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| Course Code | : | BCS-051 |
| Course Title | : | Introduction to Software Engineering |
| Assignment Number | : | BCA(V)051/Assignment/2024-25 |
| Maximum Marks | : | 100 |
| Weightage | : | 25% |
| Last Date of Submission | : | 31stOctober,2024(For July, Session) 30thApril, 2025(For January, Session) |

This assignment has eight questions for a total of 80 marks. Answer all the questions. Each question carries 10 marks. Rest 20 marks are for viva voce. You may use illustrations and diagrams to enhance explanations. Please go through the guidelines regarding assignments given in the Programme Guide for the format of presentation.

- Q1.** What is SRS? Develop SRS for "Railway Reservation System". Make necessary assumptions. Follow IEEE SRS format. Briefly explain the characteristics of a good SRS.
- Q2.** Draw first three levels of DFDs for a "Railway Reservation System". Make assumptions, wherever necessary. Briefly explain the all the DFDs with respect to Railway Reservation System.
- Q3.** Develop a test case for any testing technique for "Railway Reservation System". Briefly explain the all the test cases with respect to Railway Reservation System.
- Q4.** What are application logic objects? Explain with the help of an example.
- Q5.** What is Spiral model for software development? Explain the types of software systems developed using this model.
- Q6.**
 - a) Explain the different categories of Software Maintenance.
 - b) Draw GANTT chart for the development of "Railway Reservation System". Briefly explain the chart with respect to Railway Reservation System.
- Q7.** What is Software Configuration Management (SCM) ? Explain the need of SCM with the help of an example.
- Q8.** Write short notes on the following:
 - (a) Object Oriented Metrics
 - (b) Coupling
 - (c) Software Quality Assurance
 - (d) Capability Maturity Model