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| **Trimester: July / January 2021\_\_\_\_  - November / April 2021\_\_\_\_**  **Examination: Practical End Term Examination** | | | |
| **Programme code: 09**  **Programme: MCA** | **Class:** SY | | **Trimester:** IV  **(SVU 2021)** |
| **Name of the Constituent College:**  **K. J. Somaiya Institute of Management** | | **Name of the department/Section/Center: DST** | |
| **Course Code:   117P09C404** | **Name of the Course:** IoT and Remote Sensing Techniques | | |

**Maximum Marks: 30       Time: 2Hrs Date:   October 6, 2021**

**Notes: Attempt both the questions.**

**Each question carries 15 marks .**

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| **Question No.** |  | **Max.**  **Marks** |
| Q.1 | 1. Create a project in the KEIL simulator by the name LedBlink 2. Write a  ‘C’ program to blink the led on P1.2.(Add the necessary .h files as you deem fit. Use modular style of programming) 3. The LED should blink with the rate of 1sec on and 1sec off. 4. Show this in the logic analyser window of KEIL. 5. Take a screen shot of the code and the logic analyser window and put it up in the document. 6. Write the steps necessary for project creation along with the screenshots captured above in the document. | **15** |
| **Question No.** |  | **Max.**  **Marks** |
| Q.2 | 1. Create a project in NODE-RED environment of your computer. 2. Make a flow that shows **two processor** cores activity on a dashboard. Use the gauge and the graph related nodes to show the activity. 3. The activity should be visible on turning ‘ON’ a button on the dashboard. The processor activity should stop on turning the button ‘OFF’. 4. Take a screen shot of the Dashboard and the flows that you have created. 5. Make a document showing the Flows and write the required steps in the document along with screenshots captured above. | **15** |