**Academia International College**

**Software Project Management [BCA]**

**Lab Exercise Sheet**

***Objective***: The main objective of the practical sessions in SPM is to give an overall idea about the working of Trello, creating projects and studying different tasks that can be performed in Trello.

[*Note: The lab sheet is designed assuming that the students or college system can run Trello. If Trello is not available students can choose any other project management tool. In addition MSExcel will also be used to do some tasks.]*

**List of Problems**

**Session 1:** Getting to know ***Trello*** project management software [Tool: Trello]

1. Starting and setting up Trello (if possible desktop version, otherwise online version).
2. Getting to know the different toolbars.
3. Creating new project on dashboard.
4. Being familiar with different features.

**Session 2:** Defining and creating the Project [Tool: Trello]

1. Understanding project information, calendar, time, labels and status.
2. Creating new calendar and setting working and non-working days.
3. Applying calendar on Gantt chart.
4. Linking the tasks.

**Session 3:** Creating Tasks [Tool: Trello]

1. Entering Tasks and task duration, estimating duration, understanding milestone and phases.
2. Inserting, editing, moving, changing and deleting tasks.
3. Arranging tasks using priority.
4. Linking Tasks

**Session 4:** Scheduling [Tool: Trello]

1. Understanding lead and lag time.
2. Understanding Gantt chart and the network diagram view.
3. Examining network diagram.
4. Setting the critical path.

**Session 5:** Cost Management [Tool: Trello and/or MS Excel]

1. Managing total cost for task and resources.
2. Managing the total cost of the project.
3. Managing cost variance for tasks, resource and assignments.
4. Cost-Benefit Analysis, Calculating IRR, present value and future value, cash flow forecast.

**Session 6:** Effort Estimation [Tool: Trello and/or Excel]

1. Managing the task effort.
2. Managing the total effort of the project.

**Session 7:** Version control [Tool: Git]

1. Students will use any one version control tool with specific theme as they choose.