

Which of the following is an example of a pure public good?

- A) A restaurant
 - B) A public hospital
 - C) Indian Railways
 - D) Indian Army
-

A market which was controlled by a monopoly is broken up and is now a competitive market. Which of the following, *ceteris paribus*, is true?

- A) The price is greater than before
 - B) Marginal cost is now upward sloping
 - C) Output is great than before
 - D) Price is greater than marginal cost
-

Which of these allocation mechanisms ensure Pareto efficiency?

- A) Rationing
 - B) First come - first served
 - C) Price discrimination
 - D) Lucky draw
-

Which of the following is most likely to generate a negative externality?

- A) Air pollution in Delhi
 - B) Planting flowers in your garden
 - C) Converting a private park into a public park
 - D) Teaching a class on secularism
-

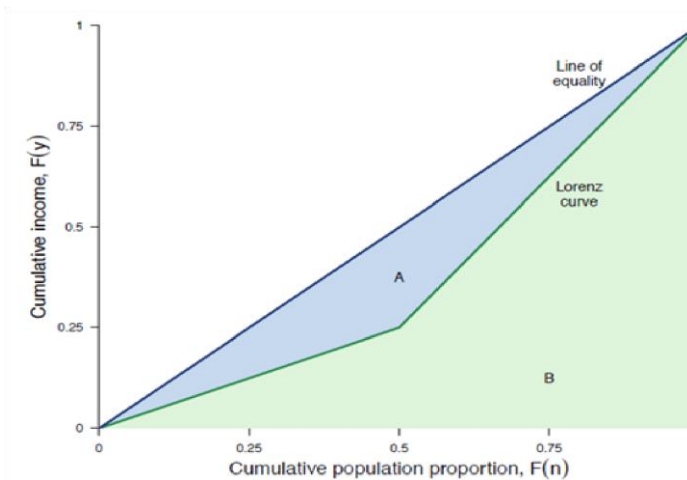
An L shaped indifference curve between two goods indicates that:

- A) One of the commodities is an economic bad
 - B) The two goods are perfect complements
 - C) The two goods are substitutes
 - D) The consumer is irrational
-

Following is the utility function $u(x_A, x_B)$ representing the preferences of an individual over two goods - A and B. Find the utility maximising level of consumption of good A if the price of good A is 2, the price of good B is 1 and the total budget is 20. $u(x_A, x_B) = x_A^2 - 10x_A + x_B$

- A) 3
 - B) 4
 - C) 6
 - D) 10
-

For a society with the following Lorenz curve what would be the Gini coefficient if A is the blue shaded area, B is the green shaded area, and $A=B/3$?



- A) 0.25
- B) 0.5
- C) 0.67
- D) 1.25

If the government increases GST on sports equipment and the prices of sports equipment **do not** change as a result, then

- A) The incidence of the tax increase has fallen entirely on the producer
- B) The incidence of the tax increase has fallen entirely on the consumer
- C) The incidence of the tax increase is shared between producer and consumer
- D) There is no increase in actual tax paid as there is no price increase

An expected utility maximiser has a von Neumann - Morgenstern utility function $u(x)=\sqrt{x}$, where x is the amount of money. The person is presented with a lottery where she may win Rs 10,000 with 5% probability. What is the maximum price the person will be willing to pay for the lottery?

- A) Rs. 500
 - B) Rs. 250
 - C) Rs. 50
 - D) Rs. 25
-

Select the best answer

		B	
		L	R
A	U	3,2	3,3
	D	6,2	3,5

- A) U,L is Nash equilibrium and is Pareto efficient
 B) U,L is Nash equilibrium but is not Pareto efficient
 C) D,R is Nash equilibrium and is Pareto efficient
 D) D,R is Nash equilibrium and is not Pareto efficient
-

Suppose that the inflation in your economy is 3% and you have received an income increase of 5%. How much has your real income increased by?

- A) 8%
 B) 5%
 C) 2%
 D) Can't say
-

How is crowding out usually understood?

- A) A lower interest rate leads to higher private investment
 B) A higher government expenditure leads to higher private investment
 C) A higher government expenditure leads to lower private investment
 D) A higher interest rate reads to lower private investment
-

Suppose a 4-sector economy with $C=C_0+c(Y-tY)$, $I=I_0$,
 $G=G_0$, $X=X_0$, and $M=M_0+mY$

Where C, I, G, X, and M refer to consumption, investment, government expenditure, exports, and imports respectively;

C_0 , I_0 , X_0 , and M_0 refer to exogenous consumption, investment, government expenditure, exports, and imports respectively;

c and m are the marginal propensities to consume and import, and t refers to the tax rate.

What is the multiplier for this economy?

- A) $1/(1-c-t-m)$
 B) $1/(1-c+ct+m)$
 C) $1/(1-c-ct-m)$
 D) $1/(1-c-ct+m)$
-

Compute the GDP of an economy where the

GNP = 34,000 (Rs. crores) and the NFIA (net factor income from abroad) = -3,000 (Rs. crores).

- A) 31,000 (Rs. crores)
 - B) 34,000 (Rs. crores)
 - C) Not enough information is given to be able to calculate answer
 - D) 37,000 (Rs. crores)
-

What is the value of the multiplier in an economy with an MPC of 0.25?

- A) 4
 - B) 1.33
 - C) 0.75
 - D) 1
-

Here is an interesting picture of Japan and its (inverted) Phillips curve (see below). In general, a Phillips curve shows that:

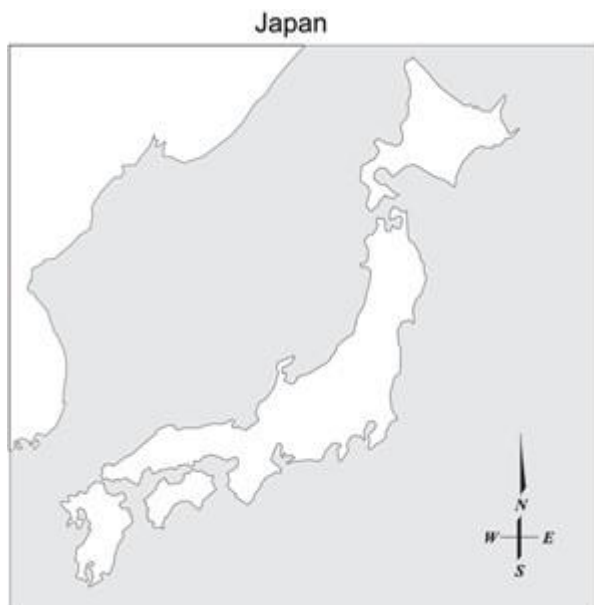
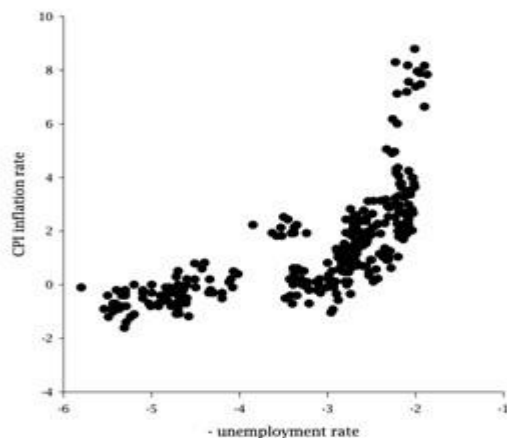


Figure 2: Japan's Inflation Rate and (Minus) Unemployment Rate
January 1980 to August 2005



- A) There is a permanent trade-off between inflation and unemployment
 - B) There is a temporary trade-off between inflation and unemployment
 - C) A country's Phillips curve looks like a map of the country
 - D) There is no case for macroeconomic policy
-

India is experiencing high inflation. Which of the following is not likely to be a cause?

- A) Fiscal deficits are high
 - B) There is labor market slack
 - C) Interest rates are low
 - D) Oil prices are high
-

"We investigate whether U.S. government spending multipliers are higher during periods of economic slack or when interest rates are near the zero lower bound. We estimate multipliers that are below unity irrespective of the amount of slack in the economy. These results are robust to two leading identification schemes, two different estimation methodologies, and many alternative specifications. In contrast, the results are more mixed for the zero lower bound state, with a few specifications implying multipliers as high as 1.5."

The above is an abstract from Valerie Ramey and Sarah Rubairy: Government Spending Multipliers in Good Times and in Bad: Evidence from US Historical Data, *Journal of Political Economy*, 2018, vol. 126, issue 2, 850 - 901

Which of the following statements is true from the above?

- A) There is no evidence of crowding out of private investment
 - B) When interest rates are low, fiscal policy is most effective
 - C) When there is labor market slack, multipliers are large
 - D) Monetary policy is more effective than fiscal policy
-

If the RBI increases the repo rate,
it is usually doing so to:

- A) Reduce inflation
 - B) Increase output
 - C) Increase inflation
 - D) Decrease output
-

Economists need to understand caste, religion and gender in India when studying educational outcomes because

- A) There is a caste, religion and gender penalty in educational outcomes.
 - B) Educational outcomes are determined only on the basis of merit
 - C) Educational outcomes are determined by teachers
 - D) Individual characteristics matter more than group based characteristics
-

An economic system is capitalist if

- A) Ownership of land and wealth are sufficiently concentrated
 - B) Advanced technology is extensively used in production
 - C) Private owners of capital goods hire wage labour to produce for profit
 - D) The bulk of production is non-agricultural
-

In India

- A) The smallest proportion of workers are in the agricultural sector but this sector has the highest contribution to GDP
 - B) The highest proportion of workers are in the agricultural sector but this sector has the lowest contribution to GDP
 - C) The highest proportion of workers are in the agricultural sector and this sector has the highest contribution to GDP
 - D) The smallest proportion of workers are in the agricultural sector and this sector has the lowest contribution to GDP
-

Which of the following statements is true?

- A) Inequality of asset ownership is greater than inequality of income which is greater than inequality of consumption
 - B) Inequality of consumption is greater than inequality of income which is greater than inequality of asset ownership
 - C) Inequality of asset ownership is greater than inequality of consumption which is greater than inequality of income
 - D) Inequality of consumption is greater than inequality of asset ownership which is greater than inequality of income
-

Economic growth in India over the last few decades can be described as

- A) High growth has been associated with high levels of employment growth
 - B) Low growth has been associated with low levels of employment growth
 - C) High growth has been associated with low levels of employment growth
 - D) Low growth has been associated with high levels of employment growth
-

The GDP per capita in India in 2017 is roughly

- A) \$2000
 - B) \$1000
 - C) \$200
 - D) \$20000
-

Which of the following is true about India's labor force?

- A) India's labor force is 1.3 billion
- B) Indian women and men participate equally in the labor force
- C) India's informal labor force is larger than its formal labor force

D) India's labor force in the metros is larger than the labor force outside the metros

In 1991, the Indian government began the program of liberalization. Which of these is an example of a policy of liberalization?

- A) De-licensing of industries
 - B) NREGA
 - C) Minimum Support Price
 - D) Jan Dhan Yojana
-

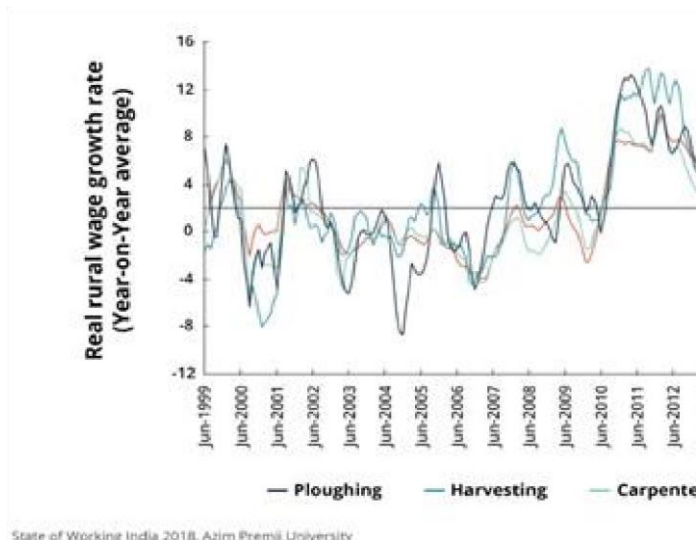
In 1965-66 the Indian economy experienced the largest fall in growth rate that it has experienced after independence. The primary reason for this fall in growth rates was

- A) Wars with China and Pakistan
 - B) Withdrawal of PL 480 aid by USA
 - C) Failure of monsoons
 - D) Crash in prices of agricultural goods in the world economy
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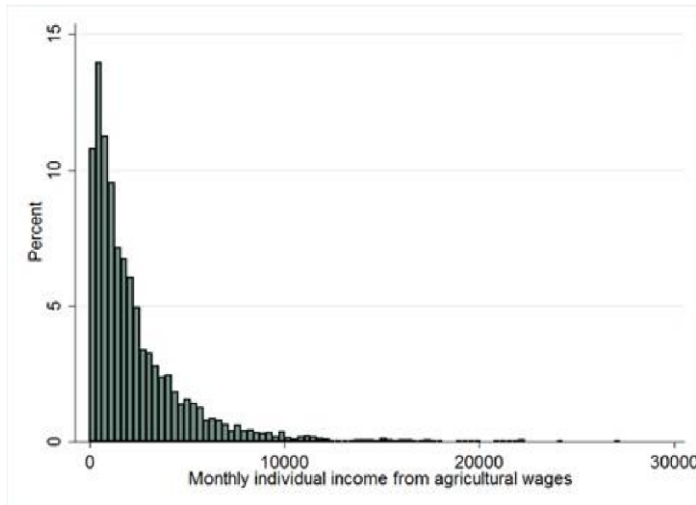
Figure (X) shows the growth rate for real wages for men in selected occupations in rural India. Which of the following statement is correct according to Figure X?



- A) Real wages in 2013 were lower than in 2011
 - B) Real wages in 2013 were higher than in 2011
 - C) There is not enough information to compare wages
 - D) Only the real wage for ploughing was lower in 2013 than in 2011
-

Directions for below Questions:

Figure (Y) is a histogram of the monthly income from agricultural wages.



Source: Indian Human Development Survey 2011-12.

Choose the correct statement based on Figure Y.

- A) The mean of the distribution is greater than the median
- B) The median of the distribution is greater than the mean
- C) We cannot compare the mean and the median of the distribution
- D) The mean for this distribution does not exist

Imagine that every person represented in Figure (Y) received an additional agricultural income of Rs 1000 per month.

- A) The mean, median and variance of the distribution would increase
- B) The mean and the median would increase, but the variance would remain the same
- C) The mean would increase but the median and the variance would remain the same
- D) All three - mean, median and variance would remain unchanged

Suppose Y_i is a random variable. Then $E(Y_i)$ is

- A) A random variable with finite non-zero variance
 - B) A random variable with infinite variance
 - C) A constant with zero variance
 - D) A constant with finite non-zero variance
-

Directions for below Questions:

Table (Z) below shows the results of regressions on a country-level dataset. The variable *Ruggedness* is an index of the ruggedness of the terrain of a country. I^{Africa} is a dummy variable that is 1 if the country is in Africa.

	Dependent Variable: Log Real GDP per Person, 2000					
	(1)	(2)	(3)	(4)	(5)	(6)
Ruggedness	-0.203 (0.093)**	-0.196 (0.094)**	-0.203 (0.094)**	-0.243 (0.092)**	-0.193 (0.081)**	-0.231 (0.077)**
Ruggedness $\times I^{Africa}$	0.393 (0.144)**	0.404 (0.146)**	0.406 (0.138)**	0.414 (0.157)**	0.302 (0.130)**	0.321 (0.127)**
I^{Africa}	-1.948 (0.220)**	-2.014 (0.222)**	-1.707 (0.325)**	-2.066 (0.324)**	-1.615 (0.295)**	-1.562 (0.415)**
Diamonds		0.017 (0.012)				0.028 (0.010)**
Diamonds $\times I^{Africa}$		-0.014 (0.012)				-0.026 (0.011)**
% Fertile soil			0.000 (0.003)			-0.002 (0.003)
% Fertile soil $\times I^{Africa}$			-0.008 (0.006)			-0.009 (0.007)
% Tropical climate				-0.007 (0.002)**		-0.009 (0.002)**
% Tropical climate $\times I^{Africa}$				0.004 (0.004)		0.006 (0.004)
Distance to coast					-0.657 (0.177)**	-1.039 (0.193)**
Distance to coast $\times I^{Africa}$					-0.291 (0.360)	-0.194 (0.386)
Constant	9.223 (0.143)**	9.204 (0.148)**	9.221 (0.200)**	9.514 (0.164)**	9.388 (0.134)**	9.959 (0.195)**
Observations	170	170	170	170	170	170
R ²	0.357	0.367	0.363	0.405	0.421	0.537

Coefficients are reported with robust standard errors in brackets. ***, **, and * indicate significance at the 1%, 5%, and 10% levels.

Source: Nunn, N., & Puga, D. (2012). Ruggedness: The blessing of bad geography in Africa. *Review of Economics and Statistics*, 94(1), 20-36.

From Table (Z), the point estimates in regression 5 indicate that one unit increase in the distance to coast in an African country is associated with an average decrease in log(GDP per person) by

- A) 0.657
- B) 0.291
- C) 0.948
- D) 0.366 36)

From Table (Z), the value of the constant in regression 1 (9.223) indicates

- A) The log(GDP per person) of a non-African country with ruggedness index 0
- B) The average log(GDP per person) of all non-African countries in the sample
- C) The log(GDP per person) of the country with the lowest ruggedness
- D) None of the above

Choose the statement that best summarises the results presented in Table (Z)

- A) Diamonds, soil fertility, tropical climate and distance to coast are not statistically significant determinant of the per capita incomes of African countries, whereas all of these except soil fertility are statistically significant determinants of per capita income for nonAfrican countries
- B) African countries with more rugged terrain tend to have higher per capita incomes than those with less ruggedness, whereas in non-African countries the relationship is the opposite
- C) Ruggedness increases per capita GDP in African countries and decreases it in non-African countries
- D) African countries are poorer on average and hence ruggedness increases per capita income in those countries

Using Table (Z), a researcher proposes to use annual Rainfall in a district as an Instrumental Variable for district level Agricultural Wage. Which of the following statements is correct?

- A) It is a valid instrument because it is correlated with *Agricultural Wage*
- B) It is a valid instrument because it is exogenous
- C) It is a valid instrument because it is exogenous *and* it is correlated with *Agricultural Wage*
- D) The information given is not sufficient to determine whether it is a valid instrument or not

In statistical inference, it is customary to judge any large sample t-statistic larger than 2 (in absolute value) as

- A) Useless evidence as it does not give us information about the likelihood of the null hypothesis being true
- B) Evidence in favour of the null hypothesis used to construct it
- C) Evidence against the null hypothesis used to construct it as the statistic taking such a large value is a likely event
- D) Evidence against the null hypothesis used to construct it as the statistic taking such a large value is an unlikely event

I have panel data on n workers over t periods. I want to run a Mincerian regression to find the effect of education on wages while controlling for individual timeinvariant unobservable characteristics. The following three methods are proposed to run the regression.

- (A) Calculate the mean-deviation of wage and education for each individual by subtracting their individual mean wages and mean educations from their actual wage and education. Then run an OLS with the de-meanned variables.
- (B) For each individual, subtract the wage (and education) of period 1 from that of period 2, period 2 from period 3 and so on. Then run an OLS of the differenced variables.
- (C) Add $n-1$ dummy variables, one for each individual (except one) and then run an OLS

The correct methods is/are-

- A) Only A
- B) A and B but not C
- C) A, B and C
- D) Only C

Consider the following utility functions over two goods x and y .

$$u_1(x,y)=ax+by$$

$$u_2(x,y)=x^a y^b$$

$$u_3(x,y)=a \ln(x) + b \ln(y)$$

Which of the three utility functions have the same marginal rates of substitution for any given values of x and y .

- A) $u_1(x,y)$ and $u_2(x,y)$
 - B) $u_2(x,y)$ and $u_3(x,y)$
 - C) $u_1(x,y)$ and $u_3(x,y)$
 - D) None of the above
-

A social planner has a Utilitarian social welfare function. The planner assumes that all individuals in the society have identical utility functions with diminishing marginal utility of money i.e. the utility function is concave with respect to money. This implies that any transfer of money from the rich to the poor will

- A) Increase social welfare
 - B) Decrease social welfare
 - C) Leave social welfare unchanged
 - D) Not enough information to determine the change in social welfare
-

Suppose a person choosing between fish (x) and money (y) has the following utility function:

$$u(x, y) = y + 10x - x^2$$

Let the price of fish be 2 and the price of money be 1. If the person has a budget of 30, find the amount of fish the person can buy to maximise their utility.

- A) 8
 - B) 5
 - C) 4
 - D) 2
-

A tax increase will not cause any deadweight loss if

- A) The supply is inelastic
- B) The demand is inelastic

- C) The tax is lumpsum
D) All of the above

	H	M	L
h	2,2	3,3	4,4
m	3,5	5,1	2,4
l	4,2	2,2	5,3

The table above shows the payoff matrix between player 1 who chooses between strategies h , m and l , and player 2 who chooses between strategies H , M and L .

The first number in each cell denotes the payoff for player 1 and the second number denotes the payoff for player 2. We consider only pure strategies.

Select the correct statement:

- A) The Nash equilibrium is (l, L) and it is Pareto efficient
B) The Nash equilibrium is (l, L) and it is not Pareto efficient
C) The Nash equilibrium is (h, L) and it is Pareto efficient
D) The Nash equilibrium is (h, L) and it is not Pareto efficient
-

A person was offered a choice between

- (i) A lottery of Rs 100 with 50% probability and Rs 20 with 50% probability,
(ii) A sure amount of Rs 50 If the person chooses (ii), then according to the expected utility theory, the person is

- A) Risk averse
B) Risk neutral
C) Risk loving
D) The person's risk preference cannot be inferred from the given information
-

Consider an indifference curve of a utility function of a consumer over two goods. Which of the following statement is true about the curve?

- A) Utility increases as you move along the indifference curve from left to right
B) The point of intersection of two indifference curve is the optimal point of consumption
C) The slope of the indifference curve is equal to the marginal rate of substitution between the two goods
D) All of the above
-

Which of the following production functions has constant returns to scale?

- A) $f_1(l,k)=l^{0.3}k^{0.7}$
 - B) $f_2(l,k)=l+2k$
 - C) $f_3(l,k)=\min\{3l,k\}$
 - D) All the above
-

Assume that the price-elasticity of demand for adult footwear is relatively high, while the price-elasticity of demand for children's footwear is low. The elasticity of supply for both is the same. Now if GST on both adult's footwear and children's footwear is increased by five percentage points, what would happen to their prices?

- A) Both their prices would increase by the same proportion
 - B) The price of adult footwear would see a higher proportional increase
 - C) The price of children's footwear would see a higher proportional increase
 - D) Prices would remain unchanged
-

Traffic is a big problem in Bangalore. A Pigouvian solution to the problem would be

- A) A government law restricting the number of vehicle
(like Delhi's odd-even rule)
 - B) A congestion charge to be paid by every vehicle in the city
 - C) Increase in the width of roads to accommodate more cars
 - D) All of the above
-

Suppose a 4-sector economy with

$$C=10+.8(Y-T), I=10, G=50, X=40, T=50 \text{ and } M=10+.3Y$$

Where C, I, G, X, T and M refer to consumption, investment, government expenditure, exports, taxes and imports respectively. What is equilibrium income in this economy?

- A) 170
 - B) 120
 - C) 200
 - D) 220
-

Monetary policy will have the largest effect on income when

- A) The IS curve is steep and the LM curve is steep
 - B) The IS curve is flat and the LM curve is steep
 - C) The IS curve is flat and the LM curve is flat
 - D) The IS curve is steep and the LM curve is flat
-

From the Quantity Theory of Money if M increases by 5 percent and V increases by 2 percent, then

- A) Real income increases by approximately 7 percent
 - B) The price level increases by approximately 5 percent
 - C) Nominal income increases by approximately 5 percent
 - D) Nominal income increases by approximately 7 percent
-

You observe that the government is increasing infrastructural spending. This could be a response to:

- A) Higher unemployment
 - B) Slow Economic Growth
 - C) A recognized period of recession
 - D) All of the above
-

According to the Solow model, persistently rising output and living standards can only be explained by:

- A) Capital accumulation
 - B) High savings rates
 - C) Population growth
 - D) Technological progress
-

What is the value of the multiplier in a closed economy with a Marginal Propensity to Save of 0.25?

- A) 4
 - B) 1.33
 - C) 5
 - D) 1
-

The value today associated with receiving Rs. 100 two years from today when the annual interest rate is 5% is

- A) Rs. 100
 - B) Rs. 90.7
 - C) Rs. 90
 - D) Rs 95.2
-

If the government increases its spending which of the following could occur?

- A) Unemployment decreases
 - B) Inflation increases
 - C) The fiscal deficit rises
 - D) All of the above
-

Which of the following are possible consequences of a fiscal expansion?

- A) An increase in the trade deficit
- B) Deflation
- C) A reduction in national income
- D) A rise in unemployment

Which of the following is true?

- A) Real GDP is always greater than Nominal GDP
 - B) Nominal GDP is always greater than Real GDP
 - C) Real GDP excludes some sectors counted in nominal GDP
 - D) Real GDP is lower than Nominal GDP if inflation is positive
-

Consider two random variables x and Y . Looking at the scatter between x and Y , the researcher contemplates the following population regression:

$$Y = \beta_0 + \beta_1 x^2 + \beta_2 x^3 + \beta_3 e^x + \varepsilon.$$

Which of the following statements is true:

- A) OLS cannot be applied as the equation is cubic in x
 - B) OLS cannot be applied as the equation contains e^x term
 - C) OLS cannot be applied as the equation is cubic in x and contains e^x term
 - D) OLS can be applied despite cubic in x and e^x term
-

$$\frac{\sum (x_i - \bar{x})^2}{n}$$

The degrees of freedom of the sample variance s , defined as $\frac{\sum (x_i - \bar{x})^2}{n}$ is

- A) n
 - B) $n - 1$
 - C) $n - 2$
 - D) \sqrt{n}
-

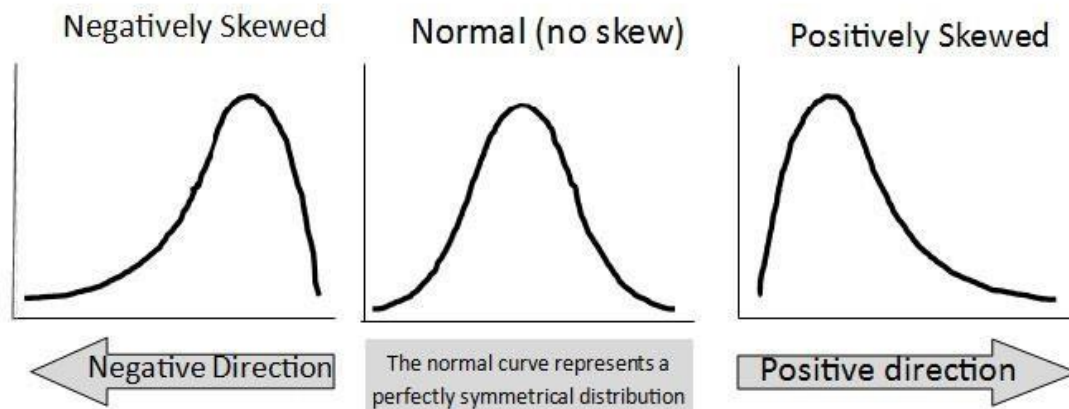
Consider a sample of n observations. The sample proportion of a binary categorical variable coded as 0/1 can be seen as,

- A) The sample median of the sequence of 1s and 0s
 - B) The sample mode of the sequence of 1s and 0s
 - C) The sample mean of the sequence of 1s and 0s
 - D) None of the above
-

In set theory, if A and B are independent events, it follows that:

- A) A and B' (B complement) are independent
 - B) $P(A \cap B) = P(A) + P(B)$
 - C) $P(A \cap B) = P(A/B)$ D)
 - D) All of the above
-

Please refer to the figure below:



- A) The mean and the median are the same value for all three plots
 - B) The mean is lower than median for the plot on the left (marked Negative Direction), while it is higher than median for plot on the right (marked Positive direction)
 - C) The mean is higher than median for the plot on the left (marked Negative Direction), while it is lower than median for plot on the right (marked Positive direction)
 - D) The mean and median cannot be the same value for all three plots shown above
-

An oil exploration company currently has two active projects, one in Asia and the other in Europe such that the success of each project is independent of the other project. The probability that the Asian project is successful is 0.4, and the probability that the European project is successful is 0.7. Suppose you are told that the Asian project is not successful. Then, the probability that the European project is also not successful is,

- A) 0.7
 - B) 0.28
 - C) 0.3
 - D) Indeterminate (cannot be specified)
-

In the context of hypothesis testing consider the following three statements:

- i. Even if the sample weakly contradicts the null hypothesis, the null hypothesis will be rejected.
- ii. Only if the sample strongly contradicts the null hypothesis, the null hypothesis will be rejected
- iii. The researcher approaches a test, assuming the null hypothesis to be true.

Which of the following is true

- A) Only i. is correct
 - B) Only ii. is correct
 - C) Both i. and iii. are correct
 - D) Both ii. and iii. are correct
-

Consider the following regression equation:

$$Y = \beta_0 + \beta_1 x^2 + \beta_2 (x * z) + \varepsilon.$$

Which of the following statements is true assuming this is the correct population equation:

- A) The partial effect z is given by $2\beta_1 x + \beta_2 x$
 - B) The partial effect z is given by $2\beta_1 x + \beta_2$
 - C) The partial effect z is given by $\beta_2 x$
 - D) The partial effect z is given by β_2
-

If random variable X follows Poisson Distribution and random variable Y follows Binomial Distribution, then

- A) X must be discrete and Y must be continuous
 - B) X must be continuous and Y must be discrete
 - C) X and Y must both be discrete
 - D) X and Y must both be continuous
-

A family has moved into a new neighborhood. The neighborhood has two medical clinics. Each medical clinic has two obstetricians and three pediatricians. The family requires the services of both types of doctors but is constrained to choose both doctors from the same clinic. In how many ways can this be done?

- A) 10
 - B) 8
 - C) 36
 - D) 12
-

The poverty head count ratio measures

- A) The depth of poverty below the poverty line
 - B) The percentage of people living below the poverty line
 - C) The number of people living below the poverty line
 - D) The amount of inequality between the rich and the poor
-

The term “jobless growth” refers to

- A) A rise in proportion of women out of the labour force
 - B) A strong rise in unemployment accompanied by strong GDP growth
 - C) A strong rise in the youth unemployment rate despite high GDP growth
 - D) A weak rise in employment despite high GDP growth
-

Until recently, the Indian economy followed the five year plan model of planning, which means that the government makes plans which are adhered to for five years. However, Indira Gandhi suspended five year plans and followed annual budgets from 1966-69. Why did she do this?

- A) Congress did not have a majority government in the Lok Sabha
 - B) Food shortages and a sharp spike in inflation caused by monsoon failures
 - C) Threat of Maoist and Naxalite movements
 - D) War between India and Pakistan
-

In India

- A) The smallest proportion of workers are in the agricultural sector, but this sector has the highest contribution to GDP
 - B) The highest proportion of workers are in the agricultural sector, but this sector has the lowest contribution to GDP
 - C) The highest proportion of workers are in the agricultural sector and this sector has the highest contribution to GDP
 - D) The smallest proportion of workers are in the agricultural sector and this sector has the lowest contribution to GDP
-

What is the aim of Ayushman Bharat Yojna – National Health Protection scheme

- A) Health care insurance coverage for scheduled caste, scheduled tribe and low income households
 - B) Free health care of all Indian citizens
 - C) Subsidization of hospital charges for low income households
 - D) Free checkup in public hospitals
-

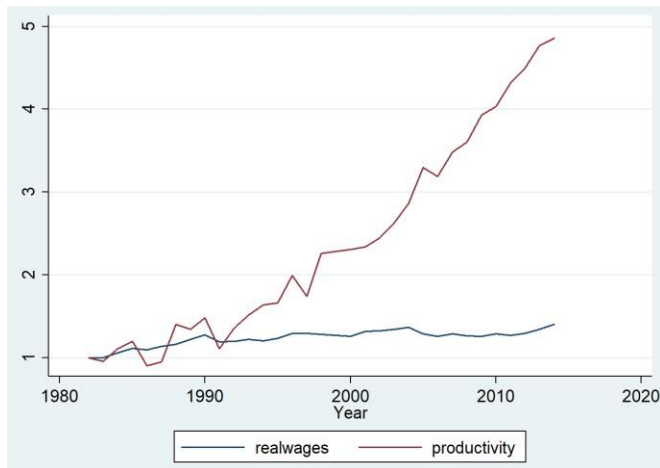
In 2005 the Government of India introduced a programme that guaranteed 100 days of employment per year per household in rural areas. What is the name of this programme?

- A) Sampoorn Grameen Rozgar Yojana (SGRY)
 - B) National Rural Employment Guarantee Act (NREGA) which was later renamed the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)
 - C) National Rural Livelihoods Mission (NRLM)
 - D) Skill India Mission
-

After liberal reforms were introduced in 1991, the government decided to dis-invest public sector enterprises (PSE). What does dis-investment mean in this context?

- A) Allowing private companies to invest in sectors which were only controlled by PSE's like telecommunication
 - B) The selling of government equity in public sector undertakings
 - C) Selling off assets of PSE to private companies
 - D) Shutting down Public Sector Enterprises
-

This graph on wages and productivity for India shows



- A) productivity gains have NOT been associated with proportionate rises in real wages
- B) productivity gains have been associated with proportionate rises in real wages
- C) productivity gains have been associated with rising formalization of work
- D) productivity gains have been associated with the rise of women in the work force

Work in India is characterized by

- A) the majority of workers in the organized sector
- B) the majority of workers in the unorganized sector
- C) the majority of workers out of the labour force
- D) the majority of women entering the paid labour force

The Gender Wage Gap refers to...

- A) Average difference in wages (or remuneration) of women compared to men who are working
- B) Average difference in time spent working of women compared to men
- C) Standard deviation of wages for women compared to men.
- D) Difference between the highest paid women workers and the highest paid male workers

Let the utility function of an individual indicating their preferences over the quantity of two goods denoted by x and y , be given by $u(x,y)=x-y$. Then the marginal rate of substitution between these two goods, and the slope of the indifference curves denoting this utility function would respectively be

- A) 1 and 1
 - B) 1 and -1
 - C) -1 and 1
 - D) -1 and -1
-

Let $y(k, l)$ be a production function such that $y(4k, 4l) = 2y(k, l)$, then the production function exhibits:

- A) Constant returns to scale
 - B) Increasing returns to scale
 - C) Decreasing returns to scale
 - D) Linearity
-

When a market is perfectly competitive then the *marginal revenue* for a firm

- A) Increases as it produces more
 - B) Decreases as it produces more
 - C) Depends on the cost function
 - D) Is equal to the price
-

Let A and B be two individuals, and x_A and x_B be the amounts of a good consumed by them respectively. If one wants to model a situation where individual A is self-centred and individual B is altruistic, which pair of utility functions best represents this case?

- A) $u_A(x_A, x_B) = x_A + x_B$ and $u_B(x_A, x_B) = x_A + x_B$
 - B) $u_A(x_A, x_B) = x_A$ and $u_B(x_A, x_B) = x_A + x_B$
 - C) $u_A(x_A, x_B) = x_A + x_B$ and $u_B(x_A, x_B) = x_B$
 - D) $u_A(x_A, x_B) = x_A$ and $u_B(x_A, x_B) = x_B$
-

Two people, A and B, are expected utility maximisers. A's utility function is given by $u_A(x) = x^2$. B's utility function is given by $u_B(x) = \sqrt{x}$. Both are offered a lottery ticket worth Rs 100, and the prize money of Rs 10,000. The probability of winning the lottery is 0.9%. Which one of them is going to buy the ticket?

- A) A will buy the ticket
 - B) B will buy the ticket
 - C) Both A and B will buy the ticket
 - D) Neither A nor B will buy the ticket
-

Consider the following two statements about a simple two-person, two good exchange economy where there are no externalities, information is perfect, neither individuals have any market power, and utility functions are 'well-behaved'.

- A: All Pareto efficient outcomes are achievable through competitive equilibria
- B: All competitive equilibria are Pareto efficient

- A) Both A and B are true
- B) A is true but B is not

- C) B is true but A is not
D) Neither A nor B is true
-

Consider four different possible market structures for a homogenous good with constant marginal cost. Assume that the demand function is identical in all four cases.

- 1: Cournot or quantity competition with two firms. Price: p_1
- 2: Cournot or quantity competition with infinitely many firms. Price: p_2
- 3: Bertrand or price competition with two firms. Price: p_3
- 4: Bertrand or price competition with infinitely many firms. Price: p_4

Which of the following statements about the prices is true?

- A) $p_1 = p_2 = p_3 = p_4$
B) $p_1 > p_2 = p_3 = p_4$
C) $p_1 > p_2 = p_3 > p_4$
D) $p_1 > p_2$ and $p_3 > p_4$
-

A person's utility function over the amount of rice in kg (r) and amount of dal in kg (d) is given by $u(r,d)=r^{0.4}d^{0.6}$. The person already has 5 kgs of rice at home that can be consumed but not sold. Now the person heads off to the market to purchase rice and dal with a budget of Rs 100. Now his utility function can be written as $u(r_p,d)=(r_p+5)^{0.4}d^{0.6}$, where r_p is the amount of rice purchased, and the amount of rice consumed $r=r_p+5$. If the price of rice is 1 rupee per kg and the price of dal is 2 rupees per kg, what is the amount of rice that the person will purchase?

- A) 37
B) 40
C) 60
D) 63
-

Consider the following 2-person simultaneous moves game

	D	H
d	2, 5	5, 4
h	3, 4	4, 3

The table above shows the payoff matrix between player 1 who chooses between strategies d and h , and player 2 who chooses between strategies D and H . The first number in each cell denotes the payoff for player 1 and the second number denotes the payoff for player 2. The Nash equilibrium will be:

- A) d, D
B) d, H
C) h, D
D) h, H
-

A firm has three components of its production cost. It has a fixed cost c_f of 10 units that is independent of the production level. It has raw material cost c_r that varies linearly with the quantity produced. It has labour cost c_l that varies as the square of the quantity produced. Hence total cost $c = c_f + c_r + c_l$. The marginal cost of this firm will be

- A) Constant with quantity produced
 - B) Increasing at a constant rate with quantity produced
 - C) Increasing at an increasing rate with quantity produced
 - D) Increasing at a decreasing rate with quantity produced
-

Consider an open economy where the savings propensity is 0.3 and import propensity is 0.2. The value of the multiplier is

- A) 1.5
 - B) 2
 - C) 3
 - D) 4
-

If the growth rate of nominal GDP in a given period is 9% and the growth rate of real GDP is 5%, which of the following statements is correct?

- A) Inflation rate is 4%
 - B) Inflation rate is 14%
 - C) Inflation rate is 1.8%
 - D) Inflation rate cannot be calculated from the given information
-

Consider a closed economy without government intervention. By the income method, gross domestic product is found to be equal to the sum of wages and profits. Assume that all wages are spent on consumption expenditure and all profits are saved. If investment is Rs 50 billion, which of the following statements is correct?

- A) Profit is less than Rs 50 billion
 - B) Profit is equal to Rs 50 billion
 - C) Profit is greater than Rs. 50 billion
 - D) Profit cannot be determined from given information
-

Assume that the only tax which the government levies in an economy is the lump-sum tax. The economy is demand constrained. The government increases expenditure by maintaining a *balanced budget*. Which of the following remarks would be *wrong*?

- A) Change in government expenditures would be equal to change in taxes
 - B) The value of the multiplier would be greater than 1
 - C) Higher government expenditure would lead to higher output
 - D) The consumption expenditure would remain unchanged
-

$C=10+0.5Y$, $I=20$, $G=30$, $X=5$ and $M=0.3Y$. If C , I , G , X , M and Y denote consumption, investment, government expenditure, export, import and GDP respectively, what is the equilibrium level of GDP ?

- A) 61.25
 - B) 81.25
 - C) 91.5
 - D) 101.5
-

The original Phillips Curve is argued to be negatively sloped in the inflation-unemployment space on the basis of the following assumption:

- A) Higher employment leads to higher expected price
 - B) Higher employment leads to higher nominal wage rate
 - C) Higher inflation leads to higher output and employment
 - D) Higher employment leads to higher mark-up
-

Consider a closed economy with positive government expenditure and zero taxes. The output is constrained by aggregate expenditure. Aggregate savings is the product of savings propensity and output, where savings propensity is fixed and less than 1. The government expenditure and interest rate are exogenously given. Investment decisions are formed on the basis of expectations as argued by Keynes and it responds negatively to changes in interest rate. Which of the following statements is *wrong*?

- A) If government expenditure rises by Re. 1, aggregate savings increases by Re.1
 - B) If savings propensity rises, aggregate savings rises
 - C) If interest rate rises, aggregate savings fall
 - D) If investment rises by Re.1, output rises by more than Re.1
-

Consider an open economy where output is constrained by balance of payment. The net capital inflow is zero, real exchange rate is fixed, and trade is balanced in every period. The level of import at any given period is equal to the product of import propensity of output and the level of output. The import propensity of output is *fixed* at 0.25 for any given period. If *growth rate* of export is 5%, then the growth rate of output for that period is

- A) 1.25%
 - B) 5%
 - C) 20%
 - D) Cannot be determined from the given information
-

The growth rate of labour productivity of an economy is 3%, whereas the growth rate of labour supply is 1%. What would be the steady state growth rate of output in Solow model?

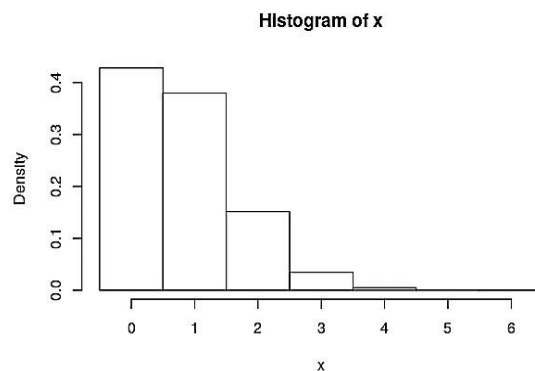
- A) 2%

- B) 3%
- C) 4%
- D) None of the Above

Suppose there are 2 countries, the Goldland and the Creditmoneyland. The output in both the countries are equal in the initial period. In both the economies, the IS schedule is negatively sloped. The money supply is fixed in Goldland and interest rate is determined by money demand at given money supply. In Creditmoneyland, the interest rate is fixed by central bank and money supply is determined by money demand. Now government expenditures increase by 1 unit in both the countries. The output rises to Y_G and Y_C in Goldland and Creditmoneyland respectively. If everything else is similar between the 2 countries, which of the following is correct?

- A) $Y_G > Y_C$
 - B) $Y_C > Y_G$
 - C) $Y_C = Y_G$
 - D) Cannot be determined from the given information
-

From the following histogram of a variable x , which of the options is true.



- A) Mean of $x <$ Median of x
 - B) Mean of $x =$ Median of x
 - C) Mean of $x >$ Median of x
 - D) Impossible to say
-

If A and B are disjoint events with $P(A) = 0.2$ and $P(B) = 0.5$. Suppose \bar{A} denotes the complement of the event A . Then what is $P(\bar{A} \cap B)$?

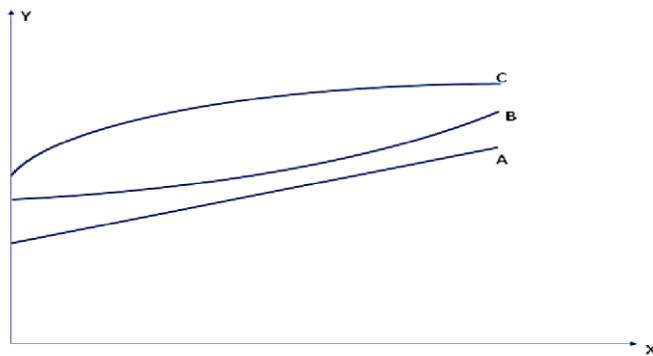
- A) 0.50
 - B) 0.30
 - C) 0.10
 - D) 0
-

Suppose θ denotes the true unknown average weight of women in India. Suppose you collect two

random samples, each of the same size, to estimate θ . Suppose θ_1 and θ_2 are two estimators of θ such that $E[\theta_1] = E[\theta_2] = \theta$. Further suppose that variance of $\theta_1 <$ variance of θ_2 . Then which of the following is true?

- A) θ_1 is a better estimator of θ compared to θ_2
 - B) θ_2 is a better estimator of θ compared to θ_1
 - C) Both are equally good estimators
 - D) Not enough information to say which is a better estimator
-

Please refer to the figure below. If $Y = \ln(X)$, then which of the following options is true?



- A) The relationship between the two variables is best depicted by graph A.
 - B) The relationship between the two variables is best depicted by graph B.
 - C) The relationship between the two variables is best depicted by graph C.
 - D) It depends on whether we take negative values of x or positive values of x .
-

Suppose a random variable Y is such that $P[Y=c] = 1$ for some real number c . Then the variance of Y is

- A) c
 - B) 1
 - C) 0
 - D) Cannot be calculated
-

Fatima is a scientist and works for the Weather Board of India and is involved in making daily weather forecasts for National Television. She is known to be very good at her work. Mohan is a salesman who works for a private company. Both Fatima and Mohan do not like getting wet in the rain, but they also do not like carrying an umbrella unnecessarily. Suppose whether it rains today is independent of whether it rained yesterday, and we use R to denote the event that it rains today. Using standard notation in probability theory, please read the following statements:

● **Statement 1:** $E[R | \text{Fatima is carrying an umbrella today}] > E[R | \text{Mohan is carrying an umbrella today}]$.

● **Statement 2:** $E[R | \text{Fatima was carrying an umbrella yesterday}] = E[R | \text{Mohan was carrying an umbrella yesterday}]$.

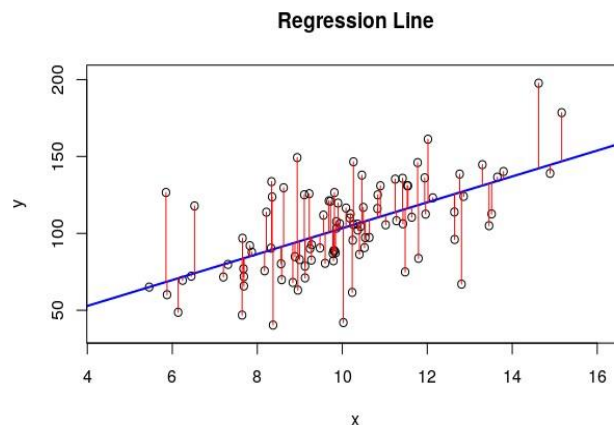
● **Statement 3:** $E[R | \text{Fatima is carrying an umbrella today}] = E[R | \text{Fatima was carrying an umbrella yesterday}]$

● **Statement 4:** $E[R | \text{Fatima is carrying an umbrella today}] = E[R | \text{Mohan was carrying an umbrella yesterday}]$

Which of the following is most likely to be true?

- A) Only statement 1 is true
 - B) Statements 1 and 2 are true
 - C) Statements 1, 2 and 3 are true
 - D) All statements are true
-

In the figure below, x is an explanatory variable and y is a response variable. Based on observed data of x and y , a linear regression line has been estimated. The blue line is the estimated regression line of y on x . What are the red lines in the graph called?

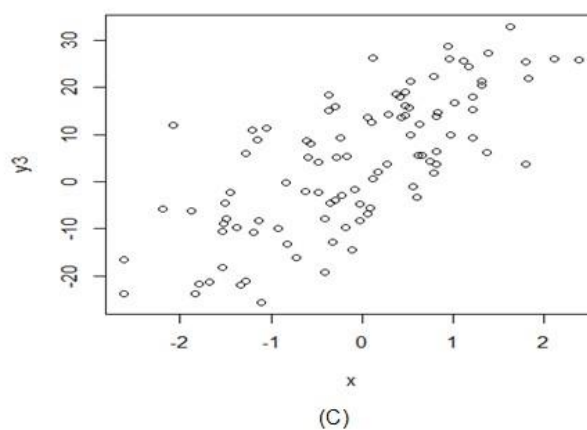
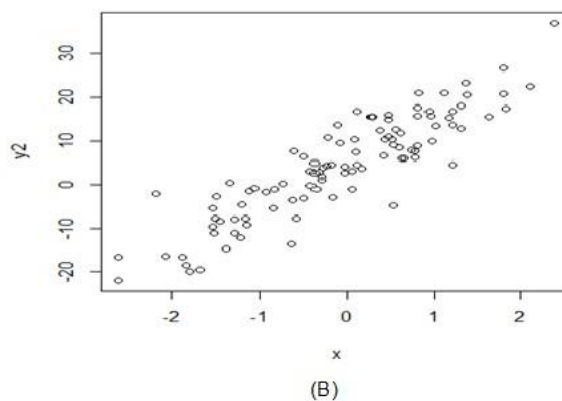
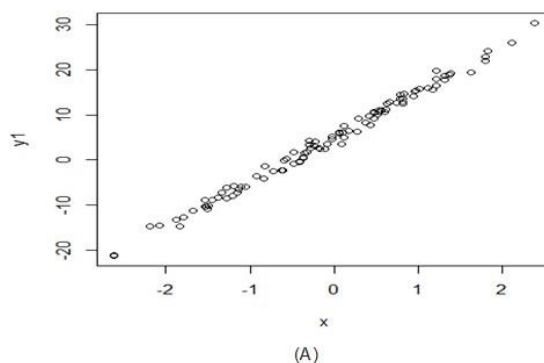


- A) Predicted Values
 - B) Intercept
 - C) Residuals
 - D) Standard error
-

An individual claimed that the mileage (i.e., the petrol consumption per unit distance travelled) of her car does not depend on the speed with which the car was driven. To test this claim, she drove the car at various speeds between 45 km/hour and 75 km/hour and collated the data on how many litres of petrol were being consumed at each speed level. Based on this data, she fitted a simple linear regression model and obtained the following estimated regression equation: $\hat{Y} = 0.05 - 0.17x$ where Y denotes the mileage (kilometres per litre) and x denotes the speed level at which she drove. Based on this, she tested the hypothesis whether mileage per litre of petrol is unaffected by the speed with which she drove and got a p-value of 0.001. Which of the following statements is FALSE?

- A) At a 5% level of significance, car speeds have no effect on the mileage.
 - B) At a 5% level of significance, car speeds have an effect on mileage.
 - C) As the speed increases by 5 units, mileage decreases by 0.85 units on average.
 - D) At a 1% level of significance, car speeds have an effect on mileage.
-

Consider the three scatter plots A, B & C.



Suppose you are called upon as an economist to make an accurate prediction about Y , for given a value of X and your salary would be based on how good your prediction turns out to be. Three scatterplots A, B and C are given above. Which of the three scatter plots would you prefer to be the raw data that depicts the relationship between X and Y based on which you can predict:

- A) I would be indifferent as the method used for prediction remains the same irrespective of the data.

- B) I would prefer the scatterplot A (between x and y1) as the raw data.
 - C) I would prefer the scatterplot B (between x and y2) as the raw data.
 - D) I would prefer the scatterplot C (between x and y3) as the raw data.
-

Suppose you have the following two scenarios related to hypothesis testing:

Scenario 1:

Null: Mean height of boys in the class is 5 feet 6 inches

Alternative: Mean height of the boys in the class is 5 feet 7 inches

Scenario 2:

Null: Mean height of boys in the class is 5 feet 6 inches

Alternative: Mean height of the boys in the class is 5 feet 8 inches

Keeping the level of significance at 15 percent, which of the following is true:

- A) Both scenarios are invalid as the level of significance is always fixed at 1 percent or 5 percent.
 - B) In scenario 1, the probability of rejecting the null when the null is true is higher than in scenario 2.
 - C) In scenario 1, probability of rejecting the null when the null is true is lower than in scenario 2.
 - D) In scenario 1, the probability of not rejecting the null when the null is false is lower than in scenario 2.
-

Why is the decade 1921-31 referred to as the year of the great divide in India?

- A) Gandhi launched his Satyagraha movement and mobilized masses all over the country.
 - B) The first Indian steel industry was developed by Tata's.
 - C) India's dependency on British imports started declining.
 - D) Population growth rate went up significantly.
-

A special economic zone (SEZ) is an area in a country that is subject to different economic regulations than other regions within the same country. What was the main reason for implementing the SEZ act of 2005?

- A) To develop backwards regions.
 - B) To create employment.
 - C) To attract Foreign Direct Investment.
 - D) To develop export capabilities of the country.
-

What were the primary aims of the fiscal responsibility and budget management act of 2003?

- A) To control the exchange rate.
- B) To attract more Foreign Direct Investment in the India economy.
- C) To make the central government more prudent in its budgetary decision.

D) To give more autonomy to the RBI to control the Money Supply.

Which of the following statements is NOT TRUE about the Mahatma Gandhi National Rural Guarantee Act 2005?

- A) If the government fails to provide employment, it must provide unemployment allowances to those people
 - B) MGNREGA aims to create durable assets (such as roads, canals, ponds and wells).
 - C) MGNREGA is applicable to all regions and citizens of India.
 - D) It is the largest social security programme in the world.
-

In 1979 independent India experienced the lowest growth rate in its history? What was the main reason for the fall in growth rate?

- A) OPEC price rise
 - B) Industrial stagnation
 - C) Monsoon Failure
 - D) High Fiscal Deficit
-

The rate of profit in Marxian analysis is calculated as:

- A) Ratio of surplus value to the total capital
 - B) Ratio of surplus value to the variable capital
 - C) Ratio of surplus value to the constant capital
 - D) Ratio of surplus value to the organic composition of capital
-

Which of the following is **NOT TRUE** for caste-based inequality in Indian labour market?

- A) There exists a wage gap between different castes groups.
 - B) There continues to exist segregation across occupations between different caste groups.
 - C) India has a policy for caste-based reservations in the informal sector
 - D) The female labour force participation rate is higher among scheduled castes and scheduled tribes than among the general caste.
-

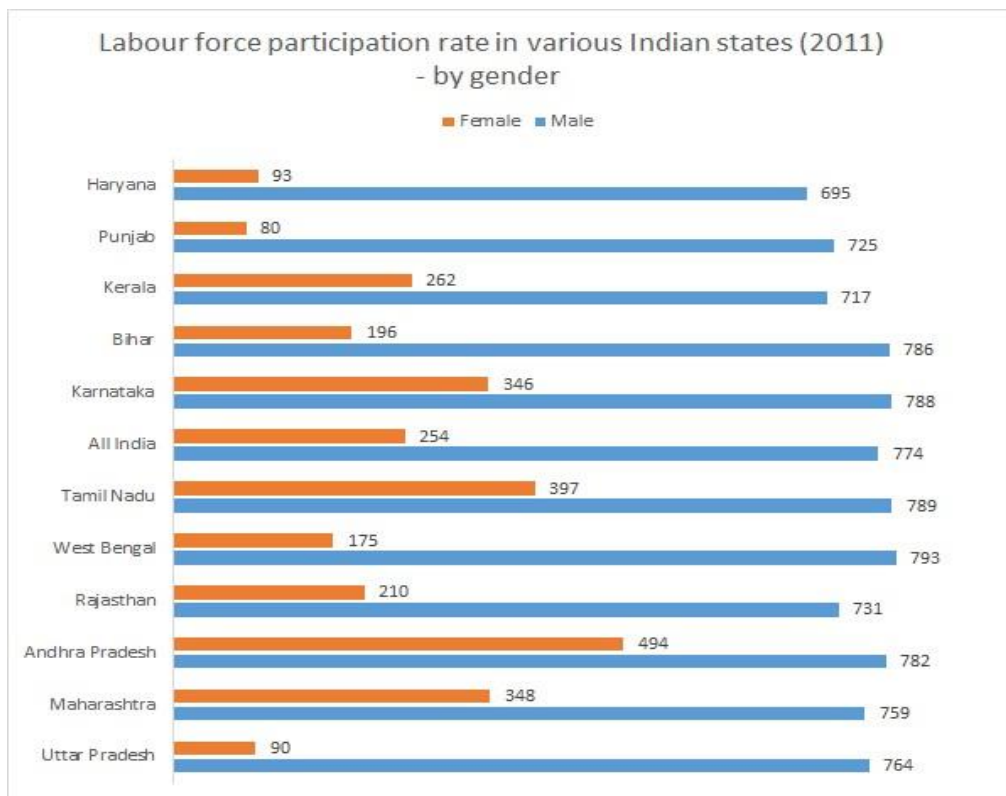
The labour force participation rate is measured as

- A) The proportion of employed persons out of the total working age population.
 - B) The proportion of employed persons plus those voluntarily unemployed out of the total population.
 - C) The proportion of employed persons plus those unemployed who are seeking work out of the total working age population.
 - D) The proportion of employed persons plus those willing to work but not seeking work out of the total population.
-

Which of these is **NOT TRUE** for Indian agriculture over a period of roughly the past three decades since 1990?

- A) The agricultural land area per capita is witnessing a falling trend.
 - B) The employment in agriculture as a percentage of total employment is witnessing a falling trend.
 - C) The share of land area used for agriculture, measured as a percentage of total land area, has remained roughly constant.
 - D) Agricultural value added has been witnessing a falling trend.
-

Which of the following statements is **NOT** correct based on the graph below?



- A) The female labour force participation rate in India is lower than that in the state of Kerala.
 - B) The difference in the male and female-labour force participation rate is lowest in Andhra Pradesh.
 - C) The difference in the male and female-labour force participation rate is highest in Bihar.
 - D) The female labour force participation rate is highest in Andhra Pradesh.
-

Consider a null hypothesis the population mean height is 5 feet. Test A has a significance (alpha) level of 0.05, and another test B has a significance level of 0.01. The power of the two tests has the following characteristic:

- a) Test A has greater power than test B.

- b) To compare the relative power of tests A and B, we need to know the alternative hypothesis in each case.
 - c) Test B has greater power than test A.
 - d) The power of the tests is independent of their significance levels.
-

Suppose X is a continuous random variable, with mean $E(X)$ and variance $V(X)$. Which of the following statements is true.

- a) The uncertainty in X is fully characterized by its probability density function.
 - b) The uncertainty in X is fully characterized by $E(X)$ and $V(X)$.
 - c) The uncertainty in X is fully characterized by $V(X)$.
 - d) The uncertainty in X cannot be fully characterized because it is continuous.
-

Suppose X is a uniform random variable on the interval 5 to 7. Let $f(x)$ be its probability density function. Which of the following statements is true:

- a) $f(x)=6$ for all x in $(5,7)$ and is 0 otherwise.
 - b) $f(x)=1$ for all x in $(5,7)$ and is 0 otherwise.
 - c) $f(x)=2$ for all x in $(5,7)$ and is 0 otherwise.
 - d) $f(x)=0.5$ for all x in $(5,7)$ and is 0 otherwise.
-

Suppose the 95% confidence interval for population mean height of Indian women is $(5.2, 6.0)$. What is your best guess among the options below about the 99% confidence interval for the same population mean.

- a) It is $(5, 6.2)$.
 - b) It is $[5.4, 5.8]$.
 - c) It is $(5.4, 5.8)$.
 - d) It can be either $(5.4, 5.8)$ or $[5.4, 5.8]$ as both are equivalent.
-

The heights of a certain population of males are normally distributed with mean 68 inches and standard deviation 7 inches. The proportion of the population whose height is greater than 61 inches is approximately:

- a) 84%
 - b) 99%
 - c) 68%
 - d) 16%
-

Samples of size 64 are selected from a population with mean 20 and standard deviation 16. The standard error of the sampling distribution of sample means is

- a) 4
 - b) 2
 - c) 0.25
 - d) 0.50
-

Thirty students take two courses - Intermediate Microeconomics one semester and Intermediate Macroeconomics in the following semester. Their overall course grades in percentage are listed below for both courses. Which of the following statistical procedures would be most appropriate to test the claim that the student's overall course grades are the same in both courses? Assume that any necessary normality requirements hold.

Student	1	2	3	4	5
Intermediate Microeconomics	70%	62.6%	89%	91.3%	58.9%
Intermediate Macroeconomics	65.5%	61.0%	83.2%	93.0%	44.8%

- a) Two-tailed two-sample paired/dependent t-test of means
 - b) Two-tailed two-sample independent t-test of means
 - c) Two-tailed two-sample independent z-test of means
 - d) One-tailed two-sample z-test of proportions
-

Suppose an insurance company divides its population into two classes - those who are prone to have accidents and those who are not. The data shows that there is a 10% probability that an accident-prone person will have an accident in a 1-year period. The probability for all others is 5%. If the probability of a new policyholder being accident-prone is 20%, find the probability that a new policyholder will have an accident in the first year:

- a) 10%
 - b) 33%
 - c) 40%
 - d) 6%
-

For any linear regression model where Y is the dependent variable one can derive the expression as given here. Each term in the equation has its usual interpretation. y_i is the value of the i^{th} observation of y in the data. \hat{y}_i is the value of the i^{th} observation as predicted by the regression model and \bar{y} is the mean of n observations of the dependent variable y.

$$\sum_{i=1}^n (y_i - \bar{y})^2 = \sum_{i=1}^n (\hat{y}_i - \bar{y})^2 + \sum_{i=1}^n (y_i - \hat{y}_i)^2$$

$$A = B + C$$

Which of the options in the multiple choice is correct.

- a) A high ratio of B/A indicates that the model explains a lot of variability in y.

- b) A high ratio of C/A indicates that the model explains a lot of variability in y.
 - c) A low ratio of B/A indicates that the model explains a lot of variability in y.
 - d) Variability in y cannot be explained by this equation
-

Figure 1 shows the results of a survey comparing the change in income from before the pandemic to after the pandemic across income groups. The y-axis represents the income category of the households and the x-axis represents the percentage of households. INR in the figure refers to

Indian rupees. “Same” in Figure 2, indicates that the households have said that there was no change in income before and after the pandemic while “Decreased” in figure indicates that the households have said their household incomes decreased post pandemic.

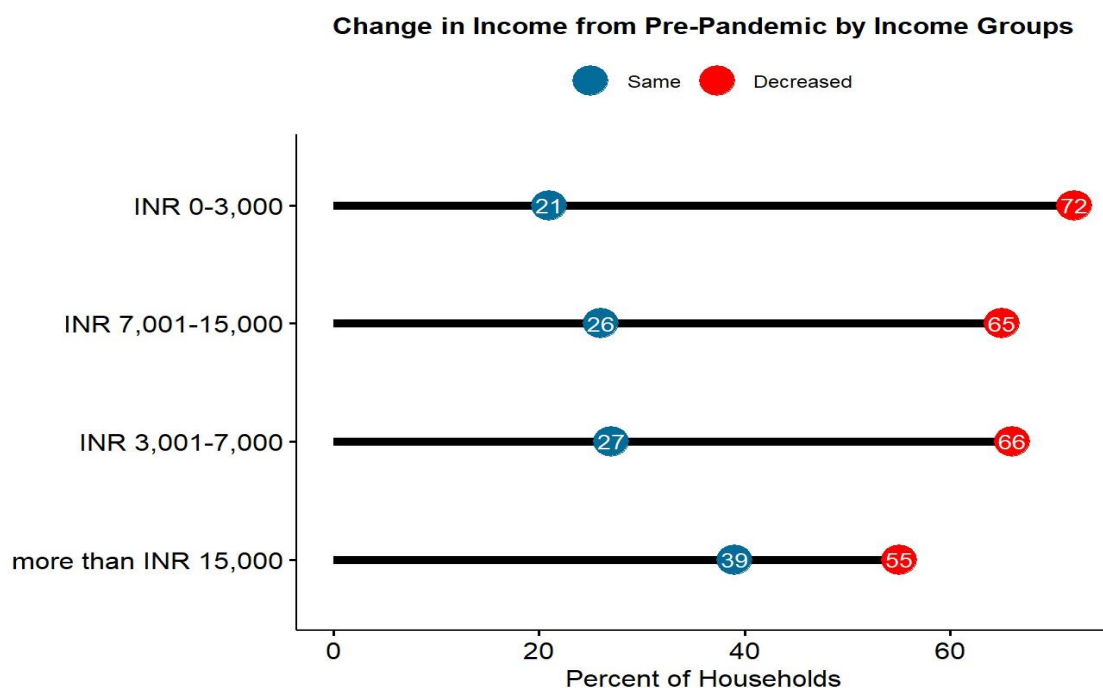


Figure 1: Change in income-by-income groups

Assuming that incomes either remained the same, decreased or increased post-pandemic compared to pre-pandemic, which among the following options is correct.

- a) The income group more than INR 15,000 had the most percentage of households reporting an increase in income.
 - b) The income group INR 7,001 - 15,000 had the most percentage of households reporting an increase in income.
 - c) The income group more than INR 15,000 had the least percentage of households reporting an increase in income.
 - d) The income group INR 3,001 - 7,000 had the most percentage of households reporting an increase in income.
-

Consider an open economy ISLM model. According to Mundell-Fleming, which of the following cannot be effective simultaneously?

- a) free capital flow, autonomous monetary policy, flexible exchange rate
 - b) free capital flow, autonomous monetary policy, fixed exchange rate
 - c) free capital flow, fiscal policy, fixed exchange rate
 - d) monetary policy and fiscal policy under closed economy
-

Consider a closed economy where consumption propensity is 0.5 and government budget is always balanced. If government expenditure rises by 1 unit, by how much will output rise under balanced budget multiplier?

- a) 0.5
 - b) 1
 - c) 2
 - d) 0
-

The inflation rate of an economy rises. If the central bank wants to reduce inflation rate, which of the following policies will it implement?

- a) Reduce interest rate
 - b) Increase interest rate
 - c) Depreciate nominal exchange rate
 - d) Sell government bonds
-

Consider 2 economies, A and B, which have equal consumption and import propensities. Government expenditure rises in country A by Rs. 100, while its exports remain unchanged. Exports rise in country B by Rs. 100, while its government expenditures remains same. If trade balance is the difference between export and import, which of the following proposition is correct?

- a) Trade balance improves in Country A and B by equal amount
 - b) Trade balance deteriorates in Country A and B by equal amount
 - c) Trade balance improves in A, deteriorates in B
 - d) Trade balance improves in B, deteriorates in A
-

Which of the following statement is wrong?

- a) Philips curve will shift upward in the case of cost-push inflation
 - b) Short Run Philips curve is vertical under adaptive expectation
 - c) Philips Curve is vertical under rational expectation
 - d) Philips Curve is unstable under adaptive expectation
-

Consider a simple Keynesian model. The consumption function of an economy is given by $C = 50 + 0.5Y$. Investment expenditure, $I = 100$. Output is given by $Y = C + I$. Now suppose investment expenditure rises by 20 units. Which of the following statement is correct?

- a) Equilibrium output rises from 300 to 340
 - b) Equilibrium output rises from 300 to 320
 - c) Equilibrium output rises from 150 to 190
 - d) Equilibrium output rises from 150 to 170
-

If everyone prefers holding cash to holding bond, this situation would be known as?

- a) Widow's curse
 - b) Liquidity trap
 - c) Paradox of thrift
 - d) None of the above
-

If marginal propensity to consume goes up in the economy, then

- a) Level of IS curve will change
 - b) Slope of IS curve will change
 - c) Level of LM curve will change
 - d) Slope of LM curve will change
-

Suppose, the LM curve is positively sloped and the IS curve is negatively sloped. If money supply is increased by the monetary authority, then in the IS-LM framework it will

- a) Reduce investment
 - b) Increase investment
 - c) Have no effect on investment
 - d) Can't say
-

Which of the following is not a monetary policy instrument

- a) Repo rate
 - b) Cash Reserve Ratio
 - c) Reverse repo rate
 - d) Capital adequacy ratio
-

The figure below shows the demand curve for candies. Which of the following statements is true?

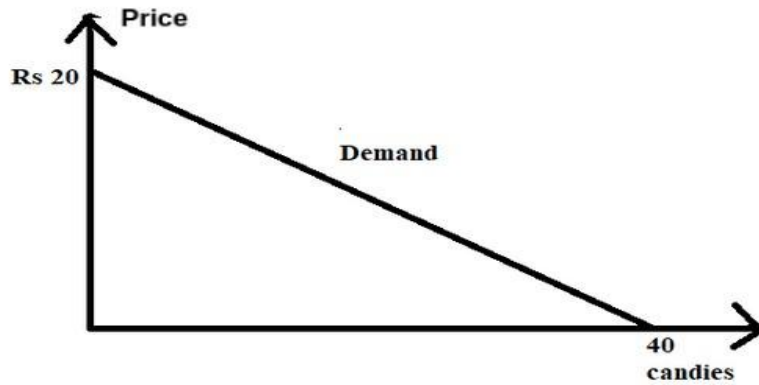


Figure X. Figure for question (X)

- a) The inverse demand function is given by the equation $P = 40 - 2Q$
 - b) The marginal revenue can be expressed as a function of quantity as follows: $MR = 20Q - 0.5Q^2$
 - c) The marginal revenue can be expressed as a function of quantity as follows: $MR = 20 - Q$
 - d) Without more information, neither the inverse demand function nor the marginal revenue function can be determined.
-

The marginal rate of substitution of good y with respect to good x is given by $mrs(x,y) = (\text{Marginal utility of } x) / (\text{Marginal utility of } y)$. Consider the Cobb-Douglas utility function $u(x,y) = x^{0.2}y^{0.8}$. Select which of the following statements is the correct interpretation of the MRS.

- a) The consumer will be indifferent if 4 units of good y are exchanged with 1 unit of good x
 - b) The consumer will be indifferent if 1 unit of good y are exchanged with 4 units of good x
 - c) The consumer will be indifferent if $y/4x$ units of good y are exchanged with 1 unit of good x
 - d) The consumer will be indifferent if 1 units of good y are exchanged with $y/4x$ unit of good x
-

Let the preference of a consumer over tea and biscuits be given by $u(t,b) = \min\{2t, b\}$, where t is the number of cups of tea, and b is the number of biscuits. The price of tea is Rs 10 per cup and the price of one biscuit is Rs 2. the person has a total of Rs 28 to spend. What is the amount of tea and biscuits that the consumer will buy to maximise their utility?

- a) 1 cup of Tea and 2 Biscuits.
 - b) 2 cups of Tea and 1 Biscuit.
 - c) 2 cups of Tea and 4 Biscuits.
 - d) 4 cups of Tea and 2 Biscuits.
-

Consider the market for a perfectly competitive good called G with a linear downward demand curve. If the price of a substitute good, called S , decreases, what will happen to the demand of the good G ? (Recall: A demand curve is drawn on a plane with price on Y axis versus quantity on X axis)

- a) Demand for G will shift to the right, because people will substitute S with G .
- b) Demand for G will shift to the left, because people will substitute G with S .

- c) Demand for G will be the same, but the demand curve will become non-linear, because different consumers will substitute G and S in different proportions.
 - d) Demand for G will be the same and it will remain linear, but the slope of the demand curve will change, because the relative price ratio of S and G has changed.
-

Consider the following graph depicting a monopolist's marginal revenue (MR), marginal cost (MC) and the market demand curve. Which of the following statements is true?

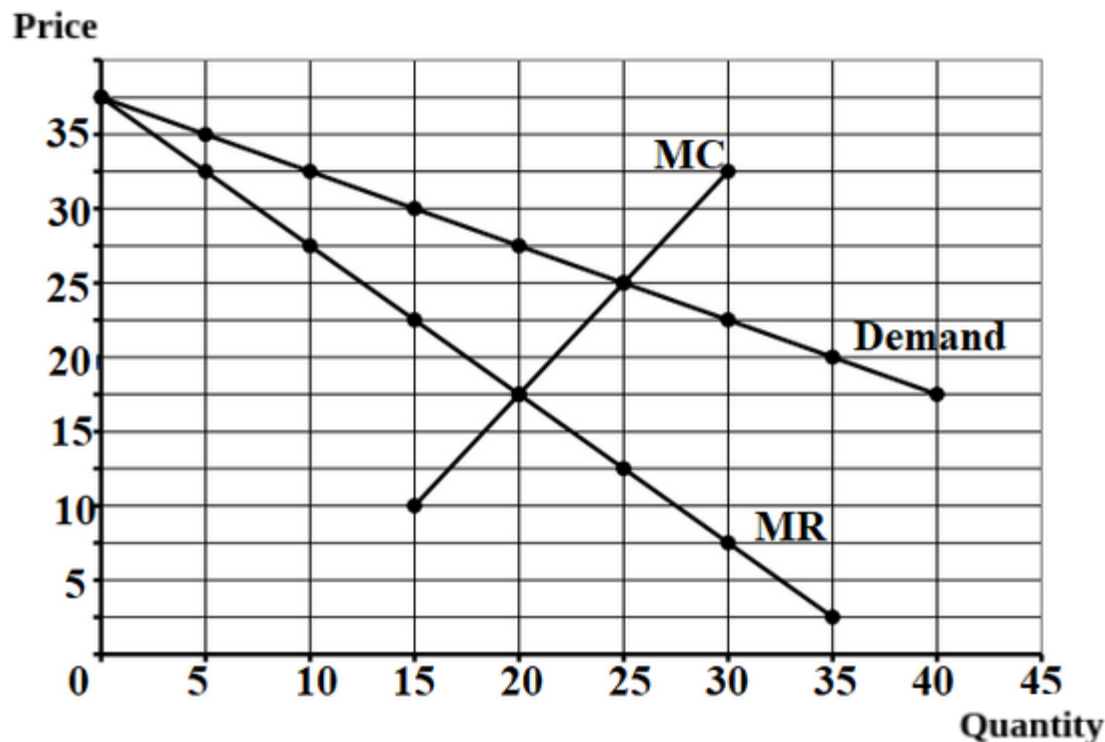


Figure X. Figure for question (X)

- a) The monopolist will charge 17.5 rupees per unit and sell 20 units.
 - b) The monopolist will charge 25 rupees per unit and sell 12.5 units.
 - c) The monopolist will charge 25 rupees per unit and sell 25 units.
 - d) The monopolist will charge 27.5 rupees per unit and sell 20 units.
-

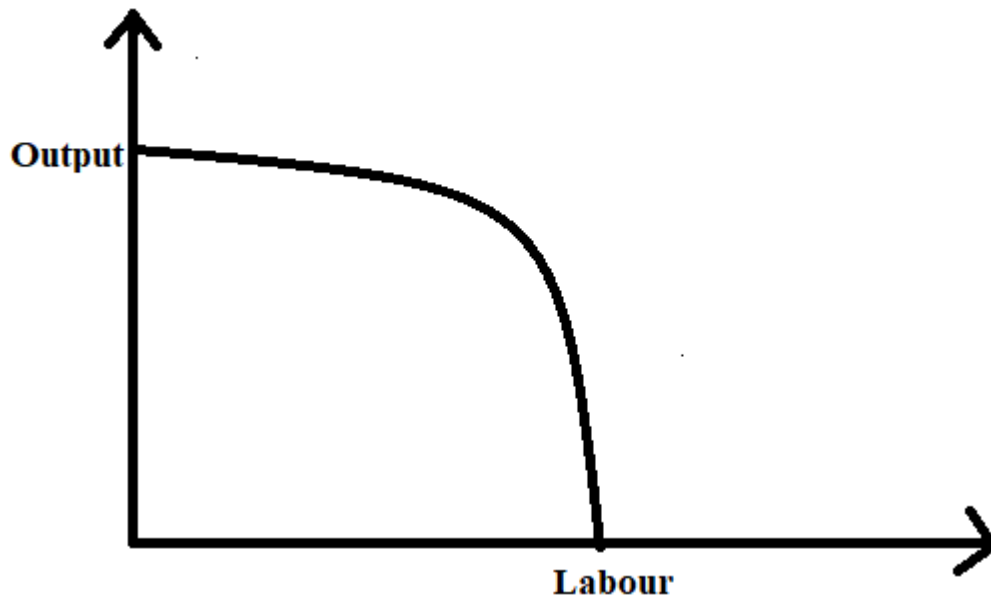
Which of the following decisions will increase the economic profit of a firm with increasing marginal cost operating in a perfectly competitive market?

- a) The firm decreases output if the price of a good exceeds its marginal cost of production.
 - b) The firm increases output if the price of a good is less than its marginal cost of production.
 - c) The firm decreases output if the price of a good is less than its marginal cost of production.
 - d) The firm charges a higher price if the existing price is equal to its marginal cost of production.
-

It is believed that an educated citizen has positive externalities for other citizens. The government should provide scholarships and subsidies for college education, because:

- a) The marginal private cost is more than the marginal social cost, hence college education will be under-supplied in competitive equilibrium
 - b) The marginal private cost is less than the marginal social cost, hence college education will be under-supplied in competitive equilibrium
 - c) The marginal private benefit is more than the marginal social benefit, hence college education will be under-demanded in competitive equilibrium
 - d) The marginal private benefit is less than the marginal social benefit, hence the college education will be under-demanded in competitive equilibrium
-

Which of the following statements about the figure below is true?



- a) The graph above shows that hiring more labour increases output.
 - b) The graph above shows that an increase in the level of an input leads to a decrease in the quantity produced.
 - c) The graph above is known as the production possibilities frontier as it shows the possible levels of output for different levels of input (labour).
 - d) The graph above is an accurate representation of how labour and output are related in the real world.
-

A firm that has a monopoly over good X observes that when it decreases the price of the good from Rs 100 to Rs 90, its total revenue decreases from Rs 1,00,000 to Rs 99,000. What is the elasticity of demand of good X with respect to its price?

- a) 10
 - b) 5
 - c) 1
 - d) 1/10
-

An individual likes both income and leisure and can decide how much time they want to work, and how much time they want to keep aside for leisure. If the exogenously given hourly wage increases (while everything else remains the same), which of the following statements must be true?

- a) One can now earn the same amount of money by working fewer hours, therefore for any rational individual, an increase in hourly wage will always result in fewer hours of work.
 - b) One can now earn more money by working the same number of hours, therefore for any rational individual, an increase in hourly wage will not change the hours of work.
 - c) For any individual, every extra hour of leisure is now costlier, therefore an increase in hourly wage will always result in more hours of work.
 - d) We need more information to determine whether working hours will actually increase or decrease.
-