MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
MCA II Year I Semester (R14) Regular End Semester Examinations – Dec/Jan- 2015-16
(Regulations: R14)
JAVA PROGRAMMING

Time: 3Hrs

Max Marks: 60

Attempt all the questions. All parts of the question must be answered in one place only.
In Q.no 1 to 5 answer either I or II only

Q.1(I)	What are Constructors? Explain parameterized and non parameterized constructor with an example for each.	12M
	OR	
Q.1(II)	Define overloading and overriding with an example? Write the difference between overloading and overriding with an example?	12M
Q.2(I)	Explain Inheritance basics by giving details of member access, super class and subclass relationship.	12M
	OR	
Q.2(II)	What are abstract classes? Explain with an example.	12M
Q.3(I)	What is synchronization? What are different ways of synchronizing threads? Explain with an example	12M
	OR	
Q.3(II)	Discuss type wrappers and explain the auto boxing & unboxing.	12M

Q.4(I) Explain the following with syntax and code snippet   12M
     a. FileInputStream
     b. FileOutputStream
     c. DataInputStream

OR

Q.4(II) Discuss briefly about the following with example   12M
     a. TCP
     b. UDP
     c. URL

Q.5(I) a. Discuss Grid and Card Layout managers   12M
     b. Explain icons and Labels of swing.

OR

Q.5(II) a. Describe any four mouse events.   12M
     b. What is listener? With an example, describe the usage of event listener.

*** END***

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
MCA II Year I Semester (R14) Regular End Semester Examinations – Dec/Jan- 2015-16
(Regulations: R14)
COMPUTER NETWORKS

Time: 3Hrs   Max Marks: 60

> Attempt all the questions. All parts of the question must be answered in one place only.
> **In Q.no 1 to 5 answer either I or II only**

Q.1(I)	a. What is data communication? Explain the working of basic communication model with example.	07M
	b. Explain traditional based internet applications.	05M
	OR	
Q.1(II)	Explain the working of ISO-OSI protocol stack with neat diagram and also specify the function of each layer.	12M
Q.2(I)	a. Explain ATM with neat diagram.	06M
	b. Explain Circuit switching in detail.	06M
	OR	
Q.2(II)	Explain Transmission Impairments in detail.	12M
Q.3(I)	With the help of diagram explain 5 different categories of connecting devices.	12M
	OR	
Q.3(II)	What is Routing? Differentiate Link state Routing with Distance Vector Routing protocol.	12M
Q.4(I)	With neat diagram explain the functions of network management system	12M
	OR	
Q.4(II)	a. Explain File Transfer Protocol.	06M
	b. Explain any 2 types of web documents.	06M
Q.5(I)	a. Differentiate between symmetric and asymmetric key cryptography.	06M
	b. Briefly explain the security services related to message or entity.	06M
	OR	
Q.5(II)	a. What is Hash function criteria? Explain.	06M
	b. What is firewall? Explain the types of firewall.	06M

*** END***

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
MCA II Year I Semester (R14) Regular End Semester Examinations – Dec/Jan- 2015-16
(Regulations: R14)
SOFTWARE ENGINEERING

Time: 3Hrs   Max Marks: 60

Attempt all the questions. All parts of the question must be answered in one place only.
In Q.no 1 to 5 answer either I or II only

Q.1(I)	Explain any 5 process models.	12M
	OR	
Q.1(II)	(a) Explain Various steps in software process.	7M
	(b)Write short notes on Myths.	5M
Q.2(I)	What is SRS? Explain with an example.	12M
	OR	
Q.2(II)	How can we estimate the software? Define estimation models.	12M
Q.3(I)	Describe various golden rules for UID.	12M
	OR	
Q.3(II)	Briefly describe component level design.	12M
Q.4(I)	What is control structure testing? Explain in detail.	12M
	OR	
Q.4(II)	What is black box testing? Prepare a test case for Library Management System.	12M
Q.5(I)	Describe metrics for software quality.	12M
	OR	
Q.5(II)	Explain the process of Reverse Engineering, with a real world example.	12M

*** END***

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
MCA II Year I Semester (R14) Regular End Semester Examinations – Dec/Jan- 2015-16
(Regulations: R14)
ACCOUNTANCY & FINANCIAL MANAGEMENT

Time: 3Hrs

Max Marks: 60

Attempt all the questions. All parts of the question must be answered in one place only.
In Q.no 1 to 5 answer either I or II only

Q.1(I) How do you classify the accounts? Explain the rules of debit and credit with respect of different types of accounts.   **12M**

OR

Q.1(II) Distinguish between the Journal and Ledger.   **12M**

Q.2(I) Discuss briefly functions of financial management.   **12M**

OR

Q.2(II) Define Leverage. Explain various types of leverages   **12M**

Q.3(I) Define Ratio. Explain various types of profitability ratios   **12M**

OR

Q.3(II) a. Gross Profit Ratio is 25% of sales and sales is Rs.8,00,000. You are required to calculate Gross Profit, and Cost of Goods sold.   **12M**

b. Given the amount of the cost of goods sold is Rs.6,00,000 and the stock turnover ratio is 10, calculate average stock

Q.4(I) From the following data to calculate break even quantity and quantity to be sold to Obtain a targeted profit of Rs.40,000/-   **12M**

Units Sold: 5,000 units @ Rs.200 per unit

Variable cost per unit Rs.100/-

Fixed expenses Rs.2,00,000

OR

Q.4(II) Define Break Even Point. Explain its assumptions.   **12M**

Q.5(I) From the following information calculate the net present value of the two projects and suggest which of the two projects should accepted assuming a discount rate of 10%. **12M**

	Project X	Project Y
Initial Investment	Rs.20, 000	Rs.30, 000
Estimated Life	5 years	5 years
Scrap Value	Rs.1, 000	Rs.2, 000

The profits before depreciation and after taxes (cash flows) are as follows:

Project	Year 1	Year 2	Year 3	Year 4	Year 5
X	5,000	10,000	10,000	3,000	2,000
Y	20,000	10,000	5,000	3,000	2,000

OR

Q.5(II) Calculate the NPV for a project requiring an initial investment of Rs.200000 and which provides net cash inflow of Rs.60000 each year for six years. Assume the cost of funds to be 8% p.a. and that there is no scrap value. **12M**

*** END***