**OPERATING SYSTEM (PRACTICALS) – FALL 2012**

**EXPERIMENT 1 – INTRODUCTION TO OPERATING SYSTEMS**

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| **DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | **Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | |
| **Marks Obtained: \_\_\_\_\_** | | **COURSE: BESE 16 \_\_\_\_\_** | |
| **Deadline: 1400 hrs 17 Sep 2012** | | **Instructor: Engr. Umar Mahmud** | |
|  | **Instructions**   * This is an Individual lab. Write your remarks next to the space provided. * Plagiarism is strictly forbidden. * Submit hard copy of the report before deadline. Marks will be deducted for late submissions. | |  |
| 1. | **Objectives:**   1. Practical usage of different OS. 2. Working with common system tools in Windows and Ubuntu | |  |
| 2. | **Time Required:** 3 hrs | |  |
| 3. | **Software Required:**   1. MS DOS 2. Windows OS 3. Ubuntu OS 4. Android/Symbian/etc | |  |
| 4. | **Operating System** is an intermediary between the user of a compute machine and the underlying hardware. The major need of an OS is to provide a convenient means to the user for machine operation. Moreover, the OS also solves the user problems as well as hides the complexities of the underlying hardware. | |  |
| 5. | Components of the OS are shown as below | |  |
| 6. | Which Operating Systems have you used? Enlist.   1. MS-DOS Promt 2. Linux (Red Hat) 3. Windows 4. BT5(only ssh (secure shell)). | | (0.5) |
| 7. | Is Symbian an OS? Where is it used? Yes | | (0.25) |
| 8. | Is Android an OS? Where is it used?  It is and linux based operating system used for mobiles and smartfone applications | | (0.25) |
| 9. | **Disk Operating System (DOS)**: DOS is a single task batch OS. It has a Command-Line Interface (CLI) that allows the user to perform different tasks. DOS was developed for IBM compatible machines in 1981. | |  |
| 10. | Press Windows key + r and type cmd. What was the outcome? | | (0.25) |
| 11. | Type HELP to view a list of commands. | |  |
| 12. | Use the TIME command to set the new time. | |  |
| 13. | Set the title to your name using the TITLE command | |  |
| 14. | Is DOS Case-Sensitive? (True/False) No | | (0.25) |
| 15. | Do DOS allow two tasks to be done simultaneously? Give comments? No | | (0.5) |
| 16. | Type CALC. What is the outcome? Calculator application will get it start. | | (0.25) |
| 17. | What happens when we type IPCONFIG? What happens when IPCONFIG/ALL is typed? Its computer ip configuration protocols. | | (0.25) |
| 18. | A list of DOS commands can be found here. <http://www.computerhope.com/msdos.htm> | |  |
| 19. | **Windows** is a graphical, multi-tasking OS developed by Microsoft since 1985. | |  |
| 20. | **Task Manager**: Open the task manager and enlist what all information is shown. Write the titles of the tabs and the information provided under these tabs. Show the PID for each process in the Processes Tab. | | (1) |
| 21. | **Processes:** A Process is a program in execution. A program is a combination of code and data. The programs that you may be familiar with have only one process. Programs that hold multiple processes can be written e.g., a program that opens a file on a disk, reads the data and sends it to a receiver through the internet can have the Reading Process and the Sending Process. | |  |
| 22. | Terminate the process WINWORD.EXE. What was the effect?  Office Word File gets closed. | | (0.5) |
| 23. | In the Performance Tab, What are the current CPU usage and the PF Usage?  CPU usage 36 %. Page Fault Usage is 709 MB | | (0.25) |
| 24. | In the users tab? Who all are the current users? Can users be switched in windows? If so how?  Yes, its allowd in windows. | | (0.5) |
| 25. | What is the total number of Handles, Threads and Processes currently on your machine? Where did you find it?  Handles are variables,  14123 Threads,and it’s a smaller version of a process,(Multi threading system, multi processing system) | | (0.5) |
| 26. | **Disk Manager**: Right click on My Computer and select Manage. Go to storage and then Disk Management. What is displayed?  dfrg.msc shortcut key, | | (0.25) |
| 27. | **Disk Defragmenter**: Check to see which disks need to be defragmented? | | (0.25) |
| 28. | **Device Manager:** Select device manager. Disable and then Enable the sound driver. What facility is provided in Device Manager? | | (0.5) |
| 29. | What are the specifications of your mobile phone? Write the Make, Model, and the OS. | | (0.25) |
| 30. | Describe how can you get the MAC address of your mobile phone? Write the command/procedure and the MAC address | | (0.5) |
| 31. | **Ubuntu:** Ubuntu is a free, open-source, graphical, multi-tasking Linux-distribution. | |  |
| 32. | Install Ubuntu on your private-machine | |  |
| 33. | **System Monitor:** This tool is the equivalent of task manager in windows. Identify what all information is displayed in System Monitor. | | (0.5) |
| 34. | Which is better System Monitor or Task Manager? Give your thoughts. | | (1) |
| 35. | Use the Device Manager in Ubuntu. Disable and Enable the Sound Driver. What facility is provided in Device manager? | | (0.5) |
| 35. | What did you learn in this experiment? | | (1) |