

B. TECH. (COMPUTER SCIENCE & BUSINESS SYSTEMS) (CBCS - 2018 COURSE)

B.Tech. (CSBS) Sem - VII :: SUMMER - 2022

SUBJECT : IT WORKSHOP

Day : Tuesday
Date : 31-05-2022

S-20478-2022

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) Draw neat and labelled diagrams **WHEREVER** necessary.
 - 4) Assume suitable data, if necessary.
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Q. 1 What are the basic features of Matlab? Explain the strengths and weaknesses with help of examples. (10)

OR

For building a software, which programmer practices you will follow? Explain in detail with examples. (10)

Q. 2 a) Explain in short, the hierarchy of operations in Matlab. (05)

b) Explain the maintaining the track of work session. (05)

OR

Write a Matlab program, showing: (10)

- i) Matlab variables
- ii) Overwriting variables
- iii) Managing the work space

Q. 3 a) Write a program for addition of two 4×4 matrix using Matlab. (05)

b) Explain any of two mathematical functions with examples. (05)

OR

Explain any of four matrix operations with suitable code. (10)

Q. 4 a) Write a program showing ".tif" image file. Give the titles and labels for the axis. (05)

b) Write a program, showing multiple data sets in one plot and apply line styles. (05)

OR

Write a Matlab program, showing: (10)

- i) Add salt and pepper noise
- ii) Remove by using median filtering
- iii) Show all the subplots in same figure

Q. 5 a) What are side effects of script? Explain M-file script. (05)

b) Explain "While end" loop with proper flow structure. (05)

OR

With the proper flow structure, explain: (10)

- i) "if ___ end loop"
- ii) "for ___ end loop"

Q. 6 a) Explain in short the debugging process. (05)

b) How to set the break points in an M-file? (05)

OR

How to examine values in M-file? Also, explain correcting and ending debugging. (10)

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