**Jan/Feb 2022**

**Assignment**

**DBB1105 – COMPUTER FUNDAMENTALS**

**Set- First**

**1. How would you define Computers? Explain the key characteristics of each generation of computers.**

**Ans:** The term ‘computer’ is derived from the word ‘compute’, which means to calculate. A computer can be defined as an electronic device which processes the input (data) and displays the desired output. Computer is also used for storing data. In this unit you will be studying characteristics of computers and get to know the different classifications of computers. You will also study the different applications of computers. Further we will discuss the architecture of computer in which we can explain the different devices and will know different functions of those

**2. Convert (372.34)8 to hexadecimal system number and (250.4375)10 to hexadecimal system number.**

**Ans:** The number: 372.348 in Octal number system and want to translate it into Hexadecimal.  
To do this, at first translate it to decimal here s :  
  
372.348 = 3∙82+7∙81+2∙80+3∙8-1+4∙8-2 = 192+56+2+0.375+0.0625 = 250.437510  
  
Happened: 250.437510  
  
Converting 250.437510

**3. What are the basic functions of MS Excel? Explain the steps to use slide master in a presentation.**

**Ans: Functions increase user productivity when working with excel**. Let’s say you would like to get the grand total for the above home supplies budget. To make it simpler, you can use a formula to get the grand total. Using a formula, you would have to reference the cells E4 through to E8 one by one. You would have to use the following formula.

= E4 + E5 +

**Set- Second**

**4. What are the various design strategies for Software System Design? Explain the four quality measures for building software products.**

**Ans: The various design strategies for Software System Design:-**

### ****Bottom-up Strategy****

This kind of system design strategy revolves around designing the subsystems and the lowest-level components (even sub-components) first. By designing these components first, the higher-level subsystems and larger components can then be built easily and more efficiently. This allows less time to be wasted in conducting recon and troubleshooting. The entire process of building the lower-level components into larger sets is continued till the entire system is one single component. This design strategy also facilitates the reusability of generic solutions and low-level

**5. Enlist the main functions of the operating system? Describe various components of operating systems.**

**Ans:** An operating system is a software component that acts as the core of a computer system. It performs various functions and is essentially the interface that connects your computer and its supported components.

In this section, we will discuss the basic functions of the operating system. Operating systems generally accomplish these goals by running processes in low privilege and providing service calls that invoke the operating system kernel in high-privilege state.

The main functions of an operating System are: Resource Management: The resource management

**6. Discuss the TCP/IP protocol layers with the help of a diagram. Explain how the internet works.**

**Ans:**

**These layers include**:

(i) **Application layer:** The application layer is provided by the program that uses TCP/IP for communication. An application is a user process cooperating with another process usually on a different host (there is also a benefit to application communication within a single host). Examples of applications include Telnet and the File Transfer Protocol (FTP). The interface between the application