

K. J. Somaiya College of Engineering, Mumbai-77

(Autonomous College Affiliated to University of Mumbai)

Semester: ODD 2019-20

Max. Marks: 30**Duration: 1hr.15 min.**

Class: TY

Semester: V

Branch: COMP

Term Test 2

Name of the Course: Software Engineering

Question No.		Max. Marks
1	<p>Draw Deployment diagram for Android application deployment</p> <p>Note: Android SDK tools compile and package the code along with any required data and resource files into Android application archive file. The archive file represents one Android application to be deployed to the Android-enabled mobile devices.</p> <p>OR</p> <p>Draw Deployment diagram of an Apple iTunes application</p> <p>Note: Apple's iTunes application communicates with Apple iTunes Store. Customer can buy and download music, video, TV shows, audiobooks, etc. and store it in media library. Mobile devices like Apple iPod Touch and Apple iPhone update media libraries from home computer with iTunes through USB, or could download media directly from Apple iTunes Store using some wireless protocol.</p>	5M
2	Draw Component diagram for Online shopping system	5M
3	<p>Show the orders of module integration for the approaches as below:</p> <ol style="list-style-type: none">1. Top-down (Depth First Search) (02M)2. Top-down (Breadth First Search (02M)3. Bottom up approach (02M) <p>Estimate the number of stubs and drivers needed for each approach.</p> <pre>graph TD; A[A] --- B[B]; A --- C[C]; A --- D[D]; B --- E[E]; B --- F[F]; E --- J[J]; F --- J; C --- G[G]; G --- K[K]; G --- L[L]; D --- H[H]; D --- I[I]; H --- M[M]; I --- M</pre>	10M
	<ol style="list-style-type: none">4. Number of Stubs (02M)5. Number of Drivers (02M)	

4	<p>Draw a control flow graph for the following sample code (04M)</p> <p>Determine the cyclomatic complexity of the graph using all 3 methods (06M)</p> <pre> (a) sum_of_all_positive_numbers(a, num_of_entries, sum) (b) sum = 0 (c) init = 1 (d) while(init <= num_of_entries) (e) if a[init] > 0 (f) sum = sum + a[init] endif (g) init = init + 1 endwhile (h) end sum_of_all_positive_numbers </pre>	10M
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