

CEL – Operating System,
Maintenance and Repair

T009

Wednesday, 16/11/2016

08:30 – 11:30

WORKFORCE DEVELOPMENT AUTHORITY



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**ADVANCED LEVEL NATIONAL EXAMINATIONS, 2016,
TECHNICAL AND PROFESSIONAL STUDIES**

EXAM TITLE: Operating System, Maintenance and Repair

OPTION: Computer Electronics (CEL)

DURATION: 3hours

INSTRUCTIONS:

The paper is composed of **three (3) main Sections** as follows:

Section I: Fifteen (15) compulsory questions. 55 marks

Section II: Attempt any three (3) out of five questions. 30 marks

Section III: Attempt any one (1) out of three questions. 15 marks

Note:

Every candidate is required to carefully comply with the above instructions. Penalty measures will be applied on their strict consideration.

Section I. Fifteen (15) Compulsory questions**55marks**

01. Explain the POS process. **4marks**
02. Give any **two** devices that use a serial port. **3marks**
03. Give any **two** functions of BIOS. **3marks**
04. Define track and sector. **3marks**
05. Explain a process. **3marks**
06. Give any **two** methods for dealing with deadlock problem. **3marks**
07. Explain disk partitioning. **3marks**
08. Define:
- a. Multiprogramming
 - b. Multiprocessing
 - c. Distributed processing
- 6marks**
09. Define:
- a. The buffer
 - b. The cache
- 4marks**
10. Define following terms on disk performance: **8marks**
- c. Seek time
 - d. Rotational delay
 - e. Transfer time
 - f. Access time
11. Explain the importance of CMOS. **3marks**
12. Define EPROM. **3marks**
13. Explain the utility of MSCONFIG command. **3marks**
14. Define handheld systems. **3marks**
15. Give three (3) elements determining the performance of a PC. **3marks**

Section II. Choose and answer any three (3) questions.**30marks**

16. How to Add Missing Windows Installations to the Boot Configuration Data (BCD)? **10marks**
17. Define the Hardware Components of a Desktop Computer/Laptop? **10marks**
18. Explain the main components of CPU. **10marks**

19. Write short notes on the following storage devices: **10marks**
- a. CD ROM
 - b. DVD
 - c. Zip Disk
20. a) If a Customer complains that his computer is working really slow, what are the things you would check? **(5marks)**
- b) Mention advantages of Multiprocessor systems. **(5marks)**

Section III. Choose and answer any one (1) question. **15marks**

21. Discuss the system requirements for components in a computer for Windows XP to run effectively.
22. What are the main steps required in Operating System installation?
23. Differentiate between primary memory, secondary memory, and cache memory.