

Seat No. : _____

XU-131

April-2013

T.Y.M.Sc.

**Five Years M.Sc. (CA & IT) Integrated (K.S.)
Software Engineering**

Time : 3 Hours]

[Max. Marks : 100

1. Attempt any **four** : **20**
- (a) Justify 'software doesn't "wear out".
 - (b) Define :
 - (i) Software Engineering
 - (ii) Umbrella Activities
 - (c) Write a note on "Water Fall Model"
 - (d) Write a note on "Testing Principles".
 - (e) Write a note on "RMMM".
2. Attempt any **four** : **20**
- (a) Write a brief note on "Hatley-Pirbhai Modeling".
 - (b) Write a brief note on "Quality Function Deployment".
 - (c) Briefly explain with figure "Elements of the analysis model".
 - (d) Explain Behavioural Model with suitable examples.
 - (e) Explain with figure "Modularity & Software Cost".
3. Attempt any **four** : **20**
- (a) What is a "well-formed" design class ?
 - (b) What is Software Architecture ? Why is Architecture important ?
 - (c) Explain with figure " Defect Amplification & Removal".
 - (d) Explain any one golden rule of user interface.
 - (e) Writ a brief note on "The overall strategy for software testing".

4. Attempt **all** the following :
- (a) Write a brief note on : “System testing” 5
- (b) Write a brief note on : “Measures, Metrix & Indicators”. 5
- (c) Develop an optimized flow graph, calculate cyclomatic complexily & derive test cases for the following pseudo code 10
- ```

up – 60 = true ; sum = 0 ;
for i to no-of-sub do
 If marks [i] < 70 then up-60 = false ;
 end if ;
 sum = sum + marks [i] ;
 end for ;
avg = sum / no-of-sub ;
It avg > 80 & up-60 = true
 then printf (“Distinction”)
end if ;

```
5. Attempt any **four** : 20
- (a) Writ a note on “Web Engineering Content Design”.
- (b) Write a note on “Web App testing process” with a figure.
- (c) Write a note on “Four P’s : people, product, process & project”.
- (d) Write a note on “the Make/Buy Decision”.
- (e) What should we do when management demands that we make a deadline that is impossible ?
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