<u>**EXAMINATION FOR THE DIPLOMA CERTIFICATE IN INFORMATION TECHNOLOGY**</u>

<u>**DIT110: INFORMATION AND TECHNOLOGY ESSENTIALS**</u>

STREAM: SEM 3   **TIME:** 9.00-11.00 A.M

EXAMINATION SESSION: AUGUST   **DATE: 16/08/**2016

<u>Part-A</u>
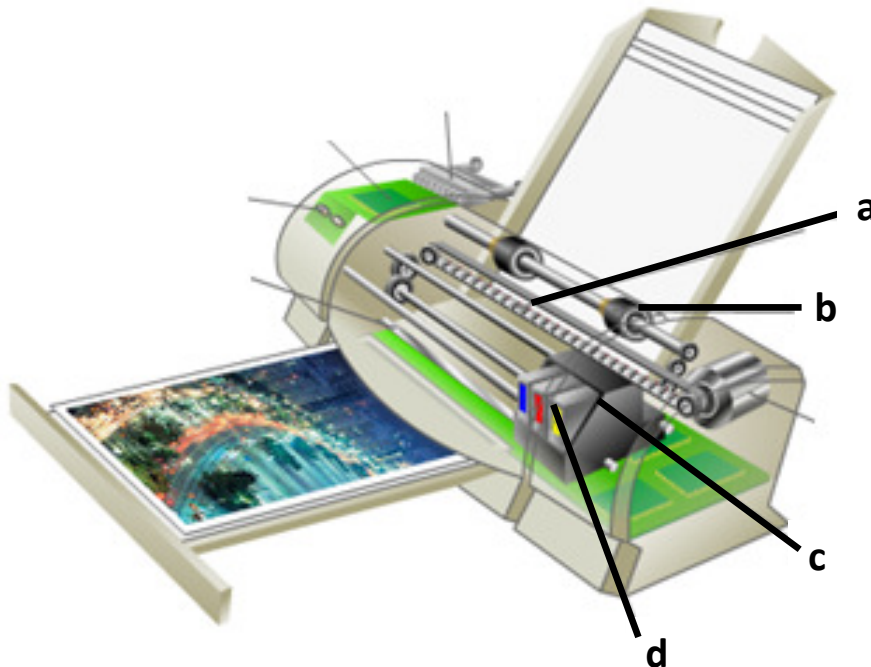## Question One (Marks 30) Compulsory

a) What are the four basic units of electricity? Explain each one.   (Marks 4)

b) Adapter cards are installed to add functionality to a computer. Explain any three of these adapters.   (Marks 6)

c) Identify four characteristics of safe workspace in a safe lab.   (Marks 4)

d) Describe how to install and configure printers.   (Marks 5)

e) Computer security is very essential.Explain the following terminologies?   (Marks 5)

      i.   **Adware**

     ii.   **Phishing**

    iii.   **Virus**

    iv.   **A Trojan**

     v.   **A Rootkit**

f) Identify any two illegal computer or network usage.   (Marks 2)

g) Distinguish briefly between **Peer-to-peer networks** and**Client/server networks**   (Marks 2)

h) Give any two common laptop features.   (Marks 2)

Part-B
Question Two (Marks 20)

a) Explain the purpose and benefits of preventive maintenance. (Marks 4)

b) What is **DLP?** (Marks 2)

c) What is the main Purpose of an Operating System? (Marks 1)

d) State and explain four characteristics of an operating system. (Marks 4)

e) What is the purpose of Dynamic Host Configuration Protocol (DHCP) (marks 1)

f) Describe mobile devices. (Marks 4)

g) To access a printer, a computer must have a compatible **interface** with it. Name any four types of this common interface. (Marks 4)

Question Three (Marks 20)

a)

   i. There are various types of printers, name the above printer? (Marks 1)

   ii. Name the parts of the above printer. (Marks 4)

     a.

     b.

     c.

     d.

   iii. As a computer technician, you may be required to purchase, repair, or maintain a printer. Name any 5 criteria while selecting a printer. (Marks 5)

b) Differentiate between Preventive maintenance and Troubleshooting. (Marks 4)

c) What is a **Data cables?** (Marks 1)

d) State 5 technicians use **BIOS**. (Marks 5)

Question Four (Marks 20)

a) State the six steps of computer troubleshooting Process (6 marks)
b) What is a computer data network? (Marks 1)
c) Network devices link together using a variety of connections. Name any three. (Marks 3)
d) On which occasions does a laptop battery may need to be replaced? (Marks 4)
e) State any five advantages of using Flash memory storage (SSD). (Marks 5)
f) State **Ohm's Law.** (Marks 1)

Question Five (Marks 20)

a) State and explain CommonPC Problems and Solutions. (Marks 8)
b) Differentiate between the following? (Marks 4)

    i. LAN and WAN

    ii. Ring and Star topology

c) State and explain three types of keyboards (6 marks)
d) Name any two common Network Operating Systems(NOS) (Marks 2)