

Your Roll Number:

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF DELHI
M.Phil/Ph.D Course Work Examination, 7th August 2021

MATH20-R01:RESEARCH METHODOLOGY

Time: 2 hours

Maximum Marks: 35

Instructions: • Attempt any **Five** questions. • Each question carries **Seven** marks.

- (1) Who is the best Greek Mathematician in the 6th century BCE? Substantiate your answer. How did the Greek Mathematicians influence the development of Mathematics in India? Elucidate. [4+3 Marks]
- (2) Distinguish between research topic and a research problem. Choose a research problem in your area of research and discuss its objectives. [2+5 Marks]
- (3) Discuss the duties of student and supervisor in the scientific research. Describe the method of publishing a research paper. [4+3 Marks]
- (4) Discuss different funding agencies for scientific research in Mathematics. Write a brief research proposal for getting financial support from the University of Delhi. [2+5 Marks]
- (5) Distinguish between oral and poster presentations. Select one paper of your interest and describe how do you present it in oral and poster format. [2+5 Marks]
- (6) Write the LaTeX type set for the title, author affiliations, abstract, introduction and references. What is built-in function in MATLAB? write its syntax? write the syntax for different built-in functions in MATLAB. [4+3 Marks]

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