B.E. IV Semester Examination, June 2014 Electrical and Electronics Materials Time: Three Hours Maximum Marks: 70 Nota: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice. ii) All parts of each guestion are to be attempted at one place. iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks. iv) Except numericals, Derivation, Design and Drawing etc. Unit - I 1. a) Classify the solids from electrical engineering point of view. b) Write the electrical and mechanical properties of the material to be use as overhead transmission, also name the materials used. c) Write the definition, formula and unit of 'coefficient of thermal conductivity' of materials. Give its types also. OR Write a note on fuel cell. 2. a) What is dissipation factor. Give the formula to calculate it. b) List the factors affecting the dielectric strength of the material. c) Write the phenomenon of charging and discharging of a dielectric. Ex-402 Base of the material of the components of charging and discharging of a dielectric. Ex-402 Base of the material of the components of charging and discharging of a dielectric. Ex-402 Base of the materials of the factors affecting the dielectric strength of the material. Ex-402 PTO Ex-402 Figure 19) Insulation vanish on the what is dielectric strength of use the proposed using oil in a transformer. How its dielectric strength of the semiconductors works. Give the application of semiconductors works. Give the applications of semiconductors works. Give the applications of the port of works. Give the applications of the port of the por		Roll No EX - 402		d)	Write the applications of following insulating materials in electrical industries. i) Bakelite ii) PVC
Examination, June 2014 Electrical and Electronics Materials Time: Three Hours Maximum Marks: 70 Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice. ii) All parts of each question are to be attempted at one place. iii) All parts of each question are to be attempted at one place. iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks. iv) Except numericals, Derivation, Design and Drawing etc. Unit - I 1. a) Classify the solids from electrical engineering point of view. b) Write the electrical and mechanical properties of the material to be use as overhead transmission, also name the materials used. c) Write the definition, formula and unit of 'coefficient of thermal conductivity' of materials. Give its types also. OR Write a note on fuel cell. Thirt II 2. a) What is dissipation factor. Give the formula to calculate it. it. Unit - II 5. a) Explain term monolithic integrated circuit. 2. a) What is dissipation factor. Give the formula to calculate it. it. Graphs of the factors affecting the dielectric strength of the material. 3. a) How semiconductors works. Give the application of semiconductors works. Give the application of semiconductors works. Give the applications. 2. c) Explain Hamman and the electric strength of the material work is dielectric. 4. d) How semiconductors works. Give the application of semiconductors works. Give the applications. 2. c) Write the electrical and mechanical material and its special features of poperation of germanium or silicon as rectifier. 4. a) Write the difference between Dia, Para and Ferro magnetism. 2. b) Write the definition, formula and unit of 'coefficient of thermal conductivity' of materials. 3. c) Explain Hysteresis and magnetostriction. 3. d) Explain superconductivity of materials. 3. d) Write a note on fuel cell. 4. a) Write an onto on fuel cell. 5. a) Explain plann		B.E. IV Semester			
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Unit - I 1. a) Classify the solids from electrical engineering point of view. b) Write the electrical and mechanical properties of the material to be use as overhead transmission, also name the materials used. c) Write the definition, formula and unit of 'coefficient of thermal conductivity'. d) Explain superconductivity of materials. Give its types also. OR Write a note on fuel cell. 7 Unit - II 2. a) What is dissipation factor. Give the formula to calculate it. b) List the factors affecting the dielectric strength of the material. c) Write the properties of phosphorescent materials and its applications. 2 Explain Hysteresis and magnetostriction. 3 State the effects of impurities on the properties of magnetic material. 7 Compare soft and hard magnetic materials. 7 Unit - V Unit - V Unit - V S a) Explain term monolithic integrated circuit. 2 b) Describe the CMOS technology. 2 c) Explain planner technology of I-C fabrication. 3 d) Write a note on I-C packaging. 7 Write the phenomenon of charging and discharging of a dielectric. 3		compulsory and D part has internal choice. ii) All parts of each question are to be attempted at one place. iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.	3.	b) c)	semiconductors. 2 What is thermally sensitive resistor is called. Give its special feature and applications. 2 Compare the operation of germanium or silicon as rectifier. 3 Describe the working of Hall effect generator. 7 OR What are the special features of 7
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