Your Roll Number: P2109

DEPARTMENT OF MATHEMATICS, UNIVERSITY OF DELHI M.Phil/Ph.D Course Work Examination, 11th July 2022

## MATH20-R01:RESEARCH METHODOLOGY

Time: 2 hours

Instructions:

• Attempt any Five questions.

• Each question carries

- (1) Name four Mathematicians and explain their contribution to the [2+5 Marks] subject of Mathematics due to which Mathematics developed in India and in the world.
- With the help of examples, distinguish between research topic and a [4+3 Marks] research problem. Choose a research problem in your area of research and discuss its objectives.
- Discuss the duties of student and supervisor in the scientific research. [4+3 Marks] Describe the method of publishing a research paper.
  - (4) Discuss different funding agencies in India and in the world which [3+4 Marks] provide financial grants for scientific research in Mathematics. Write a research proposal in Mathematics for getting major grant from the DST, Govt. of India.
  - Distinguish between oral and poster presentations. Select one paper [2+5 Marks] of your interest and describe how do you present it in oral and poster format.
  - (6) Write the LaTeX type set for the title, author affiliations, abstract, [4+3 Marks] introduction and references. What is built-in function in MATLAB? write its syntax? write the syntax for different built-in functions in MATLAB.

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