Q.P. Code :11614

[Time: 3 Hours]   [Marks:80]

Please check whether you have got the right question paper.

N.B: 1. **Question No.1 is compulsory.**
         2. **Attempt any three questions out of remaining five.**

Q.1   Develop the SRS for Hospital Management System.   20
       Hospital Management System is a process of implementing all the activities of the hospital in a computerized automated way to fasten the performance.
       This system is to maintain the patient details, lab reports and to calculate the bill of the patient. You can also manually edit any patient details and issue bill receipt to patient within few seconds.
       SRS for the hospital Management system should include the following:
       a) Product perspective
       b) Scope and objective
       c) Functional requirements
       d) Non-functional requirements

Q.2 a) Explain cohesion and Coupling. Explain different types with detailed example.   10
     b) Explain in detail Service-Oriented Software Engineering.   10

Q.3 a) Explain what is cyclomatic complexity and different methods to calculate it. Find the cyclomatic   10
         complexity of following code

```
int x, y, power;
float z;
input (x, y );
if (y<0)
   power = - y:
else
power = y;
z = 1;
while (power ! = 0 ){
z =z * x;
power = power – 1;
}
if (y<0)
     z = 1/z;
output (z);
end
```

     b) Explain Risk and its types? Explain the steps involved in setting up or generating RMMM plan.   10

Q.4. a) Consider a software project using Semi-detached mode with 30,000 lines of code. Obtain effort   10
         estimation, Duration estimation and person estimation.

     b) Explain steps in version and change control.   10

(P.T.O)

94EE609B04F642FF54CC46720CB69DAB

Q.5. a) Explain software reverse engineering in detail.   10

     b) What is FTR? Explain the Review guidelines considered during FTR.   10

Q.6.   Write short notes on **any two**:-   20
           (a) Software Configuration Management
           (b) Test Driven Development
           (c) Agile Process Models
           (d) User interface design

94EE609B04F642FF54CC46720CB69DAB