



	InSem Examination-I Winter 2023		
	Exam Seat No.:		
	Academic Year:2023-2024	Semester:III	
	Name of Programme: B.Tech (Mechanical Engineering)	Pattern: 2022	
	Name of Course:Basic Electronics for Mechanical Engineering	Course Code:MEC222004	
	Max. Marks:30	Duration:1 Hrs	

	<p>Instructions: Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.</p> <ol style="list-style-type: none">1. This question paper contains 2 page(s).2. Answer to each new question is to be started on a new page.3. Assume suitable data wherever required, but justify it.4. Draw the neat labelled diagrams, wherever necessary.5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question	
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Questions no : 1 Attempt following Question

- a) Explain impact of electronics on Mechanical Industry (5) CO1

OR

- b) Draw a neat sketch of Half wave and full wave bridge rectifier? (5) CO1
- c) Compare active and passive components explain passive components (5) CO1

OR

- d) Draw and explain V-I characteristics of Diode (5) CO1

- e) Draw Circuit symbol of Basic Logic gates with their truth table (5) CO1

OR

- f) State and prove DeMorgans sum & product theorem with the help of truth table (5) CO1

Question No. 2 Attempt following Question

- a) List out different types of Measuring instruments and state applications of each (5) CO2

OR

- b) Explain functions of Digital Multimeter in detail. (5) CO2

- c) Compare Cathode Ray Oscilloscope and Digital Storage Oscilloscope. (5) CO2

OR

- d) Define the term Display and enlist types of display with suitable examples. (5) CO2

- e) Differentiate between LED and OLED display. (5) CO2

OR

- f) What do you mean by I2C, CAN & MOST bus also state the applications of each? (5) CO2