

**Change of Faculty/Change of Subject Test  
Sample Questions**

- Q1. In a certain code 256 means red colour chalk, 589 means green colour flower and 254 means white colour chalk. The digit in the code that indicates white is:
- (a) 2
  - (b) 4
  - (c) 5
  - (d) 8

Ans (b)

- Q2. The area of a rectangle is 150 meter square. When the breadth of the same rectangle is increased by 2 meters and length decreased by 5 meters, the area of the rectangle decreases by 30 square meters. What is the perimeter of the square whose sides are equal to the length of the rectangle?
- (a) 80m
  - (b) 60m
  - (c) 28m
  - (d) 100m

Ans (b)

- Q3. If consumer Andy is willing to give up 4 units of food for 1 unit of wine, then Andy's marginal rate of substitution of wine for food is \_\_\_\_\_.
- (a) 2
  - (b)  $\frac{1}{4}$
  - (c)  $\frac{1}{2}$
  - (d) 4

Ans (d)

- Q4. A natural monopoly is a market situation in which
- (a) all firms sell natural resources
  - (b) a single firm supplies natural resources to an entire industry
  - (c) a single firm can supply the market output more efficiently than many firms
  - (d) none of the above

Ans (c)

- Q5. The real GDP can be obtained from the nominal GDP by
- (a) adjusting for changes over time
  - (b) adjusting for data collection errors
  - (c) adjusting for population changes
  - (d) adjusting for changes in prices

Ans (d)

- Q6. Frictional unemployment exists :
- (a) When there is a decrease in real GDP.
  - (b) Because it takes time to find a job when one is first entering the labour force.
  - (c) As a result of technological change.
  - (d) When an individual retires.

Ans (b)

- Q7. The minimum value of  $|x^2 - 5x + 21|$  is
- (a) -5
  - (b) 0
  - (c) -1
  - (d) -2

Ans (b)

- Q8. The function  $f(x) = 3x(x - 2)$  has a
- (a) minimum at  $x = 1$

- (b) maximum at  $x = 1$
- (c) minimum at  $x = 2$
- (d) maximum at  $x = 2$

Ans (a)

Q9. If a distribution is skewed to the left, then it is \_\_\_\_\_.

- (a) Negatively skewed
- (b) Positively skewed
- (c) Symmetrically skewed
- (d) Symmetrical

Ans (a)

Q10. How many dependent variables are used in multiple regression?

- (a) Two
- (b) One or more
- (c) Two or more
- (d) One

Ans (d)

Q11. The standard deviation is:

- (a) The square root of the variance
- (b) A measure of variability
- (c) An approximate indicator of how numbers vary from the mean
- (d) All of the above

Ans (d)

Q12. A convex set is a set of elements from a vector space such that all the points on the straight line between any two points of the set are also contained in the set.

- (a) True
- (b) False

Ans (a)

Q13. Non-overlapping categories or intervals are known as \_\_\_\_\_.

- (a) Inclusive
- (b) Exhaustive
- (c) Mutually exclusive
- (d) Mutually exclusive and exhaustive

Ans (c)

Q14. An individual on a trip to Singapore feels unwell and visits a doctor in Singapore. The doctor recommends a surgery and charges a high fee. On his return home, the family doctor tells him that a treatment with medicines would have been as effective, less risky and cheaper. In both alternatives, the doctor who acts on the individual's instructions follows his own interests rather than yours. Both alternatives would be an illustration of:

- (a) principal – agent problem
- (b) moral hazard

Ans (a)

Q15. Marginal productivity of labour

- (a) Increases when the price of goods sold increases, *ceteris paribus*
- (b) Decreases when there is an adverse supply shock, *ceteris paribus*
- (c) Increases when more workers are hired
- (d) Decreases when there is increase in the quantity of capital, *ceteris paribus*
- (e) Ans (b)