

SUBJECT CODE NO:- K-182
FACULTY OF ENGINEERING AND TECHNOLOGY
Third Year MCA Examination Oct/Nov 2016
Cyber Security
(Revised)

[Time: Three Hours]

[Max. Marks:80]

Please check whether you have got the right question paper.

- N.B
- i) Answer any six questions, choosing three (3) from each section.
 - ii) Question number 1 and 5 are mandatory.

Section A

- Q.1 Write in brief about the following. 16
- a) Cyber security Management Metrics.
 - b) Cyber security Policy Definition.
 - c) Cross site scripting
 - d) Format string attacks.
- Q.2 What is cyber security frame work? Draw and explain E-commerce environment, system Architecture. 12
- Q.3
- i) What are cyber security myths? 06
 - ii) Challenges of cyber security. 06
- Q.4 What are security goals for Cell Phone? Explain key agreement and authentication for GSM (2G). 12

Section B

- Q.5 Write in brief about the following. 16
- a) Phishing
 - b) Session High jacking
 - c) Virus and worm characteristics
 - d) SQL Injection.
- Q.6
- a) Write in detail about Bluetooth Link Level security. 08
 - b) Differentiate Static Packet Filtering and Dynamic Packet Filtering Firewalls. 04
- Q.7
- a) Discuss in detail the Discretionary access control in windows OS. 08
 - b) Email worms. 04
- Q.8
- a) What is IDS and IPS? Explain types of IDS. 08
 - b) Botnets 04

SUBJECT CODE NO:- K-207
FACULTY OF ENGINEERING AND TECHNOLOGY
Third Year MCA Examination Oct/Nov 2016
Cloud Computing
(Revised)

[Time: Three Hours]

[Max. Marks:80]

Please check whether you have got the right question paper.

- N.B
- i) Q. No.1 and Q.No.8 are compulsory.
 - ii) Solve any two questions from Q. No. 2 to 4.
 - iii) Solve any two questions from Q. No. 5 to 7.

Section A

- | | | |
|-----|---|----------|
| Q.1 | Explain NIST cloud computing Reference Architecture. | 08 |
| Q.2 | a) Describe basics of virtualization along with appropriate example. b) Discuss infrastructure as a service in cloud computing. | 08 08 |
| Q.3 | a) Explain the need of virtualization. b) Differentiate between Desktop virtualization & server virtualization. | 08 08 |
| Q.4 | a) Explain public cloud and private cloud with their Advantages & disadvantages. b) Explain the role of any two types of user who are involved in cloud computing. | 08 08 |

Section – B

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|-----|---|----------|
| Q.5 | a) Explain the responsibilities of cloud computing customers. b) Describe the terms confidentiality, integrity & availability with reference to cloud computing. | 08 08 |
| Q.6 | a) Discuss cloud security concern in detail. b) Explain information security governance process. | 08 08 |
| Q.7 | a) Explain cloud security threats in detail. b) Explain enterprise risk management recommendations. | 08 08 |
| Q.8 | Write short note on (any two) a) Hypervisor b) Data shading c) Denial of service | 08 |

SUBJECT CODE NO:- K-307
FACULTY OF ENGINEERING AND TECHNOLOGY
Third Year MCA Examination Oct/Nov 2016
Image Processing and GIS
(Revised)

[Time: Three Hours]

[Max. Marks:80]

Please check whether you have got the right question paper.

- N.B
- i) Question No.1 and Q.No.5 are compulsory.
 - ii) In All Solve any Three questions from each section.

Section A

- Q.1 Explain fundamental steps in DIP with diagram. 08
- Q.2
- a) Explain Image acquisition using single sensor and sensor strip. 08
 - b) What is image sampling and quantization? 08
- Q.3
- a) What is Morphology? Explain erosion operation with example. 08
 - b) Define histogram processing. What is meant by histogram equalization? 08
- Q.4 Write short note on: 16
- i) Hit or miss transformation
 - ii) Distance measures
 - iii) Boundary extraction in morphology
 - iv) Hole filling algorithm in morphology

Section – B

- Q.5 Explain edge detection in detail. 08
- Q.6
- a) Explain string matching in structural pattern recognition. 08
 - b) Explain watershed segmentation. 08
- Q.7
- a) What is GIS? Explain history of GIS. 08
 - b) How is vector data represented? Explain. 08
- Q.8 Write short note on: 16
- i) Microwave Remote sensing
 - ii) Imaging sensor systems

SUBJECT CODE NO:- K-240
FACULTY OF ENGINEERING AND TECHNOLOGY
Third Year MCA Examination Oct/Nov 2016
Enterprise Resource Planning
(Revised)

[Time: Three Hours]

[Max. Marks:80]

Please check whether you have got the right question paper.

- N.B
1. Q.No.04 and Q.08 are compulsory.
 2. Attempt any two questions from the remaining questions in each section.
 3. Figures to the right indicate full marks.

Section A

- | | | |
|-----|--|----|
| Q.1 | a) What is ERP? List & explain benefits & limitation of ERP. | 08 |
| | b) Discuss the ERP Evolutions briefly. | 08 |
| Q.2 | a) What are critical success factors affecting on ERP Implementation? Explain in detail. | 08 |
| | b) Describe various phases of ERP Implementation. | 08 |
| Q.3 | a) Explain the economical aspects of ERP implementation. | 08 |
| | b) Why ERP is important to an organization? List any three ERP implementation strategies & explain it in detail. | 08 |
| Q.4 | Write a short notes on(Any two) | 08 |
| | a) CRM. | |
| | b) SCM. | |
| | c) OLAP. | |
| | d) DSS. | |

Section B

- | | | |
|-----|---|----|
| Q.5 | a) Explain Human Resource Management module with suitable diagram. | 08 |
| | b) Explain the subsystems of sales & distribution module. | 08 |
| Q.6 | a) Discuss the challenges & limitations in ERP customization. | 08 |
| | b) Describe the role of top level management in ERP implementation. | 08 |
| Q.7 | a) Who is consultant? Write the selection criteria of a consultant. | 08 |
| | b) Discuss the ERP auditing process in post-implementation of ERP software. | 08 |
| Q.8 | Write a short note on (any Two). | 08 |
| | a) Cloud ERP. | |
| | b) Change management. | |
| | c) E-commerce. | |
| | d) AHP. | |

SUBJECT CODE NO:- K-272
FACULTY OF ENGINEERING AND TECHNOLOGY
Third Year MCA Examination Oct/Nov 2016
Elective-I: Mobile Computing
(Revised)

[Time: Three Hours]

[Max. Marks:80]

Please check whether you have got the right question paper.

N.B

- i) Q.No.1 and Q.No.5 are compulsory.
- ii) Attempt any two questions from the remaining questions of each section.
- iii) Assume suitable data wherever necessary.

Section A

- | | | |
|-----|--|----------|
| Q.1 | Solve any two. a) Explain radio interface protocols. b) Explain applications of mobile computing. c) Explain handover in GSM. | 08 |
| Q.2 | a) Explain 3G technology in detail. b) Define multiplexing & explain TDM in detail. | 08 08 |
| Q.3 | a) Explain spread spectrum in detail. b) Explain working of CDPD in detail. | 08 08 |
| Q.4 | a) What are advantages & problems of forwarding mechanism in Bluetooth networks? b) Explain WLL in detail. | 08 08 |

Section-B

- | | | |
|-----|--|----------|
| Q.5 | Solve any two. a) Explain android database connectivity. b) Explain drawback of IPV4. c) Explain reverse tunnelling. | 08 |
| Q.6 | a) Explain agent advertisement and discovery. b) Explain IP in IP encapsulation and minimal encapsulation for mobile IP system. | 08 08 |
| Q.7 | a) Explain in detail wireless ATM working group. b) Explain snooping TCP. | 08 08 |
| Q.8 | a) What makes an android application? b) List and explain UI controls in android application development. | 08 08 |

SUBJECT CODE NO:- K-273
FACULTY OF ENGINEERING AND TECHNOLOGY
Third Year MCA Examination Oct/Nov 2016
Elective-I: Embedded System
(Revised)

[Time: Three Hours]

[Max. Marks:80]

Please check whether you have got the right question paper.

- N.B
- i) Q.No.1 and Q.No.5 are compulsory.
 - ii) Solve any two questions from section A from Q.2 to Q.4.
 - iii) Solve any two questions from section B from Q.6 to Q.8.

Section A

- Q.1 Differentiate between the following. (Any Two) 08
- 1) Microprocessor and microcontroller
 - 2) Computer and Embedded system.
 - 3) CISC and RISC processors.
- Q.2 10
- a) Perform comparative study of addressing modes of 8086 and 8051 and PIC.
 - b) Explain the applications of embedded systems in various areas. 06
- Q.3 08
- a) What is embedded system? Why it is so hard to define.
 - b) What do you mean by system – on- chip? How will the definitions of an embedded system changes with system – on – chip. 08
- Q.4 08
- a) Define different characteristics of embedded system developed by using 8051 microcontroller.
 - b) Explain any two type of instruction set available with 8051 microcontroller. 08

Section-B

- Q.5 Write short notes on. (any two) 08
- 1) Serial communication bus
 - 2) CAN Bus
 - 3) I2C bus
- Q.6 08
- a) Explain various instructions set available with ARM processors. Explain any two types with example.
 - b) What are the challenges faced in designing an embedded system. 08
- Q.7 10
- a) Draw & explain neat labelled diagram of internal architecture of PIC.
 - b) What is the role of hard real time and soft real time system? 06
- Q.8 08
- a) What is the role of linker and loader? 08
 - b) Explain exception interrupt handling and firmware. 08