**Unit 12.1 : Program Development Life Cycle**

Homework: Week 3 (30 Jan 2023 to 5 Feb 2023)

1a) Describe the “waterfall model” of the program development methodology

[3 Marks].

This linear sequential development cycle is one of the earliest models is used

Each stage is completed and signed off before the next stage is begun

This model is suitable for smaller projects with a short timescale,for which

the requirements are well known and unlikely to change

b) State two advantages and two disadvantages of the waterfall model

[2 Marks]

Advantages:easy to manage,understand and use

each stage has specific deliverables

Disadvantages:not suitable for long ,complex projects

difficult to change the requirements at a later stage

2a) Describe the “RAD (Rapid Application Development) model” of the program development methodology

[3 Marks].

This model is suitable for complicated projects that need development in a short timeframe to meet the evolving needs of a business.

b) State two advantages and two disadvantages of the RAD model

[2 Marks]

Advantages: reduced overall development time

rapid frequent customer feedback informs the development

Disadvantages :needs strong teams or skilled developers

not suitable for short simple projects.