

**Birla Institute of Technology & Science, Pilani**  
**Work Integrated Learning Programmes Division**  
**First Semester 2022-2023**

**Mid-Semester Test**  
**(EC-2 Regular)**

Course No. : **SS ZG622**  
Course Title : **SOFTWARE PROJECT MANAGEMENT**  
Nature of Exam : Open Book  
Weightage : 30%  
Duration : 2 Hours  
Date of Exam :

No. of Pages	= 1
No. of Questions	= 6

**Note to Students:**

1. Please follow all the *Instructions to Candidates* given on the cover page of the answer book.
2. All parts of a question should be answered consecutively. Each answer should start from a fresh page.
3. Assumptions made if any, should be stated clearly at the beginning of your answer.
4. Your answers should demonstrate a good understanding of the concepts, methods and techniques taught in the course (not just generic answers).
5. For the questions related to ACL Mux Core project, please refer to the case study material provided.
6. Draw neat, labeled diagrams wherever applicable.

Q.1 5 Marks

Elaborate the criteria used for selecting between the waterfall process model and the iterative process model (not the agile process model) referring to the ACL Mux Core software development project.

Q.2 5 Marks

Explain the key difference between software project management objectives and software system/software product objectives using the ACL Mux Core project.

Q.3 5 Marks

Using the user story “reserve books for borrowing” in a typical university library system, describe in detail (step-by-step) how the planning poker technique can be employed for effort estimation in Scrum.

Q.4 5 Marks

Elaborate how the function point analysis works for software effort estimation referring to “reserve books for borrowing” functionality any two of the five components (external input types, external output types, external inquiry types, logical internal file types and external interface file types).

Q.5 5 Marks

Describe the concept of work breakdown structure (WBS) in waterfall model referring to the ACL Mux Core project. Elaborate the role of WBS in effort estimation and project planning.

Q.6 5 Marks

The senior management at ACL has selected usability, security, flexibility and interoperability as the four important product quality attributes that should be included in the quality plan for the Mux Core project. Describe these four quality attributes including suggestion for suitable metrics or measures for assessment of each of these attributes.