QP CODE **Enrollment Number: ……**

T5056 **Name: ……**

MA DEGREE EXAMINATIONS, MAY 2024
First Semester
M.A. Economics
M23EC01AC – Software Packages for Economic Analysis (Spreadsheet)
(2023 July admissions)

Time: 3 Hours **Max Marks: 70**

Section A

Answer any ten of the following questions in a word or sentence each. Each question carries 1 mark.

1. Define a workbook in Excel.
2. Which tab in Excel contains options for cell formatting?
3. Name one basic operator used in Excel formulas.
4. Define a relative cell reference in Excel.
5. What is the purpose of conditional formatting in Excel?
6. Which tab in Excel contains the option to create a chart?
7. Which Excel function is used to calculate the mean of a dataset?
8. What type of chart is best for showing the distribution of data?
9. What is the purpose of hypothesis testing in statistics?
10. Which Excel function is used to perform a t-test for means comparison?
11. When is a t-test for means comparison appropriate in statistical analysis?
12. What is the significance level commonly used in hypothesis testing?
13. What does the VLOOKUP function do in Excel?
14. Give an example where logical functions like IF, AND, or OR can be useful in economic analysis.
15. How Solver facilitates goal seeking in Excel?

(1X10=10)

Section B

Answer any five of the following questions in two or three sentences each. Each question carries 2 marks.

16. What is the purpose of using the format painter tool in Excel?
17. Explain the difference between a workbook and a worksheet in Excel.
18. What is the difference between the SUM and COUNT functions?
19. Describe the use of the IF function in Excel.

20. How do you apply a basic conditional formatting to highlight cells greater than a specified value?
21. Describe the process of modifying the title of a chart in Excel.
22. What is the purpose of using the 'Format Data Series' option in Excel charts?
23. Explain how to use the 'Data Analysis' ToolPak to create a histogram.
24. Describe the process of setting up a hypothesis test in Excel.
25. Explain the concept of array formulas in Excel.

(2X5=10)

Section C

Answer any five of the following questions in a paragraph each. Each question carries 4 marks.

26. Describe the steps to enter a formula in an Excel cell and give an example.
27. Explain how to apply basic formatting options (font, alignment, borders) in Excel.
28. How do you use absolute and relative cell references in a formula? Provide examples.
29. Explain how to use the advanced filter feature in Excel.
30. Describe the steps to create a bar chart in Excel from a given data range.
31. Describe the steps to create a pie chart in Excel and customize it with data labels and colors.
32. Discuss the steps involved in conducting a chi-square test for categorical data in Excel.
33. How can logical functions like IF, AND, and OR be combined to create more complex decision-making rules in Excel?

(4X5=20)

Section D

Answer any three of the following questions in two pages each. Each question carries 10 marks.

34. Explain how to use Excel's built-in functions to perform basic calculations and data analysis. Include examples of using SUM, AVERAGE, MIN, and MAX functions. Provide detailed steps for each function.
35. Explain the importance of using data validation in Excel. Describe the steps to set up data validation and provide examples of different types of validation rules.
36. Describe the process of creating and customizing a line chart in Excel. Include steps for adding data labels, changing line styles, and formatting the chart area.
37. Discuss the various Excel functions used to generate descriptive statistics (mean, median, mode, standard deviation). Include examples and screenshots for each function.
38. Explain the concept of hypothesis testing and its importance in statistical analysis. Discuss the steps involved in conducting a hypothesis test, including formulation of null and alternative hypotheses, choosing a significance level, calculating test statistics, and interpreting results.
39. Explore the concept of dynamic arrays in Excel. Explain how dynamic arrays differ from traditional array formulas and provide examples of situations where dynamic arrays are useful. Demonstrate the use of dynamic arrays in solving a specific problem.

(10X3=30)