QUESTION BANK

B.TECH
(III YEAR – I SEM)
(2017-18)

DEPARTMENT OF
COMPUTER SCIENCE AND ENGINEERING

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

Recognized under 2(f) and 12 (B) of UGC ACT 1956
(Affiliated to JNTUH, Hyderabad, Approved by AICTE - Accredited by NBA & NAAC – 'A' Grade - ISO 9001:2015 Certified)
Maisammaguda, Dhulapally (Post Via. Hakimpet), Secunderabad – 500100, Telangana State, India

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

Permanently Affiliated to JNTUH, Approved by AICTE-Accredited by NBA & NAAC- A-Grade; ISO 9001:2008 Certified

B.Tech III Year I Semester Examinations

COMPILER DESIGN (A50514)

Time : 3.00 Hours   **MODEL PAPER -1**   Max.Marks: 75

_____

PART-A (25 Marks)

1 a) Define the terms Language Translator and compiler.   [2M]

  b) Write Regular Expression for specifying Identifiers and Constants of C   [3M]

  c) What is an ambiguous grammar? Give example.   [2M]

  d) Define left recursion. Is the following grammar left recursive? $E \rightarrow E+E \mid E*E \mid a \mid b$ [3M]

  e) What is hashing? Explain.   [2M]

  f) Find the type expression for the statements: int a,b,sum a= func(10,20);   [3M]

  g) What is code optimization? Give example for any two optimization techniques   [2M]

  h) What is a flow graph? Explain with an example.   [3M]

  i) List out different object code forms.   [2M]

  j) Differentiate Abstract Syntax Tree and DAG representations of intermediate code.   [3M]

PART-B (5x10 = 50 Marks)

2. Discuss the phases of a compiler indicating the inputs and outputs of each phase in translating

    the statement "amount = principle + rate * 36.0 "   [10M]

OR

3. Define an LL(1) grammar. Is the following grammar LL(1). G:S $\rightarrow$ iEtS | iEtSes |a , E $\rightarrow$ b.
    Also write the rules for computing FIRST() and FOLLOW().   [10M]

4. What is an LALR(1) grammar?. Construct LALR parsing table for the following grammar:

S→ CC, C → cC , C → c|d .   [10 M]

OR

5. Explain the usage of YACC parser generator in construction of a Parser.   [10 M]

6. What are different intermediate code forms? Discuss different Three Address code types and implementations of Three Address statements.   [10 M]

OR

7. With a neat diagram explain the format of the Symbol Table. And discuss the tree structures representation of scope information.   [10 M]

8. Explain the following code optimization techniques with examples.   [10 M]

   a) Constant propagation   b) Strength reduction   c) Code Motion

9. a) What is an induction variable? Explain with an example.   [10 M]

   b) Discuss how induction variables can be detected and eliminated from the given   [10M]

      intermediate code

         B2:   i:= i+1

                 t1:=4*j

                 t2:=a[t1]

                 if t2<10 goto B2

10. Explain various issues in the design of the code generation.   [10M]

OR

11. a). Explain the code generation algorithm in detail.   [10M]

    b). Write short notes on peephole optimization.

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B.Tech III Year I Semester Examinations

COMPILER DESIGN (A50514)

Time : 3.00 Hours | **MODEL PAPER -2** | Max.Marks: 75

_____

PART-A (25 Marks)

1 a) What is a compiler? List different types of Compiler [2M]

  b) Specify the functionality of linker, loader, and compiler [3M]

  c) List down the conflicts during shift-reduce parsing [2M]

  d) Explain about handle pruning? [3M]

  e) List the three kinds of intermediate representation [2M]

  f) Explain postfix notation [3M]

  g) Define Peephole Optimization [2M]

  h) Differentiate constant propagation and variable propagation [3M]

  i) What is meant by Dead code Elimination. [2M]

  j) Specify the various object code forms [3M]

PART-B (5x10 = 50 Marks)

2. List out the functions of a Lexical Analyzer? State the reasons for the Separation of Analyses programs into Lexical, Syntax, and Semantic Analyses. [10 M]

OR

3. Define a Parser. What is the role of grammars in Parser construction? Construct the Predictive parsing table for the grammar G : E → E+T |T , E →T*F |F , F →(E) |id. [10M]

4. What is an LR(0) item? Construct an SLR parsing table for the grammar

   G: S→ L=R |R, L → *R | id, R → L. Is it SLR(1) grammar?   [10 M]

<div align="center">OR</div>

5. Construct SLR parsing table for the following grammar: R-> R'|'R|RR|R*|(R)|al b   [10 M]

6. What do you mean by attributed grammars? Discuss the a translation scheme for   Converting
   an infix expression to its equivalent postfix form.   [10 M]

<div align="center">OR</div>

7. Define activation records. Explain how it is related with runtime storage allocation.   [10 M]

8. What is the role of code Optimizer in compiler? Is it a mandatory phase?   [10 M]

9. What is DAG and flow graph? Explain their role in compilation process.   [10 M]

10.a) Explain why next-use information is required for generating object code?   [5M]

   b) Explain the main issues in code generation.   [5M]

<div align="center">OR</div>

11. Generate code for the following C program using any code generation algorithm.   [10 M]

```
main()

{

Int I;

Int a[10];

while(i<=10)

a[i]=0;

}
```

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B.Tech III Year I Semester Examinations

COMPILER DESIGN (A50514)

Time : 3.00 Hours   **MODEL PAPER -3**   **Max.Marks: 75**

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PART-A (25 Marks)

1 a) What is an interpreter? Give two languages that are interpreted.   [2M]

  b) Write short notes on bootstrapping.   [3M]

  c) List out the kind of errors handled by the Scanner.   [2M]

  d) What is do you mean by left factoring the grammars? Explain.   [3M]

  e) What is a handle in bottom up parsing? Explain.   [2M]

  f) Convert the expression a= b*-c + b*-c into Three Address statements?   [3M]

  g) Define common sub expressions?   [2M]

  h) Explain inner loops   [3M]

  i) Specify the properties of Object code generation   [2M]

  j) Compute the cost of following code sequence: MOV B,A   ADD C,A   [3M]

PART-B (5x10 = 50 Marks)

2. What is LEX? Discuss the usage of LEX in Lexical Analyzer generation.   [10 M]

OR

3.a) Write a note on the parse generator '_ YACC.

  b) Write the YACC specification of a simple desk calculator as given: [10M]
    E->E+T/T   T->T*F /F   F -> (E) | digit where digit between 0 to 9.

4. a) Obtain the directed acycJic graph for the expression : x+x*(y+ z)+(y+z)* w   [10 M]

b) Explain the following with example: i) Quadqaples ii) Triples iii) Indirect triple

OR

5. Compare and contrast SLR with LALR. Define Kernel items and Non-kernel items.   [10 M]

Show the following grammar is LALR(1)

S-> Aa | bAc | dc | bda

A-> d

6. Generate the three address code for the following code fragment.   [10 M]

a = b + 1   x = y + 3   y = a / b   a = b + c

OR

7. Write a note on simple type checker and list the different types of type checking   [10 M]

8. What is the role of code Optimizer in compiler? Is it a mandatory phase?   [10 M]

OR

9. a) Construct a DAG for the expression: a+a*(b-c)+(b-c)*d   [10 M]

b) Explain various machine independent code optimization techniques.

10. a) Discuss Global Register Allocation in code generation.   [10 M]

b) Generate code for the following C statements: i) x=f(a)+f(a) ii) y=x/5;.

OR

11. Consider the following basic block of 3-address instructions: [10 M]

a:=b+c   x:=a+b   b:=a-d   c:=b+c   d=a-d   y=a-d

Write the next-use information for each line of the basic block.

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B.Tech III Year I Semester Examinations

COMPILER DESIGN (A50514)

Time : 3.00 Hours   **MODEL PAPER -4**   **Max.Marks: 75**

_____

PART-A (25 Marks)

1 a) State some compiler construction tools.   [2M]

 b) Differentiate pass and phase.   [3M]

 c) What is LR(k) parsing?   [2M]

 d) Describe the types of LR parsers.   [3M]

 e) State the three kinds of intermediate representation   [2M]

 f) List the different types of type checking.   [3M]

 g) What is meant by strength reduction.   [2M]

 h) Specify the applications of DAG   [3M]

 i) Explain the role of code generator in a compiler   [2M]

 j) How to calculate the cost of an instruction.   [3M]

PART-B (5x10 = 50 Marks)

2. What is LEX? Discuss the usage of LEX in Lexical Analyzer generation.   [10 M]

OR

 3. State the various phases of a compiler and explain them in detail.   [10M]

 4. Prepare a canonical parsing table for the given grammar: [10 M]

        S-> CC

        C-> cC / d   OR

5. Compare and contrast SLR with LALR. Define Kernel items and Non-kernel items.   [10M]

   Show the following grammar is LALR(1)

       S-> Aa | bAc | dc | bda

       A-> d

6. Generate the three address code for the following code fragment.   [10 M]

   while(a>b)

   {

   if(c<d)

   x=y+z;

   else

   x=y-z;

   }

<div align="center">OR</div>

7. Explain the use of symbol table in compilation process. List out the various attributes for
   implementing the symbol table.   [10 M]

8. Explain the different storage allocation strategies.   [10 M]

<div align="center">OR</div>

9. Explain the role of DAG in optimization with example.   [10 M]

10. Generate code for the following: i) x=f(a)+f(a)+f(a) ii) x=f(f(a)) iii) x=++f(a) iv)
x=f(a)/g(b,c)   [10 M]

<div align="center">OR</div>

11. Explain the following terms: i) Register Descriptor ii) Address Descriptor iii) Instruction
Costs   [10 M]

Code No: 115AP

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year I Semester Examinations, November - 2015
COMPILER DESIGN
(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 75

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A (25 Marks)

1.a) Define Cross Compiler.   [2]
  b) Eliminate immediate left recursion for the following grammar:
      E->E+T | T
      T->T* F | F
      F-> (E) | id   [3]
  c) List the rules for computing FOLLOW SET.   [2]
  d) Define CLOSURE (I).   [3]
  e) What is a symbol table?   [2]
  f) What does a semantic analysis do?   [3]
  g) Define basic block in a flow graph.   [2]
  h) What is a DAG? Mention its applications   [3]
  i) Generate a object code for following statements
      a = b + c;   d = a+e   [2]
  j) Mention the properties that a code generator should possess.   [3]

PART - B (50 Marks)

2.   What are the various phases of the compiler? Explain each phase in detail.   [10]
                              OR
3.   Construct the predictive parser for the following grammar: [10]
     S->(L)/a
     L->L,S/S

4.   Find the SLR parsing table for the given grammar:
     E->E+E | E*E | (E) | id.
     And parse the sentence (a+b)*c.   [10]
                              OR
5.   Construct an LALR Parsing table for the following grammar: [10]
     E-> E+T |T
     T-> T*F|F
     F->id

6. Generate intermediate code for the following code segment along with the required syntax directed translation scheme:

   if(a>b)

   x=a+b

   else

   x=a-b

   Where a and x are of real and b of int type data.   [10]

   OR

7. Give syntax directed translation scheme for simple desk circulator.   [10]

8. Explain the following with an example:
   a) Redundant sub expression elimination
   b) Frequency reduction
   c) Copy propagation.   [3+3+4]

   OR

9. Optimize the following code using various optimization techniques: [10]

   i=1; s=0;

   for (i=1; i<=3; i++)

   for (j=1;j<=3;j++)

   c[i][j]=c[i][j] + a[i][j] + b[i][j]

10. Explain in detail about machine dependent code optimization techniques.   [10]

    OR

11. Give an example to show how DAG is used for register allocation.   [10]

---ooOoo---

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year I Semester Examinations, November/December - 2016
COMPILER DESIGN
(Computer Science and Engineering)

Time: 3 hours

Max. Marks: 75

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART - A

(25 Marks)

1.a) Write a brief note on bootstrap process. [2]
b) What are the differences between a compiler and an interpreter? [3]
c) Give the specification of the YACC parser generator. [2]
d) Construct the LR(0) items for the "dangling-else" grammar. [3]
e) How to check structural equivalence of two type expressions? [2]
f) Define and write the differences between synthesized attributes and inherited attributes. [3]
g) Write a short note on Flow graph. [2]
h) Write an algorithm for constructing a basic block. [3]
i) Define various possible outputs of the code generator. [2]
j) Construct DAG for the following basic block: [3]
   T1=A+B
   T2=C+D
   T3=E – T2
   T4=T1– T3

PART - B

(50 Marks)

2.a) Explain various error recovery strategies in lexical analysis.
b) Construct a Finite Automata and Scanning algorithm for recognizing identifiers, numerical constants in C language. [5+5]

OR

3. Explain the various phases of a compiler with an illustrative example. [10]

4. Construct the LR Parsing table for the following grammar: [10]
   E→E + T | T
   T→T * F | F
   F → (E)/id

OR

5.a) Write a YACC program that will take regular expression as input and produce its parse tree as output.
b) Write an algorithm for computing LR(k) item sets. [5+5]

6.a) Write an SDT to convert infix to postfix expression.
  b) Explain briefly about polymorphic functions. [5+5]

OR

7. Explain various storage allocation strategies with its merits and demerits. [10]

8. Discuss various techniques of function preserving transformations for code optimization. [10]

OR

9. Explain how data flow equations are set up and solved for improving code. [10]

10. Explain the following peephole optimization techniques: [5+5]
  a) Elimination of Redundant Code
  b) Elimination of Unreachable Code.

OR

11. Explain in detail about machine dependent code optimization techniques with their drawbacks. [10]

---ooOoo---

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
COMPUTER SCIENCE AND ENGINEERING
Computer Graphics
MODEL QUESTION PAPER-I
III CSE I Semester

Duration: 3hrs   **Max Marks: 75**

PART-A
Answer all the following

1.
a. Distinguish between raster scan and random scan display systems.
b.Explain about viewing pipeline.
c.what is an window and viewport?"
d.What is an inside outside test?
e.Derive the matrix form for the translation of basic geometric transformations in 3D
   graphics?
f.What is meant by composite transformations?
g.What is an quard tree?
h.Enumerate the disadvantages of depth buffer algorithm?
i.What are the steps in design of animation sequence?
j.What is raster animation?

PART- B
2.a) What are the application areas of computer graphics? Explain briefly?
b)Explain about video display devices?

                                       OR

3.Consider a raster display system with resolution of 800 by 400. How many pixels could be accessed per second by a display controller that refreshes the screen at the rate of 60 frames per second?

4.Give the transformation matrix for the following?
i)To shift left by 2 units and due to rotate by 450 clockwise.
ii) To reflect with respect to y=-x axis.

                                       OR

5.Derive the transformation matrices for rotation and translation in 2-D Cartesian coordinate system?

6.a) Define the blending function for B-spline curve?
b)List various polygon rendering methods?

                                       OR

7. Write a short notes on
a) Quad tree b) BSP trees c) Boundary representation of solids

8.What are the steps involved in depth buffer algorithm?

                                       OR

9.Explain the Warnock's algorithm?

10.What are the various types of interpolation used in animation?

                                       OR

11. What are the characteristics of key frame animation?

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
COMPUTER SCIENCE AND ENGINEERING
Computer Graphics
MODEL QUESTION PAPER-II
III CSE I Semester

Duration: 3hrs   **Max Marks: 75**

PART-A
Answer all the following
1.a.Define horizontal and vertical retrace?
  b.Discuss edge fill algorithm?
  c.Explain the viewing pipeline?
  d.What is an clipping?
  e.Give the transformation matrix for rotation about x-axis in3D?
  f.What are the characterstics of perspective projections?
  g.Explain how area subdivision works for visible surface detection?
  h.Write a short notes on painters algorithm?
  i.List and explain about the steps of animation?
  j.Describe the various methods used to control animation?.

PART- B

2.a)Explain briefly about the video display device?
  b)Explain briefly about the construction of plasma panel display?
                                    OR
3.Explain briefly about the basic transformations?

4.With an example explain cohen-sutherland line clipping algorithm?
                                    OR
5.Explain Sutherland Hodgeman polygon clipping?

6.Write short notes on parallel and perspective projections?.
                                    OR
7.Explain in detail about 3D window to viewport coordinate transformations?

8.Explain Back face detection method and painters algorithm?
                                    OR
9.Explain depth buffer algorithm for hidden surface removal?

10.Write about different computer animation languages?
                                    OR
11. Explain the steps in the design of animation sequence?.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
COMPUTER SCIENCE AND ENGINEERING
Computer Graphics
MODEL QUESTION PAPER-III
III CSE I Semester

Duration: 3hrs   **Max Marks: 75**

PART-A
Answer all the following

1.a.List out the merits and demerits of Plasma panel display..

b.What is bitmap and what is pixmap?

c.Explain about BSP tree?

d.Write about octree method?

e.What are the various types of interpolation used in animation?

f.Describe the problem of temporal aliasing?

g.Write a short notes on spline representation?

h.Explain the polygon meshes and quadric surface?

i.Describe the beam penetration method

j.Obtain the reflection of the point A(10,10) about y=x+2

PART- B

2.Explain the mathematical procedure in deciding the points on the periphery of the ellipse using mid point ellipse algorithm

<div align="center">OR</div>

3.What are the steps involved in the DDA line drawing algorithm

4.What is the principle of cyrus-Beck algorithm for clipping polygon? Illustrate with an example.

<div align="center">OR</div>

5.What are the stages involved in the window to viewport coordinate transformation. Explain about each stage.

6.Explan Gouraud shading?

<div align="center">OR</div>

7.Derive the matrices for rotation about three principle axis in 3-D graphics

8.Discuss about the scan line method for visible surface detection.

<div align="center">OR</div>

9. Which algorithms are suitable for hidden surface removal of objects with non-planar surface .justify?

10.Discuss about the techniques used to achieve the simple animation effects.

<div align="center">OR</div>

11.List the typical tasks for which the animation functions are defined in animation languages.

Code No: XXXXX
MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY, HYDERABAD
B. Tech III Year I Semester Examinations
Computer Networks
(Computer Science and Engineering)

Time: 3 hours   **Max Marks: 75**
Note: This question paper contains two parts A and B. Part A is compulsory which carries 25 marks.
Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit.
Each question carries 10 marks and may have a, b, c as sub questions.

MODEL PAPER – 1

PART-A(Answer all the Questions)

1. a) Define Protocol, Interface and Peer entity.   (2M)
    b) What is Piggybacking technique?   (3M)
    c) Explain Token Ring briefly.   (2M)
    d) Write Ethernet Cabling Standards.   (3M)
    e) What is the purpose of TTL?   (2M)
    f) Explain the channel allocation problem.   (3M)
    g) Write the operational difference bridge and switch.   (2M)
    h) Write short note on RTP.   (3M)
    i) Explain the Class of IP addresses.   (2M)
    j) Write the TCP header format.   (3M)

PART-B

2. Explain ISO OSI Reference model with neat sketch.
                              (OR)   (10M)
3. Explain different kinds of Transmission Media.
4. Explain CSMA and CSMA/CD in detail.
                              (OR)   (10M)
5. a) Explain Data link layer Switching.
    b) Explain Collision Free Protocols.
6. Explain Dynamic Routing algorithms.
                              (OR)   (10M)
7. Explain Congestion Control algorithms.
8. a) Explain IPV4 header format.
    b) Explain DHCP.
                              (OR)   (10M)
9. a) Explain Transport layer Services.
    b) Explain Crash Recovery.
10. a) Explain UDP header format.
    b) Explain TCP Connection management modeling.
                              (OR)   (10M)
11. Explain the following
          a) FTP   b) TELNET   c) DNS

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY, HYDERABAD
B. Tech III Year I Semester Examinations
Computer Networks
(Computer Science and Engineering)

Time: 3 hours   **Max Marks: 75**

Note: This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

MODEL PAPER – 2

PART-A(Answer all the Questions)
1.   a) Explain Internet Standards.   (2M)
     b) Explain Character stuffing and Bit stuffing.   (3M)
     c) Explain Token Bus briefly.   (2M)
     d) Write 802.3 Frame format.   (3M)
     e) What is Store and Forward packet switching?   (2M)
     f) Explain the Count to infinity problem.   (3M)
     g) Write the short note on Admission Control.   (2M)
     h) Write short note on RPC.   (3M)
     i) Define Tunneling.   .   (2M)
     j) Write the short note on TCP Service model.   (3M)

PART-B
2.   Explain TCP/IP Protocol Suit with neat sketch.
                          (OR)   (10M)
3.   Explain different kinds of Flow Control Protocols.
4.   Explain Pure and Slotted ALOHA in detail.
                          (OR)   (10M)
5.   a) Explain Inter Networking Devices in detail.
     b) Explain Spanning tree bridges.
6.   Explain Shortest Path Routing algorithm and Flooding.
                          (OR)   (10M)
7.   Explain Congestion Prevention Policies.
8.   a) Explain IPV6 header format.   (10M)
     b) Explain ARP and RARP.
                          (OR)
9.   a) Explain Transport layer Connection Establishment and Connection Release.
     b) Explain Transport protocol addressing.
10. a) Explain TCP header format.
     b) Explain TCP Congestion Control.
                          (OR)   (10M)
11. Explain the following.
          a) SMTP   b) HTTP   c) DNS

Code No: XXXXX
MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY, HYDERABAD
B. Tech III Year I Semester Examinations
Computer Networks
(Computer Science and Engineering)

Time: 3 hours   **Max Marks: 75**

Note: This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

MODEL PAPER – 3

PART-A(Answer all the Questions)

   1. a. What is a protocol and a standard?   (2M)

      b. What is meant by layered architecture?   (2M)

      c. Name Topology types and describe and two?   (3M)

      d. Notes on channelization?   (3M)

      e. Describe physical layer implementation of Gigabit Ethernet?   (3M)

      f. What is masking?   (2M)

      g. What is SVC and PVC?   (3M)

      h. Write Short notes on hierarchical routing?   (3M)

      i. Write short notes on internetwork routing   (2M)

      j. What is client server application.   (2M)

PART-B

2.Comparison between OSI reference model and TCP\IP reference Model .   [10]

                          (OR)

3. a)Explain error detection using CRC for the following: [10]

    Consider a message 110010 represented by the polynomial $M(x) = x5 + x4 + x$

    and a generating polynomial $G(x) = x3 + x2 + 1$ (1101)

  b. Explain sliding window protocol.

4.Explain Ethernet physical and MAC sublayer and Ethernet types?   [10]

                          (OR)

5.Explain all the connecting devices?   [10]

6.a) Explain distance vector routing with an example?   [5+5]

  b). Describe count to infinity problem.

                          (OR)

7.Explain Leaky bucket and token bucket algorithms?   [10]

8.a) Describe classification of IP addresses and explain CIDR.   [5+5]

  b). Write notes on Packet Fragmentation.

                          (OR)

9. a)Write notes on transport layer services.   [5+5]

  b)Describe about transport layer addressing.

10.a) Explain RPC. [5+5]

  b.Explain Two way handshake and three way handshake methods.

(OR)

11.Explain the following [10]

        a)DNS   b)FTP   c)SSH   d)TELNET   e)E-Mail   f)HTTP

Code No: XXXXX
MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY, HYDERABAD
B. Tech III Year I Semester Examinations
Computer Networks
(Computer Science and Engineering)
Time: 3 hours   Max Marks: 75
Note: This question paper contains two parts A and B. Part A is compulsory which carries 25
marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full
question from each unit. Each question carries 10 marks and may have a, b, c as sub
questions.

MODEL PAPER – 4

PART-A(Answer all the Questions)
1. a)What are the issues in data link layer ?   (2M)
    b)How internet is administered?   (3M)
    c) What is a Switch?   (2M)
    d) Explain spanning tree bridge.   (3M)
    e) What is Optimality Principle?   (2M)
    f) Explain datagram subnet .   (3M)
    g)What is crash recovery ?   (2M)
    h)Explain packet fragmentation.   (3M)
    i)What is electronic mail ?   .   (2M)
    j)What is TELNET ?   (3M)

PART-B
2.a)Compare OSI and TCP/IP reference model.   [5+5]
b)Discuss about internet standards   .
                                  (OR)
3.a)Describe guided Transmission media.   [5+5]
b)Explain CRC error detection method.
4.Explain various ALOHA Protocols.   [10]
                                  (OR)
5.Explain fast Ethernet and Gigabit Ethernet.   [10]
6.Explain shortest path routing.   [10]
                                  (OR)
7.Explain count-to-infinity problem.   [10]
8.Explain the following protocols   [5+5]
a)RARP   b)DHCP
                                  (OR)
9.Explain connection establishment and release in transport layer.   [10]
10.a)Explain the real time transport protocol.   [5+5]
b)Explain the TCP transmission policy.
                                  (OR)
11.a)Explain TCP congestion control.   [5+5]
b)Write short notes on:
        i)DNS   ii)FTP

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY
B. Tech III Year I Semester Examinations
Operating Systems

Time: 3 hours   **Max Marks: 75**

Note: This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 sections. Answer any one full question from each section. Each question carries 10 marks and may have a, b, c as sub questions.

MODEL PAPER - 1

PART-A

1) a)What is graceful degradation ?   [2M]
   b)Briefly Explain dual mode operation.   [3M]
   c)Define soft affinity and hard affinity.   [2M]
   d)Briefly Explain Thread scheduling.   [3M]
   e)Define Swapping.   [2M]
   f)Briefly Explain allocation of frames.   [3M]
   g)What is Latency time ?   [2M]
   h)Explain file system structure.   [3M]
   i) What is Access matrix.   [2M]
   j)Briefly Explain resource request algorithm.   [3M]

PART-B

2)What is a system call? Explain different types of system calls.   [10M]
                                        (OR)
3)Explain briefly about special purpose systems ?
4)What is SRTF Scheduling algorithm? Explain with a neat gantt chart.   [10M]
                                        (OR)
5)What is a monitor? How are monitors used in solving the Dining Philosophers Problem ?
6) Explain about Paging with a neat block diagram.   [10M]
                                        (OR)
7)Consider the page reference string 1,3,4,0,5,3,2,1,0,4,5,2.How many page faults occur for the LRU and Optimal replacement algorithms with 4 frames each ?
8)Explain about File system interface.   [10M]
                                        (OR)
9)Explain file allocation methods.
10)Explain the three implementation methods of access matrix.   [10M]
                                        (OR)
11)Explain the following
   a) deadlock detection b) deadlock recovery

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MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY
B. Tech III Year I Semester Examinations
Operating Systems

Time: 3 hours   Max Marks: 75

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MODEL PAPER-2

PART-A

1)a) What is multiprogramming ?   [2M]
   b)Briefly explain virtual machines.   [3M]
   c)Define Contention scope.   [2M]
   d)Explain multiprocessor scheduling.   [3M]
   e)Define Thrashing   [2M]
   f)Explain Demand Paging.   [3M]
   g)What is seek time ?   [2M]
   h)Briefly explain file system mounting.   [3M]
   i)What is safe state ?   [2M]
   j)Explain revocation of access rights.   [3M]

PART-B

2)Explain about various types of operating systems.   [10M]

(OR)

3)Explain operating systems services and functions.

4)Consider the following four processes,with the length of the CPU burst given in milliseconds. [10M]

Process	AT	BT
P1	0	5
P2	1	6
P3	2	2
P4	3	8

Calculate the average waiting time for
   I)   Non preemptive SJF scheduling.
   II)   Average Turnaround time.

(OR)

5)State and Explain critical section problem.

6)Explain paging concept in Operating Systems.   [10M]

(OR)

7)Explain about segmented memory management with a neat block diagram.

8)Explain about file system interface.   [10M]

(OR)

9)Explain file allocation methods.

10)Enumerate and explain the necessary conditions for deadlocks.   [10M]

(OR)

11)Explain bankers algorithm for deadlock avoidance.

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY
B. Tech III Year I Semester Examinations
Operating Systems

Time: 3 hours   Max Marks: 75

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MODEL PAPER - 3

PART-A

1. (a) Write short notes on Layered OS Structure?   [2M]

(b) Briefly explain system programs.   [3M]

(c) Differentiate Process & Program?   [2M]

(d) Briefly explain real time scheduling.   [3M]

(e) What do you mean virtual memory?   [2M]

(f) Briefly explain the structure of page table.   [3M]

(g) Briefly explain free space management.   [2M]
 h) Differentiate Relative access & Sequential access?   [3M]

(i) Explain Resource allocation graph?   [2M]

(j) Briefly Explain access control.   [3M]

PART-B

2. Explain Computer system architecture & OS structure with neat diagrams.   [10M]

(OR)

3. (a) Explain Special purpose systems.

(b) Explain about user Operating System Interface.

4. (a) Explain Process states with a neat diagram?   [10M]

(b) Differentiate Preemption & Non- Preemption with an example?

(OR)

5. Explain Scheduler? Consider the following set of processes, with the arrival times and the CPU burst times given in milliseconds.

```
--------------------------------------------------------
Process        Arrival-Time        Burst-Time
--------------------------------------------------------
   P1               0                    5
   P2               1                 3
   P3               2                 3
   P4               4                 1

--------------------------------------------------------
```

What is the average turnaround time and average waiting time for these processes with the preemptive shortest remaining processing time first (SRTF) algorithm?

6. Write short notes on the following   [10M]

(a) Swapping, contiguous memory allocation and segmentation.

(b) Logical address & Physical address.

(c) Demand paging & thrashing.

(OR)

7. (a) Explain paging concept with neat diagram.

(b) Write short notes on allocation of frames.

8. (a) Discuss the criteria for choosing a file organization. [10M]

(b) Describe indexed file, indexed sequential file organization.

(OR)

9. Discuss C-Scan and Scan disk scheduling algorithms?

10. Write the resource allocation algorithm for Deadlock detection. [10M]

(OR)

11. (a) Explain a) Capability based systems.

b) Language – based protection.

.

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY
B. Tech III Year I Semester Examinations
Operating Systems

Time: 3 hours   Max Marks: 75

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MODEL PAPER-4

PART-A

1. (a) Write short notes on distributed systems.   [2M]

   (b) Explain System call with an example.   [3M]

   (c) What is context switch?   [2M]

   (d) Explain readers writers problem ?   [3M]

   (e) What is demand paging?   [2M]

   (f) Briefly explain segmentation with paging.   [3M]

   (g)Briefly explain sequential file access.   [2M]

   (h) What are the operations on the directories?   [3M]

   (i) What is deadlock?   [2M]

   (j) Briefly explain safety algorithm.   [3M]

PART-B

2. Explain OS Structure with neat diagrams   [10M]

(OR)

3. (a) Explain different types of System Calls.

   (b) Explain about OS Operations.

4. What is Process Control Block? Explain its structure.   [10M]

(OR)

5. (a) Most round-robin schedules uses a fixed size quantum. Give an argument in favor of a small quantum. Now give an argument in favor of a large quantum. Compare and contrast the types of systems and jobs to which the argument apply.

   (b) With an example explain shortest- Process- Next scheduling.

6. Explain different Page Table structures.   [10M]

(OR)

7. (a) Discuss LRU-Approximation page Replacement.

(b) Consider LRU, FIFO, Optimal page replacement algorithms. Rank these algorithms from bad to perfect according to their page fault rate. Separate those algorithms which suffer from Belady''s anomaly from those which do not.

8. (a) Explain File System Structure   [10M]

   (b) Write short notes on file Allocation methods

<div align="center">(OR)</div>

9. Discuss C-Scan and Scan disk scheduling algorithms?

10. Explain Bankers algorithm and find that the given snapshot is a safe state or not?   [10M]

- 5 processes and 3 resource types A (with 10), B (with 5), and C (with 7 instances).
- A Snapshot:

Available		Allocation		Max	
A B C		A B C	A B C	
3 3 2	P0	0 1 0	7 5 3	
	P1	2 0 0	3 2 2	
	P2	3 0 2	9 0 2	
	P3	2 1 1	2 2 2	
	P4	0 0 2	4 3 3	

<div align="center">(OR)</div>

11. (a) Explain implementation of access matrix.

   (b) Explain Revocation of Access matrix.

Code No: XXXXX

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY
B. Tech III Year I Semester Examinations
Operating Systems

Time: 3 hours   **Max Marks: 75**

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MODEL PAPER- 5

PART-A

1.a)What are the four components of a computer system?   [2M]

b) How does a clustered system differ from a multicore system?   [3M]

c) What is a job queue?   [2M]

d)Briefly explain load balancing.   [3M]

e)What is swapping?   [2M]

f)Briefly explain contiguous allocation.   [3M]

g)What are the operations on directories?   [2M]

h)Briefly explain indexed sequential file access method.   [3M]

i)Briefly explain compiler based enforcement?   [2M]

j) What is the only reasonable condition that can be used to prevent deadlocks from occurring?   [3M]

PART-B

2) Explain a)OS functions b)virtual machines.   [10M]
(OR)
3)Explain in detail about the evolution criteria in Operating System

4) Write the short notes on the following   [10M]
  (a) Semaphores (b) Classic problem of synchronization
(OR)
5)Explain about different CPU Scheduling methods

6)What is paging. Describe the concept of Segmentation.   [10M]

(OR)
7)Explain the difference between Logical and physical address space.

8) Discuss about N- step- SCAN policy for disk scheduling.   [10M]

(OR)
9) Give an example of an application that could benefit from operating system support for random access to indexed files.

10) Write the resource allocation algorithm for Deadlock detection.   [10M]

(OR)
11) Explain a)Goals of protection b) Domain of protection

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY
B. Tech III Year I Semester Examinations
Operating Systems

Time: 3 hours   Max Marks: 75

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MODEL PAPER-6

PART-A

1a)What is the difference between volatile and nonvolatile storage?   [2M]

 b) Provide at least two advantages of multiprocessor systems.   [3M]

 c)Name at least two activities the operating system is responsible for in connection   [2M]
 with process management.

 d)Briefly explain process states.   [3M]

e)What is thrashing?   [2M]

f)Briefly explain structure of page table.   [3M]

g)What do you mean bad blocks?   [2M]

h)Briefly explain tree structured directory.   [3M]

i)Briefly explain capability based systems.   [2M]

j)Provide at least one method for recovering from deadlock.   [3M]

PART-B

2) Explain the different types System calls with suitable examples   [10M]

(OR)

3) Explain about various types of operating systems.

4) (a) What is the need for mutual exclusion?   [10M]

 (b) What is a critical resource?

 (c) What is a critical section?

 (d) What is starvation?

(OR)

5) Most round-robin schedules uses a fixed size quantum. Give an argument in
favor of a small quantum. Now give an argument in favor of a large quantum.
Compare and contrast the types of systems and jobs to which the argument
apply.

6) Discuss LRU-Approximation page Replacement.   [10M]

(OR)

7) Explain the concept of virtual memory and Demand Paging.

8) Describe indexed file, indexed sequential file organization.   [10M]

(OR)

9) Explain about Disk Scheduling

10) Explain about any Deadlock detection algorithm   [10M]

(OR)

11)Explain a) implementation of access matrix b) revocation of access matrix

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
B.Tech III year – I Semester Examinations, Model Paper-1
MANAGEMENT SCIENCE

Time: 3 hours   **Max. Marks: 75**

PART- A (25 Marks)

Answer all the questions   **25 marks**

1. A) Define management.
   B) Explain concepts of management.
   C) Define HRD. What are the various activities in it?
   D) What is MBO? How it will be used in performance appraisal.
   E) Write about critical path.
   F) Explain rules for drawing networks.
   G) Define corporate planning process.
   H) Explain about micro environment.
   I) Explain any four features of Management.
   J) Define Process Control & Acceptance Sampling.

Section-B   5x10=50

2. Define Management and explain the functions of Management**.**
                                Or
3. What is the importance of Management in the present business scenario?
4. Discuss the various Organizational Structures**.**
                                Or
5. Explain the Marketing Mix.
                                Or
6. What are the differences between PM and HRM?
                                Or
7. Explain the significance of manpower planning?
8. Differentiate between PERT and CPM?
                                Or
9. Explain the steps involved in probability of completing the project with in given time?
10. Explain the significance of environmental analysis?
                                Or
11. Explain the steps in Strategy formulation and implementation?

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
B.Tech III year – I Semester Examinations, Model Paper-2
MANAGEMENT SCIENCE

Time: 3 hours   Max. Marks: 75

PART- A (25 Marks)

Answer all the questions   **25 marks**

1.
   A. Differentiate Leader vs. manager.
   B. Explain different types of leaderships.
   C. Why is Management considered as both an Art & Science?
   D. Determine EOQ.
   E. What is induction? Explain its importance?
   F. Differentiating training and development.
   G. What is slack? Explain about it.
   H. What is cost slope?
   I. Goals vs. objectives.
   J. Generic strategic alternatives.

Section-B   5x10=50

2. Explain various principles of management.

                                   Or

3. Explain different need levels in Maslow's motivation theory.

4. Explain the various Leadership Theories.

                                   Or

5. Explain

   A) Functions of marketing.

   B) Importance of marketing mix.

6. What are the challenges faced by HR manager in the organization.

                                   Or

7. What is job evaluation? Explain various methods of job evaluation.

8. Write about different time estimates.

                                   Or

9. Write about different types of floats.

10. Explain about strategy variations.

                                   Or

11. Explain different elements of corporate planning process

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
B.Tech III year – I Semester Examinations, Model Paper-3
MANAGEMENT SCIENCE

Time: 3 hours   **Max. Marks: 75**

PART- A (25 Marks)
Answer all the questions   **25 Marks**

1. **A)** Management vs. administration.
   B) Theory-X Vs. Theory-Y
   C) Selling vs. marketing.
   D) Significance of ABC analysis.
   E) Define Process Control & Acceptance Sampling.
   F) Differentiate wages and salaries.
   G) Activity vs event.
   H) Explain about Quality Circles.
   I) Explain role of SBUs.
   J) Explain importance of programmes in strategic management.

Section-B   **5x10=50 Marks**

2. Explain various social responsibilities of an organization.

Or

3. Explain various principles of organizing.

4. Explain various elements of promotion mix.

Or

5. Discuss about various types of plant layouts with its merits and demerits.

6. Define merit rating. Explain methods of merit rating.

Or

7. Define training. Explain various on-the job and off-the job training methods.

8. Draw a network for following data.

Activity	Preceding activity
A	------
B	------
C	A
D	A
E	B
F	C,D
G	D
H	D,E
I	F,G,H

Or

9. Explain significance of CPM.

10. Explain SWOT analysis.

Or

11. What is significance of strategic Alliances?

Time: 3 hours   Max. Marks: 75

PART- A (25 Marks)
Answer all the questions   25 Marks

1.
   A. Line organization vs. line and staff organization.
   B. Staffing vs. Organizing.
   C. Elements of promotion mix.
   D. Write a short note about JIT (Just in Time).
   E. Recruitment vs. selection.
   F. Write a short note about succession strategy.
   G. Vision vs. mission.
   H. Goals vs. objectives.
   I. Discuss about various factors in the macro environment.
   J. Explain about diversification growth with examples.

Section-B   5x10=50

2. Explain about different types of organizational structures with suitable examples.

Or

3. What is departmentation? Explain about different criteria for departmentation.

4. Explain significance of

   a) Control charts   b) Accepting sampling.

Or

5. What are the various Job Evaluation Techniques?

6. What is compensation management?

   Explain about a) monetary benefits. b) Non-monetary benefits.

Or

7. Explain about role of job analysis.

8. Show the calculations of total cost at every stage of crashing.

Activity	Normal		Crash	
	Days	cost	Days	Cost
1-2	3	500	2	1000
1-3	2	750	1	1500
1-4	6	1400	4	2600
2-4	5	1000	3	1800
2-5	7	1150	6	1450
3-4	2	800	2	800
4-5	4	1000	2	2400

Or

9. Explain various steps involved in finding probability that the project can be completed in the given scheduled time.

10. What are the different strategies to improve sales?

Or

11. Explain the significance of strategic management in the competitive environment.

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
B.Tech III year – I Semester Examinations, Model Paper-5
MANAGEMENT SCIENCE

Time: 3 hours   **Max. Marks: 75**
PART- A (25 Marks)
Answer all the questions   **25 Marks**

1.
A) Write about matrix organization.
B) Explain about team structure.
C) Explain about BPR.
D) What is importance of SQC?
E) Training vs. development.
F) Write about Job description.
G) Explain different rules for network drawing.
H) Write about different time estimates.
I) Bench marking.
J) Write about micro environment.

Section-B   5x10=50

2. What are the various modern approaches to organization structures?

Or

3. What is the significance of organization structures in the business?
4. Explain different strategies to be followed in the different stages of PLC (product life cycle).

Or

5. Explain differences between control charts for variables and control charts for attributes.
6. Why HRM has such a significant role in present scenario.

Or

7. Explain different steps in selection process.
8.

Activity	Least time(days)	Greatest time(days)	Most likely time(days)
1-2	3	15	6
1-3	2	14	5
1-4	6	30	12
2-5	2	8	5
2-6	5	17	11
3-6	3	15	6
4-7	3	27	9
5-7	1	7	4
6-7	2	8	5

a) Draw network.
b) What is the probability that the project will be completed in 27 days.

Or

9. Draw the Network and Identify the Critical Path

Activity	1-2	1-3	1-5	2-3	2-4	3-4	3-5	3-6	4-6	5-6
Duration(in weeks)	8	7	12	4	10	3	5	10	7	4

10. Write about balanced score card.

Or

11. Explain the concept of Environmental analysis.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD
B. Tech III Year I Semester Examinations
SOFTWARE ENGINEERING
(Computer Science and Engineering)

Time: 3 hours   **Max Marks: 75**

Note: This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

MODEL PAPER – I

PART – A

1. List and define the various software myths.
2. List the sources of software standards
3. Write any three metrics defined to measure non-functional requirements
4. Explain the need of behavior model for software development
5. Define functional independence
6. Distinguish between classes and components
7. Define unit testing and top down integration testing
8. Define recovery testing
9. Explain about product size risk
10. Define quality of conformance

PART – B

1. A. Elaborate on evolution of software
   B. Explain the following
        i. Specific goals and specific practices
        ii. Generic goals and generic practices as defined by CMMi for project planning
                           OR
2. What is waterfall model? How is it different from other engineering process models
3. A. What are system requirements? How would you specify them?
   B. Discuss an example of a type of system where social and political factors might strongly influence the system requirements. Explain why these factors are important in your example.
                           OR
4. Elaborate on context models.
5. A. Give a good and bad software design for any particular problem.
   B. What is architecture style? Discuss various categories of it.
                           OR
6. Explain the principles of class based component design in detail.
7. A. Who will test the software, either developer or an independent test group?
   B. What questions do black box tests answer?
                           OR
8. Discuss in detail on function based metrics.
9. Explain about process risks.
                           OR
10. A. Explain about risk mitigation, monitoring and management.
    B. What are formal technical reviews? Explain how it will assess software design quality.

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD
B. Tech III Year I Semester Examinations
SOFTWARE ENGINEERING
(Computer Science and Engineering)

Time: 3 hours   **Max Marks: 75**

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MODEL PAPER - II

PART-A

1. a. Discuss the objectives of CASE.
   b. What are the advantages of prototyping model over waterfall model?
   c. Define feasibility study.
   d. Discuss the statement, "requirements management needs automated support".
   e. What is the intent of information hiding?
   f. What is software design?
   g. What are the advantages and disadvantages of bottom-up integration?
   h. How is white box testing performed using statement testing?
   i. Write a brief note on risk assessment
   j. Discuss the importance of quality assurance.

PART-B

2. a. What is CASE? Discuss different types in it.
   b. Explain about capability assessment process.
                                        OR
3. What is meant by prototyping? Discuss in detail the prototyping model.
4. a. Discuss about principal requirements engineering activities and their relationships.
   b. Discuss the significance of requirements validation and also discuss various requirements validation techniques.
                                        OR
5. Discuss the merits and demerits of data flow diagram
6. a. State and explain various software design concepts.
   b. What is instantiation? How would you describe instantiations of the system?
                                        OR
7. What is coupling? Explain various types of coupling in detail.
8. a. Explain unit testing.
   b. Discuss about software tools for test case design.
                                        OR
9. Write short notes on,
   a. Component level design metrics
   b. Operation Oriented metrics
10. What do you understand by risk identification? What are the popular techniques developed for this purpose?
                                        OR
11. a. What is software quality control?
    c. Define six sigma. Give steps in it.

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD
B. Tech III Year I Semester Examinations
SOFTWARE ENGINEERING
(Computer Science and Engineering)

Time: 3 hours   **Max Marks: 75**

Note: This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

MODEL PAPER - III

PART-A

1) a. Explain is legacy software?
   b. Explain process pattern?
   c. What are kinds of non-functional requirements
   d. Explain viewpoints and types of view points
   e. Give a short notes on low coupling
   f. List out the golden rules for interface design
   g. Explain the difference between top-down integration with bottom-up integration?
   h. Define alpha testing and beta testing
   i. Define risk projection
   j. Define SQA plan in short.

PART-B

2) What is SDLC. Explain the Spiral model in detail?.

                                                        OR

3) a. Explain process frame work activities
   b. Explain in detail the capability Maturity Model Integration (CMMI).

4) a. Discuss your knowledge of how an ATM is used , develop a set of use-cases that could serve as a basis for understanding the requirements for an ATM system.
   b. Explain data and object model.

                                                        OR

5) a. Give a good and bad software design for any particular problem.
   b. What is architecture style? Discuss various categories of it.

6) a. Describe mapping data flow into a software architecture.
   b. Explain the guide lines of component level design

                                                        OR

7) Discuss briefly the following fundamental concepts of software design:
    i) Abstraction ii) Modularity iii) Information hiding.

8) a. Compare validation testing and system testing.
   b. Explain about RMMM Plan?

                                                        OR

9) Explain seven principals of risk management

10) Explain in detail ISO 9000 quality standards

                                                        OR

11) a. Explain software quality assurance
    b.Explain quality management with their terms