Q. What do you mean by input design? Describe three major approaches for entering data into the computer.

Ans: Input design: Input design is the process of converting user – originated inputs to a computer based format.

There are three major approaches for entering data into the computer:

- **Menu:** A menu is a selection list that simplifies computer data access or entry. Instead of remembering what to enter, the user chooses from a list of options and types the option letter associated with it. The following figure shows a menu for entering, adding or deleting box types in safe deposit billing system. A menu limits a user's choice of responses but reduces the chances for error in data entry

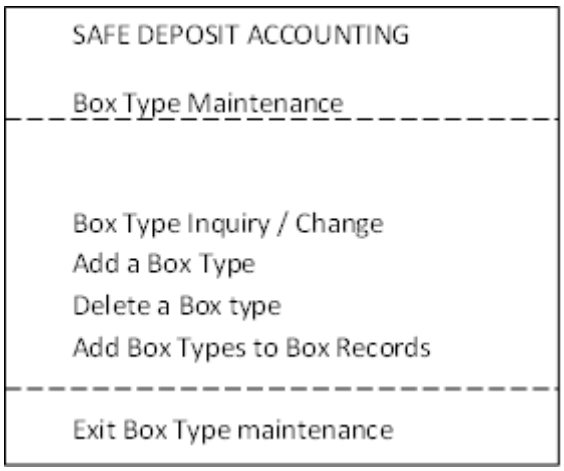

Fig: *Menu*

- **Formatted form:** A formatted form is a preprinted form or a template that requests the user to enter data in appropriate locations. It is a fill – in – the – blank type form. The form is flashed on the screen as a unit. The cursor is usually positioned at the first blank. After the user responds by filling in the appropriate information, the curser automatically moves to the next line and so on until the form is completed.
- **Prompt:** In prompt the system displays one inquiry at a time, asking the user for a response. For example, the following dialogue represents a prompt approach to data entry.

System:	ENTER PASSWORD
User:	A1260
System:	ENTER FILENAME
User:	Inventory
System:	INPUT DATA NOW? Y/N
User:	Y

Fig: *Prompt*

Q. What is a form? Describe three classes of form.

Ans: Form: People read from forms, write on forms and spend billions of hours handling forms and filling forms. The data the forms carry come from people, and the informational output of the system

goes to people. So the form is a tool with a message; it is the physical carrier of data – of information. Forms are primarily classified into three ways:

- **Action form:**

Definition: An action form requests the user to do something – get action.
Characteristics:

- Orders, instructs, authorizes.
- Achieves results.
- Goes from one place to another.

Example: Application form, purchase order, sales slip, shop order, time card.

- **Memory form:**

Definition: A memory form is a record of historical data that remains in a file, is used for reference and serves as control on key details.
Characteristics:

- Represents historical data.
- Data generally used for reference.
- Stationary and remains in one place, usually in a file.
- Serves as control on certain details.

Examples: Bond register, inventory record, journal record, purchase record, stock ledger.

- **Report:**

Definition: A report form guides supervisors and other administrators in their activities. It provides data on a project or a job.
Characteristics:

- Summary picture of a project.
- Provides information about job or details that need attention.
- Used by a manger with authority to effect change.
- Used as a basis for decision making.

Example: Balance sheet, operating statement, profit and loss statement, sales analysis, trial balance.
Q. What are the requirements of form design?
Ans: There are several major requirements of form design:

- **Identification and wording:** The form title must clearly identify its purpose. Columns and rows should be labeled to avoid confusion. The form should also be identified by form name or code number to make it easy to reorder.
- **Maximum readability and use:** The form must be easy to use and fill out. It should be legible, intelligible and uncomplicated. Ample writing space must be provided for inserting data.
- **Physical factors:** The forms composition, color, layout and paper stock should lend themselves to easy reading. Pages should be numbered when multipage reports are being generated for the user.

- **Order of data items:** The data requested should reflect a logical sequence. Related data should be in adjacent positions.
- **Ease of data entry:** If used for data entry, the form should have field positions indicated under each column of data and should have some indication of where decimal points are.
- **Size and arrangement:** The form must be easily stored and field. It should provide for signatures. Important items must be in a prominent location on the form.
- **Use of instructions:** The instructions that accompany a form should clearly show how it is used and handled.
- **Efficiency consideration:** The form must be cost effective. This means eliminating unnecessary data and facilitating reading lines across the form.
- **Type of report:** Forms design should also consider whether the content is executive summary, intermediate managerial information or supporting data.

Q. Describe different types of form.

Ans: Forms are classified into several categories: flat forms, unit-set/snap out forms, continuous strip/fanfold forms, NCR paper and preprinted forms. These types are described briefly –

Flat forms: A flat form is a single copy form prepared manually or by a machine and printed on any grade of paper. For additional copies of the original, carbon paper is inserted between copies. It is the easiest form to design, print and reproduces; it has a low volume use; and it is the least expensive.

Unit – set/snap out forms: These forms have an original copy and several copies with one time carbon paper interleaved between them. The set is glued into a unit for easy handling. The carbon paper is approximately 3/8 inch shorter than the copies. The copies are perforated at the glue margin for tearing out, although the carbon is not perforated.

Continuous strip/fanfold forms: These are multiple – unit forms joined together in a continuous strip with perforations between each pair of forms. One – time carbon is interleaved between copies, which are stacked in a fanfold arrangement. The fanfold is the least expensive construction for large volume use. Computer printouts are invariably produced on them; they are virtually part of systems design.

no carbon required

NCR paper: Several copies can be made by pressing a chemical undercoating on the top sheet into a claylike coating on the top of the second sheet. The writing pressure forms an image by the coating material. The same process applies to the back of the second sheet for producing a carbon copy on the face of the succeeding sheet and so on. NCR paper has many applications in sales book, checkbooks, inventory tickets and deposit slips.

Q. What do you mean by data classification and zoning?

Ans: Data classification and zoning: After the items are classified into a logical sequence by group, the next consideration is placing the data groups in appropriate areas. The following figure shows two interlocking forms divided into seven zones each. To summarize:

- A form is divided into zones; each zone represents a similar group of information.
- The zones are organized in a logical flow based on the upper left corner method.
- When more than one form is involved, the sequence of data is related forms should follow the same flow.