

RGPV (diploma wing) BHOPAL		OBE CURRICULUM FOR THE COURSE		FORMAT- 1	Sheet No
Branch	COMPUTER HARDWARE AND MAINTENANCE			Semester	FOURTH
Course Code		Course Name	PC Assembly & Maintenance		
Course Outcome 1	Student will be able to explain the Basics of computer assembly			(Hrs)	(Mark s)
Learning Outcome11	Able to to identify the parts of the machine			08	10
Contents	Elements of Computers, Cabinets & SMPS, Processors , Motherboard Expansion Slots , add-on cards, data cables and power cables , Connectors, headers I/O Ports,Serial, Parallel , USB , firmware				
Method of Assessment	END SEM THEORY (EXTERNAL)				
Learning Outcome 12	Able To explain the functions of the Memory devices			08	10
Contents	Primary Memory devices:- RAM, Static and Dynamic RAM,ROM,EPROM,EEPROM, Secondary memory:- Hard disk Drive, Floppy Drive, Flash Device, CD/ DVD drive				
Method of Assessment	END SEM THEORY (EXTERNAL)				
Learning Outcome13	Able To explain the input output devices			06	10
Contents	Input devices:-Key Boards, Mouse, Microphone, Web cameras, Scanner & Bar code reader MICR. Output devices: Monitor, Projector, Printer, Plotter, and Speakers.				
Method of Assessment	Question Paper–Internal Assignment- Progressive theory component				
Course Outcome 2	Able to do the installation of the OPERATING SYSTEM				
Learning Outcome21	To explain the basic steps of configuring the OS			07	10
Contents	Introduction to Basic Input output system (BIOS) ,BIOS configurations, Entering in to the BIOS, Selecting the BOOT devices priority, BIOS Security.				
Method of Assessment	Question Paper–Internal Assignment- Progressive (theory component)				
Learning Outcome22	TO explain hard disk partition			06	10
Contents	Analyze partition requirements for Different applications, Hard disk partitioning.				
Method of Assessment	END SEM THEORY (EXTERNAL)				
Learning Outcome23	To install WINDOWS AND LINUX			07	10

Contents	Types of different file systems for WINDOWS and LINUX Installation of WINDOWS and Linux OS.		
Method of Assessment	INTERNAL assessment -PRACTICAL		
Learning Outcome24	To perform CMOS setup BIOS setup	06	10
Contents	Installation of CMOS utility setup, Installation of SMPS,		
Method of Assessment	INTERNAL assessment -PRACTICAL		
Course Outcome 3	Able to perform software installations		
Learning Outcome31	Able to handle the control panel	08	10
Contents	Basics of Control Panel, Device Manager and system service		
Method of Assessment	END SEM THEORY (EXTERNAL)		
Learning Outcome32	Able to configure the peripherals	07	10
Contents	Configuration of peripherals: Printers, Scanners, Web camera mouse , keyboard, Monitor.		
Method of Assessment	TEST-I (INTERNALPRACTICAL)		
Learning Outcome33	Able to install and uninstall software	07	10
Contents	Installation & Un installation of various Application Software and utilities software		
Method of Assessment	EXTERNAL END-SEM PRACTICAL EXAM		
Course Outcome 4	Able to perform basic trouble shooting operations		
Learning Outcome41	Able to identify the errors	07	10
Contents	Power on self test (POST) Identification of error Codes, Hardware failure, operating system failure, device driver error.		
Method of Assessment	END SEM THEORY (EXTERNAL)		
Learning Outcome42	Able to identify plug and play devices and ports	08	10
Contents	Troubleshooting Plug & Play devices Serial Port signals, Troubleshooting serial ports, Troubleshooting video adapter.		
Method of Assessment	END SEM THEORY (EXTERNAL)		
Learning Outcome43	Able to identify BOOT failures	08	10
Contents	Troubleshooting Boot Failures Installing and Configuring Terminal Services Remote Desktop Connection		
Method of	EXTERNAL END-SEM PRACTICAL EXAM		

Assessment			
Course Outcome 5	Able to take up safety precautions		
Learning Outcome51	Able to handle backup to protect data	08	10
Contents	Types of Backup and its Need, Using Backup Utility, Scheduling Backups Restoring Data, Automated System Recovery (ASR)		
Method of Assessment	END SEM THEORY (EXTERNAL)		
Learning Outcome52	Able to install protective software	09	10
Contents	Introduction to Computer VIRUS, Malwares, Spammer, antivirus and anti malwares, Introduction to Firewall		
Method of Assessment	INTERNAL assessment -PRACTICAL		

Experiment list

1. Draw Layout & understand internal parts of Computers Desktop & Laptop.
2. Identify different types of Processors, Cables, Connectors used in Computer.
3. Identify different types of Drives & understand internal mechanism of the same (HDD, Optical drive, Zip, Pen, SCSI Drive).
4. Installation of SCSI Drive, Optical Drives (CDR, DVRW).
5. Draw layout & understand sections of Motherboards.
6. Safety measure during P.C. Assembling Plan and assemble a P.C.
7. Configuring important parameters of CMOS Setup utility, BIOS update.
8. Installation of Windows OS, Partitioning, Formatting.
9. Installation of LINUX Operating System.
10. Installation of Add On Cards Installation of Printers & Cameras
11. Installation of Application Software T