

B. TECH. (COMPUTER SCIENCE & BUSINESS SYSTEMS) (CBCS - 2018 COURSE)
B.Tech. (CSBS) Sem - VII : SUMMER : 2024
SUBJECT: IT WORKSHOP

Day : Thursday
Date : 09/05/2024

S-20478-2024

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 **WHEREVER** necessary.
- 4) Draw neat labeled diagrams **WHEREVER** necessary.

Q.1 Discuss the strengths and weaknesses of MATLAB as a programming language and environment. In what situations is it particularly well- suited, and where might it have limitations? (10)

OR

Q.1 Provide a brief overview of the history of MATLAB and its evolution as a programming language and environment for scientific computing? (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 What are some common matrix operations and functions available in MATLAB, and how can they be used for tasks like matrix multiplication, transposition, and inversion? (10)

OR

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

Q.4 How can you add titles and axis labels to your MATLAB plot for better visualization? (10)

OR

Q.4 What is the purpose of annotations in data plots, and how can you add them to your MATLAB plot? (10)

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

OR

Q.5 How can you save the output of a MATLAB program to a file? Why is useful? (10)

Q.6 Why is it important to prepare for debugging before you start the process in MATLAB? (10)

OR

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