#### **GANPAT UNIVERSITY FACULTY OF ENGINEERING AND TECHNOLOGY (DIPLOMA PROGRAMMES)** Branch/Spec. | Computer Engineering / Information Programme Diploma Engineering Technology Semester Version 1.0.0.0 Effective from Academic Year Effective for the batch Admitted in 2018-19 June 2018 1ES107 Subject code **Subject Name Computer Workshop** Teaching scheme Examination scheme (Marks) (Per week) Lecture(DT) Practical(Lab.) Total CE SEE Total Р L TU TW Credit 0 0 2 0 2 Theory 00 00 00 Hours 0 0 4 0 4 Practical 60 40 100

# Re-requisites:

### None

# Learning Outcome:

The theory should be taught and practical should be carried out in such a manner that students are able to acquire different learning out comes in cognitive, psychomotor and affective domain to demonstrate following course outcomes.

- Student can be able to identified basic computer hardware parts.
- Student can be able to install operating system and applications.
- Student can learn how to remain safe on Internet.

Practical syllabus		
Unit	Content	Hrs
1	Introduction Computer System Definition, History, Hardware, Software, Firmware, Computer Block Diagram	6
2	Computer Hardware Basic Parts of Computer: Input, Output, Storage, Processing, SMPS	12
3	Computer Software  Definition: Code, Program, Software, Types of Software	8
4	Introduction to Operating System  Definition, Importance of Operating System, Types of Operating System, Computer and Mobile operating system, Files, Directory, Booting, Booting Process, Installation of Some Operating System (Windows Xp. Windows 7, Windows 10, Ubuntu), Make a system level changes with Control Panel, Registry, Updating Operating system, Backup and Restore, Component of Desktop, Installation of Different software like Office, Antivirus etc, Browser etc, Scanning of System for Virus,	12
5	Networking Definition, Types of Network, Topology, Making small network, Access system remotely with Remote desktop and Team Viewer.	10
6	Internet Introduction, Web Browser, Choosing a Password: Bad Passwords, Good Passwords, creating an email id, Web-based E-mail Programs, E-mail through a specialist program (Outlook, Thunderbird), Google Drive, Malicious Software, Phishing, Piracy, Stay safe in Social Media	12

# Practical content

- 1. Study about Computer Hardware, Software and Firmware.
- 2. Study about Computer Block Diagram and it's Working.
- 3. Study and demonstrate the Input devices.
- 4. Study and demonstrate the Output devices.
- 5. Study and demonstrate the Processor.

- 6. Study and Demonstrate the SMPS.
- 7. Study about code, Program and software.
- 8. Study about Types of software.
- 9. Research at least 8 operating system and give advantages and disadvantages of them.
- 10. Installation of windows 7 operating system.
- 11. Installation of windows 8 operating system.
- 12. Installation of Ubuntu Operating system.
- 13. Tweaking operating system with control panel and Registry.
- 14. Perform backup and restore.
- 15. Installation of applications like Office, Browser.
- 16. Scanning the System for Virus.
- 17. Making a small LAN in Laboratory.
- 18. Access system Remotely with Remote desktop and Team viewer.
- 19. Demonstrate how to create an email id.
- 20. Study about Google Drive.
- 21. Sharing document with Google Drive.
- 22. Creating the form in Drive.
- 23. Assembling of PC

# Text Book

- 1 Computer Fundamentals, Architecture & Organisation by B.Ram (New Age International)
- The Complete PC Upgrade & Maintenance Lab Manual by Richard Mansfield, Evangelos Petroutsos (SYBEX)

# Web References:

Contain should be refer on the internet

https://en.wikibooks.org/wiki/Computers\_for\_Beginners

https://lifehacker.com/5826509/how-to-build-a-computer-from-scratch-lesson-1-hardware-basics

https://www.gcflearnfree.org/computerbasics/understanding-operating-systems/1/

https://carleton.ca/its/2016/social-media-safety/