7E4102

Roll No. _____ [Total No. of Pages : 3

7E4102

B.Tech. VII Semester (Main/Back) Examination - 2013

Information Tech.

7IT3 Electronics Design Automation

Time : 3 Hours **Maximum Marks : 80**
Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **five** questions, selecting **one** question from each **unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

Unit - I

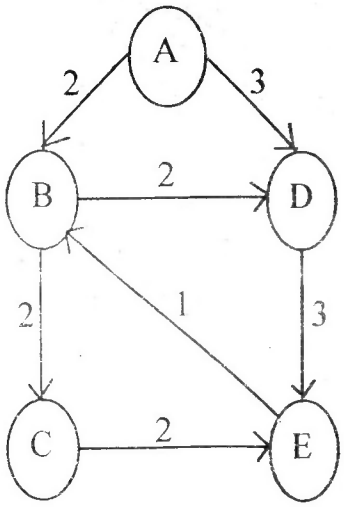
1. a) State Moore's Law and what are the different micro electronics design style. **(8)**

   b) Consider function f=ab+bc & g=ac. Draw the corresponding OBDDs and determine the ROBDD corresponding to $f \oplus g$ (Use order (a,b,c)). **(8)**

OR

1. a) Explain Gajskis's Y-chart for three views of a circuit. **(8)**

   b) Using Dijkstra's Algorithm, compute the solution to the single-source shortest (directed) path problem for the following directed graph. Show all steps. **(8)**



48

Unit - II

2. a) Explain Hardware Modeling Languages. **(8)**

   b) Explain the Temporal Domain Scheduling with example. **(8)**

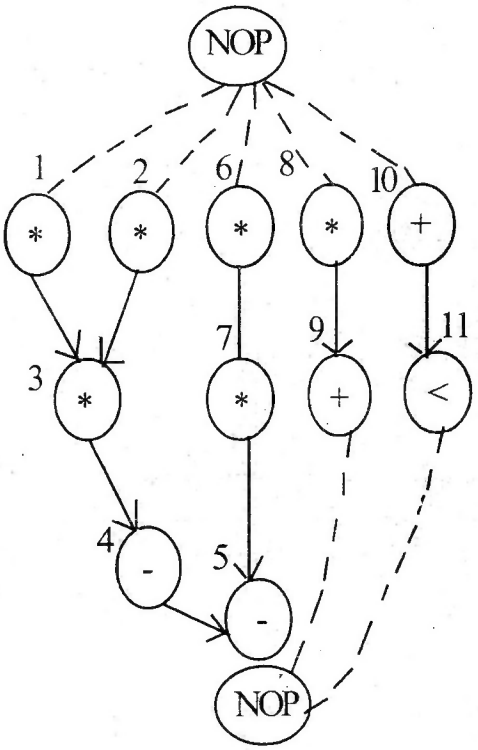
OR

2. a) What is meant by compiler optimization. Explain any two height reduction techniques. **(8)**

   b) Explain the spatial domain binding with example. **(8)**

Unit - III

3. Consider the graph given below. Assume the execution delays of the multiplier and of the ALU are 2 and 1 cycle, respectively. Assuming the schedule the graph by using the ASAP algorithm. Assuming the latency bound of $\overline{\lambda} = 8$ cycles, schedule the graph using ALAP algorithm. Determine the mobility of the operations. **(16)**



OR

3. a) Explain one example of latency and resource constrained scheduling. **(8)**

   b) Explain constraint graph. How can the feasibility of constraint graph be verified. **(8)**

Unit - IV

4. Consider the three-input, two-output function $f = \begin{bmatrix} f_1 \\ f_2 \end{bmatrix}$ where $f_1 = a'b'c' + a'b'c + ab'c + abc'; f_2 = a'b'c + ab'c$. A minimum cover of cardinality 3 is given by:

00*	10
*01	11
11*	10

(16)

OR

4. Write short notes :

   a) Positional Cube Notations.

   b) Multi-valued inputs. **(8×2=16)**

Unit - V

5. a) In VHDL language, distinguish between.

      i. Variable & signal assignment.

      ii. Entity & Architecture. **(4×2=8)**

   b) Describe the test bench modeling. **(8)**

OR

5. What is meant by test bench modeling? Write VHDL code for nibble adder test bench. Give one example for 'WAIT ON' & 'Case' statements. **(16)**

50

7E5099

Roll No. _____ [Total No. of Pages : 2

7E 5099

B.Tech. VII Semester (Main) Examination - 2013

Information Tech.

7IT3 Data Mining & Ware Housing

Time : 3 Hours **Maximum Marks : 80**
Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **five** questions, selecting **one** question from each **unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

Unit - I

1. a) What is data cleaning? Discuss methods to fill missing values and eliminate noisy data. **(8)**

   b) What is data integration. Discuss chi-square method to discover correlation between two attributes. **(8)**

OR

1. a) Define data transformation. Enumerate various data transformation strategies. Discuss normalization of data in detail. **(8)**

   b) What do you understand by data reduction. Discuss in brief strategies for data reduction. **(8)**

Unit - II

2. Write technical note on:

   a) Frequent Item set. **(5)**

   b) Closed Item set. **(5)**

   c) Association mining. **(6)**

OR

2. Discuss in detail the apriori algorithm for finding frequent Item sets using candidate generation. How association rules are generated from frequent Item sets. **(16)**

Unit - III

3. Define and differentiate classification and prediction. Explain Decision Tree induction. **(16)**

OR

3. State Baye's theorem. Discuss Basian classification method with the help of an example. **(16)**

Unit - IV

4. Give William H. Inmon's definition of data warehouse, explain in brief the key features used in definition. Differentiate between database system and Data warehouse. **(16)**

OR

4. What is multi dimensional data model? Explain star, snow flakes and fact constellation schemes for multi dimensional databases, with the help of examples. **(16)**

Unit - V

5. Define and differentiate among ROLAP, MOLAP and HOLAP. **(16)**

OR

5. Write technical note on :-

   a) Backup and recovery of data ware house.

   b) Tuning and Testing of data ware house. **(8+8)**

7E5101

Roll No. _____ [Total No. of Pages : 3

7E5101

B.Tech.VII Semester (Main/Back) Examination - 2013

Information Tech.

7IT6.2 Intelligent Systems

Time : 3 Hours **Maximum Marks : 80**

Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **five** questions, selecting **one** question from each **unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

Unit - I

1. a) What is Intelligent system with the Reference of Artificial Intelligence? (4)

   b) What is AI techniques? (4)

   c) Describe state space problem of Missionarie and cannible problem (8)

OR

1. a) Solve the given below 8-puzzle problem with the help of A^* Algorithm

Initial State

2	8	3
1	6	4
7		5

Goal state

1	2	3
8		4
7	6	5

(12)

   b) Write a difference between steepest Hill climbing and simple Hill climbing (4)

Unit - II

2. a) Distinguish between Data, information and knowledge. present on overview of K R method. (8)

b) Discuss various terms

i) Predicate logic **(4)**

ii) Forward VS Backward Reasoning **(4)**

OR

2. Consider the following set of sentences

a) Marcus was a man **(2)**

b) Marcus was a pompeian **(2)**

c) All pompeians were Romans **(2)**

d) Caesar was a Ruler **(2)**

e) Every one is loyal to some one **(2)**

f) All Romans were either loyal to Caesar or hated him **(2)**

g) Marcus tried to assosinate Caesar **(2)**

h) TOMY was a dog **(2)**

Convert these sentences in WFF's in Predicate logic.

Unit - III

3. Explain Goal stack planning ÷STRIPS planning method with SUSMAN Anomaly **(16)**

OR

3. (a) Explain Min-Max search procedure with suitable example **(8)**

(b) Explain Alpha-Beta cutoff **(8)**

Unit - IV

4. (a) What is learning? Explain Role learning **(8)**

(b) Explain types of learning and how can we learn? **(8)**

OR

4. (a) Discuss Neural Network Architecture **(4)**

(b) What is neuron and a weight of biological neuron(appron) **(4)**

(c) Discuss hope field N/W **(4)**

(d) What is perceptron Explain its working? **(4)**

Unit - V

5. a) What is Fuzzy logic system? Explain its Fuzzy sets **(8)**

   b) Discuss ANT Algorithm **(8)**

OR

5. a) Write steps to develop on expert system **(8)**

   b) What do you understand by expert system? Also Explain its component **(8)**

7E5100

Roll No. _____ [Total No. of Pages : 2

7E5100

B. Tech. VII Semester (Main) Examination-2013

Information Tech.

7IT4 Internet Programming

Time : 3 Hours **Maximum Marks : 80**

Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **five** questions, selecting **one** question from **each** unit. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

Unit - I

1. a) What is cascading style sheets. Write CSS code for the followings:-
   i) How to set background color of web page.
   ii) How to set space between characters.
   iii) A fixed background image. **(8)**

   b) Create an XHTML document containing three ordered lists: ice cream, soft serve and frozen yogurt. Each ordered list should contain a nested, unordered list of your favourite flavors. Provide a minimum of three flavors in each unordered list. **(8)**

OR

1. a) Differentiate between:-
   i) XSLT/RSS
   ii) DTD/HTTP
   iii) HTTP/HTTPS
   iv) Web server / web service
   v) URI / URL. **(2×5=10)**

   b) What is webserver? How it is different from proxy server. Explain. **(6)**

Unit - II

2. a) What do you mean by well formed XML document? What are the parsing techniques of XML? Discuss about them. **(8)**

   b) Where does Java script fit into web document? Write a Javascript script that reads a line of text from the keyboard and print a table indicating all the words starting from the uppercase letters. **(8)**

OR

2. a) What is DTD? How is it useful for validating XML? Explain with suitable example. **(8)**

b) Write short notes on:-
   i) XML namespaces
   ii) DOM. **(4×2)**

Unit - III

3. a) Describe the differences between traditional web applications and Ajax applications. **(8)**
   b) Explain the followings:-
      i) Client side scripting Vs server side scripting.
      ii) Dojo toolkit. **(4×2)**

OR

3. a) Explain XML Http request object with their properties and methods. **(8)**
   b) Create an Ajax enabled version of feedback form which contains fields like name, comments, e-mail addresses etc. ensure that each field is nonempty and check the validity of e-mail address. Create a XML file that contains a list of e-mails addresses that are not allowed to post feedback. **(8)**

Unit - IV

4. a) Describe how cookies can be used to store information on a computer and how the information can be retrieved by a PHP script. Assume that cookies are not disabled an the client. **(8)**
   b) How connectivity to a database is performed in ASP. NET. Explain all the steps. **(8)**

OR

4. a) Explain the followings in PHP:-
      i) String processing and regular expression.
      ii) form processing and Business logic. **(4×2)**
   b) Create an ASP. NET page that uses a persistent cookie to keep track of how many times the client computer has visited the page with in one month expiration date. **(8)**

Unit - V

5. a) How JSP page translates into servlets? Describe all standard action elements and all scripting elements used in JSP? **(8)**
   b) Explain JSF components in detail with a suitable example. **(8)**

OR

5. a) explain the following in context of JSP:-
      i) Request and Response objects.
      ii) Cookies and their use .
      iii) Directness **(8)**
   b) Write short notes on:-
      i) Net Beans
      ii) Session Tracking **(4×2)**

7E4238

Roll No. _____ [Total No. of Pages : 3

7E4238

B.Tech. VII Semester (Main) Examination - 2013

7CS2 Wireless Communications & Networks

7E72

Time : 3 Hours **Maximum Marks : 80**

Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **five** questions, selecting **one** question from each **unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

Unit - I

1. Explain the following for cellular networks
   i) Channel Assignment Strategies
   ii) 2nd & 3rd Generation Cellular Network
   iii) Improving Coverage & Capacity
   iv) Applications of mobile communications **(4×4)**

OR

1. a) Explain the cellular revolution process **(8)**
   b) What is the coverage of a base station that transmits a signal at 2kW, given that the receiver sensitivity is - 100dBm, the path loss at the first meter is 32dB, and the path loss gradient is $\alpha = 4$? **(8)**

Unit - II

2. a) What is GSM? Explain using diagram & with following blocks **(2)**
   i) BSC
   ii) MSC
   iii) HLR
   iv) BTS **(2×4)**

b) Draw the frame structure of conventional GSM system and show its different time slots (6)

OR

2. a) What is handoff? Why it happens? (6)

b) Compare cordless system with GSM Technology (4)

c) What are the effects of multigraph propagation? Also explain transmission impairments. (6)

Unit - III

3. a) For a wireless communication system explain the following

i) TDMA

ii) FDMA

iii) CDMA (12)

b) Explain the concept of packet radio (4)

OR

3. a) For IEEE 802.11 explain the following (12)

i) System Architecture

ii) Protocol Architecture

iii) Physical & MAC layer

b) What are the advantages & disadvantages of wireless LAN? (4)

Unit - IV

4. a) What is mobile IP? Explain the goals and requirements of mobile IP. (8)

b) Explain mobile Ad-hoc Network? Also explain GSR and DSR (8)

OR

4. (a) Explain the following terms for mobile IP (12)

i) Mobile TCP

ii) Snooping TCP

iii) Selective Retransmission

(b) Compare infra-red and radio transmission (4)

Unit - V

5. a) Explain frequency reuse principle in cellular system with suitable diagram **(6)**

   b) What is satellite network? Explain GEO MEO and LEO satellites with its parameters and their applications. **(10)**

OR

5. Write short notes on the following **(4×4)**

   i) Bluetooth

   ii) WWW

   iii) WML Script

   iv) push & pull services

7E4239

Roll No. _____ [Total No. of Pages : 3

7E4239

B.Tech. VII Semester (Main/Back) Examination - 2013

Computer Engg.

7CS3 Compiler Construction

Time : 3 Hours **Maximum Marks : 80**
Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **five** questions, selecting **one** question from each **unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

Unit - I

1. a) What are the different phases of compiler? Explain them with the help of suitable example. **(10)**

   b) Explain the following terms in brief.

   i. Input buffering.

   ii. Functions of lexical analyzer. **(3×2=6)**

OR

1. a) Consider context free grammar $S \rightarrow SS+|SS*|a$.

   i. Show how the string aa+a* can be generated by this grammar.

   ii. Construct a parse tree for this string.

   iii. What language is generated by this grammar? Justify your answer. **(8)**

   b) Construct minimum state DFA's for following regular expression.

   i. $(a|b)*a(a|b)$

   ii. $(a|b)*a(a|b)(a|b)$

   iii. $(a|b)*a(a|b)(a|b)(a|b)$ **(8)**

Unit - II

2. Consider the following grammar G:-

$E \rightarrow E+T \mid T$

$T \rightarrow TF \mid F$

$F \rightarrow F^* \mid a \mid b$

i. Construct the SLR parsing table for this grammar.

ii. Construct the LALR parsing table. **(8×2=16)**

OR

2. Write down a short note on following:

i. Operator precedence parser for regular expressions.

ii. Difference between bottoms up and top down parsing with suitable example.

iii. YACC error handling in LR parser.

iv. Context free grammar. **(4×4=16)**

Unit - III

3. a) Give a syntax-directed definition to translate infix expression into infix Expression without redundant parenthesis. For example, since + and * Associate to the left, ((a*(b+c))*(d)) can be rewritten as a*(b+c)*d. **(10)**

b) Write simplifications of a simple type checker with example. **(6)**

OR

3. Write a program to translate an infix expression into postfix form. Also writes Down syntax directed definition for the same. **(16)**

Unit - IV

4. a) Explain the various Runtime storage management techniques? Explain these with the help of suitable programming example. **(10)**

b) Explain the differences between stack allocation and heap allocation strategies. (6)

OR

4. Write a short note on (any two):

i. Symbol table and Dangling References.

ii. Activation Records and Parameter Passing.

iii. Storage allocation strategies. **(8×2=16)**

Unit - V

5. a) Construct a DAG for the basic block whose code is given below:-

D:=B*C
E:=A+B
B:=B*C
A:=E-D **(10)**

b) What is peephole optimization? Explain it. **(6)**

OR

5. a) Explain in brief the various issues of design of a code generator. **(8)**

b) Explain the basic block and control flow graph. **(8)**

7E4093

Roll No. _____ [Total No. of Pages : 3

7E4093

B.Tech.VII Semester (Old back) Examination - 2013

Computer Engg.

7CS3 Logic Synthesis

Time : 3 Hours **Maximum Marks : 80**
Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **five** questions, selecting **one** question from each **unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

Unit - I

1. a) Design a model of a 4 - bit adder is behavioral and in data flow VHDL. Including the interface description. **(8)**

   b) Explain following:

      i) Set

      ii) Cardinality

      iii) Domain and co-domain

      iv) Symmetric **(8)**

OR

1. a) Explain decision problem with a binary-valued solution **(8)**

   b) What is BINARY decision diagram? Explain **(4)**

   c) Explain following:

      i) Associativity

      ii) Idempotence **(4)**

Unit - II

2. a) Draw a block diagram to simplified view of circuit models, synthesis and optimization in HDL **(8)**

b) Explain structural hardware languages and behavioral hardware languages in brief. **(8)**

OR

2. a) Consider the following model fragment which is describe by set of computions

$xl = x + dx$

$ul = u - (3 * x * u * du) - (3 * y * du);$

$yl = y + u * dx ;$

$C = xl < a$

design a data flow graph for the above **(8)**

b) Explain Resources and constraints for architectural synthesis. **(8)**

Unit - III

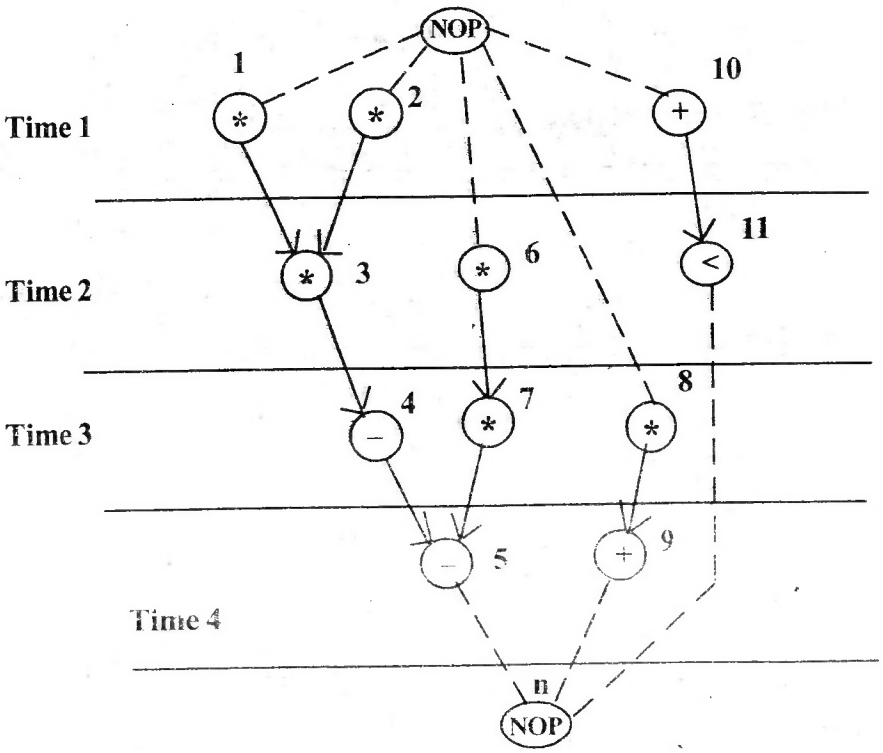
3. a) Explain Latency-Constrained scheduling with ALAP algorithm. **(8)**

b) What is Integer Linear programming model? Explain. **(8)**

OR

3. a) Write an algorithm for Hewistic list scheduling. **(8)**

b) Determine the type distributions for the given scheduled sequencing graph. **(8)**



Unit - IV

4. a) Show that $f' = x.f'_x + x'.f'_{x'}$ **(8)**

   b) Explain the most common operators in hemistic minimization **(8)**

OR

4. (a) Explain positional cube notation **(8)**

   (b) What is list oriented manipulation? Explain. **(8)**

Unit - V

5. a) Explain the block diagram of a finite state machine implementation also explain the state transition diagram with a suitable example. **(8)**

   b) Explain the difference between synchronous circuit and synchronous logical network with a suitable example. **(8)**

OR

5. Write short note on **(any two)** **(8×2=16)**

   a) Finite state machine traversal method

   b) State Encoding

   c) State minimization

7E4243

Roll No. _____ [Total No. of Pages : 2

7E4243

B.Tech. VII Semester (Main) Examination - 2013

Computer Engg.

7CS2 Data Mining and Ware housing

Time : 3 Hours

Maximum Marks : 80
Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **five** questions, selecting **one** question from each **unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

Unit - I

1. a) Describe the data mining functionalities? **(8)**

   b) Discuss the concept of hierarchy generation with detailed analysis **(8)**

OR

1. a) Explain the data cube aggregation **(4)**

   b) What are the different levels of analysis in data mining **(4)**

   c) Explain the term missing value and data cleaning **(8)**

Unit - II

2. What are the multilevel association rule? and how to improve efficiency of mining association rules? **(16)**

OR

2. a) What do you understand by measuring dispersion of data. (4)

   b) Discuss the multi dimensional data models. (4)

   c) Discuss the "Apriori algorithm" only **(8)**

Unit - III

3. a) i) Explain the ID3 algorithm of decision tree construction. **(4)**

ii) How are the decision tree useful in data mining **(4)**

b) Discuss the hierarchical technique for clustering application **(8)**

OR

3. Write a short note on

a) i) Genetic algorithms

ii) CLIQUE method **(5×2=10)**

b) Explain the data cardinality in data ware housing **(6)**

Unit - IV

4. a) What are the steps of planning a datawarehouse **(8)**

b) Discuss the meta data and state, how it is useful. **(8)**

OR

4. Explain in brief

a) Data warehouse Vs Data mart

b) Cube grade problem **(8+8)**

Unit - V

5. a) Differentiate between ROLAP and MOLAP **(6)**

b) How can we control the aggregation problem and what do you mean by denormalization. **(10)**

OR

5. a) Explain security issues in data warehousing **(8)**

b) What do you mean by recovery of data warehouse explain its testing and strategy. **(8)**

7E4241

Roll No. _____ [Total No. of Pages : 3

7E4241

B.Tech.VII Semester (Main/Back) Examination - 2013
Computer Engg.
7CS5 Computer Graphics & Multimedia Techniques
Common to CS & IT

Time : 3 Hours **Maximum Marks : 80**
Min. Passing Marks : 24

Instructions to Candidates:
*Attempt any **five** questions, selecting **one** question from each **unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

Unit - I

1. a) Explain the functions of display processor in raster scan display. Compare the merits and demerits of raster and vector devices **(10)**

   b) Explain the methods (any two) for producing color displays with the help of suitable diagrams **(6)**

OR

1. a) What is scan conversion? What are the major adverse side effects of scan conversion? **(4)**

   b) Show why the point-to-line error is always $\leq \frac{1}{2}$ for the midpoint line scan-conversion algorithm **(4)**

   c) What steps are required to scan convert a circle using bresenham's algorithm. Also, Derive the equation of decision variable with the help of neat diagram **(8)**

Unit - II

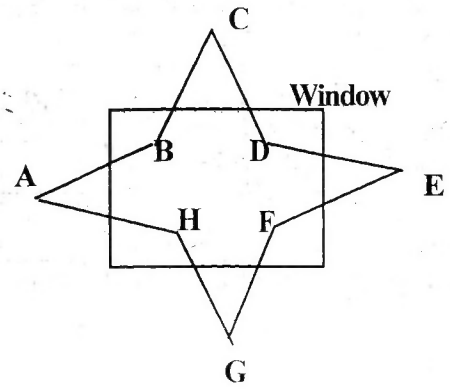
2. a) Use Cohen-Sutherland line clipping algorithm to find the visible portion of the line P(40,80), Q(120.30) inside the window, the window is defined as ABCD: A(20,20), B(60,20), C(60,40) and D(20,40) **(8)**

   b) What is homogeneous coordinate? Discuss the composite transformation matrices for two successive translation and scaling. **(8)**

OR

2. a) Reflect the triangle ΔABC about the line 3x-4y+8=0. The position vector of the coordinate ABC is given as A(4,1), B(5,2) and C(4,3) **(10)**

   b) Clip the given polygon using Sutherland. Hodgeman algorithm. The polygon is defined using set of vertices {A, B,C,D,E,F,G,H}. What will be the new set of vertices after clipping, show through a diagram. **(6)**



Unit - III

3. a) Prove that "The Sum of blending functions is unity for every value of parameter in Bezier curves". **(6)**

   b) Differentiate between image space and object space methods **(5)**

   c) Differentiate B-Splines with Bezier curves **(5)**

OR

3. (a) A cubic bezier curve segment is described by control points P_0 (2,2), P_1(4,8), P_2 (8,8) and P_3(9,5). Another curve segment is described by q_0(a,b), q_1(c,2), q_2(15,2) and q_3 (18,2). Determine the values of a,b and c so that the two curve segments Join smoothly. **(6)**

   (b) Explain Depth-Buffer method for visible surface detection. How is it different from scan-line method of visible surface detection? **(10)**

Unit - IV

4. a) Explain Gouraud shading and compare it with phong shading **(8)**

   b) Explain in brief about RGB. CMY and HSV color models. **(8)**

OR

4. (a) Explain how to simulate reflections from surfaces of different roughness using a reflection map. **(8)**

   (b) Write short note on simple recursive ray tracing without antialiasing **(8)**

Unit - V

5. a) Explain the followings:-

   i) SCSI

   ii) MIDI (8)

   b) Explain the TIFF file format with its merits and demerits (8)

OR

5. a) What do you mean by frame rate and pixel depth in digital video? (4)

   b) Write short notes on:-

   i) Animation Techniques

   ii) Multimedia storage technologies (12)

7)

7E4240

Roll No. _____ [Total No. of Pages : 3

7E4240

B.Tech. VII Semester (Main/Back) Examination - 2013

7CS4 Computer Aided Design for VLSI

Time : 3 Hours **Maximum Marks : 80**

Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **five** questions, selecting **one** question from each **unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

Unit - I

1. a) Describe Computer-Aided synthesis and optimization. **(8)**

   b) What is cell based design style? Explain in terms of library binding **(8)**

OR

2. a) What is Moore's law, locate the present status on it, predict its validity in near future. **(8)**

   b) What are the circuit models? Discuss the classification of models on the basis of levels and views. **(8)**

Unit - II

3. a) What is binary decision diagram? Explain RCBDD algorithm with an example **(8)**

   b) What are distinctive features of HDL **(8)**

OR

4. a) How do you differentiate between structural and behavioural HDL? Explain with example. **(8)**

   b) Write a technical note on **(8)**

      i) Sequencing graph

      ii) Hierarchical graph.

Unit - III

5. a) What is ill-posed constraint graph? Give one example in which ill-posed sequencing graph can be converted in to well-posed graph. **(8)**

   b) Give the ASAP and ALAP algorithm and explain with an example. **(8)**

OR

6. Write technical note on the following

   a) Force directed scheduling **(4)**

   b) Multiprocessor scheduling **(4)**

   c) Heuristic scheduling **(4)**

   d) Scheduling constraints and resources. **(4)**

Unit - IV

7. a) Explain the testability properties on two-level logic cover-positional cube notation. **(8)**

   b) Explain the exact logic minimization and principle for logic operation. **(8)**

OR

8. a) Explain the functions with multi volume inputs and list oriented manipulation. **(8)**

   b) What are combinational circuits and sequential circuits **(8)**

Unit - V

9. a) Explain clock routing and power routing. **(8)**

b) What is placement? What are the different levels of placement. Explain in detail. **(8)**

OR

10. a) Explain floorplanning and stimulated annealing in detail. **(8)**

b) Explain left-edge algorithm in detail. **(8)**

7E4237

Roll No. _____ [Total No. of Pages : 2

7E4237

B.Tech. VII Semester (Main/Back) Examination - 2013
Computer Engg.
7CS1 Software Project Management
Common to CS & IT

Time : 3 Hours **Maximum Marks : 80**
Min. Passing Marks : 24

Instructions to Candidates:

*Attempt any **five** questions, selecting **one** question from each **unit**. All questions carry **equal** marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.)*

Unit - I

1. a) How will you establish a software metrics program? **(8)**

   b) Explain in brief metrics of software quality. **(8)**

OR

1. a) What do you meant by software project management? Discuss in brief Management spectrum in software project management. **(8)**

   b) Explain W^5HH principles. How they are useful in Software Project Management **(8)**

Unit - II

2. What is software scope and feasibility with respect to project planning process. **(16)**

OR

2. How is software project estimation done? What features come under this estimation? **(16)**

Unit - III

3. a) Why scheduling is required while developing a software project? **(8)**

   b) Explain risk projection, refinement with respect to risk management **(8)**

OR

3. a) Explain earned value analysis in brief. **(8)**

   b) Explain monitoring and management in brief **(8)**

Unit - IV

4. What is software quality? Describe the concept of quality control and give a brief note on quality and productivity factors. **(16)**

OR

4. Write short notes on following:

   a) Software quality characteristics

   b) Mc call's quality model

   c) SQA architecture

   d) Cleanroom process. **(16)**

Unit - V

5. Explain project execution and closure in brief. Also draw the block diagram of project execution which shows different phases. **(16)**

OR

5. Why project monitoring and control is required for the product? Explain project tracking, issue tracking, defect tracking and activities tracking. **(16)**
