

[Time:2.30 Hrs]		[ Marks:75 ]
Please check whether you have got the right question paper.		
N.B:	<ol style="list-style-type: none"> <li>1. All question are compulsory.</li> <li>2. Figures to the right indicate full marks.</li> <li>3. Students answering in the regional language should refer in case of doubt to the main text of the paper in English.</li> </ol>	

Q.1	<p>Attempt <b><u>any three</u></b> of the following:</p> <ol style="list-style-type: none"> <li>a. What is software engineering? Explain in brief.</li> <li>b. Explain software development life cycle.</li> <li>c. Write short notes on the significance of SRS.</li> <li>d. Explain Waterfall model. List its advantages and disadvantages.</li> <li>e. Write notes on RUP architecture.</li> <li>f. Explain RAD model</li> </ol>	15
Q.2	<p>Attempt <b><u>any three</u></b> of the following:</p> <ol style="list-style-type: none"> <li>a. Explain what is socio-technical system?</li> <li>b. Describe the emergent properties of socio-technical system.</li> <li>c. Describe in short about Legacy Systems?</li> <li>d. What are the three principal types of critical system? Explain the differences between these?</li> <li>e. What are different Principal stages to a change management process?</li> <li>f. Explain Use Case diagram with a neat diagram.</li> </ol>	15
Q.3	<p>Attempt <b><u>any three</u></b> of the following:</p> <ol style="list-style-type: none"> <li>a. What are the advantages of Architectural Design? Which factors are dependable during the design?</li> <li>b. What are the three system organization styles of architectural design? Explain in brief.</li> <li>c. Write short notes on any two:               <ol style="list-style-type: none"> <li>a) User Analysis</li> <li>b) Testing in XP</li> <li>c) Interface Evaluation</li> </ol> </li> <li>d. Explain Strategies to help manage risk.</li> <li>e. Explain the process of Software Quality Management</li> <li>f. Explain what is software metric and measurement?</li> </ol>	15
Q.4	<p>Attempt <b><u>any three</u></b> of the following:</p> <ol style="list-style-type: none"> <li>a. Explain the differences between verification and validation process.</li> <li>b. What is the objective of software cost estimation?</li> <li>c. Explain System testing process.</li> <li>d. Describe three different models of Cost Constructive Model (COCOMO).</li> <li>e. Explain type of metrics function points and object point to estimate the software productivity.</li> <li>f. Calculate the Cyclomatic Complexity using the Control Flow diagram for the given example:</li> </ol> <p>IF A= 10 THEN IF B &gt;C THEN</p>	15

	<pre> A = B ELSE A = C ENDIF ENDIF PRINT A PRINT B PRINT C </pre>	
Q.5	<p>Attempt <b><u>any three</u></b> of the following:</p> <ol style="list-style-type: none"> <li>Write notes on ISO 9000 quality standards.</li> <li>Explain process improvement cycle.</li> <li>Explain CMMI framework.</li> <li>Explain Software as service.</li> <li>Explain service engineering with neat diagram.</li> <li>Write notes on Client – Server Computing.</li> </ol>	15