Question Paper

SCHOOL OF INFORMATION SCIENCES
SECOND SEMESTER MSc INFORMATION SCIENCE
DEGREE MAKE - UP EXAMINATION - JULY 2017
Tuesday, July 11,2017
Time : 10:00 to 13:00

Software Engineering [MIS 504]

Marks: 100   Duration: 180 mins.

Answer all the questions.

1)   Name at least 4 aspects of software   (10)
        engineering? Explain any two aspects of
        software engineering? (2+8)

2)   Name two different approaches of software   (10)
        design briefly discuss each of them? Discuss
        Author's Rant or views? Discuss briefly
        software myths? (2+3+5)

3) Discuss the first step in identifying the requirements?   (10)
    Why we need to elicit the requirements and Name 4
    techniques to elicit requirements, give a one to line
    description for each of the
    technique?
    (5+5)

4)   Give brief description of UML modeling   (10)
        elements in class diagrams given below
        a. Association, aggregation, dependency. (6)
        b. Multiplicity and navigation indicators (4)

5)   Name & Discuss various symbols used in Data   (10)
        flow diagrams? How synchronous and
        asynchronous operations are shown in DFD
        using DFD symbols? (5+5)

6)   Name and discuss briefly the three   (10)
        fundamental parts of a user interface? Name
        three goals of good user interface? Name 6
        principles of user interface design? (4+3+3)

7)   Name and explain five views of software   (10)

Quality explain at least any 4 of them.

8) List Black box Test Case design techniques and explain at least 4 of them in detail? (10)

9) List organizational approach for unit testing? Explain any one of organizational approach for unit testing in detail? Discuss advantages and disadvantages for any one of the organizational approaches of unit testing? (2+6+2) (10)

10) What is Decision tree technique when we use this? Generate the Decision tree for the following requirement.: Library Membership Software (LMS) Which should support the following three options: (10)
New Member, Renewal and Cancel Membership. When the new member option is selected the software should ask for the member's name, address, and phone number. If proper information is entered the software should create a membership record for the new member and print a bill for the annual membership charges and the security deposit payable. If the renewal option is chosen the LMS should ask for the members name and the membership number. If the member details entered are valid then the membership expiry date in the membership record should be updated and the annual membership charges payable by the member should be printed. If the member details entered are invalid then an error message should be displayed. If the cancel membership option is selected. The name of a valid member is entered, the membership is cancelled. A cheque for the balance amount due to the member is printed and his membership record is deleted.