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**200969**

**BACHELOR OF VOCATION**  
**Automotive Mechatronics**  
**Subject: Design of Mechatronics**  
**Subject Code: ABME-303**  
**Semester: Fifth**  
**September 2020**  
**Theory (External): 35 Marks**  
**Time: 03 hours**

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**INSTRUCTIONS TO THE STUDENTS**

1. Read the questions carefully and write the answers in the answer sheets.
2. Wherever necessary, the diagram drawn should be neat and properly labelled.
3. This questions paper comprises of 6 questions out of which student need to attempt any 3 questions.
4. All questions carry equal marks.
5. The time allotted will be 3 hours for examinations including time of downloading of question paper to emailing of answer books to the concerned Dean/IC.

## **ESSAY TYPE QUESTIONS**

1. Explain the Integrated design issues in Mechatronics with suitable examples and applications.
2. Explain Mechatronics design process with neat and clean diagram.
3. Differentiate between Physical modeling and Experimental modeling with neat diagram and applications.
4. Differentiate between simulator and simulation with neat diagram and applications.
5. Discuss the working principle of Solenoid with neat diagram and applications.
6. Describe the role of Artificial intelligence in Mechatronics with neat diagram.

\*\*\*\*\* END OF PAPER\*\*\*\*\*