Topic:- DU_J19_PHD_BE_T1

**1) Read the given passage and answer the question that follows:-**

***Erosion is regarded not merely as the physical removal of soil by water and wind, but rather as the deterioration of all the component parts of the habitat in which man and his crops and livestock have to exist. Since there is no conclusive evidence for any major climatic change in historic times to explain this deterioration, we must conclude that the eroding of the total environment has been due primarily to thoughtless destruction of the vegetative cover. This has led to deterioration of the microclimate above and below the surface, generally in the direction of a general drying out of the soil which has exposed it to erosive action of wind and rainfall of high intensity or frequency, and to the loss of organic matter in the soil, thus reducing its capacity to resist erosion by conserving the water that falls on the surface. If everything possible is done within the total environment to conserve the naturally planted or cultivated vegetation, this will also ensure optimal conservation of soil and water.***

**It is argued in the passage that the impoverishment of the world's habitat _____. [Question ID = 14688]**

1. is largely due to gradual changes in climate over long years [Option ID = 28750]
2. cannot be remedied [Option ID = 28752]
3. is first and foremost due to man's irresponsible abuse of the vegetable cover of the earth [Option ID = 28749]
4. became inevitable as soon as agricultural and animal husbandry developed [Option ID = 28751]

**Correct Answer :-**

- is first and foremost due to man's irresponsible abuse of the vegetable cover of the earth [Option ID = 28749]

**2) Read the given passage and answer the question that follows:-**

***Erosion is regarded not merely as the physical removal of soil by water and wind, but rather as the deterioration of all the component parts of the habitat in which man and his crops and livestock have to exist. Since there is no conclusive evidence for any major climatic change in historic times to explain this deterioration, we must conclude that the eroding of the total environment has been due primarily to thoughtless destruction of the vegetative cover. This has led to deterioration of the microclimate above and below the surface, generally in the direction of a general drying out of the soil which has exposed it to erosive action of wind and rainfall of high intensity or frequency, and to the loss of organic matter in the soil, thus reducing its capacity to resist erosion by conserving the water that falls on the surface. If everything possible is done within the total environment to conserve the naturally planted or cultivated vegetation, this will also ensure optimal conservation of soil and water.***

**It is pointed out in the passage that the loss of organic matter in the soil _____. [Question ID = 14689]**

1. is a direct result of insufficient rain [Option ID = 28754]
2. led to the destruction of the world's vegetative cover [Option ID = 28753]
3. is an irreversible process [Option ID = 28755]
4. has made the soil more susceptible to erosion [Option ID = 28756]

**Correct Answer :-**

- led to the destruction of the world's vegetative cover [Option ID = 28753]

Topic:- DU_J19_PHD_BE_T2

**1) Which of the following statement/s is/are correct?**

**[Question ID = 14734]**

1. The t distribution converges in distribution to the Standard Normal Distribution [Option ID = 28936]
2. The t distribution converges in probability to zero [Option ID = 28935]
3. The t distribution converges in probability to the Normal distribution [Option ID = 28934]
4. The t and Normal probability distributions are not related with each other [Option ID = 28933]

**Correct Answer :-**

- The t and Normal probability distributions are not related with each other [Option ID = 28933]

**2) Which of the following is correct about the 'Hindu Rate of Growth'?**

**[Question ID = 14710]**

1. Reflects low growth performance of the Indian economy during 1950-80. [Option ID = 28839]
2. This is about economic growth of the Hindu population. [Option ID = 28837]
3. Hints at low growth in India since 2008 [Option ID = 28840]
4. It is about economic disparities among different social groups in India. [Option ID = 28838]

**Correct Answer :-**

- This is about economic growth of the Hindu population. [Option ID = 28837]

**3) Which of the following is/are true of MSMEs (Micro, Small, and Medium Enterprises) in India ?**

**1) About 95% of industrial units are there in MSMEs**
**2) About 40% of export earning comes from the MSMEs**
**3) About 6-8% of GDP comes from MSMEs**
**4) It's the largest employer only after agriculture.**

**[Question ID = 14713]**

1. Only 1&2 [Option ID = 28849]
2. Only 1,2and 3. [Option ID = 28851]
3. Only 2&3. [Option ID = 28850]
4. All of these [Option ID = 28852]

**Correct Answer :-**

- Only 1&2 [Option ID = 28849]

**4) Which of the following Economists has been awarded the Nobel Prize in Economics?**

**[Question ID = 14719]**

1. Dale Jorgenson [Option ID = 28874]
2. John Maynard Keynes [Option ID = 28876]
3. Richard Thaler [Option ID = 28875]
4. Muhammad Yunus [Option ID = 28873]

**Correct Answer :-**

- Muhammad Yunus [Option ID = 28873]

**5) In India, in the overall Index of Industrial Production, the Indices of Eight Core Industries have a combined weight of 37-90%. Which of the following are among those Eight Core Industries?**
**1. Cement**
**2. Fertilizers**
**3. Natural gas**
**4. Refinery products**
**5. Textiles**

**Select the correct answer using the codes given below:-**

**[Question ID = 14715]**

1. 1, 2, 3 and 4 only [Option ID = 28859]
2. 1, 2, 3, 4 and 5 [Option ID = 28860]
3. 1 and 5 only [Option ID = 28857]
4. 2, 3 and 4 only [Option ID = 28858]

**Correct Answer :-**

- 1 and 5 only [Option ID = 28857]

**6) If A and B are independent events, then which of following pairs of events are independent:-**

**i. *A'* and B**
**ii. A and *B'***
**iii. *A'* and *B'***

**[Question ID = 14723]**

1. i and ii [Option ID = 28890]
2. Only iii [Option ID = 28891]
3. Only i [Option ID = 28889]
4. All of these [Option ID = 28892]

**Correct Answer :-**

- Only i [Option ID = 28889]

**7) The book 'Why Nations Fail' is authored / co-authored by:- [Question ID = 14717]**

1. Joseph Stiglitz [Option ID = 28865]
2. Daron Acemoglu [Option ID = 28867]
3. John Kenneth Galbraith [Option ID = 28868]
4. Kaushik Basu [Option ID = 28866]

**Correct Answer :-**

- Joseph Stiglitz [Option ID = 28865]

**8) *Identify the antonym or synonym of the given word:-***

**Sanguine.**

**[Question ID = 14696]**

1. Menial [Option ID = 28784]
2. Morose [Option ID = 28781]
3. Venial [Option ID = 28783]
4. Droll [Option ID = 28782]

**Correct Answer :-**

- Morose [Option ID = 28781]

**9) The coefficient of variation of real wages in a city was 6. Nominal wages were double that of real wages. So the coefficient of variation of nominal wages in the city was:- [Question ID = 14731]**

1. Can't say, from the information given [Option ID = 28924]
2. 3 [Option ID = 28922]
3. 6 [Option ID = 28923]
4. 12 [Option ID = 28921]

**Correct Answer :-**

- 12 [Option ID = 28921]

**10) The primary deficit refers to:- [Question ID = 14714]**

1. The fiscal deficit less the interest outgo in the budget. [Option ID = 28856]
2. The deficit in the capital account of the budget [Option ID = 28855]
3. The deficit in the revenue account of the budget. [Option ID = 28854]
4. The deficit in the primary sector of the economy. [Option ID = 28853]

**Correct Answer :-**

- The deficit in the primary sector of the economy. [Option ID = 28853]

**11) In the context of hypothesis testing, a Type I error is one where:- [Question ID = 14736]**

1. A false null hypothesis is accepted. [Option ID = 28942]
2. A true null hypothesis is rejected. [Option ID = 28941]
3. The square root of the standard error is reduced to zero. [Option ID = 28943]
4. The power of a test is maximized. [Option ID = 28944]

**Correct Answer :-**

- A true null hypothesis is rejected. [Option ID = 28941]

**12) Regression model that can be used when the dependent variable is a binary variable:-**

**i. Logistic RegressionModel**
**ii. Linear Probability Model**
**iii. Probit Model**

**[Question ID = 14728]**

1. Only ii [Option ID = 28910]
2. i and ii [Option ID = 28911]
3. Only i [Option ID = 28909]
4. i, ii, and iii [Option ID = 28912]

**Correct Answer :-**

- Only i [Option ID = 28909]

**13)** ***Identify the antonym or synonym of the given word:-***

**Transient [Question ID = 14701]**

1. Foregone [Option ID = 28804]
2. Elegant [Option ID = 28801]
3. Bereft [Option ID = 28803]
4. Temporary [Option ID = 28802]

**Correct Answer :-**

- Elegant [Option ID = 28801]

**14)** ***Identify the antonym or synonym of the given word:-***

**Felicity [Question ID = 14697]**

1. Sadness [Option ID = 28786]
2. Redress [Option ID = 28785]
3. Lucky [Option ID = 28788]
4. Serendipity [Option ID = 28787]

**Correct Answer :-**

- Redress [Option ID = 28785]

**15)** ***Identify the antonym or synonym of the given word:-***

**Undaunted [Question ID = 14700]**

1. Understand [Option ID = 28800]
2. Discouraged [Option ID = 28799]
3. Impalpable [Option ID = 28797]
4. Emblazoned [Option ID = 28798]

**Correct Answer :-**

- Impalpable [Option ID = 28797]

**16)** ***Identify the antonym or synonym of the given word:-***

**Lachrymose [Question ID = 14698]**

1. Astride [Option ID = 28789]
2. Benevolent [Option ID = 28790]
3. Varicose [Option ID = 28792]
4. Tearful [Option ID = 28791]

**Correct Answer :-**

- Astride [Option ID = 28789]

**17)** ***Identify the antonym or synonym of the given word:-***

**Panegyric [Question ID = 14699]**

1. Eulogy [Option ID = 28795]
2. Panacea [Option ID = 28796]

3. Disaster [Option ID = 28793]
4. Aversion [Option ID = 28794]

**Correct Answer :-**

- Disaster [Option ID = 28793]

**18) Consider the following statements about the Financial sector in India.**

**(I) A bull is a speculator who has an optimistic view about the share market**
**(II) Individual investors do not participate in the money market which is open only for the RBI, Commercial Banks and other Financial institutions.**
**(III) Money market instruments are highly liquid but extremely risky.**

**Choose the correct option below:- [Question ID = 14705]**

1. Only (I) is True. [Option ID = 28817]
2. Only (I) and (II) are True [Option ID = 28818]
3. Only (I) and (III) are True [Option ID = 28819]
4. All the Statements are False [Option ID = 28820]

**Correct Answer :-**

- Only (I) is True. [Option ID = 28817]

**19) Nominal exchange rate depreciation:- [Question ID = 14721]**

1. Does not affect the real exchange rate [Option ID = 28882]
2. Always leads to an improvement in the balance of trade [Option ID = 28881]
3. Always brings about a real exchange rate depreciation [Option ID = 28883]
4. Need not lead to an improvement in the balance of trade. [Option ID = 28884]

**Correct Answer :-**

- Always leads to an improvement in the balance of trade [Option ID = 28881]

**20) The money multiplier in an economy increases with:- [Question ID = 14712]**

1. greater cash holding by each individual in society [Option ID = 28848]
2. increase in Statuary Liquidity Ratio [Option ID = 28846]
3. increase in banking habit of the population [Option ID = 28847]
4. increases in Cash Reserve Ratio [Option ID = 28845]

**Correct Answer :-**

- increases in Cash Reserve Ratio [Option ID = 28845]

**21) The concept of DALY refers to _____, a method used to assess _____. [Question ID = 14709]**

1. Depreciation Adjusted Life Years, longevity of productive assets [Option ID = 28833]
2. Depreciation Adjusted Life Years, valuation of fixed assets [Option ID = 28836]
3. Disability Adjusted Life Years, burden of disease and health status [Option ID = 28834]
4. Disability Adjusted Life Years, social equality and equality of opportunity [Option ID = 28835]

**Correct Answer :-**

- Depreciation Adjusted Life Years, longevity of productive assets [Option ID = 28833]

**22)**

**Suppose, in equilibrium, aggregate income (in units of money per year) in an economy $Y = C + I$, where investment expenditure (in units of money per year) $I = 1000$ and aggregate consumption expenditure (in units of money per year) C satisfies the following conditions:**
***i) C is a function of current disposable income in the economy ($Y_d$);***
***ii) If $Y_d = 0$ then $C = 500$.***
***iii) Marginal propensity to save out of $Y_d$ is constant in the economy and equal to 30%.***
***Suppose the government collects direct tax revenues equal to 15% of Y and makes direct transfer payments equal to 750 units of money per year.***

***What is the equilibrium value of Y in the economy?***

**[Question ID = 14716]**

1. Between 4250 and 4750 [Option ID = 28863]
2. Between 3250 and 3750 [Option ID = 28861]
3. Between 4750 and 5250 [Option ID = 28864]
4. Between 3750 and 4250 [Option ID = 28862]

**Correct Answer :-**

- Between 3250 and 3750 [Option ID = 28861]

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**23) Suppose "x" is the arrival time of buses at a bus stop in a three-hour period from 2pm to 5pm. Then "x" is a:-**

**[Question ID = 14727]**

1. Continuous random variable [Option ID = 28906]
2. Constant [Option ID = 28907]
3. Discrete random variable [Option ID = 28905]
4. None of these [Option ID = 28908]

**Correct Answer :-**

- Discrete random variable [Option ID = 28905]

---

**24) When a variable Y is regressed on another variable X the estimated regression line:-**

**(I) Passes through the Means of X and Y;**
**(II) Minimizes the sum of squared distances from the scatter points;**
**(III) Does not pass through each one of the scatter points**

**Choose the correct option:- [Question ID = 14735]**

1. (I), (II) and (III) are all True [Option ID = 28940]
2. Only (II) is True [Option ID = 28939]
3. Only (II) and (III) are True [Option ID = 28937]
4. Only (I) and (II) are True [Option ID = 28938]

**Correct Answer :-**

- Only (II) and (III) are True [Option ID = 28937]

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**25) When a qualitative variable with M categories is used in a regression model, there can be a problem of dummy variable trap if:- [Question ID = 14725]**

1. M number of dummies are used without intercept along with a dummy interaction term [Option ID = 28900]
2. M number of dummies are used with intercept [Option ID = 28899]

3. M-1 number of dummies are used with intercept [Option ID = 28898]
4. M Number of dummies are used without intercept [Option ID = 28897]

**Correct Answer :-**

- M Number of dummies are used without intercept [Option ID = 28897]

**26) The number of elements in a set is given as n(A)=105, n(B)=280 and n(A-B)=55 then n(B-A)=? [Question ID = 14739]**

1. 230 [Option ID = 28955]
2. 50 [Option ID = 28953]
3. 225 [Option ID = 28954]
4. 55 [Option ID = 28956]

**Correct Answer :-**

- 50 [Option ID = 28953]

**27) Choose the option below that provides the correct match of List – I with List – II:-**

| List – I | List – II |
|---|---|
| **I. Rybczynski Theorem** | **a. The effect of tariffs on factor prices** |
| **II. Metzler Effect** | **b. The effect of factor supply on production and growth** |
| **III. Stolper Samuelson Theorem** | **c. The effect of tariffs on domestic prices** |
| **IV. Immiserising growth** | **d. The effect of growth on terms of trade** |

**[Question ID = 14711]**

1. I - b, II - a, III - c, IV - d [Option ID = 28843]
2. I - b, II - c, III - a, IV - d [Option ID = 28844]
3. I - d, II - a, III - c, IV - b [Option ID = 28842]
4. I - d, II - c, III - a, IV - b [Option ID = 28841]

**Correct Answer :-**

- I - d, II - c, III - a, IV - b [Option ID = 28841]

**28) The best method to find the seasonal variation is:- [Question ID = 14738]**

1. None of the above [Option ID = 28952]
2. Simple average method [Option ID = 28951]
3. Ratio to trend method [Option ID = 28949]
4. Ratio to moving average method [Option ID = 28950]

**Correct Answer :-**

- Ratio to trend method [Option ID = 28949]

**29) Ramu is very conscious about the food he eats. He only eats *rotis* and *dal*; a cup of *dal* costs Rs 2 while each *roti* costs a rupee and Ramu decides to spend only Rs 13 per day on food. Also he decides to consume exactly 5500 calories a day; he has been told that each roti has 1000 calories while each cup of dal has 500 calories. He spends his entire money allocated on food. Then:-**

**[Question ID = 14704]**

1. He consumes 5 rotis and 4 cups of dal per day [Option ID = 28815]
2. He consumes no more than 3 rotis per day. [Option ID = 28814]
3. He consumes 3 rotis and 5 cups of dal. [Option ID = 28813]

4. Unless we are given some more information about preferences we cannot say what Ramu does. [Option ID = 28816]

**Correct Answer :-**

- He consumes 3 rotis and 5 cups of dal. [Option ID = 28813]

**30) Rita obtained 61 out of 100 marks in a MBA Entrance test. She found that her score was the 72nd percentile in the frequency distribution of the test scores. If 10,000 students appeared for the test, then:- [Question ID = 14730]**

1. at least 2800 students got 61 or more [Option ID = 28918]
2. at least 2800 students got 61 or less [Option ID = 28919]
3. at least 28 per cent of the students got 72 or more [Option ID = 28920]
4. at least 72 per cent of the students got 72 or more [Option ID = 28917]

**Correct Answer :-**

- at least 72 per cent of the students got 72 or more [Option ID = 28917]

**31) Consider the following Statements:-**

**(I) A sample statistic changes each time you draw a sample and try to measure it, but a population parameter remains fixed.**
**(II) A population parameter changes each time you try to measure it, but a sample statistic remains fixed across samples.**
**(III) The true value of a sample statistic can never be known but the true value of a population parameter can always be observed.**

**Choose the correct option below:-**

**[Question ID = 14741]**

1. Only (III) is True [Option ID = 28963]
2. Only (II) is True [Option ID = 28962]
3. (I), (II) and (III) are all False [Option ID = 28964]
4. Only (I) is True [Option ID = 28961]

**Correct Answer :-**

- Only (I) is True [Option ID = 28961]

**32) Consider the following table.**

| Country | Wage rates | Cutlery | Wheat |
|---|---|---|---|
| **U.S.A** | 4 dollar/hr | 120hr/unit | 60hr/bu |
| **England** | 6 pound/hr | 60hr/unit | 40hr/bu |

**Given exchange rate is 1pound/1.25 dollar.**

**Which country has comparative cost advantage in which commodity at given exchange rate?**

**[Question ID = 14718]**

1. Both the countries have equal cost advantage in both the commodities. [Option ID = 28872]

2. U.S.A has comparative cost advantage in the production of cutlery while England in wheat. [Option ID = 28870]
3. England has comparative cost advantage in the production of cutlery while the U.S.A in wheat. [Option ID = 28869]
4. Comparative cost advantage cannot be determined owing to insufficient information. [Option ID = 28871]

**Correct Answer :-**

- England has comparative cost advantage in the production of cutlery while the U.S.A in wheat. [Option ID = 28869]

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**33) Consider the following regarding learning outcomes in India:-**

**a) The Learning Poverty Count (LPC) measures the number of children who do not meet the basic learning benchmark.**
**b) The Learning Poverty Gap (LPG) measures how far each student is from the benchmark.**

**Which of the above is/are true?**

**[Question ID = 14702]**

1. Both a & b [Option ID = 28807]
2. Only b [Option ID = 28806]
3. Only a [Option ID = 28805]
4. None of these [Option ID = 28808]

**Correct Answer :-**

- Only a [Option ID = 28805]

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**34) Which of the following statement/s are true:-**

**i. An Unbiased estimator is always an efficient estimator**
**ii. An efficient estimator has maximum variance in the class of all unbiased estimators. [Question ID = 14726]**

1. None [Option ID = 28904]
2. Only i [Option ID = 28902]
3. Only ii [Option ID = 28903]
4. Both i and ii [Option ID = 28901]

**Correct Answer :-**

- Both i and ii [Option ID = 28901]

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**35) The final exam marks for 100 students in a Maths paper had an average of 70 and a standard deviation of 5. How many students had scored marks between 60 and 80 ? [Question ID = 14733]**

1. Can't say, from the information given [Option ID = 28929]
2. At least 75% of the students [Option ID = 28932]
3. Less than 50% of the students [Option ID = 28931]
4. No more than 70 per cent of the students [Option ID = 28930]

**Correct Answer :-**

- Can't say, from the information given [Option ID = 28929]

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**36)**

**Match the following:-**

**1. Exponential Distribution** **i. Variance is double of mean**
**2. Chi-Square Distribution** **ii. Variance is the square of the mean**
**3. Poisson Distribution** **iii. Variance is equal to the mean**

**[Question ID = 14737]**

1. 1-iii ,2-ii, 3-i [Option ID = 28946]
2. 1-ii, 2-iii, 3-i [Option ID = 28947]
3. 1-ii ,2-i, 3-iii [Option ID = 28948]
4. 1-i, 2-ii, 3-iii [Option ID = 28945]

**Correct Answer :-**

- 1-i, 2-ii, 3-iii [Option ID = 28945]

---

**37)** Let $X_1$ and $X_2$ have a joint probability mass function

$$f(X_1, X_2) = \frac{x_1+2x_2}{18} x_1 = 1,2 \text{ and } x_2 = 1,2$$

The Mean and Variance of $X_1$ are

**[Question ID = 14724]**

1. . $\text{Mean}=\frac{13}{14}$ and $\text{Variance}=\frac{19}{80}$ [Option ID = 28893]
2. $\text{Mean}=\frac{14}{19}$ and $\text{Variance}=\frac{20}{81}$ [Option ID = 28895]
3. $\text{Mean}=\frac{14}{19}$ and $\text{Variance}=\frac{19}{81}$ [Option ID = 28896]
4. $\text{Mean}=\frac{1}{2}$ and $\text{Variance}=\frac{19}{80}$ [Option ID = 28894]

**Correct Answer :-**

- . $\text{Mean}=\frac{13}{14}$ and $\text{Variance}=\frac{19}{80}$ [Option ID = 28893]

---

**38)** Simplify

$$2\,ln4 - \frac{1}{2}\ln 16 + \ln 2$$

**[Question ID = 14732]**

1. ln 8 [Option ID = 28925]
2. ln 16 [Option ID = 28926]
3. ln 32 [Option ID = 28928]
4. ln 24 [Option ID = 28927]

**Correct Answer :-**

- ln 8 [Option ID = 28925]

**39) A sources of growth equation derived from the neoclassical production function Y = f(K,L,A) is $g_Y = g_A + w_K g_K + w_L g_L$; where Y is aggregate output, L is labour, K is capital, A is the technological parameter and g stands for rate of growth. Suppose that in the equation above $g_Y = .04$, $g_K$ and $g_L$, are both = .03, and $w_K + w_L = 1$. What does this imply?**

**[Question ID = 14720]**

1. Productivity must be growing by 7% a year. [Option ID = 28880]
2. Productivity must be growing by 1% a year. [Option ID = 28879]
3. National income must be growing by 1% a year. [Option ID = 28878]
4. National income must be growing by 7% a year. [Option ID = 28877]

**Correct Answer :-**

- National income must be growing by 7% a year. [Option ID = 28877]

---

**40) Consider the following situation regarding the Indian economy where the currency is on a managed float. There is a surge in portfolio capital inflows; at the same time the economy is facing inflationary pressures and Indian exports are facing stiff price competition from labour intensive developing countries. In this case choose the correct policy alternatives before the RBI from the given options:-**

**(I) Foreign exchange intervention involving purchase of dollars**
**(II) Foreign exchange intervention involving sale of dollars**
**(III) Open market operations involving sale of securities and increase in cash reserve ratio**
**(IV) Open market operations involving purchase of securities and decrease in cash reserve ratio**
**[Question ID = 14703]**

1. (II) and (IV) only [Option ID = 28812]
2. (II) and (III) only [Option ID = 28811]
3. (I) and (IV) only [Option ID = 28809]
4. (I) and (III) only [Option ID = 28810]

**Correct Answer :-**

- (I) and (IV) only [Option ID = 28809]

---

**41) Consider the following statements about the Indian Capital market.**

**(I) The capital market is a market for medium and long-term funds**
**(II) Call money, trade bills, commercial paper, certificate of deposit are important capital market instruments.**
**(III) Capital market instruments yield high returns but they are also quite risky.**

**Choose the correct option below:- [Question ID = 14708]**

1. (I), (II) and (III) are all False [Option ID = 28831]
2. (I), (II) and (III) are all True [Option ID = 28832]
3. Only (II) is False [Option ID = 28829]
4. Only (I) is False [Option ID = 28830]

**Correct Answer :-**

- Only (II) is False [Option ID = 28829]

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**42) The random variable x represents the number of heads that appear in 1000 tosses of a fair coin. The mean and variance of x will be:- [Question ID = 14740]**

1. Mean =300, Variance=150 [Option ID = 28958]
2. Mean= 200, Variance=100 [Option ID = 28957]

3. Mean =500, Variance=250 [Option ID = 28960]
4. Mean = 400, Variance=200 [Option ID = 28959]

**Correct Answer :-**

- Mean= 200, Variance=100 [Option ID = 28957]

---

**43) PMI refers to the _____ and one of the major indicators it is based on is _____.**

**Choose the correct combination:- [Question ID = 14707]**

1. Producers Manufacturing Index; inventory levels [Option ID = 28827]
2. Purchasing Managers Index; new orders [Option ID = 28828]
3. Primary Manufactures Index; production [Option ID = 28826]
4. Production Monitoring Index; employment environment [Option ID = 28825]

**Correct Answer :-**

- Production Monitoring Index; employment environment [Option ID = 28825]

---

**44) A monopolist has an inverse demand curve given by p = 32 – 5q, where q stands for quantity of output and p is the price per unit of output. The monopolist has no fixed cost and his marginal cost is 7 at all level of output. Which of the following expresses the monopolist's profit as a function of output? [Question ID = 14706]**

1. 32 – 10 q [Option ID = 28822]
2. 32 – 5q - 7. [Option ID = 28821]
3. 32 – 5 $q^2$- 7. [Option ID = 28824]
4. 25q – 5 $q^2$ [Option ID = 28823]

**Correct Answer :-**

- 32 – 5q - 7. [Option ID = 28821]

---

**45) *Choose the option that correctly completes the blanks in the given sentence:-***

**If the experiment _____ successful at the first try, we _____ it again tomorrow. [Question ID = 14695]**

1. had been / wouldn't have to perform [Option ID = 28780]
2. should be / will have to perform [Option ID = 28779]
3. weren't / wouldn't have to perform [Option ID = 28778]
4. must have been / won't have to perform [Option ID = 28777]

**Correct Answer :-**

- must have been / won't have to perform [Option ID = 28777]

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**46) *Choose the option that correctly completes the blanks in the given sentence:-***

**I don't think that the meeting _____ so long as there _____ enough members. [Question ID = 14694]**

1. is holding / will be [Option ID = 28775]
2. had held / could be [Option ID = 28774]
3. can be held / aren't [Option ID = 28773]
4. has been held / were [Option ID = 28776]

**Correct Answer :-**

- can be held / aren't [Option ID = 28773]

**47) If A and B are two square matrix then which of the following is true:-**

**i. $AB=BA$ if $A=B^{-1}$**
**ii. AB=BA if B is Identity Matrix [Question ID = 14729]**

1. None [Option ID = 28916]
2. Only ii [Option ID = 28914]
3. Both i and ii [Option ID = 28915]
4. Only i [Option ID = 28913]

**Correct Answer :-**

- Only i [Option ID = 28913]

**48) The following statements describe a set of properties for the probability distribution of a random variable X.**

**Which of the following statements must be incorrect?**

**[Question ID = 14722]**

1. Standard Deviation($X$) = − 1 [Option ID = 28886]
2. Variance($X$) = 1 [Option ID = 28885]
3. The distribution of $X$ is symmetric about E($X$) [Option ID = 28888]
4. The distribution of $X$ is not symmetric about E($X$) [Option ID = 28887]

**Correct Answer :-**

- Variance($X$) = 1 [Option ID = 28885]