MCA DEGREE III SEMESTER EXAMINATION NOVEMBER 2015

CAS 2303/2304 SOFTWARE ENGINEERING
(*Regular and Supplementary*)

Time : 3 Hours   Maximum Marks : 50

PART A
(Answer *ALL* questions)

$(15 \times 2 = 30)$

I. (a) What are the characteristics of a software?

    (b) What are the generic process framework activities?

    (c) Point out two draw backs of RAD model.

II. (a) Explain cardinality.

    (b) Distinguish between expected requirements and exciting requirements.

    (c) Explain why it takes longer to develop a utility program than an application program and longer still to develop a system program.

III. (a) Explain refactoring.

    (b) What is software architecture and point out its importance?

    (c) Explain two quality attributes of a software design.

IV. (a) What is CBSE process?

    (b) List out the different steps for interface design.

    (c) Describe golden rules of interface design.

V. (a) Explain the difference between verification and validation.

    (b) Describe any two attributes of a good test.

    (c) What is mean by behavioral testing?

PART B

$(5 \times 4 = 20)$

VI.   Explain spiral model.

OR

VII.   Explain CMMI.

VIII.   Explain class based modelling.

OR

IX.   You are a Software Engineer involved in the development of a financial system. You know that this system will make significant number of people when it is successfully implemented. Hence, the people in the environment deny you to access the essential information to complete the requirement analysis. Suggest methods to overcome this difficulty.

X.   Amateur Artist's Magazine (AAM) is an established monthly publication. AAM is mailed to subscribe and also sold at bookstores and stalls. A number of copies are mailed free of cost to an influential group of people. Here is the breakdown of AAM's circulation list.

39000 copies mailed directly to subscribers.
5000 copies sold through stores.
2000 copies distributed free.

Draw a context diagram and data flow diagram for the subscription processing system. Clearly list your assumptions.

OR

XI.   Explain architectural styles.

XII.   Explain SCM process.

OR

XIII.   Explain component based development.

XIV.   Explain integration testing.

OR

XV.   Explain basis path testing

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