



GOVERNMENT COLLEGE OF ENGINEERING, JALGAON

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Name of Examination : **Winter 2020** - (Preview)

Course Code & Course Name : **ET205U - Electronic Material and Components**

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Maximum Marks : **60**

Duration : **3 Hrs**

[Edit](#) [Print](#) [View Answer Key](#) [Close](#) **Answer Key Submission Type:** Marking scheme with model answers and solutions of numerical

Instructions:

1. All questions are compulsory.
2. Illustrate your answer with suitable figures/sketches wherever necessary.
3. Assume suitable additional data; if required. Class
4. Use of logarithmic table, drawing instruments and non programmable calculators is allowed.
5. Figures to the right indicate full marks.

- Que1)** a) Classify the insulating materials and describe any one of them. [6]
 b) Explain ferrites in brief. [6]
- Que2)** Write any two [6]
 a) Describe in detailed the manufacturing process of carbon film resistor. [6]
 b) Explain in detailed the manufacturing process of a Paper capacitor. Also state the difference between extended foil and metallized paper capacitor. [6]
 c) What are the different types of relays ? Explain them briefly and also write where they are used. [6]
- Que3)** Write any two [6]
 a) Explain thin film technology. State materials and processes in thin films. [6]
 b) What is meant by integrated circuits? State its types. [6]
 c) Explain in detailed various processes in IC manufacturing. [6]
- Que4)** Write any two [6]
 a) Describe in detailed thick film technology. [6]
 b) Describe the various types of laminates used in PCBs. [6]
 c) Explain the manufacturing process of double sided PCB. [6]
- Que5)** a) Explain the preparation of single sided PCB. [6]
 b) Explain the fabrication technique for FET. [6]

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