GLS UNIVERSITY
Faculty of Computer Applications & IT
SUBJECT: 0301403 Structured and Object Oriented Analysis and Design
BCA Sem – IV
Assignment – II

Q-1 Fill in the blanks:
1. _____ shows how data moves through the system.
2. A set of DFDs provides a logical model that shows what the system does, not how it does it. (T/F)
3. In DFDs, a process symbol can be referred to as a black box. (T/F)
4. In DFD, _____ receives input data and produces output that has a different content, form or both.
5. In DFD, Processes contains _____ that transform data and produce the required results.
6. In DFD, processes are also considered as _____ .
7. In DFD, _____ is the path for data to move from one part of information to another.
8. A process that produces output but has no input is called _____.
9. A process that has input but does not produce output is called _____.
10. A process that has at least one input and one output but both are not related or are insufficient is known as _____.
11. In DFD, _____ is used to represent data that the system stores because one or more processes need to use the data at a later time.
12. DFD entities are also called _____
13. In DFD, entities providing data are called _____.
14. In DFD, entities getting data are called _____.
15. _____ diagram is a top level view of an information system that shows the system boundaries and scope.
16. _____ is a data flow in which the same data travels to two or more different locations.
17. _____ is process that consists of a single functions that is not exploded further.
18. _____ is the process of drawing a series of increasingly detailed diagrams until all functional primitives are identified.
19. _____ maintains consistency among the set of DFD by ensuring that input and output flows are aligned properly.

Q-2 Explain the following terms. (Definition / Explanation)
1. DFD
2. Context level DFD
3. Spontaneous generation
4. Black hole
5. Gray hole
6. Black box
7. Diverging data flow
8. Parent diagram
9. Child diagram
10. Leveling DFD
11. Balancing DFD

12.   Functional Primitives

Q-3   Answer the following:
1.   List and explain symbols of DFD. (Gane and Sarson)
2.   List and explain symbols of DFD. (Yourdon)

Q-4   Draw DFD for following systems:
1.   ATM Management System
2.   Order Management System
3.   Hospital Management System
4.   Inventory Management System
5.   Online Hotel Booking System
6.   Online Project Management System
7.   Library Management System
8.   Hostel Management System

**Note: Que 1 fill in the blanks is to be attempted by all the students compulsorily.
          Ques 2, 3, 4 to be attempted as under.**

Question 2	
Roll no	**Que no**
A1 to A20, B1 to B20, C1 to C20	1, 6, 11
A21 to A40, B21 to B40, C21 to C40	2, 7, 12
A41 to A60, B41 to B60, C41 to C60	3, 8, 1
A61 to A80, B61 to B80, C61 to C80	4, 9, 2
A81 onwards, B81 onwards, C81 onwards	5, 10, 3
Question 3	
Roll no	**Que no**
A1 to A20, B1 to B20, C1 to C20	1
A21 to A40, B21 to B40, C21 to C40	2
A41 to A60, B41 to B60, C41 to C60	1
A61 to A80, B61 to B80, C61 to C80	2
A81 onwards, B81 onwards, C81 onwards	1
Question 4	
Roll no	**Que no**
A1 to A20, B1 to B20, C1 to C20	8, 3
A21 to A40, B21 to B40, C21 to C40	7, 2
A41 to A60, B41 to B60, C41 to C60	6, 1
A61 to A80, B61 to B80, C61 to C80	5, 8
A81 onwards, B81 onwards, C81 onwards	4, 7