

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**MSc DEGREE EXAMINATION MAY 2024
(Second Semester)**

Branch – MATHEMATICS

MAJOR ELECTIVE COURSE – I : MATLAB AND LaTeX

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	_____ command eliminates empty lines to allow more lines with information displayed on the screen. a) format bank b) format compact c) format short e d) format loose	K1	CO1
	2	Which of the function rounds the value towards infinity? a) fix(x) b) round (x) c) ceil(x) d) floor(x)	K2	CO1
2	3	The _____ command is used to display the elements of a variable without displaying the name of the variable, and to display text. a) disp b) input c) who d) output	K1	CO2
	4	Multiple plots can be created on the same page with the _____ command. a) plot b) axis c) subplot d) legend	K2	CO2
3	5	In _____ loops the number of passes is not specified when the looping process starts. a) for b) while c) do-while d) while-end	K2	CO3
	6	The _____ command can be used inside a loop (for or while) to stop the present pass and start the next pass in the looping process. a) continue b) switch c) break d) while	K1	CO3
4	7	An _____ is initiated with the command \begin{name} and is terminated by \end{name}. a) preamble b) environment c) itemize d) argument	K1	CO4
	8	Values are assigned to a length parameter by means of the _____ LATEX command. a) \newcounter b) \newlength c) \setcounter d) \setlength	K2	CO4
5	9	The current date can be placed at any point in the text with the command _____. a) \usepackage{eurosym} b) \date c) \today d) \day, \month, and \year	K1	CO5
	10	A title, or headline, is produced with _____ when the command comes at the beginning of the material in the float environment. a) \heading b) \caption c) \title d) \sep	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Discuss about Elementary Math Built-In Functions in LaTeX.	K3	CO1
	(OR)			
	11.b.	Explain about the Generation of Random Numbers.		
2	12.a.	Elaborate the commands used in LaTeX for Importing and Exporting Data from Excel file.	K3	CO2
	(OR)			
	12.b.	Elucidate about Creating a Function File.		
3	13.a.	How does the switch-case statement work in LaTeX?	K4	CO3
	(OR)			
	13.b.	Discuss about Derivatives of Polynomials.		
4	14.a.	What does 'Lengths' explains in LaTeX?	K5	CO4
	(OR)			
	14.b.	Discuss about Page numbering in LaTeX.		
5	15.a.	List out Mathematical accents used in LaTeX.	K4	CO5
	(OR)			
	15.b.	Classify the Math style parameters used in LaTeX.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Discuss briefly about Array Multiplication and Array Division.	K4	CO1
2	17	Briefly discuss about Two- dimensional plots.	K4	CO2
3	18	Discuss in detail about Relational and Logical operators.	K4	CO3
4	19	Explain in detail about Mathematical Symbols.	K5	CO4
5	20	Elaborate briefly about Graphical Packages.	K5	CO5

Z-Z-Z

END