S.No.: 165 BATCH: 2017

Reg.No.:		

END OF SEMESTER EXAMINATIONS, NOVEMBER - 2018 ADVANCED COMPUTATIONAL PROGRAMMING SUBJECT CODE: 17P3MA17

MAJOR: M.SC (Mathematics) TIME : 3 HOURS

SEMESTER : III MAX.MARKS: 70

Answer ALL Questions:

 $\underline{SECTION} - A (5 X 4 = 20)$

- 1. What is MATLAB? Where MATLAB can be applicable? (OR)
- 2. Explain about the Built-in functions of MATLAB.
- 3. Explain the Matrix Manipulations with an example.
- 4. What are the functions used to read text files from a certain format in MATLAB?
- 5. Sort Note on Break and Continue Commands.
 - (OR)
- 6. Write a MATLAB Program to demo the switch case statement.
- 7. What is Interpolation and Extrapolation in MATLAB? What are their types?

(OR)

- 8. How can you create and evaluate Polynomials in MATLAB? Explain.
- 9. Name the Graphics System used in MATLAB.

10. Discuss about Symbolic Mathematics.

$\underline{SECTION} - B (5 X 10 = 50)$

Answer ALL Questions:

- 11. Explain the different types of operators used in MATLAB with an example.
- 12. What are the types of files used in MATLAB? Explain.
- 13. Elucidate Matrix and Array Operations in MATLAB with suitable examples.

(OR)

- 14. Discuss about Low level input-output functions with an example.
- 15. What are the Applications of MATLAB? How can you develop and deploy?
- 16. Explain conditional and looping statements with suitable examples.
- 17. Explain about Polynomial Curve Fitting in MATLAB.

- 18. Write a MATLAB Program to find the roots of the quadratic Polynomial.
- 19. Demonstrate about various Plots used in MATLAB Graphics.

20. How do you solve Ordinary differential Equations (ODE)? Explain with an example. * * * * *