IBM PERSONAL COMPUTER ARCHITECTURE & HARDWARE TROUBLESHOOTING

Objective: *To teach students about the internal architecture of IBM Personal Computer and various parts of it and give some knowledge in PC troubleshooting & maintenance.*

UNIT-I

Fundamentals of PC technology – Signaling – CPU family & operation – CPU trouble shooting – details of RAM.

UNIT-II

Motherboards – Power supply, Cooling and Protection.

UNIT-III

Data storage interfaces : Mass storage, Magnetic storage, Optical Storage.

UNIT-IV

I/O ports and Devices – Keyboards and pointing devices- Video sub-system – Audio subsystem.

UNIT-V

Modem and Communication – Networking – Printers – Troubleshooting tools and techniques – Basic data recovery & disaster recovery.

TEXT BOOK:

1. **Craig Zacker, John Rourke ,** PC hardware – The Complete Reference, Tata McGrawHill, 2001 (ISBN 0-07-043606-1) **[Unit-1 :(**Chapters 1,2,3); **Unit-2** : (Chapters 4,5); **Unit-3 (**Chapters 6,7,8); **Unit-4 (**Chapters 9,10,11, 12) ; **Unit-5 (**Chapters 13,14,15,17,18)]

REFERENCE BOOK:

1. **Govindarajulu. B,** IBM PC and clones : Hardware, Trouble shooting and Maintenance. Second edition, Tata-McGraw Hill, (ISBN 0-07-048286-1).
2. **Rosch. Winn L.**, Hardware bible, Sixth edition, Que/Techmedia publishers, 2003 (ISBN 81-7635-696-4).