

Total No. of Questions: 6

Total No. of Printed Pages: 3

Enrollment No.....



Knowledge is Power

Faculty of Management Studies  
End Sem Examination Dec 2024

MS3AE07 IT for Data Analyst

Programme: BBA

Branch/Specialisation: Business  
Analytics

Duration: 3 Hrs.

Maximum Marks: 60

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

- |   | Marks | BL | PO | CO | PSO |
|---|-------|----|----|----|-----|
| Q.1 i. Which of the following is used for slicing and dicing data in Excel?   | 1     | 1  | 10 | 1  | 1   |
| (a) Pivot tables  |       |    |    |    |     |
| (b) Sort and filter   |       |    |    |    |     |
| (c) Conditional formatting  |       |    |    |    |     |
| (d) Data validation   |       |    |    |    |     |
| ii. Which function in Excel helps to link data from multiple files or tables? | 1     | 1  | 10 | 1  | 1   |
| (a) INDEX   |       |    |    |    |     |
| (b) VLOOKUP   |       |    |    |    |     |
| (c) MATCH   |       |    |    |    |     |
| (d) OFFSET  |       |    |    |    |     |
| iii. What is the primary purpose of the data analysis ToolPak in Excel?       | 1     | 1  | 10 | 2  | 2   |
| (a) Visualizing data  |       |    |    |    |     |
| (b) Automating repetitive tasks   |       |    |    |    |     |
| (c) Performing statistical analysis   |       |    |    |    |     |
| (d) Sorting and filtering data  |       |    |    |    |     |
| iv. In VBA, which object is used to manipulate Excel worksheets?              | 1     | 1  | 10 | 2  | 2   |
| (a) Workbook  |       |    |    |    |     |
| (b) Worksheet   |       |    |    |    |     |
| (c) Range   |       |    |    |    |     |
| (d) Cell  |       |    |    |    |     |

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- v. What is an objective function in optimization problems? **1** 1 10 3 3
- (a) The constraint of the model
  - (b) The main goal of the problem to maximize or minimize
  - (c) The input variable
  - (d) The dependent variable
- vi. Which of the following is NOT an Excel Solver feature? **1** 2 10 3 3
- (a) Adding constraints
  - (b) Sensitivity analysis
  - (c) Formatting data
  - (d) Optimizing results
- vii. The NPV function in Excel calculates: **1** 2 10 4 4
- (a) Present value of future cash flows
  - (b) Net present value of investments
  - (c) Internal rate of return
  - (d) Compound interest
- viii. Depreciation in Excel can be calculated using which of the following functions? **1** 2 10 4 4
- (a) PMT (b) DB (c) PV (d) FV
- ix. Which of the following features in MS Word helps in generating labels for bulk mail? **1** 1 10 5 5
- (a) Macros (b) Mail merge
  - (c) SmartArt (d) Text wrapping
- x. Which MS PowerPoint feature allows linking between slides for interactive presentations? **1** 2 10 5 5
- (a) Slide transition (b) Hyperlinks
  - (c) SmartArt (d) Animation pane
- Q.2**
- i. Define pivot tables. Explain their role in data analysis. **2** 1 6 1 1
  - ii. What is conditional formatting in Excel? Provide an example where it can be applied effectively. **3** 2 10 1 2
  - iii. Explain the use of VLOOKUP in Excel with an example. **5** 3 10 1 2

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- OR iv. Create a step-by-step approach to generate and analyse data using pivot tables. **5** 3 10 1 2
- Q.3 i. What is the role of INDEX and MATCH functions in Excel? **2** 1 10 2 1
- ii. Describe how to create an interactive dashboard in Excel. Include its key components. **8** 4 10 2 3
- OR iii. Discuss the process of performing regression analysis using the data analysis ToolPak. **8** 4 2 2 3
- Q.4 i. What is the business relevance of optimization? Provide an example. **3** 2 10 3 4
- ii. Explain the steps to set up and solve an optimization problem using Excel Solver. **7** 3 10 3 4
- OR iii. Discuss the concept of sensitivity analysis and its application in optimization problems. **7** 3 2 3 4
- Q.5 i. What is the time value of money? How is it calculated using Excel? **4** 2 10 4 4
- ii. Discuss the use of NPV and IRR functions in evaluating investment opportunities. Provide a real-world example. **6** 3 10 4 4
- OR iii. Explain the process of calculating depreciation using the DB function in Excel with an example. **6** 3 10 4 4
- Q.6 Attempt any two:
- i. Explain how to use citations and bibliographies in MS Word. Provide steps to format a research document using APA style. **5** 3 6 5 5
  - ii. Discuss the key elements of creating a professional presentation in MS PowerPoint. Provide examples of tools used for enhancing visual appeal. **5** 3 6 5 5
  - iii. How can you use mail merge in MS Word for sending personalized invitations? Provide step-by-step instructions. **5** 3 6 5 5

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## **Marking Scheme**

MS3AE07 IT for Data Analyst

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Q.1	i) (a) Pivot tables ii) (b) VLOOKUP iii) (c) Performing statistical analysis iv) (b) Worksheet v) (b) The main goal of the problem to maximize or minimize vi) (c) Formatting data vii) (b) Net Present Value of investments viii) (b) DB ix) (b) Mail Merge x) (b) Hyperlinks	1 1 1 1 1 1 1 1 1 1	Q.4 OR Q.5 OR Q.6	Definition: 2 Marks, Example: 1 Marks Concept introduction: 2 Marks, Step by step explanation: 5 Marks Definition: 3 Marks, Application explanation: 4 Marks Definition: 2 Marks, Example/Calculation: 2 Marks NPV Explanation: 2 Marks, IRR Explanation 2 Marks, Example: 2 Marks Explanation of DB function: 3 Marks, Example: 3 Marks Explanation of key elements: 2 Marks, Examples of tools/ Steps for APA formatting: 3 Marks Explanation of mail merge and its purpose: 2 Marks, Step by Step instructions: 3 Marks Explanation of citations and bibliographies : 2 Marks, Steps for APA formatting : 3 Marks	3 7 7 4 6 6 5 5 5
Q.2	i. Definition: 1 Marks, Explanation: 1 Marks ii. Definition: 1 Marks, Explanation/ Example: 2 Marks iii. Definition: 2 Marks, Explanation/ Example: 3 Marks iv. Steps (All Detailed): 5 Marks	2 3 5 5		*****	
Q.3	i. Definition: 1 Marks, Explanation: 1 Marks ii. Definition: 2 Marks, Explanation of components and process: 6 Marks iii. Definition: 2 Marks, Step by step explanation: 6 Marks	2 8 8			
OR					