begin{cases} 6xy \\ 0 \end{cases}$ if $0 < y \le \sqrt{x} \le 1$ otherwise. Then, the |
| | function $fX, Y(x, y) = {6xy \atop 0} if \ 0 < y \le \sqrt{x} \le 1$ otherwise. Then, the conditional Probability $P\left(Y \ge \frac{1}{3} \mid X = \frac{2}{3}\right)$ is |
| (A) | 1/2 |
| (B) | 5/9 |
| (C) | 5/6 |
| (D) | 3/4 |

| Question - 7 | Let $X_1 \sim N(\mu, \sigma_1^2)$ and $X_2 \sim N(\mu_2, \sigma_2^2)$ be two normally distributed random variables, where $\mu_1 = 2, \mu_2 = 3$ and $\sigma_1^2 = 4, \sigma_2^2 = 9$. The correlation coefficient between them is 0.5. The variance of the random variable $(X_1 + X_2)$ is (in integer) |
|--------------|--|
| Answer | 19 |



MATHEMATICAL ECONOMICS

| Question – 1 | You have a budget of Rs. 4000 and would like to purchase LPG cylinders from a local seller who charges Rs. 50 per cylinder. The seller has a subsidy scheme by which if you return the empty cylinder purchased from him, you will get a refund of Rs. 20 per cylinder. You cannot borrow money from anyone. The maximum number of cylinders you can purchase is |
|--------------|--|
| (A) | 131 |
| (B) | 132 |
| (C) | 133 |
| (D) | 134 |

| Question – 2 | The differential equation $(3x^2y + y^3)dx + (x^3 + 3xy^2)dy = 0$ is |
|--------------|--|
| (A) | homogenous and exact |
| (B) | neither separable nor exact |
| (C) | exact and not homogenous |
| (D) | homogenous and not exact |

| Question – 3 | Which one of the following statements is correct? |
|--------------|---|
| (A) | If 〈 an〉 is a bounded sequence, then it is convergent |
| (B) | If (an) is a convergent sequence, then it is monotonic |
| (C) | If (an) is a convergent sequence and converges to zero, then the series |
| | $\sum_{n=1}^{\infty} a_n$ is convergent. |
| (D) | If a series $\sum_{n=1}^{\infty} a_n i$ is convergent, then sequence $\langle an \rangle$ is convergent and |
| | converges to zero |

| Question – 4 | Let . and (.,.) denote the standard norm and inner product in Rn, |
|--------------|--|
| | respectively. If $u, v \in \mathbb{R}^3$ such that $ u = v = 2$ and the angle between |
| | u and v is $\pi/3$ then |
| (A) | $ u-v = 2\sqrt{2}$ |
| (B) | $\langle u, v \rangle = 2\sqrt{3}$ |
| (C) | $ u-v = 2\sqrt{3}$ |
| (D) | $ u+v = 2\sqrt{3}$ |

| Question – 5 | Let W be a subspace of the vector space R 3 over the field R spanned by $(0-1)$ 2) and $(2-1)$ 0. Which one of the following vectors lies in W ? |
|--------------|--|
| (A) | (1 1 1) |
| (B) | (-111) |
| (C) | (1 –1 1) |
| (D) | (1 1 -1) |

| Question – 6 | Let $f, g: \mathbb{R} \to \mathbb{R}$ be defined by $f(x) = xe - x$ and $g(x) = x x $. Then, on \mathbb{R} , |
|--------------|---|
| (A) | both f and g are convex |
| (B) | f is convex and g is not convex |
| (C) | f is not quasiconvex and g is quasiconvex |
| (D) | neither f nor g is quasiconvex |



| Question – 7 | Let ($x1*=1$, $x2*=0$, $x3*=2$) be an optimal solution of the linear programming problem minimize $x1+5x2+2x3$ subject to $x1-x2 \le 1$ $x1+x2+x3 \ge 3$ $x1$, $x2$, $x3 \ge 0$. If ($\lambda 1*$, $\lambda 2*$) is an optimal solution of its dual, then |
|--------------|---|
| (A) | $2\lambda 1 * = 3\lambda 2 *$ |
| (B) | $2\lambda 1 * = \lambda 2 *$ |
| (C) | $\lambda 1 *= 2\lambda 2 *$ |
| (D) | $\lambda 1 * = \lambda 2$ |

| Question – 8 | For any two sets $S1$, $S2 \subseteq \mathbb{R}$, define the set $S1 - S2 = \{x \in S1, x \notin S2\}$. Let $P = \{x \in \mathbb{R}: x = 2 = 2 = 3 \le 0\}$ and $Q = \{x \in \mathbb{R}: \log 5 \ (1 + x = 2) \le 1\}$. Then, |
|--------------|---|
| (A) | P - Q = [2, 3] |
| (B) | Q - P = (1, 2] |
| (C) | P - Q = [-3, -2) |
| (D) | Q - P = [-2, -1) |

| Question – 9 | Let f be a function defined on $(-\pi, \pi)$ as $(2, 2)$ | |
|--------------|--|--|
| | $f(x) = \frac{\cos(\pi + x)}{\sin(\pi - 2 x)}$ | |
| | Then, | |
| (A) | f is not continuous at $x=0$ | |
| (B) | f is continuous but not differentiable at $x=0$ | |
| (C) | $\lim x \to 0 + \frac{f(x) - f(0)}{x} = -1$ | |
| (D) | f'(0) = -1 | |

| Question – 10 | Let $x, y \in R$ and the matrix $ \begin{bmatrix} x+y & x-y \\ x-y & x+y \end{bmatrix} $ Also, let adj(M)be the adjoint and det(M) be the determinant of the matrix M. If $M = \begin{bmatrix} 3 \\ 1 \end{bmatrix} = \begin{bmatrix} -1 \\ 3 \end{bmatrix}$, then |
|---------------|---|
| (A) | x + y = -3/4 |
| (B) | $x - y = \frac{3}{4}$ |
| (C) | det(M) = -1 |
| (D) | det(adj(M)) = 1 |

| Question – 11 | Let $k \in R$. Which of the following statements is/are correct for the roots of the quadratic equation $x^2 + 2(k + 1)x + 9k - 5 = 0$ |
|---------------|---|
| (A) | If $k \le 1$, then the roots are real and positive |
| (B) | If $2 \le k \le 4$, then the roots are complex |
| (C) | If 4 <k <6,="" and="" are="" in="" opposite="" real="" roots="" sign<="" th="" the="" then=""></k> |
| (D) | If k ≥ 6, then the roots are real and negative |



| Question – 12 | The amount of money a gambler can win in a casino is determined by three independent rolls of a six-faced fair dice. The gambler wins Rs. 800 if he gets three sixes, Rs. 400 if he gets two sixes, and Rs. 100 in the event of getting only one six. The gambler does not win or lose any money in all other possible outcomes. The probability that a gambler will win at least Rs. 100 is (round off to 2 decimal places) |
|---------------|--|
| Answer | 0.14 |

| Question – 13 | The value of integral |
|---------------|---|
| | $\int_0^9 \frac{x-1}{1+\sqrt{x}} dx$ Is (in integer). |
| | is (in integer). |
| Answer | 9 |

| Question – 14 | Consider the first equation | |
|---------------|---|--|
| | $X_n = \frac{n+1}{n} X_{n-1}$, $n = 1, 2, 3$ If $x_0 = 2$, then $x_{100} - x_{50}$ equals (in integer). | |
| Answer | 100 | |

| Question – 15 | Let $y(x) > 0$ be a solution of the differential equation |
|---------------|--|
| | $\frac{dy}{dx} + y = y^2$ If $y(\ln 2) = \frac{1}{3}$, where $\ln ln$ denotes the natural logarithm function, then $y(\ln 3)$ equals(round off to 2 decimal places) |
| Answer | 0.25 |

| Question – 16 | The optimal | The optimal value of the constrained optimization problem | |
|---------------|-------------|---|--|
| | minimize | 2xy | |
| | subject to | 9x2+4y2 ≤ 36 is . (in integer) | |
| Answer | -6 | | |

| Question – 17 | For some $\beta > 0$, let the variables x1 and x3 be the optimal basic feasible solution of the linear programming problem maximize x1+2x2+3x3 subject to 2x1-x2+x3=9 x1+2x2- β x3=1 x1, x2, x3 \geq 0. If the optimal value is 7, then β equals (in integer) |
|---------------|--|
| Answer | 3 |

IIT JAM 2021

| Question – 18 | Let $X1$, $X2$, $X3$, $X4$ be independent random variables following the standard normal distribution. Let Y be defined as, $Y = (X1 + X2)2 + (X3 + X4)2$. Then the variance of Y equals (in integer) | |
|---------------|---|--|
| Answer | 16 | |





INDIAN ECONOMY

| Question -1 | Which one of the following is NOT a feature of the New Industrial Policy 1991? |
|-------------|--|
| (A) | Abolition of industrial licensing |
| (B) | Privatization of public industries |
| (C) | Removal of restrictions on foreign trade |
| (D) | Restrictions on foreign technology agreements |

| Question -2 | Which one of the following is a possible reason for underestimation of the official poverty ratio in India? |
|-------------|---|
| (A) | Changes in the World Bank's definition of poverty |
| (B) | Price indices used in the official poverty estimation may not be adequately |
| | capturing the actual increase in the cost of living over the years |
| (C) | Existence of identical poverty lines for all the states and union territories |
| (D) | Existence of identical poverty lines for rural and urban areas |

| Question -3 | Which one of the following committees is NOT associated with financial sector |
|-------------|---|
| | reforms in India? |
| (A) | Raghuram Rajan Committee (2013) |
| (B) | Narasimham Committee (1991) |
| (C) | Tarapore Committee (1997) |
| (D) | Ur <mark>jit Patel C</mark> ommittee (2013) |

| Question -4 | Whi <mark>ch one of th</mark> e following statements is N <mark>OT correct r</mark> egarding changes in the |
|-------------|---|
| | occupational structure of the workforce between 1951 and 1991 in India? |
| (A) | Proportion of cultivators has increased |
| (B) | Proportion of agriculture labor has increased |
| (C) | Proportion of those employed in the tertiary sector has increased |
| (D) | Proportion of those employed in the primary sector has decreased |

| Question -5 | Which one of the following statements is NOT correct in the context of economic planning in India? |
|-------------|---|
| (A) | In the investment strategy for the Second Five Year Plan, a high priority was accorded to the development of heavy capital goods industries over light industries |
| (B) | The sectoral allocation to industry was the highest in the First Five Year Plan |
| (C) | Plan Holiday for three years was declared after the Third Five Year Plan |
| (D) | In each of the first ten Five Year Plan periods, the average incremental capital output ratio (ICOR) did not exceed 10 % |



| Question -6 | The workforce participation rate of a country is 60%. This country has a population of 100 million of which 6 million are unemployed. The unemployment rate for this country is |
|-------------|---|
| (A) | 2/11 |
| (B) | 1/11 |
| (C) | 3/50 |
| (D) | 1/10 |

| Question -7 | Which of the following statements is/are correct about the Indian economy |
|-------------|--|
| | during the colonial period? |
| (A) | The average annual growth of per capita income was lower during the period |
| | 1920-25 to 1947 than the period 1865 to 1920-25. |
| (B) | The colonial administration generated a large amount of revenue from peasants |
| | by raising the land revenue. |
| (C) | The British brought capital from England for the construction of Railways and |
| | passed on the burden of interest on it to the Indian taxpayers. |
| (D) | Dada <mark>bhai Naoro</mark> ji's estimates of the drain of wealth from India to England |
| | included, among other things, the home charges. |

| Question -8 | If the number of employed workers in a country increases while its population |
|-------------|---|
| | does not change, then the unemployment rate in the country |
| (A) | will always increase |
| (B) | will always decrease |
| (C) | may increase |
| (D) | may decrease |



GROWTH & DEVELOPMENT

| Question -1 | Consider a Solow growth model without technological progress. The |
|-------------|---|
| | production function is $Yt = Kt\alpha Nt \ 1-\alpha$ where Yt , Kt and Nt are the aggregate |
| | output, capital, and population at time t , respectively. The population grows at |
| | a constant rate of $gN>0$, savings rate is constant at $s\in(0,1)$ and capital |
| | depreciates at a constant rate of $\delta \ge 0$. Denote per capita capital as $kt = Kt/Nt$ |
| | and define the steady state as a situation where $kt+1 = kt = k*$ where $k*$ is a |
| | positive constant. Suppose the population growth rate exogenously increases |
| | to gN' . At the new steady state, the aggregate output will grow at a rate |
| (A) | gN |
| (B) | gN' |
| (C) | $(1-\alpha) gN$ |
| (D) | $(1-\alpha)g'N$ |

| Question -2 | The values of normalized indices for a country are as follows. |
|---------------------------------------|---|
| Dimension | Value of normalized index |
| Standard of living | 0.4 |
| Education | 0.2 |
| Health | 0.8 |
| Following the curr <mark>ent l</mark> | JNDP methodology, the value of Hum <mark>an Deve</mark> lopment Index (HDI) |
| for the country is | (round off to 1 decimal place) |
| | |
| Answer | 0.4 |



PUBLIC FINANCE

| Question -1 | An upstream paper mill dumps effluents in a river. The total benefit and total cost to the mill are $TB=120Q-Q$ 2 and $TC=20Q$, respectively, where Q is the amount of output it produces. The environmental cost due to the negative externality is $EC=Q2$. The government wants to impose a production tax of t per unit of output on the mill. The value of t to achieve the socially optimal level of production is |
|-------------|--|
| (A) | 6 |
| (B) | 25 |
| (C) | 50 |
| (D) | 70 |

| Question -2 | There are two sellers, H and L, in a second-hand goods market where product quality varies. The sellers know the quality of their own product, but the buyers cannot distinguish the product quality without further information. Sellers' valuation of their own product is based on the quality. H is willing to sell his product with quality QH at a price PH per unit and L is willing to sell the product with quality QL at a price PL per unit such that QH>QL and PH>PL. This market will suffer from |
|-------------|--|
| (A) | adverse selection |
| (B) | moral hazard |
| (C) | market failure |
| (D) | excess supply |



INTERNATIONAL ECONOMICS

| Question -1 | The net inflow of foreign currency into a country on current account and capital account combined is negative in a particular year. The country could be following a fixed or a flexible exchange rate regime. Which of the following scenarios is/are possible for the country's economy in that year? |
|-------------|---|
| (A) | The country's foreign exchange reserves may increase |
| (B) | The country's exchange rate may appreciate |
| (C) | The country's foreign exchange reserves may decrease |
| (D) | The country's exchange rate may depreciate |

| Question -2 | In a small open economy, the desired domestic savings (S^d) and the desired domestic investment (I^d) are as follows, where r^w is the world real interest rate. |
|-------------|--|
| | S^d =10+100 r^w |
| | I^d =15–100 r^w |
| | If r^w =3%, the current account balance in the equilibrium would be (in integer) |
| Answer | 1 |



COURSE AVAILABLE AT ECOHOLICS



Economic
Optional UPSC



Under Graduate Economics



Indian Economic
Service



Post Graduate Economics



NTA/UGC Net Economic + Paper 1



PG Entrance for DSE, JNU etc



RBI Grade-B DEPR



Gate Economics



RBI Grade - B GENERAL



NABARD



PhD & Research



SEBI Research Stream



School Level (11th & 12th Economic)



IIT / JAM



Econometrics



State Specific Exam for Economics



Mathematical Econometrics



Economics for MBA











