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200943

BACHELOR OF VOCATION
Automotive Manufacturing
Subject: Fundamental of Electrical
Subject Code: ABEE-102
Semester: Second
September 2020
Theory (External): 35 Marks
Time: 03 hours

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 Kirchhoff's law (voltage and current both) in detail with suitable example? What is the difference between mesh and nodal analysis?
2. Define the practical difference between the uses of different Cables and explain in detail the classification of cables accordingly?
3. Define Starter and explain its need? Explain the working star delta starter in detail?
4. Write short note on following:
 - i. Push button
 - ii. Relay and
 - iii. Contactors
5. Derive the relationship between line voltage, phase voltage, line current and phase current in star and delta connection?
6. Explain why synchronous machine is not a self-starting machine? Also explain the working of DC generator?

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