INDIRA TECHNICAL INSTITUTE EDUCATION SOCIETY NASHIK

CERTIFICATE COURSE
COMPUTER MAINTENANCE [CM]

EXAM SCHEME: THEORY PAPER 100 MARKS – 3 HRS.
PRACTICAL   100 MARKS – 2 HRS.

[CM / DCHES – II /DCNES – II]

THEORY SYLLABUS

1) IBM PC – SYSTEM
- a) Block diagram of PC_ System. Different Input and Output devises.
- b) Physical layout of Mother board (Socket-7, Slot-1 and Dual)
- c) Different CPU (P-I, P-II, P-III and P-IV) advantages and disadvantages.
- d) Study of RAM used in PC.
- e) Different connectors, Cables and Sockets use in system.
- f) Study of C-MOS (Award/AMI bios)

2) F.D.D. & H.D.D.
- a) Study of FDD and HDD drive (Types Capacity, Size, etc.)
- b) Physical installation on FDD and HDD.
- c) Jumper Setting of HDD, Twisted cable of FDD.
- d) Formatting of Floppy disk.
- e) Partitioning and formatting of Hard disk.
- f) Study of different Interface (IDE, ATA, WATA, ATAPI, etc.)

3) MONITOR (VIDEO DISPLAY UNIT)
- a) Study of different video display (monitor/LCD)
- b) Block diagram of mono VGA monitor/ Colour VGA monitor.
- c) Study of different display adopter cards.
- d) Study of Resolution and its setting.
- e) Installation of Display adopter.

4) SYSTEM SOFTWARE & DIAGNOSTIC TOOLS
- a) Installation of Window. (Win 95/98)
- b) Study of Internal and External DOS Commands (Dir, Drive select, Check disk, CD, MD, RD, Copy, Fdisk, Format, Disk copy, Scandisk, Ver., Time, Date, etc.)
- c) Study of Viruses and antidotes : Norton, PC-Cline, etc.
- d) Study of Window (Control Panel, System Tools, Device manager, Display properties)
- e) Introduction for use of Advances diagnostics (DM, Partition Magic, Defragmentation, etc.)
- f) Study of Internet (To open E-mail account, Send and receive the E-mail)

5) CD-R/W & MODEM

- a) Study of CD-ROM and installation under DOS.
- b) Installation of CD-W under windows.
- c) Study of Modem (Internal and External).
- d) Installation of Modem.

e)   Inter connection of CD-R/W, DVD, External Modem and PC- System.
f)   Installation of DVD.

6) DIFFERENT ADON CARDS   (Sound, TV Tuner, Network, DVD, Web. camera, etc.)
a)   Installation of Sound card drivers.
b)   Installation of TV Tuner card.
c)   Installation of Network Adopter.
d)   Installation of Web Camera.

7) PRINTER
a)   Types of Printer (DOT matrix, Inject, Laser Printer).
b)   Interconnection of PC and Printer.
c)   Installation of Printer in Window and DOS.
d)   Study of Printer sharing switch.

8) SCANNER
a)   Types of scanner.
b)   Study of Block diagram of scanner.
c)   Study of Installation of scanner

9) DIGNOSTIC
a)   Preventive Maintenance.   b)   Booting Problems.   c) FDD/HDD Problems.
d)   Keyboard / Mouse Problems e)   Printer Problems.

GUIDELINES FOR QUESTION PAPER SETTERS - CM / DCNES – II / DCHES – II

	Marks
Q.No.1 A) Fill in the blanks.	(05)
B) Match the following.	(05)
C) Write short answer.(answers should not be more than 2 lines)	(10)
Q.No.2 A) Topic 1.	(08)
B) Topic 2.	(08)
Q.No.3 A) Topic 3.	(08)
B) Topic 5.	(08)
Q.No.4 A) Topic 4a, b & c.	(08)
B) Topic 4d, e & f.	(08)
Q.No.5 A) Topic 6.	(08)
B) Topic 7 & 8.	(08)
Q.No.6 Debugging in pc system with peripheral on Topic No. 9.	
A) Topic No. 9.	(08)
B) Topic No. 9.	(08)

PRACTICAL EXAMINATION FOR: - CM / DCHES – II / DCNES – II

Each candidate will have to locate three faults. Two faults in system and performing one Experiment on Installation of Software/Hardware or Formatting HDD/FDD. Each faults & Installation/formatting will give 8 Marks & 12 Marks each for writing procedure.

Journal / Term work   20 Marks.
(Journal should contain minimum **30** recommended experiments)
Oral examination   20 Marks.

RECOMMENDED BOOKS FOR REFERENCE

Modern All About S.M.P.S.   Lotia / Nair

Intel microcomputer data book.
PC Made simple   Subhash Mehta
PC Upgrading & Maintenance   BPB
IBM PC Clones (II edition)   Govindrajalu
PC Magazine
Modern All About Floppy drive   Lotia / Nair
Modern All About Monitors   Lotia / Nair
Digital electronics practical devices.   Jain & Anand.
Digital principles and application   Malvino & Leach.
Intel microcomputer data book.

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