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RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES

B.Sc. (General) Degree in Applied Sciences
Third Year – Semester I Examination – Oct/ Nov2015

PHY3214–Graphical Programming

Answer**All** Questions. Time allowed: Two **hours**

- Create a new folder on H:\ drive. Rename the folder with your index number. Save each question as describe in respective question.
- Additional marks will be allocated for creativity of programs.

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1. Design a calculator using **LabVIEW** that can perform **addition, subtraction, multiplication** and **division** for two numbers. Save the program as **Q1**.
   a) Create a **subVI** with two inputs and one output and save it as **Q1sub**.

(40 Marks)

2. Design a **seven segment display** that can display numbers from 0 to 9. Save the program as **Q2**. (Use square **LED** displays in the control pallet to create the seven segment display.)

(30 Marks)

3. Copy and paste the **Q1sub.SubVi** on the **Q2** program and connect the output of the calculator to the input of the seven segment display. Save this program as **Q3**.
   a) If the output of the calculator is between 0 and 9, it should be displayed on the seven segment display.
   b) If the output of the calculator is greater than **9,** display **0** in seven segment display.

(30 Marks)