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| **COMPUTER SYSTEM OPERATION** | | | | |
| **Competency Unit (CU) : COMPUTER NETWORK CONNECTIVITY**  **SET-UP** | | **Code : IT-020-3:2013-C06** | | |
| **Work Activity 1: Analyse computer network configuration**  **specification** | | **Duration :** 7 Hours | | |
| **Learning Objectives**  At the end of learning session the apprentice will be able to:  1.1 Describe types of computer network connectivity as below  1.1.1 LAN  1.1.2 WAN  1.1.3 MAN  1.2 Define types of wireless technology  1.2.1 WIFI  1.2.1.1 Licensed Band  1.2.1.2 Unlicensed Band (2GHz & 5GHz)  1.2.2 WIMAX ( e.g. 4G LTE )  1.2.3 Mobile  1.2.4 Bluetooth  1.2.5 Etc  1.3 Describe types of computer peripheral such as  1.3.1 Scanner  1.3.2 Server  1.3.3 Printer / multifunction  1.3.4 Computer / PC  1.3.5 Wireless devices  1.3.6 Etc  1.4 Describe computer peripheral drivers such as  1.4.1 Network Interface Card (NIC)  1.4.2 Video Graphic Adapter (VGA)  1.4.3 Sound Card  1.4.4 Wireless Adapter  1.4.5 Etc  1.5 Describe network installation equipment such as  1.5.1 Equipment tools  1.5.1.1 Crimping tools  1.5.1.2 Cutter  1.5.1.3 Network tester  1.5.1.4 Etc  1.5.2 Main distribution frame  1.5.2.1 Switch  1.5.2.2 Router  1.5.2.3 Access Point  1.5.3 Patch panel  1.5.4 Patch cord  1.5.5 RJ 45 Faceplate | | | | |
| **Work Activity 2 : Carry out computer network configuration** | | | **Duration : 9** Hours | |
| **Learning Objectives**  At the end of learning session the apprentice will be able to:  2.1 Define IP address according to :  2.1.1 Subnet Mask  2.1.2 Gateway  2.1.3 Domain Name Server (DNS)  2.2 Define Network Interface Card (NIC) installation and connection into  2.2.1 Computer / PC  2.2.2 Server  2.2.3 Scanner  2.2.4 Printer / multifunction | | | | |
| **Work Activity 3 : Perform computer network connectivity test** | **Duration : 7** Hours | | | |
| **Learning Objectives**  At the end of learning session the apprentice will be able to:  3.1 Explain computer network connectivity test  3.1.1 Ping test  3.1.2 Tracert test  3.1.3 Internet browser application test  3.1.4 Print-out test  3.1.5 Scanning test  3.1.6 Wireless Authentication test  3.1.7 Wireless connectivity test  3.1.8 Etc  3.2 List items of User Acceptance Test (UAT) such as :  3.2.1 Acceptance testing report  3.2.2 Refer to computer network connectivity test | | | | |
| **Work Activity 4 : Carry out computer network troubleshoot** | | | **Duration : 9** Hours | |
| **Learning Objectives**  At the end of learning session the apprentice will be able to:  4.1 Identify NIC Light Emitting Diode (LED) indicator  4.1.1 No light (no connection)  4.1.2 Light (connection)  4.2 Define symptom/problem in connectivity as below  4.2.1 Crimping failure  4.2.1.1 Colour code standard  4.2.1.2 Crimping method  4.2.1.3 Modular Jack  4.2.2 NIC Driver wrongly installed  4.2.2.1 Incompatible model  4.2.3 Cable failure  4.2.3.1 Broken cable  4.2.4 OS compatibility  4.2.4.1 Incompatible OS version  4.2.5 Hardware compatibility  4.2.5.1 Hardware slot | | | | |
| **Work Activity 5 : Prepare computer network connectivity report** | | | **Duration : 4** Hours | |
| **Learning Objectives**  At the end of learning session the apprentice will be able to:  5.1 Explain network connectivity testing report  5.1.1 Ping test  5.1.2 Tracert test  5.1.3 Internet browser application test  5.1.4 Print-out test  5.1.5 Scanning test  5.1.6 Wireless Authentication test  5.1.7 Wireless connectivity test  5.1.8 Etc  5.2 List items of UAT status report such as :  5.2.1 Acceptance testing report  5.2.2 Refer to network connectivity testing report  5.3 Define network connectivity set-up documentation according to :  5.3.1 Configuration  5.3.2 Drivers  5.3.3 Compatibility | | | | |
| **TOTAL** | | | | **36 Hours** |