UG/3rd Sem/ELECL/(H)/T/19

2019

B.Sc.

3rd Semester Examination

ELECTRONICS (Honours)

Paper - SEC 1-T

Full Marks : 40   **Time : 2 Hours**

The question are of equal value for any group/half. The figures in the margin indicate full Marks. Candidates are required to give their answers in their own words as far as parctiable. Illustrate the answers wherever necessary.

Design Fabrication of printed Circuit Board

1. Answer any *five* questions :   5×2

   a) What are the constituents of copper clad ?   2

   b) What is resin ?   2

   c) On which factor size and number of PCB depends ? 2

   d) What is modular arrangment of PCB ?   2

   e) Mention different types of etching.   2

[Turn Over]

    f) What is emulator material ?   2

    g) Give names of two layers on the film master. ?   2

    h) What is line photography ?   2

2. Answer any *four* questions :   4×5

    a) Name the mechanical operations of PCB.   5

    b) What are the factors we have to consider for the choice of etchants ?   5

    c) What is film master ?   5

    d) Discuss double sided PCB and its significance.   5

    e) What are filters and copper foil ?   5

    f) Discuss about general check list for layout design. 5

3. Answer any *one* question :   1×10

a)   i) Explain mechanical drawing of PCB.

     ii) When and how are photoresist used in PCB fabrication ?   8+2

b)   i) What is photoresist etching ?

     ii) State with justifications whether you would increase or decrease the wavelength of the illuminating source for higher density ?   2+8

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Mobile application programming

Full Marks : 40   Time : 2 Hours

1. Answer any *five* questions :   5×2

   i) What do you understand by mobile application programming?   2

   ii) What is the goal of Eclipse simulator?   2

   iii) What is Android?   2

   iv) What are intents?   2

   v) State the importance of XML-based output.   2

   vi) Explain objective of C language.   2

   vii) List some UI elements used in ios?   2

   viii) What is a frame in an animations?   2

2. Answer any *four* questions :   4×5

   i) What are the characteristics and benefits of mobile application ?   5

   ii) Discuss the design issues in Apple iPhone.   5

   iii) Briefly explain the activity life cycle.   5

   iv) How do you store and retrive data in Android environment ?   5

[Turn Over]

v) Explain the MVC pattern of mobile application.   5

vi) Describe the layers present in ios.   5

3. Answer any *one* question :   1×10

   i) Describe android architecture in detail.   10

   ii) What do you mean by event based programming.

   7+3

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