

- 5.1.1 In a DFD external entities are represented by a**
- (a) rectangle
 - (b) ellipse
 - (c) diamond shaped box
 - (d) circle
- 5.1.2 A data flow can**
- (a) only emanate from an external entity
 - (b) only terminate in an external entity
 - (c) may emanate and terminate in an external entity
 - (d) may either emanate or terminate in an external entity but not both
- 5.1.3 A rectangle in a DFD represents**
- (a) a process
 - (b) a data store
 - (c) an external entity
 - (d) an input unit
- 5.1.4 External Entities may be a**
- (a) source of input data only
 - (b) source of input data or destination of results
 - (c) destination of results only
 - (d) repository of data
- 5.1.5 By an external entity we mean a**
- (a) unit outside the system being designed which can be controlled by an analyst
 - (b) unit outside the system whose behavior is independent of the system being designed
 - (c) a unit external to the system being designed
 - (d) a unit which is not part of a DFD
- 5.1.6 A data store in a DFD represents**
- (a) a sequential file
 - (b) a disk store
 - (c) a repository of data
 - (d) a random access memory
- 5.1.7 A data flow can**
- (a) only enter a data store
 - (b) only leave a data store
 - (c) enter or leave a data store
 - (d) either enter or leave a data store but not both
- 5.1.8 A data cannot flow between a store and**
- (i) a store
 - (ii) a process
 - (iii) an external entity
- (a) i and iii
 - (b) i and ii
 - (c) ii and iii
 - (d) ii
- 5.1.9 Data cannot flow between two data stores because**

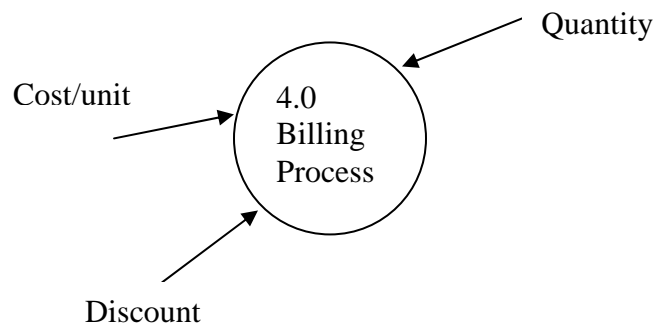
- (a) it is not allowed in a DFD
- (b) a data store is a passive repository of data
- (c) data can get corrupted
- (d) they will get merged

5.1.10 Data cannot flow from an external entity to an external entity because

- (a) it will get corrupted
- (b) it is not allowed in DFD
- (c) an external entity has no mechanism to read or write
- (d) both are outside the context of the system

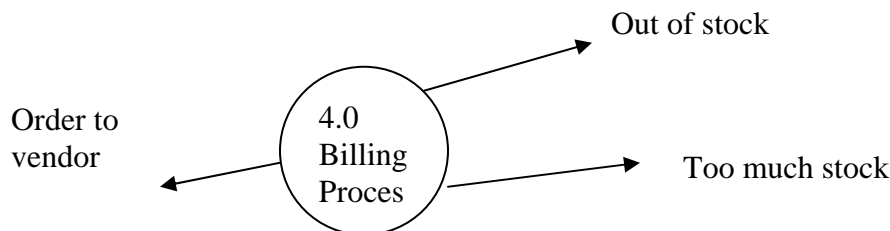
5.1.11 The following portion of a DFD is not correct as

- (a) there is no output data flow from the process
- (b) there are three data flow inputs to the process
- (c) there is no external entity
- (d) there is no data store



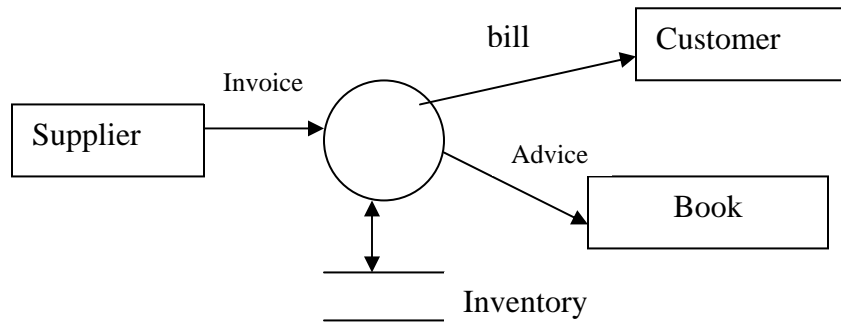
5.1.12 The following portion of a DFD is not correct as

- (a) there are many data flows out of the process
- (b) there are no input data flows to the process
- (c) the output does not go to an external entity
- (d) there is no data store



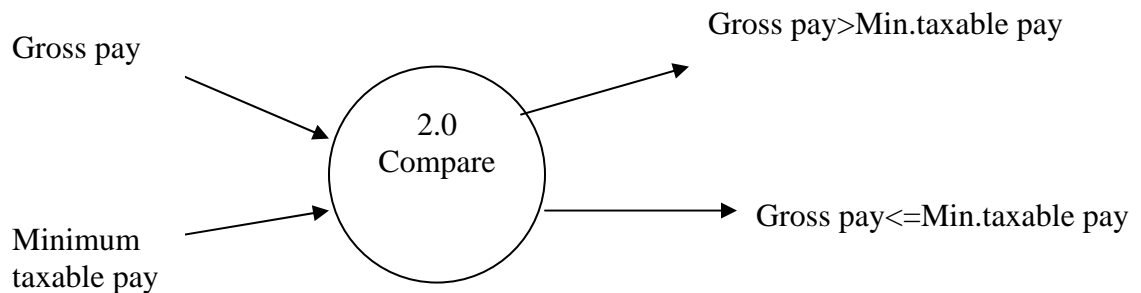
5.1.13 The following portion of DFD is wrong as

- (a) it has only one input
- (b) it writes and reads from the same data store
- (c) the process name is missing
- (d) output data flows to two external entities



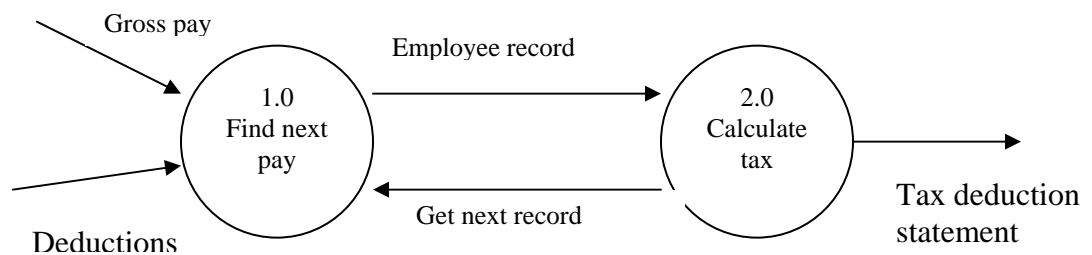
5.1.14 The following process diagram in a DFD is incorrect because

- (a) the process is a single decision
- (b) the process is not specified correctly
- (c) there are too many input data flows
- (d) the process does not refer to a data store



5.1.15 The following portion of a DFD is incorrect because

- (a) the processes do not refer to a data store
- (b) there is a loop between the two processes
- (c) the processes are not specified correctly
- (d) this structure is disallowed in a DFD



5.1.16 Data flow in a DFD must have

- (i) an arrow showing direction of flow of data
- (ii) a meaningful name
- (iii) a label such as: xyz
- (iv) no arrows as they are confusing

- (a) i and iii
- (b) ii and iv
- (c) iii and iv
- (d) i and ii

5.2.1 A context diagram

- (a) describes the context of a system
- (b) is a DFD which gives an overview of the system
- (c) is a detailed description of a system
- (d) is not used in drawing a detailed DFD

5.2.2 A context diagram is used

- (a) as the first step in developing a detailed DFD of a system
- (b) in systems analysis of very complex systems
- (c) as an aid to system design
- (d) as an aid to programmers

5.2.3 By levelling a DFD we mean

- (a) splitting it into different levels
- (b) make its structure uniform
- (c) expanding a process into one with more sub-processes giving more detail
- (d) summarizing a DFD to specify only the essentials

5.2.4 A DFD is normally levelled as

- (a) it is a good idea in design
- (b) it is recommended by many experts
- (c) it is easy to do it
- (d) it is easier to read and understand a number of smaller DFDs than one large DFD

5.2.5 A DFD is levelled by

- (a) examining complex processes in a DFD and expanding them into new DFDs with more processes which are easy to understand
- (b) merging a number of simple processes in a DFD into a complex processes in a new DFD
- (c) expanding the functions of a number of external entities into simpler functions
- (d) splitting a number of data flows into simpler data flows

5.2.6 When a DFD is levelled no new

- (a) data stores may appear
- (b) external entities may appear
- (c) processes may appear
- (d) data flows may appear

5.2.7 When a DFD is levelled

- (a) new external entities may be required
- (b) no new processes are allowed
- (c) no new data flows are allowed
- (d) new data stores may be necessary and are allowed

5.2.8 When a DFD is levelled it is a good idea not to

- (a) be concerned about the number of new processes at the next level
- (b) allow more than 5 to 10 new processes at the next level for each expanded process

- (c) allow new data stores at the next level
- (d) allow any new processes at the next level

5.2.9 When a process is expanded during levelling

- (a) data flows entering it are replaced
- (b) all data stores used by it are replaced
- (c) all data flows entering it must also enter the levelled DFD
- (d) all external entities used by it are replaced

5.3.1 Before developing a logical DFD it is a good idea to

- a) develop a physical DFD
- b) develop a system flow chart
- c) determine the contents of all data stores
- d) find out user's preferences

5.3.2 A physical DFD specifies

- (a) what processes will be used
- (b) who generates data and who processes it
- (c) what each person in an organization does
- (d) which data will be generated

5.3.3 A physical DFD

- (a) has no means of showing material flow
- (b) does not concern itself with material flow
- (c) can show only stored material
- (d) can show the flow of material

KEY TO OBJECTIVE QUESTIONS

5.1.1	a	5.1.2	c	5.1.3	c	5.1.4	b	5.1.5	c	5.1.6	c
5.1.7	c	5.1.8	a	5.1.9	d	5.1.10	d	5.1.11	a	5.1.12	b
5.1.13	c	5.1.14	a	5.1.15	b	5.1.16	d	5.2.1	b	5.2.2	a
5.2.3	c	5.2.4	d	5.2.5	a	5.2.6	b	5.2.7	d	5.2.8	b
5.2.9	c	5.3.1	a	5.3.2	b	5.3.3	d				