

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - VII Computer Science & Business Systems : WINTER : 2024
SUBJECT: ITC-V: IT WORKSHOP

Day : Thursday
Date : 05/12/2024

W-24197-2024

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Assume suitable data if necessary.
- 4) Draw neat diagrams **WHEREVER** necessary.

Q.1 What are some of the basic features that make MATLAB a popular choice for scientific and engineering applications and how does it compare to other programming language in terms of case of use and functionality? (10)

OR

Q.1 What are some good programming practices to follow when working with MATLAB to write efficient, maintainable and readable code? (10)

Q.2 How do you create and define variables in MATLAB and what precautions should you take to avoid overwriting existing variables? (10)

OR

Q.2 When encountering error messages in MATLAB what steps can you take to diagnose and correct them effectively? (10)

Q.3 How do you create a matrix in MATLAB and what is the difference between entering a matrix? (10)

OR

Q.3 Describe the concept of matrix generators and special matrices in MATLAB. Provide examples of scenarios where you might use these functions. (10)

Q.4 What are some essential components to consider when creating a simple plot in MATLAB? (10)

OR

Q.4 Explain the concept of using multiple data sets in one plot. Why you prefer to do this in data visualization? (10)

Q.5 Difference between M- File Scripts and M- File Functions in MATLAB. (10)

OR

Q.5 What are the potential side- effects that you should be aware of when working with M- File Scripts in MATLAB? (10)

Q.6 What is the purpose of setting breakpoints and how can you set them in your MATLAB code? (10)

OR

Q.6 What steps should you take to correct and end the debugging process once you have identified and fixed the issue in your M- File (10)

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