MALLA REDDY COLLEGE OF ENGINEERING &TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

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DEPARTMENT OF INFORMATION TECHNOLOGY

II B.TECH IISEMESTER QUESTION BANK 2018-19

LIST OF SUBJECTS

CODE	NAME OF THE SUBJECT
R17A0506	FORMAL LANGUAGE AND AUTOMATA THEORY
R17A0507	JAVA PROGRAMMING
R17A0508	DESIGN AND ANALYSIS OF ALGORITHMS
R17A0509	DATA BASE MANAGEMENT SYSTEMS
R17A0511	SOFTWARE ENGINEERING.
R17A0051	INTELLECTUAL PROPERTY RIGHTS

R17A0506

FORMAL LANGUAGES AND AUTOMATA THEORY

R17

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B.Tech II Semester Regular Examinations

Formal Language and Automata Theory

Model Paper -1

Information Technology

Roll No			N	3						

Time: 3 hours **Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

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SECTION – I

1). a)Design a DFA for the following language

$L = \{ 0^m 1^n \mid m \geq 0 \text{ and } n \geq 1\}$ (7M)

b). Give English description of the language: b(a*b)*a* (7M)

OR

2). a).Find DFA equal to NFA described by the following state transition table ,intital state =p, f={q,s} (10M)

States	0	1
p	q,s	q
q	r	q,r
r	s	p
s	-	p

b). Define a right linear grammar with an example (4M)

SECTION – II

3).a)Convert the following regular expression into equivalent NFA with ε-transitions

R=(10*)* (8M)

b). Construct a transition system corresponding to the regular expression

(ab+a)*(ab+b) 2).a*b+b*a (6M)

OR

4).a) Convert the R.E. = $(a|b)^*$ into DFA (10)

b). Explain about closure properties of Regular languages (4M)

SECTION – III

5.a). Construct right-linear and left-linear grammars for the following regular expression.

$0^* (1(0+1))^*$ (10M)

b).Explain about Pumping lemma theorem (4M)

OR

6). Construct the left-most and right-most derivations and parse trees for the following grammar

$S \rightarrow aB \mid bA$

A → aS | bAA | a
B → bS | aBB | b which accepts the string "aaabbabbba". (14M)

SECTION – IV

7. a).construct PDA accept the language L={$a^n b^n$ n≥0} (10M)
b). How do we say that the given grammar is ambiguous (4M)

OR

8.) Construct CFG, G=({S,A,B}, {a,b},P,S) with production set P as

S → aAbB; A → Ab/b ; B → Ba/a to CNF (14M).

SECTION – V

9).a)Explain about Chomsky hierarchy of languages. (7M)
b). Explain various types of Turing machines (7M)

(OR)

10).a)Explain about Decision properities of DCFL's. (7M)
b). Explain about P class and NP class problems? (7M)

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R17

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B.Tech II Semester supplementary Examinations

Formal Language and Automata Theory

Model Paper -2

(Information Technology)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

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SECTION – I

1).a)Construct DFA and NFA accepting the set of all strings containing 10 as a substring. (7M)

b). Define the terms alphabet, string, prefix, suffix, language give examples (7M)

(OR)

2). a)Define NFA with epsilon with an example. (7M)

b). Define regular grammar with example (7M)

SECTION – II

3).Write regular expressions for each of the following languages over an alphabet {0, 1}

a) The set of all strings not containing "111"

b) The set of all strings in which every pair of adjacent 0's appears before any pair of adjacent 1's (14M)

(OR)

4).a) Prove pumping lemma of regular sets? (7M)

b). Consider the following grammar G=({S,A}{a,b},P,S) (7M)

Where P consists of

S→aAS/a

A→SbA/SS/ba

SECTION – III

5).a). Consider the following grammar G=({S,A}{a,b},P,S) (10M)

Where P consists of

S→aAS/a

A→SbA/SS/ba

for the string aabbaa show

i)Left most derivation ii).Right most derivation

b). Define CFG and what its advantages are (4M)

(OR)

6).a). What is meant by ambiguous grammar? Test whether the grammar is ambiguous or not.

$S \rightarrow A \mid B$

$A \rightarrow aAb \mid ab$

$B \rightarrow abB \mid \epsilon$ (12M)

b). Define Chomsky Normal Form (2M)

SECTION – IV

7).a) Obtain PDA to accept all strings generated by the language $\{a^n b^m a^n \mid m, n \geq 1\}$ (12M)

b). State Arden's theorem (2M)

(OR)

8)a).Explain the equivalence of CFL and PDA. (4M)

b). Construct the given right linear grammar into equivalent left linear grammar (10M)
S→bB;B→bC;B→aB;C→a;B→b

SECTION – V

9). What are the various variations of TM? How to achieve complex tasks using TM. (14M)

(OR)

10). Design Turing Machine to increment the value of any binary number by one. The output should also be a binary number with value one more the number given. (14M)

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R17

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B.Tech II Semester Regular Examinations

Formal Language and Automata Theory

Model Paper -3

Information Technology

Roll No			N	3						

Time: 3 hours **Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

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SECTION – I

1.a) convert the following NFA to DFA (7M)

∂	0	1
→q0	{q1 q2}	{q0}
q1	{q1,q2}	Φ
*q2	{q1}	{q1 ,q2}

b). Give English description of the language: b(a*b)*a* (7M)

OR

2). construct a moore machine for the following mealy machine . (10M)

Current state	A=0		A=1	
	Next state	Output	Next state	output
→q1	q3	0	q2	0
q2	q1	1	q4	0
q3	q2	1	q1	1
q4	q4	1	q3	0

b). Define a left linear grammar with an example (4M)

SECTION – II

3).a) Explain about closure properties of Regular languages (4M)

b). Construct a transition system corresponding to the regular expression

a) (ab+a)*(ab+b) b) a*b+b*a (10M)

OR

4).a) Convert the R.E. = $(a|b)^*$ into DFA (8M)

b). Explain about closure properties of Regular languages (6M)

SECTION – III

5.a). Construct right-linear and left-linear grammars for the following regular expression.

$0^* (1(0+1))^*$ (8M)

b). Consider the following grammar G=({S,A}{a,b},P,S) (6M)

Where P consists of

S→aAS/a

A→SbA/SS/ba

for the string aabbaa show

i)Left most derivation ii).Right most derivation

OR

6).a). Construct the given right linear grammar into equivalent left linear grammar (10M)

S→bB;B→bC;B→aB;C→a;B→b

b). Explain PDA?Explain Acceptance by final state and Empty stack (4M)

SECTION – IV

7. a). Convert the below PDA transitions into equivalent CFG production rules (10M)

$\delta(q_0, a, Z) = (q_0, AZ)$

$\delta(q_0, a, A) = (q_0, A)$

$\delta(q_0, b, A) = (q_1, \varepsilon)$

$\delta(q_1, \varepsilon, Z) = (q_2, \varepsilon)$

b). How do we say that the given grammar is ambiguous (4M)

OR

8.). Design a DPDA for the language L= $\{WcW^R / W \in (0+1)^*\}$ over the alphabet $\Sigma=\{0, 1\}$.

(14M)

SECTION – V

9).a) Explain about Chomsky hierarchy of languages. (7M)

b). Define turning machine. How a TM accepts a language (7M)

(OR)

10).a) Universal Turing Machine &church's Hypothesis ? (7M)

b). Explain about Counter Machine? (7M)

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R17A0507

JAVA PROGRAMMING

Code No: R17A0507

R17

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLO

(Autonomous Institution – UGC, Govt. of India)

MODEL QUESTION PAPER - 1

JAVA PROGRAMMING

(IT)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: Question paper Consists of 5 SECTIONS (One SECTION for each UNIT).

Answer **FIVE** Questions, Choosing **ONE** Question from each SECTION and each Question carries 14 marks.

SECTION-I

1). Explain briefly about Object Oriented Programming concepts? [14M]

(OR)

2. a) Explain briefly about type conversion and type casting with example program? [7M]

b) Write a java program for finding the factorial of a given number using recursion? [7M]

SECTION-II

3. a)Explain different types of inheritances with example program? [7M]

b)What is a package? Explain User defined package with program? [7M]

(OR)

4. a)What is an Object class? Explain Object class methods? [7M]

b) Explain super keyword with program? [7M]

SECTION-III

5. a) What is an Exception? Explain different types of Exceptions? [7M]

b) Explain about try and catch with example program? [7M]

(OR)

6 a) Explain how to create a Thread with example program? [7M]

b) Explain about Thread Priority with example program? [7M]

SECTION- IV

7). Explain about Vector class and StringTokenizer class with example Program? [14M]

(OR)

9. a)Explain File class methods with program? [7M]

b) Explain different types of Drivers in JDBC? [7M]

SECTION- V

10.a) Write a java program for handling Mouse Events and Key Events? [7M]

b**)** Explain about AWT and Swing? [7M]

(OR)

11) Explain different types of Layouts with example program? [14M]

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R17

Code No: R17A0507

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

MODEL QUESTION PAPER - 2

JAVA PROGRAMMING

(IT)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note:

Question paper Consists of 5 SECTIONS (One SECTION for each UNIT).

Answer **FIVE** Questions, Choosing **ONE** Question from each SECTION and each Question carries 14 marks.

SECTION-I

1). Explain Procedure oriented programming and Object Oriented programming? [14M]

(OR)

2. a) Explain different loop control statements with example program? [7M]

b) Explain parameter passing Mechanism with example program? [7M]

SECTION-II

3. a)Explain Method overriding and Abstract class with example program? [7M]

b)What is inner class? Explain different types of inner classes? [7M]

(OR)

4. a)Difference between Interface and Abstract class? [7M]

b) Explain final keyword with method and class? [7M]

SECTION-III

5. a) What is user defined Exception? Explain user defined Exception with program? [7M]

b) Explain Multiple catch blocks with program? [7M]

(OR)

6 a) What is a Thread? Explain Thread Life cycle with neat diagram? [7M]

b) Explain Inter-Thread Communication with Producer and Consumer problem? [7M]

SECTION- IV

7). Explain Array List class, Vector class and Hash table class with example program? [14M]

(OR)

9. a)Explain FileInputStream and FileOutputStream class with example program? [7M]

b) Write a program to update data in the database using JDBC? [7M]

SECTION- V

10.a) Explain Applet life cycle with neat diagram? [7M]

b**)** Explain any three Swing components? [7M]

(OR)

11) Write a program for Calculator using Swings? [14M]

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R17

Code No: R17A0507

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

MODEL QUESTION PAPER - 3

JAVA PROGRAMMING

(IT)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: Question paper Consists of 5 SECTIONS (One SECTION for each UNIT).

Answer **FIVE** Questions, Choosing **ONE** Question from each SECTION and each Question carries 14 marks.

SECTION-I

1). Explain Constructor Overloading and Method Overloading with example program? [14M]

(OR)

2. a) Explain different Operators in Java with examples [7M]

b) Explain different String Handling methods with examples? [7M]

SECTION-II

3. a)Explain Dynamic binding with example program? [7M]

b)What is an interface? Explain how to extend an interface with program? [7M]

(OR)

4. a)Explain different Access Specifiers in java? [7M]

b) Explain about this keyword and built in packages? [7M]

SECTION-III

5. a) Explain throw and throws keyword with example program? [7M]

b)Explain nested try block with example program? [7M]

(OR)

6 a) Explain Thread Synchronization with example program? [7M]

b) Explain about Interrupting thread with example program? [7M]

SECTION- IV

7). Explain Stack class, Random class and Scanner class with example program? [14M]

(OR)

9. a)Explain RandomAccessFile methods with example program? [7M]

b) Write a program to insert data in to the database using JDBC? [7M]

SECTION- V

10.a) Explain Adapter class with example program? [7M]

b**)** Difference between Applets and Applications? [7M]

(OR)

11) Explain Event classes and Event Listeners in Event handling Mechanism [14M]

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R17

Code No: R17A0507

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

MODEL QUESTION PAPER - 4

JAVA PROGRAMMING

(IT)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: Question paper Consists of 5 SECTIONS (One SECTION for each UNIT).

Answer **FIVE** Questions, Choosing **ONE** Question from each SECTION and each Question carries 14 marks.

SECTION-I

1). Explain about Java Buzz words or Features and History of java [14M]

(OR)

2. a) Explain about Garbage Collector in java ? [7M]

b) Explain this keyword with example program? [7M]

SECTION-II

3. a)Explain Object class Methods with example? [7M]

b)Explain difference between Abstract class and Interface? [7M]

(OR)

4. a)Explain about super keyword with example program? [7M]

b) Explain how multiple inheritance is supported in java? Justify [7M]

SECTION-III

5. a) What is Exception? Explain Built in Exceptions in java [7M]

b)What is User defined Exception? Explain User defined Exception with program [7M]

(OR)

6 a) Explain about Thread Group in java with program? [7M]

b) Explain Daemon Thread with example program? [7M]

SECTION- IV

7). Explain Calendar class and Random class with example program? [14M]

(OR)

9. a) Explain different steps for creating JDBC? [7M]

b) Write a program to delete data from the database using JDBC? [7M]

SECTION- V

10.a) Explain about Delegation Event Model? [7M]

b**)** Explain how to pass parameters to an applet with program [7M]

(OR)

11) Explain Swing components [14M]

i) JButton ii) JLabel iii) JTextfield iv) JTextArea

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R17A0508

DESIGN AND ANALYSIS OF ALGORITHMS

R17

Code No: R17A0508

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

DESIGN AND ANALYSIS OF ALGORITHMS

II B. Tech II Semester Model Paper-I

(CSE& IT)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note:

Question paper Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

SECTION – I

1. Briefly explain time and space complexity estimation with examples. [14M]

(OR)

2. Write non recursive binary tree traversal algorithms [14M]

SECTION – II

3. Explain General method of Greedy method. Find the greedy solution for following job sequencing with deadlines problem n = 7, (p1,p2,p3,p4,p5,p6,p7) = (3,5,20,18,1,6,30), (d1,d2,d3,d4,…,d7)=(1,3,4,3,2,1,2) [14M]

(OR)

4. Illustrate Merge sort algorithm and discuss its time complexity. [14M]

SECTION – III

5 Solve a travelling sales person problem using dynamic programming. [14M]

.

(OR)

6 .Deign a three stage reliable system for the following instance of the problem (c1,c2,c3)=(30,15,20), (r1,r2,r3)=(0.9,0.8,0.5) and C=105. [14M]

SECTION – IV

7. How n-Queen's problem can be solved using back tracking and explain with an example. [14M]

(OR)

8 a) Explain AND/OR graphs. [7M]

b) Explain game trees. [7M]

SECTION – V

9. Discuss Draw the portion of state space tree generated by FIFOBB for the following instance of 0/1 knapsack
   n= 5, M=12, (p1, ……p5) = (10,15,6,8,4) (w1,….,w5)=(4,6,3,4,2). [14M]

(OR)

10. (a) Write and explain the Cooks theorem. [7M]
    (b) What is non deterministic algorithm explain. [7M]

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R17

Code No: R17A0508

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B.Tech II Semester Model Paper-II

Design and analysis of Algorithms

(CSE & IT)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: Question paper Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

.

SECTION – I

1. Discuss various the asymptotic notations used for best case, average case and worst case analysis of algorithms. [14M]

(OR)

2. Discuss union and find algorithms in detail with an example. [14M]

SECTION – II

3. Explain Strassen's matrix multiplication and its time complexity. [14M]

(OR)

4. a) Explain Prim's algorithm for minimal spanning tree with an example. [7M]
   b) Discuss binary search algorithm and analyze its time complexity. [7M]

SECTION – III

5. Explain matrix chain multiplication problem and Find the minimum no of operating required for the following chain matrix multiplication using dynamic programming.
   A(20,30)*B(30,10)*C(10,5)*D(5,15). [14M]

(OR)

6. Give solution for multistage graph using dynamic programming. [14M]

SECTION – IV

7. Explain the following graph traversal
   (a) Depth First search [7M]
   (b) Breath First search. [7M]

(OR)

8. Give the solution to the m-coloring of a graph using backtracking. [14M]

SECTION – V

9. Discuss in detail about the class P, NP, NP-hard and NP-complete problems. Give examples for each class. [14M]

(OR)

10. Describe Travelling Salesperson Problem (TSP) using Branch and Bound. [14M]

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R17

Code No: R17A0508

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B.Tech II Semester Model Paper-III

Design and analysis of Algorithms

(CSE & IT)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: Question paper Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

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SECTION – I

1. Explain the following with an example
   a) Probabilistic analysis [7M]
   b) Amortized analysis.[7M]

(OR)

2. a) Explain about Disjoint set operations.[7M]
   b) Write short notes on spanning trees. [7M].

SECTION – II

3. Define Greedy knapsack. Find the optimal solution of the Knapsack instance n= 7, M=15, (p1, p2, ……p7) = (10,5,15,7,6,18,3) and (w1,w2,. ...w7)=(2,3,5,7,1,4,1). [14M]

(OR)

4. Illustrate Quick sort algorithm and discuss its time complexity. [14M]

SECTION – III

5 .Let n=4 and (a1,a2,a3,a4) Construct optimal binary search for (a1, a2, a3, a4) = (do, if, int, while), p(1 : 4) = (3,3,1,1) q(0 : 4)= (2,3,1,1,1) [14M]

(OR)

6. Explain how solution will be provided for all pairs shortest path problem using dynamic programming. [14M]

SECTION – IV

7. Explain about bi-connected components in detail. [14M]

(OR)

8. Give the solution to the sum of subsets problem using backtracking. [14M]

SECTION – V

5. a) Explain non-deterministic algorithm with an example. [7M]
   b) Explain Satisfiability problem. [7M]

(OR)

10. Draw the portion of state space tree generated by LCBB for the following instance of 0/1 knapsack n= 5, M=12, (p1, ……p5) = (10,15,6,8,4) (w1, ... w5)=(4,6,3,4,2). [14M]

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R17

Code No: **R17A0508**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B.Tech II Semester Model Paper-IV

Design and analysis of Algorithms

(CSE & IT)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: Question paper Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

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SECTION – I

1. a) Explain the process of designing an algorithm. Give characteristics of an algorithm. [7M]
   b) Explain asymptotic notations. [7M]

(OR)

2. a) Explain non- recursive Post order tree traversal. [7M]
   b) Explain krushkal's algorithm for MST. [7M].

SECTION – II

3. Define Greedy knapsack. Find the optimal solution of the Knapsack instance n= 7, M=20, (p1, p2, ……p7) = (8,5,6,7,6,12,3) and (w1,w2, ...w7)=(2,10,8,7,6,4,11). [14M]

(OR)

4. Simulate Quick sort algorithm for the following example 25,36,12,4,5,16,58,54,24,16,9,65,78 [14M]

SECTION – III

5 .Let n=4 and (a1,a2,a3,a4) Construct optimal binary search for (a1, a2, a3, a4) = (cout, float, if, while), p(1 : 4) = (1/20,1/5,1/10,1/20) q(0 : 4)= (1/5,1/10,1/5,1/20,1/20) [14M]

(OR)

6. Give the optimal solution for 0/1 knapsack problem using dynamic programming (p1,p2,p3, p4) = (11, 21, 31, 33), (w1, w2, w3, w4) = (2, 11, 22, 15), M=40, n=4. [14M]

SECTION – IV

7. What is an articulation point? How to find articulation point for a given graph. [14M]

(OR)

8. Give the solution to Hamiltonian cycle problem using backtracking. [14M]

SECTION – V

9. What is state space tree? What are the different ways of searching an answer node in an state space tree explain with example. [14M]

(OR)

10. a) write non-deterministic algorithm for knapsack problem?[7M]
    b) different between NP-hard and NP-complete problems. [7M]

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R15

Code No: **R15A0508**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B.Tech II Semester Regular/Supplementary Examinations, April/May 2018

Design and analysis of Algorithms

(CSE & IT)

Roll No										

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

Note: This question paper contains two parts A and B

Part A is compulsory which carriers 25 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

PART – A (25 Marks)

5. (a) General strategy of divide and conquer [2M]
   (b) What are the performance analysis techniques of an algorithm? [3M]
   (c) What is union and find? [2M]
   (d) Explain bi connected components. [3M]
   (e) What is job sequencing with deadlines? [2M]
   (f) What is greedy method? [3M]
   (g) What is a graph coloring problem? [2M]
   (h) What is general backtracking method? [3M]
   (i) What is the difference between NP hard and NP Complete problem? [2M]
   (j) List the advantages of dynamic programming. [3M]

PART – B (50 Marks)

SECTION – I

6. Explain in detail about asymptotic notations. [10M]

(OR)

7. Explain Merge sort technique. Give the time complexity of merge sort. [10M]

SECTION – II

8. Explain the following graph traversal
   (c) Depth First search [5M]
   (d) Breath First search. [5M]

(OR)

5. Write short notes on
   a) Game trees [5M]
   b) AND/OR graphs [5M]

SECTION – III

6. How do you construct a minimum Spanning tree using kruskals algorithm explain? List any two applications. [10M]

(OR)

7. State dynamic programming. Explain with one application. [10M]

SECTION – IV

8. Explain the Travelling salesmen problem using Branch and bound technique. [10M[

(OR)

9. Give the solution to the 8 queen's problems using backtracking. [10M]

SECTION – V

10. Discuss in detail about the class P, NP, NP-hard and NP-complete problems. Give examples for each class. [10M]

(OR)

11. (a) Write and explain the Cooks theorem. [5M]

    (b) What is non deterministic algorithm explain. [5M]

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R17A0509

DATA BASE MANAGEMENT SYSTEMS

Code No: R17A0509 **R17**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B. Tech II Semester Supplementary Examinations

DATABASE MANAGEMENT SYSTEMS

(CSE& IT)

ROLLNO											

Time: 3 hours **Max. Marks: 70**

Note: .Question paper Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVEQuestions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

SECTION – I

1. a) Describe storage manager component of database system structure? [8M]
   b) Explain levels of abstraction in DBMS [6M]

OR

2 a) What is partial key? How is it represented in ER diagram? Give an example?[4M]
   b) What is a descriptive attribute? Explain? [4M]
   c) Discuss the usage of ISA feature in ER diagram? [6M]

SECTION – II

3. a)Explain the following with examples.
   i. Key constraints. ii) Foreign key constraints. [7M]
   b)Explain the following. [7M]
   i) Types of Join Operations ii) Set Operations

OR

4. a)What is a view? Explain about views in detail? [4M]
   b)Define Relational Algebra, tuple and domain relational calculus?[8M]

SECTION – III

5 a)Define BCNF? How does BCNF differ from 3NF? Explain with an example.[8M]
   b) Explain the following [6M]
   i) Lossless Join ii) Lossless decomposition

OR

6. a)What are the advantages of normalized relations over the un normalized relations?[7M]
   b)What is Redundancy? What are the different problems encountered by redundancy? Explain them.[7M]

SECTION – IV

7. a) How the use of 2PL would prevent interference between the two transactions.[6M]
   b) Explain the difference between strict 2PL and rigorous 2PL?[8M]

OR

8 a)Explain different recovery techniques used in transaction failure?[6M]
   b)Explain how concurrency execution of transactions improves overall system performance?[8M]

SECTION – V

9.a)Explain all the operations on B+ tree by taking a sample example[6M]

b) Explain B+ Trees with examples?[8M]

OR

10.a) What is the relationship between files and Indexes?[4M]

b) What is the search key for an Index?[5M]

c) What is Data entry in an Index[5M]

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R17

Code No: R17A0509

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B. Tech II Semester Supplementary Examinations

DATABASE MANAGEMENT SYSTEMS

(CSE& IT)

ROLLNO											

Time: 3 hours **Max. Marks: 70**

Note: .Question paper Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVEQuestions, Choosing ONE Question from each SECTION and each Question carries 14 marks.

SECTION – I

1. a)Define DBMS? List Database system applications.[4M]
b)What are the Different types of Data Models? Explain about Relational Model?[10M]

OR

2. a)List four significant differences between a file processing system and a DBMS?[4M]
b)What is DBMS? Explain architecture of DBMS with diagram[10M]

SECTION – II

3. a) Write a detail note on participation constraints? [7M]
b) What is the class hierarchy? How is it represented in the ER diagrams? [7M]

OR

4.a) What are aggregate functions? And list the aggregate functions supported by SQL?.[6M]
b). Consider the following tables: [8M]
Employee (Emp_no, Name, Emp_city)
Company (Emp_no, Company_name, Salary)
i. Write a SQL query to display employee name, employee city,company name and salary of all the employees whose salary >10000
ii. Write a query to display all the employees working in 'XYZ' company

SECTION – III

5 a)Explain FD and MVD with examples [4M]
b)Why normalization is required? And explain different types of normal forms[10M]

OR

6. a)What is Normalization? Discuss what are the types? Discuss the 1NF, 2NF, 3NF with example? [10M]
b) Define BCNF .How does it differ from 3NF [4M]

SECTION – IV

7. a) Explain Time stamp-Based Concurrency Control protocol [8M]
b) Explain remote backup system [6M]

OR

8. a)What are the two tables used in crash recovery along with log record? Explain With suitable example? [8M]

b) Explain about validation based protocols. [6M]

SECTION – V

9.a)Explain about tertiary storage media in detail? [6M]
b)Explain static and dynamic Hashing Techniques? [8M]

OR

10. a) Explain Clustered Indexes b) Primary and Secondary Indexes [8M]
b) Explain in detail insertion methods B+ tree index files with example[6M]

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R15

Code No: R15A0509

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B.Tech II Semester Regular/Supplementary Examinations, April/May 2018

Database Management Systems

(CSE & IT)

Roll No											

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

Note: This question paper contains two parts A and B

Part A is compulsory which carriers 25 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

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PART – A (25 Marks)

1.(a) Differentiate between conceptual data independence and physical data independence.[2M]

(b) Specify two kinds of constraints with respect to 'ISA' hierarchies/relationship. [3M]

(c) What is the difference between UNIQUE key and Primary Key in relational Model? [2M]

(d) Discuss the notations in ER-Diagram[3M]

(e) What is foreign key? [2M]

(f) What is the difference between UNION and UNION ALL in SQL?[3M]

(g) Define the term ACID properties.[2M]

(h) What are two types of lock-based protocols?[3M]

(i) What is called a query –execution engine?[2M]

(j) Compare sequential access file versus random access files.[3M]

PART – B (50 Marks)

SECTION – I

2.(a) What are the Different types of Data Models? Explain about Relational Model? [5M] (b)Why would you choose a database system instead of file system? [5M]

(OR)

3. What is DBMS? Explain architecture of DBMS with diagram. [10M]

SECTION – II

4(a). Consider the following tables: [4M]

Employee (Emp_no, Name, Emp_city)

Company (Emp_no, Company_name, Salary)

i. Write a SQL query to display employee name, employee city ,company name and salary of all the employees whose salary >10000

ii. Write a query to display all the employees working in 'XYZ' company.

(b) Explain various DML commands with neat syntax. [6M]

(OR)

5.(a) What is view in SQL? How is it defined? [5M]

(b) .What are aggregate functions? And list the aggregate functions supported by SQL? [5M]

SECTION – III

6.(a) Why normalization is required? And explain different types of normal forms[5M]

(b) Define BCNF .How does it differ from 3NF [5M] (OR)

7(a) .What is meant by lossless-join decomposition? [5M]

(b). Explain 2NF and 3NF in detail. [5M]

.

SECTION – IV

8. (a) Explain Time stamp-Based Concurrency Control protocol [5M]
   (b) Explain remote backup system [5M]

(OR)

9. (a) Explain about validation based protocols. [5M]
   (b Discuss on strict, two-phase locking protocol [5M]

SECTION – V

10. Explain static and dynamic Hashing Techniques? [10M]

(OR)

11. Explain in detail insertion methods B+ tree index files with example.[10M]

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MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

Data Base Management System

Model Paper – 1 (R15)

II B.TECH II-SEM Semester

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

Answer all the following

1.

k. List the purpose of Database System.
l. Define Data Independence.
m. Define Relational Model.
n. Define Query and Query language
o. Define Relational Algebra.
p. Define functional dependency
q. Define normalization.
r. Explain Serializability.
s. Define RAID.
t. Define Hash indices?

Answer all the questions either (a) or (b)

SECTION-I

2. What is logical data independence and why is it important?

OR

3. a) What is partial key? How is it represented in ER diagram? Give an example?
   b) What is a descriptive attribute? Explain?
   c) Discuss the usage of ISA feature in ER diagram?

SECTION-II

4. Explain the following with examples.
   a) Key constraints.
   b) Foreign key constraints.

OR

5. What is a view? Explain about views in detail?

SECTION-III

6. Explain the following
   a) Lossless Join
   b) Lossless decomposition

OR

7. What are the advantages of normalized relations over the unnormalized relations?

SECTION-IV

8. a) How the use of 2PL would prevent interference between the two transactions.
   b) Explain the difference between strict 2PL and rigorous 2PL?

OR

9. Explain different recovery techniques used in transaction failure?

SECTION-V

10. Explain all the operations on B+ tree by taking a sample example

OR

11. Explain B+ Trees with examples?

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

Data Base Management System

Model Paper – 2 (R15)

II B.TECH II Semester

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

Answer all the following

1.

k. List the drawback of normal File Processing System.
l. Define Data Models and list the types of Data Model.
m. List the role of DBA.
n. Define Embedded SQL.
o. List the properties of decomposition.
p. Define First Normal Form.
q. Define sparse index?
r. Define Query processing?
s. Define hash-table overflow?
t. Define Functional Dependency.

Answer all the questions either (a) or (b)

SECTION-I

2. a) Describe storage manager component of database system structure?
b) Explain levels of abstraction in DBMS

OR

3. Explain the E-R diagram components and notations with their extended features?

SECTION-II

4. Explain the following.
   a) Types of Join Operations
   b) Set Operations

OR

5. a) Define Relational Algebra, tuple and domain relational calculus?
   b) What are the differences between the two types of relational calculus?

SECTION-III

6. Define BCNF? How does BCNF differ from 3NF? Explain with an example.

OR

7. What is Redundancy? What are the different problems encountered by redundancy? Explain them.

SECTION-IV

8. What are the transaction isolation levels in SQL?

9. Explain how concurrency execution of transactions improves overall system performance?

SECTION-V

10. a) What is the relationship between files and ndexes?
    b)What is the search key for an Index?
    c)What is Data entry in an Index

OR

11. Explain shadow-copy Technique for Atomicity and Durability.

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

Data Base Management System

Model Paper – 3 (R15)

II B.TECH IT II Semester

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

Answer all the following

1.

1. Define Data Abstraction and list the levels of Data Abstraction.
2. Discuss about Object-Based Logical Models.
3. List the different types of database-system users.
4. Define Second Normal Form.
5. Explain Optical Storage Device?
6. Define Triggers.
7. Define lock?
8. How the time stamps are implemented
9. What are the ACID properties
10. Define instance and schema?

Answer all the questions either (a) or (b)

SECTION-I

2. Define DBMS? List Database system applications.

OR

3.List four significant differences between a file processing system and a DBMS?

SECTION-II

4.a) Write a detail note on participation constraints?

b)What is the class hierarchy? How is it represented in the ER diagrams?

5.What are NULL values? Explain in detail.

SECTION-III

6. Explain FD and MVD with examples
7. What is Normalization? Discuss what are the types? Discuss the 1NF, 2NF, 3NF with example?

SECTION-IV

8. What are the types of failures of a system?

9. What are the two tables used in crash recovery along with log record? Explain with suitable example?

SECTION-V

10. Explain about tertiary storage media in detail?

OR

11. Explain
    (a) Clustered Indexes
    (b) Primary and Secondary Indexes

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF INFORMATION TECHNOLOGY

Data Base Management System

Model Paper – 4 (R15)

II B.TECH IT II Semester

Duration: 3hrsMax Marks: 75

Answer all the following

1.

11. Define DBMS.
12. Define E-R model.
13. Write about the role of Transaction manager.
14. Define BCNF.
15. Define disk controller?
16. Define file organization
17. List the pitfalls in Relational Database Design
18. What are the two methods for dealing deadlock problem?
19. What is a primary key?
20. What does the cardinality ratio specify?

Answer all the questions either (a) or (b)

SECTION-I

2 . Explain key constraints with an example?

OR

3. Discuss the query processor of database system structure?

SECTION-II

4. Explain different types of Join Operations with relevant examples.

OR

5. Explain the following in SQL with examples.
   a) Nested Queries
   b) Correlated Queries c) Group by and Having Clauses d) Triggers

SECTION-III

6. Explain about the fourth and fifth normal forms.

OR

7. Define Functional dependencies? How are primary keys related to functional dependencies?

SECTION-IV

8. Write the locking compatibility matrix used for multiple granularity? Explain with suitable examples?

OR

9. Define the concept of schedule for a set of concurrent transaction. Give a suitable example.

SECTION-V

10. Explain about Tree based Indexing and Hash based Indexing.

11. Explain about fixed length file organization with an example? And also explain about byte-string representation in detail.

R17A0511

SOFTWARE ENGINEERING

R17

Code No: **R17A0511**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B.Tech II Semester Regular/Supplementary Examinations, April/May 2018

Software Engineering

(IT)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: This question paper contains of 5 sections. Answer five questions, choosing one question from each section and each question carries 14 marks.

PART – A (70 Marks)

SECTION – I

1. What is an architectural design? How would you assess various alternative architecture designs? [14M]

(Or)

2. (a) Define software. Explain various types of software available [7M]
   (b) Explain various characteristics of software [7M]

SECTION – II

3. What is rapid cycle testing? Explain the merits and demerits of it [14M]

(Or)

4. Discuss the statement, Build robust software that is designed to test itself [14M]

SECTION – III

5. Define coupling. Explain about content coupling in detail. [14M]

(Or)

6. Differentiate between content and common coupling. [14M]

SECTION-IV

7. Explain the need of behavioral models for software development. [14M]

(Or)

8. What is state machine? Explain the state machine model of a simple mi-crowave oven. [14M]

SECTION-V

9. Explain the role of software engineering methods in achieving software quality [14M]

(Or)

10. What do you mean by risk - oriented decisions? Explain [14M]

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R17

Code No: **R17A0511**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B.Tech II Semester Regular/Supplementary Examinations, April/May 2018

Software Engineering

(IT)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: This question paper contains of 5 sections. Answer five questions, choosing one question from each section and each question carries 14 marks.

PART – A (70 Marks)

SECTION – I

1. Write short notes on Process patterns, process assessment. [14M]

(OR)

2. Discuss about the waterfall model with figure. [14M]

SECTION – II

3. Write short notes on Context Models and Behavioral models. [14M]

(OR)

4. Explain about the Data models and Object models. [14M]

SECTION – III

5. Explain about the various design concepts. [14M]

(OR)

6. Explain about the User interface analysis and design. [14M]

SECTION – IV

7. Discuss about the Metrics for testing and source code [14M]

(OR)

8. Explain about risk management process. [14M]

SECTION – V

9. Explain about the Software reliability. [14M]

(OR)

10. Discuss about the ISO 9000 quality standards. [14M]

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R17

Code No: **R17A0511**

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

II B.Tech II Semester Regular/Supplementary Examinations, April/May 2018

Software Engineering

(IT)

Roll No										

Time: 3 hours **Max. Marks: 70**

Note: This question paper contains of 5 sections. Answer five questions, choosing one question from each section and each question carries 14 marks.

PART – A (70 Marks)

SECTION – I

1. Elaborate on spiral model in detail. [14M]

(OR)

2. (a) What is instantiation? How would you describe instantiations of the system? [7M]

   (b) Elaborate on Design quality [7M]

SECTION – II

3. Explain the process areas required to achieve various maturity levels in CMMI. [14M]

(OR)

4. Define coupling. Explain about content coupling in detail. [14 M]

SECTION – III

5. Explain the component from traditional view with an example. [14M]

(OR)

6. Elaborate on the role of quality control and quality assurance in achieving software quality. [14M]

SECTION – IV

7. Unit testing. Explain about unit test considerations and procedures. [14M]

(OR)

8. Explain about risk management process. [14M]

SECTION – V

9. Explain various deployment level design elements in detail. [14M]

(OR)

10. Discuss about the ISO 9000 quality standards. [14M]

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Code No: 115EM **R13**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech III Year I Semester Examinations, February/March - 2016
SOFTWARE ENGINEERING
(Common to CSE, IT)

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)	Distinguish between software process and project.	[2]
b)	Discuss about changing nature of software.	[3]
c)	What is meant by system requirements?	[2]
d)	Explain about context models.	[3]
e)	Write brief notes on data design.	[2]
f)	Write about interface design evaluation.	[3]
g)	What is meant by debugging?	[2]
h)	What is meant by software measurement?	[3]
i)	What is meant by software reliability?	[2]
j)	Discuss the reactive risk strategy.	[3]

Part- B

(50 Marks)

2.	State and explain various software myths.	[10]
	OR	
3.	Explain about specialized process models.	[10]
4.	Explain clearly about software requirements document.	[10]
	OR	
5.	State and explain various aspects in requirements validation process.	[10]
6.	Discuss about mapping dataflow into software architecture.	[10]
	OR	
7.	Explain about conducting component level design.	[10]
8.	Discuss about metrics for design model and source code.	[10]
	OR	
9.	Explain clearly about metrics for software quality.	[10]
10.	Explain about formal technical reviews.	[10]
	OR	
11.	Explain about risk projection and risk management.	[10]

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Code No: 115EM **R13**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year I Semester Examinations, March - 2017
SOFTWARE ENGINEERING
(Common to CSE, IT)

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)	What are the merits of incremental model?	[2]
b)	What are the fundamental activities of a software process?	[3]
c)	Differentiate ERD and DRD.	[2]
d)	What are non functional requirements?	[3]
e)	Define design process.	[2]
f)	List the principles of a software design.	[3]
g)	Distinguish between verification and validation.	[2]
h)	Write about drivers and stubs.	[3]
i)	Give a note on the various estimation techniques.	[2]
j)	Define maintenance. What are the types of software maintenance?	[3]

PART - B

(50 Marks)

2.a)	Define the term Software. Describe its various characteristics.	
b)	Elaborate on the changing nature of software in detail.	[5+5]
	OR	
3.a)	Explain software development life cycle. Discuss various activities during SDLC.	
b)	What are various myths about software?	[5+5]
4.	Give an overview of various system models.	[10]
	OR	
5.a)	Discuss about principal requirements engineering activities and their relationships.	
b)	Explain how a software requirements document is structured.	[5+5]
6.a)	Distinguish between coupling and cohesion? How do they effect software design?	
b)	For a Case study of your choice show the architectural and component design.	[5+5]
	OR	
7.	List and explain different kinds of architecture styles and patterns.	[10]

Code No: 115EM **R13**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year I Semester Examinations, November - 2015
SOFTWARE ENGINEERING
(Common to CSE, IT)

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)	What is an agile process? Explain.	[2]
b)	What is the difference between a UP Phase and a UP Workflow?	[3]
c)	What is the intent of requirements validation?	[2]
d)	What are the characteristics of good SRS document?	[3]
e)	Differentiate between coupling and cohesion.	[2]
f)	How do we assess the quality of software design?	[3]
g)	What is Cyclomatic complexity? What is its purpose?	[2]
h)	What are the metrics used for software maintenance?	[3]
i)	What is software reliability? Define.	[2]
j)	Can a program be correct and still not exhibit good quality? Explain.	[3]

PART - B **(50 Marks)**

2.a) What is the purpose of process assessment? Why has SPICE been developed as a standard process assessment?
b) Explain Spiral model with a neat sketch. What can you say about the software that is being developed or maintained as you move outward along the spiral process flow? [5+5]

OR

3.a) What are the five generic process framework activities? Explain.
b) Explain different levels of Capability Maturity model and list the KPA's of each level [5+5]

4.a) What is the goal of requirements analysis phase? Give reasons why the requirements analysis phase is a difficult one.
b) Briefly explain the models used for structured analysis. [5+5]

OR

5.a) Differentiate between functional and non-functional requirements with suitable examples.
b) "Data Modeling can be viewed as a subset of OOA." Comment on the statement and justify your comments. [5+5]

Code No: 115EM **R13**

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year I Semester Examinations, November/December - 2016
SOFTWARE ENGINEERING
(Common to CSE, IT)

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)	What is legacy software? Explain.	[2]
b)	What are the advantages of unified process?	[3]
c)	Write the purpose of context model.	[2]
d)	What is the significance of feasibility study?	[3]
e)	What is the use of interface analysis? Explain.	[2]
f)	What do you mean by software design quality? Explain.	[3]
g)	Differentiate between verification and validation.	[2]
h)	What is regression testing? Give example.	[3]
i)	Define software reliability.	[2]
j)	What is the importance of software reviews?	[3]

PART - B **(50 Marks)**

2.a)	Discuss about the changing nature of software	
b)	Explain spiral model with its merits and demerits.	[5+5]
	OR	
3.a)	Discuss in brief about different software myths and their consequences.	
b)	Explain CMMI model with a neat sketch.	[5+5]
4.a)	Differentiate between functional and non-functional requirements.	
b)	List and explain the object models in brief.	[5+5]
	OR	
5.a)	What are the activities of requirements elicitation and analysis? Explain.	
b)	Discuss about different structured methods used in software development.	[5+5]
6.a)	Explain the process of mapping dataflow into software architecture.	
b)	List the golden rules of user interface design.	[5+5]
	OR	
7.a)	Discuss about pattern based software design in detail.	
b)	Define and explain about different types of cohesion.	[5+5]

QUESTION BANK

INTELLECTUAL PROPERTY RIGHTS

SUBJECT CODE: R17A0051

UNIT I

1] What Intellectual Property Law? Give examples of same?

2] What are the Types of Intellectual Property Rights? Explain in detail?

3] What is Importance of Intellectual Property Rights, write in details?

4] What are Agencies responsible for Intellectual Property Rights registration?

5] What are Regulatory-Compliance and liability issues? Explain in detail.

UNIT II

1] What is Trade Marks? Explain in detail with examples?

2] What is Purpose and function of Trade Marks?

3] What are Acquisition of Trade Mark Rights?

4] What do you mean by Transfer of Rights?

5] What is Protectable matter? Give examples of same.

6] What are the procedures for selecting and evaluating Trademark?

7] What is Registration of Trade Marks and Claims? Explain in detail.

8] What is Trade Secret Law? Explain in detail.

9] What is the procedure for Determination of Trade Secret status?

10] What is liability for misappropriation of trade secrets? Explain in detail?

11] What is protection for submission of Trade Secret?

12] What is Trade Secret Litigation?

13] What is Unfair Competition? Give examples of same.

14] What is Misappropriation right of publicity?

15] What is false advertising, give examples of that?

UNIT III

1] What are Fundamentals of copyright law?

2] What is originality of material? Give examples of that?

3] What is right of reproduction?

4] What is right to perform the work publicity?

5] What are copyright ownership issues?

6] What is notice of copyright?

7] What is Foundation of patent law?

8] What is Patent searching process?

9] What is ownership right and transfer?

UNIT IV

1] What is Cyber law and Information Technology act?

2] What is Cyber Crime and e-commerce Issues?

3] What is data security? Give some examples of same?

4] What is confidentiality, privacy of cyber law?

5] What are International aspects of computer and online crimes, explain in detail?

UNIT V

1] What is new development of intellectual property?

2] What are new developments in trade mark law?

3] What is copyright law, patent law? Explain in detail?

4] Write notes on International overview on intellectual property rights?

5] Explain the international trade mark law?

6] Explain the copyright law and patent law on overview internationally?