**NAME RAJDEEP JAISWAL UID – 20BCS2761**

**BRANCH – B.TECH (CSE) SEC/GROUP – 26(B)**

**SEMESTER – 2ND D.O.P – 3 MAY 2021**

**SUBJECT – COMPUTER WORKSHOP**

**TOPIC - What is troubleshooting? What are the functions of POST test?**

**Troubleshooting**

**Troubleshooting is the process of diagnosing the source of a problem. It is used to fix problems with hardware, software, and many other products. The basic theory of troubleshooting is that you start with the most general (and often most obvious) possible problems, and then narrow it down to more specific issues.**

**POST**

**When power is turned on, POST (Power-On Self-Test) is the diagnostic testing sequence that a computer's**[**basic input/output system**](https://whatis.techtarget.com/definition/BIOS-basic-input-output-system)**(or "starting program") runs to determine if the computer keyboard,**[**random access memory**](https://searchstorage.techtarget.com/definition/RAM-random-access-memory)**, disk drives, and other hardware are working correctly. If the necessary hardware is detected and found to be operating properly, the computer begins to**[**boot**](https://searchwindowsserver.techtarget.com/definition/boot)**. If the hardware is not detected or is found not to be operating properly, the BIOS issues an error message which may be text on the display screen and/or a series of coded beeps, depending on the nature of the problem. Since POST runs before the computer's video card is activated, it may not be possible to progress to the display screen. The pattern of beeps may be a variable numbers of short beeps or a mixture of long and short beeps, depending on what type of BIOS is installed. The patterns of beeps contain messages about the nature of the problem detected. For example, if the keyboard is not detected, a particular pattern of beeps will inform you of that fact. An error found in the POST is usually fatal (that is, it causes current program to stop running) and will halt the boot process, since the hardware checked is absolutely essential for the computer's functions.**

LEARNING OUTCOMES

1. Apply coding skills to solve application based problems on competitive platforms such as Hacker Rank/ Hacker Earth/Code Chef.
2. Understand the basic concept and structure of computer hardware
3. Identify the existing configuration of the computers and peripherals.
4. Installing and uninstalling multiple operating systems on a machine.
5. Apply their knowledge about computer peripherals to identify /rectify problems on-board.

EVALUATION COLUMN (To be filled by concerned faculty only)

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| **Sr. No.** | **Parameters** | **Maximum**  **Marks** | **Marks**  **Obtained** |
| 1. | Worksheet Completion including writing learning objective/ Outcome | 10 |  |
| 2. | Post Lab Quiz Result | 5 |  |
| 3. | Student engagement in Simulation/ Performance/ Pre Lab Questions | 5 |  |
| 4. | Total Marks | 20 |  |