

Code : 1G452

**ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: RAJAMPET
(AUTONOMOUS)**

III B.Tech. I Semester Regular Examinations, January 2014

Information Storage Management

(IT)

Time: 3 hours

Max Marks: 70

*Answer any FIVE Questions from the following
All questions carry equal marks (14 Marks each)*

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1. Discuss about
 - a. Client-Server Architecture in E-Commerce 7M
 - b. Generic Frame work for E-Commerce 7M
2. Discuss about various Mercantile Models from Merchant's Perspective 14M
3. a) Discuss the possible Risks in Electronic Payment System 7M
b) Give summary of Smart Cards in Electronic Payment System 7M
4. Discuss the various EDI Applications in Business 14M
5. a) Discuss about Customization and Internal Commerce 7M
b) Discuss about Supply Chain Management 7M
6. Write short notes on
 - a. Concerns for Mobile Enterprise 7M
 - b. Wireless WAN's in E-Commerce 7M
7. a) Discuss about the types of Digital documents in brief 7M
b) Write a detail notes on advertising on the Internet for E-Commerce 7M
8. a) How Information Filtering can be done? Explain 7M
b) Briefly discuss about Electronic Yellow Pages 7M

Code : 1G355

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: RAJAMPET
(AUTONOMOUS)

III B.Tech. I Semester Regular Examinations, January 2014

Microprocessors and Interfacing

(Common to CSE & IT)

Time: 3 hours

Max Marks: 70

*Answer any FIVE Questions from the following
All questions carry equal marks (14 Marks each)*

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|-------|--|-----|
| 1. a) | Classify the registers in 8086 as per their function and explain in detail. | 10M |
| b) | Discuss the differences between maximum and minimum mode. | 4M |
| 2. a) | Give the importance of each field in the instruction format of 8086. | 4M |
| b) | Explain different addressing modes in 8086. | 10M |
| 3. a) | Give the importance of latches and buffers in interfacing I/O devices. | 4M |
| b) | Develop the circuit to interface A/D circuit with 8255 and write suitable alp program. | 10M |
| 4. a) | Differentiate SRAM and DRAM. | 4M |
| b) | Design Interfacing circuit of four 16K bytes of RAMs to microprocessor 8086. | 10M |
| 5. a) | Explain different data transfer methods. | 8M |
| b) | Give the 8086 interrupt structure. | 6M |
| 6. a) | Differentiate synchronous and asynchronous data transfers. | 4M |
| b) | Write a program to transmit the message "COLLEGE" using 8251 USART. | 10M |
| 7. a) | Discuss the features of 80386. | 8M |
| b) | Differentiate real and protected mode. | 6M |
| 8 | Explain 8051 architecture with suitable diagram. | 14M |

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III B.Tech. I Semester Regular Examinations, January 2014

Software Engineering

(IT)

Time: 3 hours

Max Marks: 70

*Answer any FIVE Questions from the following
All questions carry equal marks (14 Marks each)*

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|-------|--|----|
| 1. a) | Compare and contrast PSP and TSP | 8M |
| b) | Discuss the evolving role of software | 6M |
| 2. a) | Describe the phases of unified process model. | 8M |
| b) | Write about aspect oriented software development. | 6M |
| 3. a) | Explain the significance of feasibility study. | 7M |
| b) | Discuss in detail data models. | 7M |
| 4. a) | How to translate an analysis model into the design model? Explain. | 6M |
| b) | Discuss briefly transform mapping. | 8M |
| 5. a) | What is cohesion? Discuss various types of cohesion. | 7M |
| b) | Describe briefly the golden rules for user interface design. | 7M |
| 6. a) | Discuss the testing strategies for object oriented software. | 7M |
| b) | Explain the process of debugging. | 7M |
| 7. a) | Describe the metrics for software quality. | 6M |
| b) | Why risk management is necessary? Discuss the activities in risk management. | 8M |
| 8. a) | Give the minimum set of guidelines for formal technical reviews. | 7M |
| b) | Write a note on ISO 9000 quality standards. | 7M |

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(AUTONOMOUS)

III B.Tech. I Semester Regular Examinations, January 2014

Unix Programming

(IT)

Time: 3 hours

Max Marks: 70

*Answer any FIVE Questions from the following
All questions carry equal marks (14 Marks each)*

1. a) Differentiate between Unix and Microsoft Windows operating systems? How BSD Unix differs from AT&T Unix? Give historical developments of Unix? 8M
- b) What is the purpose of Unix shell? Describe three phases of Unix interactive session? 6M
2. a) Explain following Unix commands with examples?
 - i). chmod
 - ii). mount
 - iii). uniq
 - iv). tr
 8M
- b) Explain about seven types of files recognized by Unix with examples? 6M
3. a) What is command substitution? Explain about command substitution process with examples? 8M
- b) Write a shell script to count characters, words and lines in a file? 6M
4. a) Define sed utility? What are two formats of sed? Explain sed execution process with example? 6M
- b) Write a sed script to continuously copy two lines and delete third of a file? 8M
5. a) Explain about different awk output statements with examples? 8M
- b) Write an awk script to add a blank line after each line in a file? 6M
6. a) What are the startup scripts in Korn shell? Describe Korn shell startup process? 8M
- b) Write a Korn shell script to display Fibonacci series? 6M
7. a) Explain C shell command execution steps with an example? 8M
- b) Write a C shell script to find greatest common divisor of two integers? 6M
8. What is system call? Explain following system calls with examples?
 - i). open
 - ii). read
 - iii). lseek
 - iv). fstat
 14M

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ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: RAJAMPET
(AUTONOMOUS)III B.Tech. I Semester Regular Examinations, January 2014
Automata and Compiler Design
(IT)

Time: 3 hours

Max Marks: 70

*Answer any FIVE Questions from the following
All questions carry equal marks (14 Marks each)*

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1. Construct minimized DFA for the regular Expression $10 + (0 + 11) 0^* 1$ 14M
2. Construct Predictive parsing table for the following grammar.

$$E \rightarrow E + T / T$$

$$T \rightarrow T * F / F$$

$$F \rightarrow (E)/id$$
 14M
3. Construct LALR Parser for the following:

$$S \rightarrow CC$$

$$C \rightarrow cC/d$$
 14M
4. a) Generate the three address code for the following program fragment:

```

while(a<c and b>d)
do
  if a=1 then c=c+1
  else
    while a<=d
    do
      a=a+3

```

 7M
- b) Draw syntax tree for the arithmetic expression $a * (b + c) - d/2$. Write the given expression in postfix form. 7M
5. a) Differentiate between Structural Equivalence and Name Equivalence. 7M
- b) What are the specifications for a simple Type Checker? 7M
6. What are advantages and disadvantages of different data structures used in organizing a symbol table? 14M
7. Explain principle sources of optimization. 14M
8. Generate the code for following statements for the target machine (target machine is a byte addressable machine with 4 bytes to a word and N general purpose registers).assuming all variables are static. Assume 3 Registers are available.
 - (a) $X=a[I+1]$
 - (b) $a[I]=b[c[I]]$
 - (c) $a[I][J]=b[I][K]*c[K][J]$
 - (d) $a[I]=a[I]+b[J]$ 14M

Code : 1G153

ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES :: RAJAMPET
(AUTONOMOUS)

III B.Tech. I Semester Regular Examinations, January 2014

Computer Networks
(Common to CSE & IT)

Time: 3 hours

Max Marks: 70

*Answer any FIVE Questions from the following
All questions carry equal marks (14 Marks each)*

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1. a) List out the categories of Network Hardware? Explain any two in detail? 7M
b) Explain about OSI Reference Model with neat sketch? 7M
2. a) Explain about i)Magnetic Media ii) Fiber Optics 7M
b) Discuss about the structure of the PSTN? 7M
3. a) Explain Goback N sliding window protocol? 7M
b) Write short notes on different Framing techniques? 7M
4. a) Discuss about carrier sense Multiple Access Protocols? 7M
b) Explain IEEE 802.11 Frame structure? 7M
5. a) Explain about Shortest path routing algorithm? 7M
b) Explain about choke packets? 7M
6. a) Explain about IPv4 protocol Frame format? 7M
b) Discuss about Token Bucket algorithm? 7M
7. a) Describe the services provided by transport layer to above layers. 7M
b) Explain about Flow control and Buffering in Transport layer? 7M
8. a) Write short notes on Electronic Mail? 7M
b) Explain about WWW? 7M
