**Correct Marks : 2**

Question Label : Multiple Choice Question

According to the figure disk-4 has crashed. What data is present in the two blocks of disk-4?

*Note: Assume block size is 4 bits*

**Options :**

6406531892725. ✖ block A: 0101, block B: 0101

6406531892726. ✖ block A: 1110, block B: 0100

6406531892727. ✔ block A: 1111, block B: 0110

6406531892728. ✖ block A: 0001, block B: 0001

**Question Number : 346 Question Id : 640653566325 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

Assume that the binary values represent 8-bit ASCII code. What is the data word present inside this RAID-5 storage system?

*Note: The ASCII value of 'A' is 65 and 'a' is 97.*

**Options :**

6406531892729. ✖ POST

6406531892730. ✔ PORT

6406531892731. ✖ PART

6406531892732. ✖ PLUM

# Business Analytics

| | |
|---|---|
| **Section Id :** | 64065338410 |
| **Section Number :** | 13 |
| **Section type :** | Online |
| **Mandatory or Optional :** | Mandatory |
| **Number of Questions :** | 18 |
| **Number of Questions to be attempted :** | 18 |
| **Section Marks :** | 45 |
| **Display Number Panel :** | Yes |
| **Group All Questions :** | No |
| **Enable Mark as Answered Mark for Review and Clear Response :** | Yes |
| **Maximum Instruction Time :** | 0 |
| **Sub-Section Number :** | 1 |
| **Sub-Section Id :** | 64065380995 |
| **Question Shuffling Allowed :** | No |
| **Is Section Default? :** | null |

**Question Number : 347 Question Id : 640653566329 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 0**

Question Label : Multiple Choice Question

**THIS IS QUESTION PAPER FOR THE SUBJECT "DIPLOMA LEVEL : BUSINESS ANALYTICS (COMPUTER BASED EXAM)"**

**ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?**
**CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.**

**(IF IT IS NOT THE CORRECT SUBJECT, PLS CHECK THE SECTION AT THE TOP FOR THE SUBJECTS REGISTERED BY YOU)**

**Options :**

6406531892746. ✔ YES

6406531892747. ✖ NO

**Sub-Section Number :** 2

**Sub-Section Id :** 64065380996

**Question Shuffling Allowed :** Yes

**Is Section Default? :** null

**Question Number : 348 Question Id : 640653566330 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

In Regression, “Marginal” slope and “Partial” slope coincide if the explanatory variables are dependent.

**Options :**

6406531892748. ✖ TRUE

6406531892749. ✔ FALSE

**Question Number : 349 Question Id : 640653566356 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

The data on emissions from vehicular traffic for the first six months in 2023 and 2022 are provided in the Table below. If an analyst wants to develop a visualization that highlights “*The months with the highest increase in emissions in 2023 as compared to 2022*”, then which of the formulas would be apt to capture the required information for presentation

| Month | Tons of CO2 Emissions in 2022 | Tons of CO2 Emissions in 2023 |
|---|---|---|
| Jan | 1.2 | 1.5 |
| Feb | 1.1 | 1.4 |
| Mar | 1.5 | 1.8 |
| April | 1.8 | 2.2 |
| May | 2.4 | 2.5 |
| June | 2.7 | 2.9 |

**Options :**

6406531892791. ✖ (Tons of CO2 Emissions in 2023 - Tons of CO2 Emissions in 2022)/ Tons of CO2 Emissions in 2022

6406531892792. ✔ (Tons of CO2 Emissions in 2023 - Tons of CO2 Emissions in 2022)

6406531892793. ✖ None of these

**Question Number : 350 Question Id : 640653566358 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

You are solving a regression problem with 8 explanatory variables. The data has 150 observations, and the R-square value was found to be 0.75. You are adding one more explanatory variable to the dataset, making a total of 9 variables. The adjusted R square value increases to 0.86. What does it signify?

**Options :**

6406531892799. ✖ The new variable does not improve the model

6406531892800. ✖ The new variable alone has high explanatory power

6406531892801. ✔ Adjusted R squared can never be greater than R squared. Calculation error

6406531892802. ✖ None of these

**Question Number : 351 Question Id : 640653566362 Question Type : MCQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

How is Hypothetical Composite Unit computed in DEA for a DMU using graphical method?

**Options :**

6406531892816. ✔ By drawing line connecting the origin and DMU

6406531892817. ✖ By moving horizontally towards the frontier

6406531892818. ✖ By moving vertically towards the frontier

6406531892819. ✖ All of these

**Question Number : 352 Question Id : 640653566363 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

How to identify the HCU of an inefficient DMU using Linear Programming Method?

**Options :**

6406531892820. ✔ Using the shadow price

6406531892821. ✖ By moving horizontally towards the frontier

6406531892822. ✖ By moving vertically towards the frontier

6406531892823. ✖ All of these

| | |
|---|---|
| **Sub-Section Number :** | 3 |
| **Sub-Section Id :** | 64065380997 |
| **Question Shuffling Allowed :** | No |
| **Is Section Default? :** | null |

**Question Id : 640653566331 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (353 to 356)**

Question Label : Comprehension

The following is the Primal LP Formulation for a resource allocation problem. Given this, answer the subquestions

*Objective:* Maximize $(10Y_1 + 20Y_2 + 5Y_3 + 7Y_4 + 12Y_5 + 11Y_6)$

*Constraint-1:* $Y_1+Y_2+Y_3+Y_4+Y_5+Y_6 <= 200$

*Constraint-2:* $2Y_1+3Y_3 <= 50$

*Constraint-3:* $4Y_2+5Y_4+3Y_6 <= 70$

*Constraint-4:* $Y_1+ Y_3 <= 20$

*Constraint-5:* $Y_2+Y_4+Y_6 <= 70$

*Constraint-6:* $Y_1, Y_2, Y_3, Y_4, Y_5, Y_6$ are all non-negative

**Sub questions**

**Question Number : 353 Question Id : 640653566332 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Short Answer Question

How many constraints will be present in the dual formulation?

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

6

**Question Number : 354 Question Id : 640653566333 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Short Answer Question

How many decision variables will be required to formulate the dual?

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

5

**Question Number : 355 Question Id : 640653566334 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Short Answer Question

What is the objective function “co-efficient” for the dual decision variable corresponding to the “Constraint-4” in the primal?

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

20

**Question Number : 356 Question Id : 640653566335 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 3 Selectable Option : 0**

Question Label : Multiple Select Question

Which of the following is/ are valid **constraints/ objective function** in the dual formulation for the provided primal formulation

{Note: $X_i$ – represents the $i^{th}$ decision variable in the dual formulation}

**Options :**

6406531892753. ✖ Minimize ($10X_1 + 20X_2 + 5X_3 + 7X_4 + 12X_5 + 11X_6$)

6406531892754. ✖ Minimize ($200X_1 + 50X_2 + 70X_3 + 20X_4 + 70X_5 + 70X_6$)

6406531892755. ✖ $X_1 + 2X_2 + 4X_3 + X_4 >= 10$

6406531892756. ✖ $X_1 + X_2 + 4X_3 + X_4 <= 10$

6406531892757. ✔ $X_1 >= 12$

6406531892758. ✖ $X_1 <= 12$

6406531892759. ✔ $X_1 + 3X_2 + X_4 >= 5$

6406531892760. ✖ $X_1 + 3X_2 + X_4 <= 5$

**Question Id : 640653566336 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (357 to 363)**

Question Label : Comprehension

A logistic regression model is fit to predict if a student will pass the BA course (Y=1 pass, Y=0 fail). The results of the fitted model are given in the table below. Then answer the given subquestions.

| *Student ID* | *Actual "Pass" or "Fail"* | *Probability of Passing based on the logistic model* |
|---|---|---|
| ABC101 | Pass | 0.79 |
| ABC102 | Pass | 0.72 |
| ABC103 | Fail | 0.45 |
| ABC104 | Fail | 0.47 |
| ABC105 | Fail | 0.73 |
| ABC106 | Pass | 0.78 |

**Sub questions**

**Question Number : 357 Question Id : 640653566337 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Short Answer Question

Considering a threshold of 0.7, how many “True Positives” are present in the confusion matrix if the aim is to predict if a student will pass the course?

**NOTE:** Enter the answer as a numeric percentage value rounded to the nearest integer without the % symbol.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

3

**Question Number : 358 Question Id : 640653566338 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Short Answer Question

Considering a threshold of 0.7, how many “False Positives” are present in the confusion matrix if the aim is to predict if a student will pass the course?

**NOTE:** Enter the answer as a numeric percentage value rounded to the nearest integer without the % symbol.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

1

**Question Number : 359 Question Id : 640653566339 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Short Answer Question

Considering a threshold of 0.7, how many “False Negatives” are present in the confusion matrix if the aim is to predict if a student will pass the course?

**NOTE:** Enter the answer as a numeric percentage value rounded to the nearest integer without the % symbol.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

0

**Question Number : 360 Question Id : 640653566340 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Short Answer Question

Considering a threshold of 0.7, how many “True Negatives” are present in the confusion matrix if the aim is to predict if a student will pass the course?

**NOTE:** Enter the answer as a numeric percentage value rounded to the nearest integer without the % symbol.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

2

**Question Number : 361 Question Id : 640653566341 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Short Answer Question

What is the accuracy of the built logistic model for predicting if a student will **fail** the course if a threshold of 0.7 is taken?

**NOTE:** Enter the answer as a numeric percentage value rounded to two decimal places without the % symbol. For example, if your answer is “10.256 %”, enter it as “10.26”

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

83.0 to 84.0

**Question Number : 362 Question Id : 640653566342 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Short Answer Question

What is the precision of the built logistic model for predicting if a student will **pass** the course if a threshold of 0.7 is taken?

**NOTE:** Enter the answer as a numeric percentage value rounded to the nearest integer without the % symbol.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

75

**Question Number : 363 Question Id : 640653566343 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Short Answer Question

What is the recall of the built logistic model for predicting if a student will **fail** the course if a threshold of 0.7 is taken?

**NOTE:** Enter the answer as a numeric percentage value rounded to two decimal places without the % symbol. For example, if your answer is “10.256 %”, enter it as “10.26”

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

66.0 to 67.0

| | |
|---|---|
| **Sub-Section Number :** | 4 |
| **Sub-Section Id :** | 64065380998 |
| **Question Shuffling Allowed :** | No |
| **Is Section Default? :** | null |

**Question Id : 640653566344 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (364 to 368)**

Question Label : Comprehension

You are given the sales volume of three brands, “A”, “B”, and “C” in 4 cities in the table below. Using this information, answer the given subquestions.

| | Brand A | Brand B | Brand C |
|---|---|---|---|
| Chennai | 288 | 132 | 120 |
| Mumbai | 353 | 161 | 140 |
| Delhi | 124 | 181 | 135 |
| Varanasi | 154 | 125 | 175 |

**Sub questions**

**Question Number : 364 Question Id : 640653566345 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Short Answer Question

What is the expected frequency of “Chennai” people preferring “Brand-B”?

**NOTE:** If your answer is in decimal, enter it rounded to two decimal places. For example, if your answer is “10.256”, enter it as “10.26”

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

153 to 157

**Question Number : 365 Question Id : 640653566346 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Short Answer Question

What is the expected frequency for “Delhi” people preferring “Brand-C”?

**NOTE:** If your answer is in decimal, enter it rounded to two decimal places. For example, if your answer is “10.256”, enter it as “10.26”

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

118 to 122

**Question Number : 366 Question Id : 640653566347 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Short Answer Question

What is the value of the computed Chi-Square test statistic?

**NOTE:** If your answer is in decimal, enter it rounded to two decimal places. For example, if your answer is “10.256”, enter it as “10.26”

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

125 to 131

**Question Number : 367 Question Id : 640653566348 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Short Answer Question

What is the degrees of freedom for the chi-square test that you perform for this problem?

**NOTE:** Enter your answer to the nearest integer.

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

6

**Question Number : 368 Question Id : 640653566349 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1**

Question Label : Multiple Choice Question

At the significance level 0.01, chi-squared tabular value is 16.18. What do you conclude?

**Options :**

6406531892772. ✔ Reject the null hypothesis and conclude that the categorical variables are not independent

6406531892773. ✖ Accept the null hypothesis and conclude that the categorical variables are not independent

6406531892774. ✖ Accept the null hypothesis and conclude that the categorical variables are independent

6406531892775. ✖ Reject the null hypothesis and conclude that the categorical variables are independent

6406531892776. ✖ Accept the alternative hypothesis and conclude that the categorical variables are independent

6406531892777. ✖ Fail to accept the alternative hypothesis and conclude that the categorical variables are not independent

6406531892778. ✖ Fail to reject the alternative hypothesis and conclude that the categorical variables are independent

6406531892779. ✖ None of these

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|---|---|
| **Sub-Section Number :** | 5 |
| **Sub-Section Id :** | 64065380999 |
| **Question Shuffling Allowed :** | Yes |
| **Is Section Default? :** | null |

**Question Number : 369 Question Id : 640653566350 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1 Selectable Option : 0**

Question Label : Multiple Select Question

When do you choose “charts” for representing data?

**Options :**

6406531892780. ✔ To show how data changes over time

6406531892781. ✔ Show distribution of data

6406531892782. ✖ Show complete data

6406531892783. ✔ Show slice of data

**Question Number : 370 Question Id : 640653566357 Question Type : MSQ Is Question**

**Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 1 Selectable Option : 0**

Question Label : Multiple Select Question

When performing the goodness of fit test by grouping the given observations into bins, the expected frequency represents the __ (choose all that are applicable)

**Options :**

6406531892794. ✔ Probability Mass Function

6406531892795. ✔ Probability Density Function

6406531892796. ✖ Cumulative Distribution Function

6406531892797. ✖ The actual count of values in the sample that fall in each bin

6406531892798. ✖ None of these

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|---|---|
| **Sub-Section Number :** | 6 |
| **Sub-Section Id :** | 64065381000 |
| **Question Shuffling Allowed :** | No |
| **Is Section Default? :** | null |

**Question Id : 640653566351 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Question Numbers : (371 to 372)**

Question Label : Comprehension

If a constant elasticity curve models the demand response curve for the data given in the following table, then answer the given subquestions

| Demand (number of units) | Price (Rs.) |
|---|---|
| 1.0 | 10 |
| 0.50 | 20 |
| 0.33 | 30 |
| 0.25 | 40 |
| 0.20 | 50 |

**Sub questions**

**Question Number : 371 Question Id : 640653566352 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Short Answer Question

What is the demand when the price is Rs.1?

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

10

**Question Number : 372 Question Id : 640653566353 Question Type : SA Calculator : None**

**Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Short Answer Question

What is the price elasticity for the demand response curve?

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

1

**Sub-Section Number :** 7

**Sub-Section Id :** 64065381001

**Question Shuffling Allowed :** Yes

**Is Section Default? :** null

**Question Number : 373 Question Id : 640653566354 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Short Answer Question

The relationship between Demand “D” and Selling Price “P” is given by the equation D(p) = 120 – 5*P. If the intention is to maximize the profit, then what is the optimal selling price if the item is going to be sold at Rs. 20 per unit?

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Equal

**Text Areas :** PlainText

**Possible Answers :**

22

**Question Number : 374 Question Id : 640653566364 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Short Answer Question

There are 6 business units. There are two outputs and one input under consideration. You are solving the optimization problem for business unit 4 and find that the efficiency is 0.8. You find that the dual variables corresponding to the constraints of business units 3 and 5 are non-zero and the dual variables corresponding to the constraints of other units are zero. The dual variables corresponding to the constraints of business units 3 and 5 are 0.3 and 0.5 respectively. You are given the following table where sales and number of leads are the two outputs. What is the sales

in HCU 4?

| | Sales | No. of leads |
|---|---|---|
| DMU 3 | 12000 | 12 |
| DMU 5 | 8000 | 10 |

**Response Type :** Numeric

**Evaluation Required For SA :** Yes

**Show Word Count :** Yes

**Answers Type :** Range

**Text Areas :** PlainText

**Possible Answers :**

9499 to 9501

**Sub-Section Number :** 8

**Sub-Section Id :** 64065381002

**Question Shuffling Allowed :** Yes

**Is Section Default? :** null

**Question Number : 375 Question Id : 640653566355 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

The table below provides the summary statistic for a random variable. Then what distribution could be a good fit for this random variable? (select all that is/are applicable)

| Summary Statistic | Value |
|---|---|
| Number of observations | 300 |
| Mean | 4.94 |
| Median | 5.00 |
| Std. Deviation | 2.22 |
| Minimum | 1 |
| Maximum | 10 |
| Skewness | 0.71 |

**Options :**

6406531892787. ✔ Poisson distribution

6406531892788. ✖ Symmetric Gaussian distribution

6406531892789. ✖ Uniform distribution

6406531892790. ✖ Exponential distribution

**Question Number : 376 Question Id : 640653566359 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

What is productive efficiency?

**Options :**

6406531892803. ✖ It is an aspect of economic efficiency focussing on maximizing the output under given constraints.

6406531892804. ✖ Productive efficiency does not worry about optimal allocation, or choice of products

6406531892805. ✖ Effective usage of technology for maximizing the revenue

6406531892806. ✖ Consists of all combinations of outputs such that the production of one product cannot be increased without sacrificing the output of the other (without any change in technology)

6406531892807. ✔ Both It is an aspect of economic efficiency focussing on maximizing the output under given constraints & Productive efficiency does not worry about optimal allocation, or choice of products

**Question Number : 377 Question Id : 640653566360 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2**

Question Label : Multiple Choice Question

Let the objective function of the DEA problem for the DMU *k* be

Maximize: $y_{1k}O_{1k} + y_{2k}O_{2k} + y_{3k}O_{3k} + \ldots y_{Mk}O_{Mk}$

What are the constraints for the DEA problem ?

**Options :**

6406531892808. ✖ Normalizing constraint for the denominator

6406531892809. ✖ All DMUs including k will have weights assigned by k and it will be less than 1

6406531892810. ✖ Non-negativity constraint for the decision variables

6406531892811. ✔ All of these

| | |
|---|---|
| **Sub-Section Number :** | 9 |
| **Sub-Section Id :** | 64065381003 |
| **Question Shuffling Allowed :** | Yes |
| **Is Section Default? :** | null |

**Question Number : 378 Question Id : 640653566361 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 2 Selectable Option : 0**

Question Label : Multiple Select Question

There are 7 business units and you are using the DEA to compare them. You solve the LP for business unit 4. You find from the constraint expression that business unit 2 has obtained an efficiency of 1 and business unit 7 has obtained an efficiency of 1 with the optimal weights of business unit 5. Which of the following statements is correct?

**Options :**

6406531892812. ✖ Business unit 3 may be inefficient

6406531892813. ✔ Business unit 2 will be efficient

6406531892814. ✖ Business unit 7 may be inefficient

6406531892815. ✔ Business unit 7 will be efficient

# AppDev2

| | |
|---|---|
| **Section Id :** | 64065338411 |
| **Section Number :** | 14 |
| **Section type :** | Online |
| **Mandatory or Optional :** | Mandatory |
| **Number of Questions :** | 33 |
| **Number of Questions to be attempted :** | 33 |
| **Section Marks :** | 100 |
| **Display Number Panel :** | Yes |
| **Group All Questions :** | No |
| **Enable Mark as Answered Mark for Review and Clear Response :** | Yes |
| **Maximum Instruction Time :** | 0 |
| **Sub-Section Number :** | 1 |
| **Sub-Section Id :** | 64065381004 |
| **Question Shuffling Allowed :** | No |
| **Is Section Default? :** | null |

**Question Number : 379 Question Id : 640653566365 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

**Correct Marks : 0**

Question Label : Multiple Choice Question

**THIS IS QUESTION PAPER FOR THE SUBJECT "DIPLOMA LEVEL : MODERN APPLICATION DEVELOPMENT 2 (COMPUTER BASED EXAM)"**

**ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?**

**CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.**