

Read the following news article and answer the following questions on the basis of same:

Since Covid-19 mortality is higher amongst the elderly, the higher median age in richer countries could also be a factor in greater mortality in Europe and America. However, Japan, an aged and rich Asian country, has very low levels of Covid-19 mortality. Also, mortality in poorer and younger country like Mexico in North America, and in South America, is very high. Median age can, therefore, at best, be a contributory rather than a determining factor.

Source. Financial express, Dec 9, 2020

1. _____ (Higher/Lower) median age in richer countries could be a determining factor in greater mortality in Europe and America.

Answer A is correct because

Since Covid-19 mortality is higher amongst the elderly, the higher median age in richer countries could also be a factor in greater mortality in Europe and America. However, Japan, an aged and rich Asian country, has very low levels of Covid-19 mortality.

2. Directions

In the following questions, a statement of Assertion (A) is following by a statement of Reason (R) . Mark the correct choice as:

Assertion (A) . Indifference curve slopes downwards.

Reason (R) .An indifference curve never touches X-axis or Y-axis.

Answer B is correct because

- A. Indifference curves slope downwards. The only way an individual can increase consumption in one good without gaining utility is to consume another good and generate the same amount of utility. Therefore, the slope is downwards sloping. Indifference curves assume a convex shape, Statement is true
- B. Indifference curve continuously approaches the two axis but never touches them. This is because of the assumption that the consumer wants to consume both the goods. If the IC touches the x-axis it means that consumer wants to consume only one good (say, good-1) and his demand for other good (say, good-2) is zero. Statement is also true but not explanation of A.

3. The value which has the greatest frequency in a series is called:

Answer D is correct because

The value of the observation having greatest frequency is called Mode.

4. Higher indifference curve represents higher level of satisfaction.

Answer B is correct because

Higher difference curve shows a higher level of satisfactions. It shows the various combinations of excess quantity of two goods than lower indifference curve.

5. Directions

In the following questions, Statement 1 is following by Statement 2 .Mark the correct choice as :

Statement 1 . The slope of a straight line demand curve is constant throughout

Statement 2 .On a linear demand curve changes in quantity demanded due to changes in price of the commodity are in the opposite direction and same proportion.

Answer A is correct because

Both are true

Slope of the curve may remain constant, but its elasticity may be different. For example, slope of a straight line demand curve is uniform, but its elasticity is different at different points. Hence, correct answer is option A.

6. Slope of budget line is

Answer C is correct because

Money income of the consumer assumed as constant and slope of budget line also depend on market rate of exchange.

7. Median of 3 ,6 ,9 ,5 ,10 ,7 ,8,15 :

Answer B is correct because

Median= $N+1/2$ (First arrange the series in ascending or descending order

3,5,6,7,8,9,10

$N= 7$

Median = $7+1/2=4^{\text{th}}$ term is median

Median =7

8. Identify the correct formula used in asymmetrical distribution to find relationship among mean, median and mode.

Answer C is correct because

The empirical relationship between Mean, Median and Mode is: $\text{Mode} = 3 \text{ median} - 2 \text{ mean}$.

9. In case of cardinal utility analysis, utility is measured in:-

Answer A is correct because

In cardinal utility analysis, utility can be measured in terms of cardinal numbers i.e. 1,2,3,4, etc. Cardinality means that utility can be measured. Utility can be measured in the unit Util.

10. Given Budget line equation : $30A + 10 B = 600$ for 2 goods A and B , what will be the slope of budget line ?

Answer B is correct Because

The slope of the budget line is the ratio of the prices of good 1 and good 2. This would mean price of good on the x axis divided price of goods on the y axis. The slope of a budget line is always negative as it is downward sloping. Answer is -3