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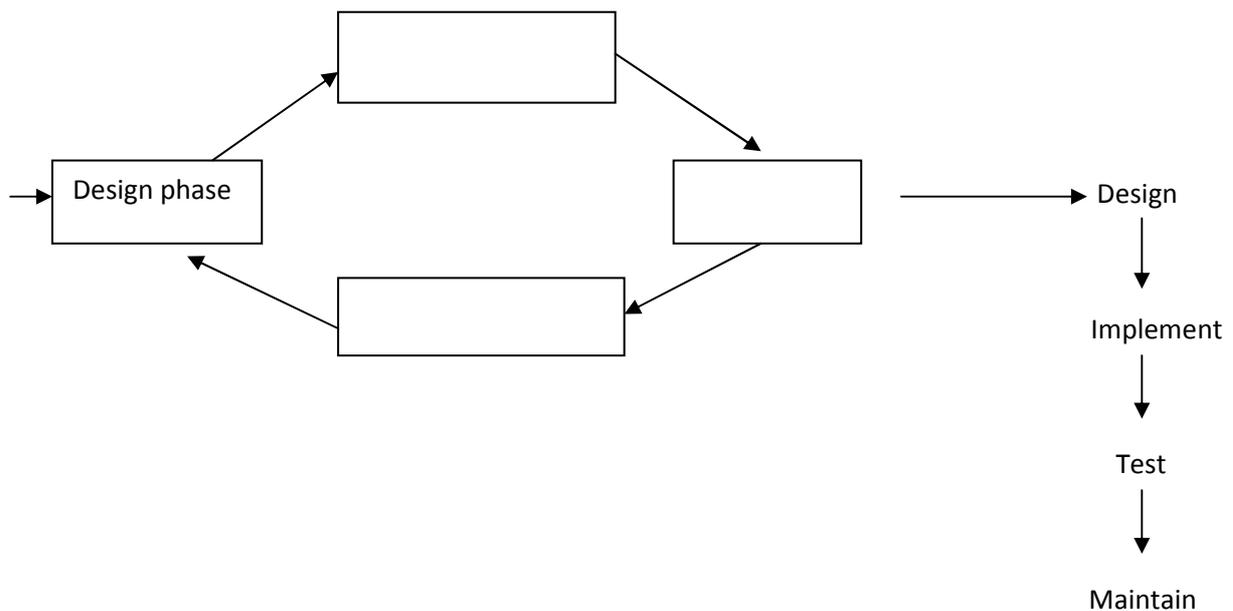# INFORMATION COMMUNICATION TECHNOLOGY
G.C.E. Advanced Level

Revision – Tutorial 19   **Duration: 45 minutes**

Answer All Questions

1) What is a system?
2) What is system boundary?
3) What is batch processing?
4) What is SDLC and briefly explain each step of SDLC?
5) What are the types of testing and briefly explain each testing method?
6) What are the 4 types of implementation?
7) What is the difference between direct implementation & Parallel implementation?
8) What is the difference between Classical waterfall model and iterative Waterfall model?
9) What is RAD and what type of systems suited with RAD model?
10) What are the disadvantages of RAD?
11) What is proto type model and fill in the blanks of following diagram.

12) Draw context diagrams and Level 1 Data Flow Diagrams for following scenarios.

   a) Books Magazine Distribution System

   ABC is a company that freely distributes books and magazines to their members. Customers can place orders with their membership number. When an order receives, it should be verified that the customer is a member by checking the Member file. If the sender is not a member, the error note is delivered to the customer back. If the customer is a member, the availability of order items should be checked from the Item file. Then the order data should be entered to the Daily Orders file and a notification should be send to the Order Processing Clerk.

b) Library System

A member can borrow books from a library by providing his/her membership no and book nos. The return date is calculated and displayed. The Book Loan Details file and the status of the Book file is updated.

When a book is returned the member once again provides the membership no and the book nos returning. The Book Loan Details file and the status of the Book file is updated.

The overdue report is generated by extracting the books which are overdue form the book loan details file and the details of the members and the books are obtained from the book file and the member file.

The list of books currently at the library is generated by getting details from the Books file.

Both these reports are needed by the Librarian.

c) Supermarket POS

In a supermarket a customer purchases items by giving the items to be purchased to the counter. Details such as the ItemNo and qty are entered to the system. The customer is given a receipt. At the end of the day a daily sales summary is sent to the Accounting System.