

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]

N.B 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. | 08 |
| | b) Discuss infrastructure as a service in cloud computing. | 08 |
| Q.3 | a) Explain the need of virtualization. | 08 |
| | b) Differentiate between Desktop virtualization & server virtualization. | 08 |
| Q.4 | a) Explain public cloud and private cloud with their Advantages & disadvantages. | 08 |
| | b) Explain the role of any two types of user who are involved in cloud computing. | 08 |

Section – B

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

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

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|-----|--|----|
| 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

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|-----|---|----|
| 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]

- N.B
- Please check whether you have got the right question paper.
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

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|-----|----------------------------------|--|----|
| 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

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|-----|--|--|----------|
| Q.1 | Solve any two. | | 08 |
| | <ul style="list-style-type: none"> a) Explain radio interface protocols. b) Explain applications of mobile computing. c) Explain handover in GSM. | | |
| Q.2 | <ul style="list-style-type: none"> a) Explain 3G technology in detail. b) Define multiplexing & explain TDM in detail. | | 08 08 |
| Q.3 | <ul style="list-style-type: none"> a) Explain spread spectrum in detail. b) Explain working of CDPD in detail. | | 08 08 |
| Q.4 | <ul style="list-style-type: none"> a) What are advantages & problems of forwarding mechanism in Bluetooth networks? b) Explain WLL in detail. | | 08 08 |

Section-B

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|-----|--|--|----------|
| Q.5 | Solve any two. | | 08 |
| | <ul style="list-style-type: none"> a) Explain android database connectivity. b) Explain drawback of IPV4. c) Explain reverse tunnelling. | | |
| Q.6 | <ul style="list-style-type: none"> a) Explain agent advertisement and discovery. b) Explain IP in IP encapsulation and minimal encapsulation for mobile IP system. | | 08 08 |
| Q.7 | <ul style="list-style-type: none"> a) Explain in detail wireless ATM working group. b) Explain snooping TCP. | | 08 08 |
| Q.8 | <ul style="list-style-type: none"> 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

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|-----|---|----|
| 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 | a) Perform comparative study of addressing modes of 8086 and 8051 and PIC. | 10 |
| | b) Explain the applications of embedded systems in various areas. | 06 |
| Q.3 | a) What is embedded system? Why it is so hard to define. | 08 |
| | 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 | a) Define different characteristics of embedded system developed by using 8051 microcontroller. | 08 |
| | b) Explain any two type of instruction set available with 8051 microcontroller. | 08 |

Section-B

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