DU PHD Business Economics

Topic:- BE PHD S2

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.

The definition of erosion given in this passage _____.

[Question ID = 1834]
1. is a strictly regional one

   [Option ID = 7330]
2. disregards man's role in it

   [Option ID = 7332]
3. concentrates on flooding

   [Option ID = 7334]
4. is a broad one

   [Option ID = 7336]

Correct Answer :-
- is a broad one

   [Option ID = 7336]

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2) *Choose the answer that is closest in meaning to the given word in capital.*

AUDACIOUS

[Question ID = 1836]
1. Useless

   [Option ID = 7338]
2. Bold

   [Option ID = 7340]
3. Foolish

   [Option ID = 7342]
4. Necessary

   [Option ID = 7344]

Correct Answer :-
- Bold

   [Option ID = 7340]

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3) *Choose the answer that is closest in meaning to the given word in capital.*

RETROSPECT

[Question ID = 1838]
1. second thoughts

   [Option ID = 7346]
2. think deeply

   [Option ID = 7347]
3. admiration

   [Option ID = 7348]

Correct Answer :-

● second thoughts

[Option ID = 7346]

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4) *Choose the answer that is closest in meaning to the given word in capital.*

CONGENITAL

[Question ID = 1840]

1. peaceful

[Option ID = 7354]

2. inherent

[Option ID = 7356]

3. happy

[Option ID = 7358]

4. illness

[Option ID = 7360]

Correct Answer :-

● inherent

[Option ID = 7356]

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5) *Choose the answer that is opposite in meaning to the given word in capital.*

ABNEGATION

[Question ID = 1843]

1. abstinence

[Option ID = 7363]

2. denial

[Option ID = 7365]

3. stint

[Option ID = 7367]

4. indulgence

[Option ID = 7369]

Correct Answer :-

● indulgence

[Option ID = 7369]

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6) *Choose the answer that is opposite in meaning to the given word in capital.*

AVUNCULAR

[Question ID = 1844]

1. protective

[Option ID = 7371]

2. kindly

[Option ID = 7373]

3. like an uncle

[Option ID = 7375]

4. hurtful

[Option ID = 7377]

Correct Answer :-

● hurtful

[Option ID = 7377]

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7) *Choose the answer that is opposite in meaning to the given word in capital.*

PREAMBLE

[Option ID = 7378]
2. introduction

[Option ID = 7379]
3. walk fast

[Option ID = 7380]
4. starting

[Option ID = 7382]

Correct Answer :-
- concluding

[Option ID = 7378]

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8) *Choose the answer that is opposite in meaning to the given word in capital.*

SOPORIFIC

[Question ID = 1849]
1. drowsiness

[Option ID = 7387]
2. sick

[Option ID = 7389]
3. alert

[Option ID = 7391]
4. sleeping pill

[Option ID = 7393]

Correct Answer :-
- alert

[Option ID = 7391]

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9) *Choose the answer that is opposite in meaning to the given word in capital.*

KNEE-JERK

[Question ID = 1851]
1. thumb-jerk

[Option ID = 7397]
2. well planned

[Option ID = 7398]
3. instant

[Option ID = 7400]
4. instantaneous

[Option ID = 7401]

Correct Answer :-
- well planned

[Option ID = 7398]

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10) *The following sentence has been divided into parts 1, 2, 3, and 4. Point out which part is grammatically incorrect.*

<u>Rahul a genuine</u>   <u>raconteur</u>   <u>whose stories</u>   <u>fascinate his listeners</u>.

    1   2   3   4

[Question ID = 1852]
1. Rahul a genuine

[Option ID = 7402]
2. raconteur

[Option ID = 7403]
3. whose stories

[Option ID = 7405]

Correct Answer :-

- Rahul a genuine

  [Option ID = 7402]

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11) Consider the following Statement and choose the correct option below :

"Domestic minus foreign interest rate would equal the expected rate of depreciation of the domestic currency".

[Question ID = 1854]

1. This Statement would be True in the presence of capital account convertibility and flexible exchange rates

   [Option ID = 7410]
2. This Statement would be true only in the presence of limited capital mobility and fixed exchange rate system in the domestic country

   [Option ID = 7411]
3. This Statement is False in the presence of perfect capital mobility under which domestic and foreign rates would always be equal.

   [Option ID = 7413]
4. This Statement is True only in case the spot rate is equal to the Forward rate of exchange.

   [Option ID = 7415]

Correct Answer :-

- This Statement would be True in the presence of capital account convertibility and flexible exchange rates

  [Option ID = 7410]

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12) The total sales S of a one-product firm are given by S (L,M) = ML - L^2 , where M = cost of materials and L = cost of labor. The maximum value of this function subject to the budget constraint M + L = 80 is:-

[Question ID = 1856]

1. S = 800 at L = 20 , M = 60

   [Option ID = 7418]
2. S = 1000 at L = 30 , M = 50

   [Option ID = 7420]
3. S = 1200 at L = 40 , M = 40

   [Option ID = 7422]
4. None of these

   [Option ID = 7424]

Correct Answer :-

- S = 800 at L = 20 , M = 60

  [Option ID = 7418]

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13) Consider the following:-

a. Average total cost (ATC), marginal cost (MC) and average variable costs (AVC) are generally 'U' shaped.

b. When average cost is decreasing, marginal cost is also decreasing and lies left of average cost but when average cost is rising, marginal cost is also rising and lies right of average cost.

c. Shut down refers to the point where marginal cost is equal to average variable cost.

Which of the above is/ are true?

[Question ID = 1859]

1. Only a & b

   [Option ID = 7427]
2. Only b & c

   [Option ID = 7428]
3. Both a & c

   [Option ID = 7430]
4. All of these

   [Option ID = 7432]

Correct Answer :-

- All of these

  [Option ID = 7432]

Ramu spends his entire income on 6 units of good x and 20 units of good y when price of x is twice the price of y. His income doubles and the price of y doubles while the price of x remains the same. Ramu wants to continue consuming 20 units of good y. The maximum number of units of good x that he can now purchase is :

[Question ID = 1860]
1. 12 [Option ID = 7434]
2. 14 [Option ID = 7435]
3. 16 [Option ID = 7436]
4. Unless we are given some more information, we cannot say. [Option ID = 7438]

Correct Answer :-
- 12 [Option ID = 7434]

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15) If the elasticity of substitution is less than one (inelastic) what will happen to share of labour relative to capital's share when the wage-interest ratio is increased?

[Question ID = 1862]
1. It will increase

   [Option ID = 7442]
2. It will decrease

   [Option ID = 7443]
3. It will remain same

   [Option ID = 7444]
4. None of these

   [Option ID = 7445]

Correct Answer :-
- It will increase

   [Option ID = 7442]

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16) If the marginal rate of substitution between the two goods X and Y consumed by a household is given by $(x - a)/(y - b)$ (where x and y denote quantities consumed of X and Y respectively; $x > a$, $y > b$) then a possible form for the utility function of the household is

[Question ID = 1863]
1. $\ln(x - a) - \ln(y - b)$

   [Option ID = 7446]
2. $\ln(x - a)/\ln(y - b)$

   [Option ID = 7447]
3. $(x - a)^2/(y - b)^2$

   [Option ID = 7448]
4. $(x - a)^2 + (y - b)^2$

   [Option ID = 7449]

Correct Answer :-
- $(x - a)^2 + (y - b)^2$

   [Option ID = 7449]

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17) A firm has a production function $q = A. K^{0.5}L^{1.8}$, where A is a positive constant. Such a production function exhibits

[Question ID = 1864]
1. Decreasing returns to scale and diminishing marginal products of the factor K

   [Option ID = 7450]
2. Increasing returns to scale and diminishing marginal product for factor K

   [Option ID = 7451]
3. Decreasing returns to scale and increasing marginal product for factor K

   [Option ID = 7452]
4. Constant returns to scale with increasing marginal products for factor L

   [Option ID = 7453]

Correct Answer :-
- Increasing returns to scale and diminishing marginal product for factor K

   [Option ID = 7451]

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18) Transfer pricing refers to

[Question ID = 1865]
s that made the cost of goods when they are traded

[Option ID = 7454]

2. The movement of factors that causes changes in price

[Option ID = 7455]

3. The over- or under-pricing of goods in intra-firm cross border trade of multinational companies

[Option ID = 7456]

4. The price which skilled and professional workers charge when transferred by companies

[Option ID = 7457]

Correct Answer :-

- The over- or under-pricing of goods in intra-firm cross border trade of multinational companies

[Option ID = 7456]

19) Assuming fixed prices, which of the following statements are true?

1. Monetary policy is more effective, flatter the IS-curve.
2. Fiscal policy is less effective, flatter the LM curve.
3. Fiscal policy is more effective, flatter the LM curve.
4. Monetary policy is ineffective and fiscal policy is fully effective in liquidity trap.

[Question ID = 1866]

1. 1, 2, 4 are True [Option ID = 7458]
2. 1, 3, 4 are True [Option ID = 7459]
3. Only 4 is True [Option ID = 7460]
4. None of the above are True [Option ID = 7461]

Correct Answer :-

- 1, 3, 4 are True [Option ID = 7459]

20) Consider the following regarding endogenous growth models:-

1. The class of models known as AK models assume there is no diminishing marginal product of capital;
2. A prediction of these models is that there is an inverse relation between the growth of GDP per capita and the initial level of per capita income;
3. These models emphasize positive externalities associated with human capital formation and R&D;

Which of the above is/ are true?

[Question ID = 1867]

1. Only 1 & 3

[Option ID = 7462]

2. Only 2 & 3

[Option ID = 7463]

3. Only 1 & 2

[Option ID = 7464]

4. All of these

[Option ID = 7465]

Correct Answer :-

- Only 1 & 3

[Option ID = 7462]

21) What is Greenfield investment?

[Question ID = 1868]

1. A form of foreign direct investment where a parent company starts a new venture in a foreign country by constructing new operational facilities.
   [Option ID = 7466]
2. A form of foreign direct investment where a company purchases or leases existing production facilities to launch a new production activity. [Option ID = 7467]
3. Investment in Green initiatives by non-resident Indians. [Option ID = 7468]
4. Foreign Investment in shares of Natural Resource based enterprises.   [Option ID = 7469]

Correct Answer :-

- A form of foreign direct investment where a parent company starts a new venture in a foreign country by constructing new operational facilities.
  [Option ID = 7466]

22) The following is not counted as a form of invisible trade:

[Question ID = 1869]

1. Software exports.

3. Foreign Portfolio Investment flows

[Option ID = 7472]
4. Remittances

[Option ID = 7473]

Correct Answer :-
- Foreign Portfolio Investment flows

[Option ID = 7472]

23) Faced with a surge in portfolio capital inflows, the Reserve Bank of India has often adopted Sterilisation policies. In this context consider the following Statements:-

(I) The need for sterilization by the RBI arises as it tends to purchase dollars to prevent appreciation of the rupee.
(II) The RBI can sterilize a surge in capital inflows by carrying out open market sale of bonds.
(III) The RBI can sterilize a surge in capital inflows by decreasing the Cash Reserve Ratio.

Which of these Statements are True?

[Question ID = 1870]
1. II and III only

[Option ID = 7474]
2. I and III only

[Option ID = 7475]
3. I and II only

[Option ID = 7476]
4. I, II and III

[Option ID = 7477]

Correct Answer :-
- I and II only

[Option ID = 7476]

24) Consider the following specific stages of demographic transition associated with economic development:

1. Low birth rate with low death rate

2. High birth rate with high death rate

3. High birth rate with low death rate

Select the correct sequence of the above stages using the codes given below:

[Question ID = 1871]
1. 1 followed by 2 followed by 3

[Option ID = 7478]
2. 2 followed by 1 followed by 3

[Option ID = 7479]
3. 2 followed by 3 followed by 1

[Option ID = 7480]
4. 3 followed by 2 followed by 1

[Option ID = 7481]

Correct Answer :-
- 2 followed by 3 followed by 1

[Option ID = 7480]

25) The labour units available in home and in foreign countries are 2400 units and 1600 units respectively. The unit labour requirement for the production of oranges is 6 in home and 10 in foreign, while for apples it is 4 in home and 2 in foreign. What would be the pattern of trade?
[Question ID = 1872]
1. Home has comparative advantage in the production of oranges so it will produce and export oranges and import apples from foreign. [Option ID = 7482]
2. Home has comparative advantage in the production of apples so it will produce and export apple and import the oranges from foreign. [Option ID = 7483]

3. Foreign has comparative advantage in the production of oranges so it will produce and export oranges and import apples from Home. [Option ID = 7484]

...rrent trade cannot be determined from the above information [Option ID = 7485]

• Home has comparative advantage in the production of ... oranges and ... [Option ID = 7482]

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26) Purchasing power parity refers to
[Question ID = 1873]

1. Achieving equality in purchasing power across different groups in society. [Option ID = 7486]
2. A theory of long run equilibrium exchange rate determination. [Option ID = 7487]
3. The international role of the US dollar. [Option ID = 7488]
4. A theory of effective demand. [Option ID = 7489]

Correct Answer :-

• A theory of long run equilibrium exchange rate determination. [Option ID = 7487]

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27) The contribution of agricultural sector to GDP in India is determined by
[Question ID = 1874]

1. Input-Output approach [Option ID = 7490]
2. Periodic Surveys [Option ID = 7491]
3. Crop cutting experiments. [Option ID = 7492]
4. Product flow approach. [Option ID = 7493]

Correct Answer :-

• Crop cutting experiments. [Option ID = 7492]

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28) If utensils worth Rs.100 are produced with steel worth Rs.50, wages paid are Rs.10, depreciation of machinery is 0 and other material purchased is Rs.10, then value added in the process is
[Question ID = 1875]

1. Rs.40 [Option ID = 7494]
2. Rs.50 [Option ID = 7495]
3. Rs.100 [Option ID = 7496]
4. Rs. 10 [Option ID = 7497]

Correct Answer :-

• Rs.40 [Option ID = 7494]

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29) Consider the following Statements regarding the Indian money market and choose the correct option below.

(I) The money market is a market for short-term funds
(II) The money market deals in monetary assets with period of maturity of up to one year
(III) Investment in the money market entails huge sums of money
(IV) The financial instruments in the Money market are highly liquid but yield low returns
[Question ID = 1876]

1. Only (I) and (II) are True [Option ID = 7498]
2. Only (I), (II) and (III) are True [Option ID = 7499]
3. Only (I), (II) and (IV) are True [Option ID = 7500]
4. All of the Statements are True [Option ID = 7501]

Correct Answer :-

• All of the Statements are True [Option ID = 7501]

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30) Consider the following statements about Financial Markets in India and choose the correct option below.

(I) Equity shares, preference shares, bonds, debentures etc. are important Money market instruments.
(II) Large institutional investors are the only participants in the Capital market which is not open for individual investors.
(III) A Bear is a financial speculator who has an optimistic view about the share market.
[Question ID = 1877]

1. Only (I) is True [Option ID = 7502]
2. Only (II) and (III) are True [Option ID = 7503]
3. (I), (II) and (III) are all False [Option ID = 7504]
4. (I), (II) and (III) are all True [Option ID = 7505]

Correct Answer :-

• (I), (II) and (III) are all False [Option ID = 7504]

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31) A school boy has 5 blue and 4 white marbles in his left pocket and 4 blue and 5 white marbles in his right pocket. If he transfers one marble at random from his left to his right pocket, what is the probability of his then drawing a blue marble from right pocket?
[Question ID = 1878]

1. $\dfrac{20}{81}$
[Option ID = 7506]

3. $\frac{5}{10}$

[Option ID = 7508]

4. $\frac{16}{90}$

[Option ID = 7509]

Correct Answer :-

- $\frac{41}{90}$

[Option ID = 7507]

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32) If X has a probability mass function (pmf) $f(x) = \frac{x}{10}$ x=1,2,3,4

then what is the value of $E[\ X(10-X)]$

[Question ID = 1879]
1. 30 [Option ID = 7510]
2. 10 [Option ID = 7511]
3. 20 [Option ID = 7512]
4. 40 [Option ID = 7513]

Correct Answer :-

- 20 [Option ID = 7512]

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33) If the random variable X has a mean μ and variance σ^2 then for every $k \geq 1$ which of the following will be true

i. $p(|x-\mu| \geq k\sigma) > \frac{1}{k^2}$

ii. $p(|x-\mu| \geq k\sigma) \leq \frac{1}{k^2}$

iii. If $\varepsilon = k\sigma$ then $p(|x-\mu| \geq \varepsilon) > \frac{\sigma^2}{\varepsilon^2}$

iv. If $\varepsilon = k\sigma$ then $p(|x-\mu| \geq \varepsilon) \leq \frac{\sigma^2}{\varepsilon^2}$

[Question ID = 1880]
1. i & iii

[Option ID = 7514]
2. only i

[Option ID = 7515]
3. ii & iv

[Option ID = 7516]
4. only iv

[Option ID = 7517]

Correct Answer :-

- ii & iv

[Option ID = 7516]

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34) Which of the following statements about testing a null hypothesis are True ?

i. We reject the null hypothesis if p-value is greater than the level of significance.

ii. We do not reject the null hypothesis if p- value is greater than the level of significance.

iii. p-value is the lowest level of significance at which we can reject the null hypothesis.

[Question ID = 1881]
1. i, ii & iii

[Option ID = 7518]
2. only i

[Option ID = 7519]
3. i & iii

[Option ID = 7520]
4. ii & iii

[Option ID = 7521]

Answer :-
- ii & iii

[Option ID = 7521]

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35) The regression analysis of the equation   Y = B X + C   generates an $R^2 = 0.80$. This implies that:
[Question ID = 1882]
1. The correlation coefficient between X and Y is 0.80. [Option ID = 7522]
2. The standard error of X is 0.80. [Option ID = 7523]
3. Eighty percent of the variation in Y is explained by this specification. [Option ID = 7524]
4. Eighty percent of the time, C and X affect Y. [Option ID = 7525]

Correct Answer :-
- Eighty percent of the variation in Y is explained by this specification. [Option ID = 7524]

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36) **Using the following data if you regress Y on X1 an X2 using ordinary least square method (OLS) then, which of the options given below would be True ?**

Dependent variable	Independent variables	
Y	X1	X2
60	2	10
80	3	15
100	8	40
120	4	20
140	10	50

[Question ID = 1883]
1. (a) OLS estimators have small variance

   [Option ID = 7526]
2. (b) Confidence intervals will be very narrow

   [Option ID = 7527]
3. (c) Both (a) and (b)

   [Option ID = 7528]
4. (d) The slope parameters cannot be estimated in this case

   [Option ID = 7529]

Correct Answer :-
- (d) The slope parameters cannot be estimated in this case

   [Option ID = 7529]

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37) Vectors $V1 = \begin{bmatrix} 2 \\ 7 \end{bmatrix}$, $V2 = \begin{bmatrix} 1 \\ 8 \end{bmatrix}$ and $V3 = \begin{bmatrix} 4 \\ 5 \end{bmatrix}$ are

[Question ID = 1884]
1. Linearly Independent [Option ID = 7530]
2. Linearly Dependent [Option ID = 7531]
3. More than two vectors can't be linearly dependent or linearly Independent [Option ID = 7532]
4. Can't say from the given information [Option ID = 7533]

Correct Answer :-
- Linearly Dependent [Option ID = 7531]

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38) Let $A = \begin{bmatrix} 3 & 1 \\ 0 & 2 \end{bmatrix}$ $B = \frac{1}{6}\begin{bmatrix} 2 & -1 \\ 0 & 3 \end{bmatrix}$ then which of following is False?

i. $A^{-1} = B$
ii. $B^{-1} = A$
iii. AB=BA

[Question ID = 1885]
1. Only i

   [Option ID = 7534]
2. Both i and ii

4. None

[Option ID = 7537]

Correct Answer :-

• None

[Option ID = 7537]

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39) Given a statement "Differentiability of a function implies continuity"

Which of the following rightly justifying the converse of this statement?

i. Continuity is a necessary condition for differentiability

ii. Continuity is a sufficient condition for differentiability

iii. All continuous functions are differentiable

[Question ID = 1886]

1. Only i

[Option ID = 7538]

2. Only ii

[Option ID = 7539]

3. Only iii

[Option ID = 7540]

4. Both ii and iii

[Option ID = 7541]

Correct Answer :-

• Only i

[Option ID = 7538]

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40) Given the function $f(x)$ match the following

1. $f'(a) > 0$ and $f''(a) > 0$	i. Function is decreasing and concave at x=a
2. $f'(a) < 0$ and $f''(a) < 0$	ii. Function is decreasing and convex at x=a
3. $f'(a) < 0$ and $f''(a) > 0$	iii. Function is increasing and convex at x=a
4. $f'(a) > 0$ and $f''(a) < 0$	iv. Function is increasing and concave at x=a

[Question ID = 1887]

1. 1-iv ,2-ii, 3-i, 4-iii

[Option ID = 7542]

2. 1-i, 2- iv, 3-iii, 4-ii

[Option ID = 7543]

3. 1-iii, 2-i, 3-ii , 4-iv

[Option ID = 7544]

4. 1-iv, 2-ii, 3-i, 4-iii

[Option ID = 7545]

Correct Answer :-

• 1-iii, 2-i, 3-ii , 4-iv

[Option ID = 7544]

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41) Consider the given function $f(X,Y)$.For which value of k given below, can this serve as the joint probability distribution of two random variables X and Y ?

$f(X,Y) = ky(2y - x)$ for $x = 0,3$ and $y = 0,1,2$

[Question ID = 1888]

1. $\frac{1}{11}$

[Option ID = 7546]

2. $\frac{1}{12}$

[Option ID = 7547]

3. $\frac{1}{10}$

[Option ID = 7548]

4. No Value

[Option ID = 7549]

42) If A, B, C and D are statements such that if at least one of A and B is true then at least one of C and D must be true. Given, both A and C are false. Then

[Question ID = 1889]

1. if D is false then B is false [Option ID = 7550]
2. both B and D are false [Option ID = 7551]
3. both B and D are true [Option ID = 7552]
4. if D is true then B is true [Option ID = 7553]

Correct Answer :-

● if D is false then B is false [Option ID = 7550]

43) What are the characteristic roots of the following matrix:

$$A = \begin{bmatrix} 3 & 2 \\ 1 & 2 \end{bmatrix}$$

[Question ID = 1890]

1. 1 and 2 [Option ID = 7554]
2. 2 and 3 [Option ID = 7555]
3. 1 and 4 [Option ID = 7556]
4. 2 and 4 [Option ID = 7557]

Correct Answer :-

● 1 and 4 [Option ID = 7556]

44) Given the regression equation $ln y = \alpha + \beta ln\ x + \mu$, which of the following is true

[Question ID = 1891]

1. I% change in x is associated with $(100 * \beta)$% change in y

[Option ID = 7558]
2. I% change in x is associated with $(100 * \beta)$% change in lny

[Option ID = 7559]
3. I% change in x is associated with β% change in y

[Option ID = 7560]
4. I% change in x is associated with β% change in lny

[Option ID = 7561]

Correct Answer :-

● I% change in x is associated with β% change in y

[Option ID = 7560]

45) The number of inches 'N' that human hair will grow is directly proportional to time 't' in months. If hair grows 6 inches in 12 months, which of the following best represents this trend?

[Question ID = 1892]

1. N = t ;   [Option ID = 7562]
2. N = mt ;   [Option ID = 7563]
3. N = 2T;   [Option ID = 7564]
4. N = ½ t [Option ID = 7565]

Correct Answer :-

● N = ½ t [Option ID = 7565]

46) For any Distribution function F(X) the value of F(-∞) and F(∞) are respectively:

[Question ID = 1893]

1. 1,-1 [Option ID = 7566]
2. 0,-1 [Option ID = 7567]
3. -1,1 [Option ID = 7568]
4. 0,1 [Option ID = 7569]

Correct Answer :-

● 0,1 [Option ID = 7569]

47) A set S has n elements then the number of elements in its power set is :

[Question ID = 1894]

1. 2n [Option ID = 7570]
2. 2n-1 [Option ID = 7571]

Correct Answer :-
- 2^n [Option ID = 7572]

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48) For any real number x, we define y = [x – log x], where we are considering natural logarithms. The value of y is [Question ID = 1895]
1. Always negative   [Option ID = 7574]
2. Always positive [Option ID = 7575]
3. Negative or Positive, depending on the value of x [Option ID = 7576]
4. Always between zero and one [Option ID = 7577]

Correct Answer :-
- Always positive [Option ID = 7575]

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49) In the city of Readalot, at least 50% of the people read a magazine. Among those who read a magazine, at the most 25% read more than one magazine. Only one of the statements given below follow from the above. Which one is it?

[Question ID = 1896]
1. At the most 25% read exactly one magazine.

   [Option ID = 7578]
2. At least 25% read all the magazines.

   [Option ID = 7579]
3. At the most 37.5% read exactly one magazine.

   [Option ID = 7580]
4. At least 37.5% read exactly one magazine.

   [Option ID = 7581]

Correct Answer :-
- At least 37.5% read exactly one magazine.

   [Option ID = 7581]

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50) A recent sample indicated that large numbers of women in a city were working from their homes. Consider the following sample of age data for women working from home :

18, 54, 20, 46, 25, 48, 53, 27, 26, 37

40, 36, 42, 25, 27, 33, 28, 40, 45, 25

The median age of the population of adult women in the city is 35.5 years. It can be concluded that the 'at-home' women workers tend to be

[Question ID = 1897]
1. the same age as the population of all women

   [Option ID = 7582]
2. of an age, that can't be determined from the information above

   [Option ID = 7583]
3. slightly older than the population of all women

   [Option ID = 7584]
4. slightly younger than the population of all women

   [Option ID = 7585]

Correct Answer :-
- slightly younger than the population of all women

   [Option ID = 7585]