GOVERNMENT OF TAMILNADU
DIRECTORATE OF TECHNICAL EDUCATION,CHENNAI
STATE PROJECT COORDINATION UNIT
(Established under Canada India Institutional Cooperation Project)

CURRICULUM

Course Name	Printer Servicing
Course Code	**CSE/2020/002**
Course Duration	50 Hours
Minimum Eligibility Criteria and Pre-requisites(if any)	ITI/10th/+2/Diploma/Graduates NIL
Course Objectives	This course facilitates the necessary knowledge of working principle of printers, identification of problems and troubleshoot the problems of printers.
Course Outcomes	The students will learn the printer fundamentals, install and to configure the printers.
Expected Job Roles	Printer Servicing

TEACHING AND SCHEME OF EXAMINATION					
Course Code	Course Name	Hours		Assessment Marks	Duration of Examination
				Min	Max	
CSE/2020/002	**Printer Servicing**	Theory	20	10	20	3 Hours
		Practical	30	40	80	
		Total	50	50	100	

CSE/2020/002 - PRINTER SERVICING

DETAILED SYLLABUS

UNIT NO	MODULES	NO.OF.HOURS THEORY
I	BASICS OF PRINTERS:	
	Printer introduction, types of printer:dot matrix, ink jet, laser printers, Printer Working principles. Printer Components and functions of Components.	04
II	PRINTER INSTALLATION IN VARIOUS OPERATING SYSTEM	
	Printer Installation in Windows OS, wireless printer installation in Windows OS, Printer installation in Ubantu, Boss Linux, Printer installation in Ubantu using command prompt.	04
III	CONFIGURING PRINTERS IN NETWORK	
	Add a printer to the network group in Windows OS, Add a printer to the network group in Linux.	04
IV	PRINTER DRIVER	
	Update and remove drivers, Remove printer from system, Printer troubleshooting, default printer settings.	04
V	PRINTER HARDWARE PROBLEMS	
	Paper Jams and Ghost Jams,Printer Driver Problems,Printhead Cleaning, Replace the Cartridge / Low Ink Message, Slow Printer Speed, What Are the Signs That a Printer Drum Needs to Be Replaced?, Blurry Prints, Black Spots, Poor Print Quality, Other Signs and Symptoms.	04
	Total Theory Hours	**20**
	Total Practical Hours	**30**
	Total Hours	**50**

PRACTICALS (30 HOURS)

1. Identification of Components for below printers

    a) Dot matrix b) Inkjet c) Laser

2. Laser printer installation in Windows OS.

3. Laser printer installation in Ubantu OS.

4. Laser printer installation in Ubantu using command prompt.

5. Add a printer to the network group in Windows OS platform.

6. Add a printer to the network group in Linux OS platform.

7. Update and remove printer drivers.

8. Uninstall or Remove printer from the computer.

9. Set your printer to default printer.

10. To solve the paper Jams problem.

11. To solve the printer drivers problems.

12. Head cleaning.

13. Identify cartridge level and replace the cartridge .

14. Identify the drum problem and replace the drum.

15. To solve the following problems

    a) Black dots

    b) Blurry print

    c) Poor Print Quality.

HARDWARE REQUIREMENT

S.NO	LIST OF TOOLS /EQUIPMENTS
1	Desktop /Laptop computers
2	Printers and its accessories Dot Matrix printers Inkjet Printers Laserjet Printers

SOFTWARE REQUIREMENT

S.NO	LIST OF SOFTWARE
1	Operating System
2	Printer Driver software

REFERENCE BOOKS

S.NO	NAME OF THE BOOK	AUTHOR	PUBLISHER
1.	Easy Laser Printer Maintenance and Repair December 1994	Stephen J Bigelow	McGraw-Hill Professional
2.	oubleshooting and repairing Computer Printers	Stephen J Bigelow	McGraw-Hill Professional

ASSESSMENT AND CERTIFICATION

S.No	Criteria for assessment
1.	A trainee will be assessed based on the performance in End Examination for Theory and Practical conducted internally in the Project Polytechnic College for a duration of 3 hours
2.	A trainee must have 75% of attendance to appear for End examination in Theory and Practical.
3.	The assessment for theory part will be based on the marks scored in the end examination on the knowledge bank of questions (1 word/objective type questions)
4.	The assessment for practical part will be based on the marks scored in the end examination conducted by the Project Polytechnic and assessed by the Examiners approved by Strategic Plan Implementation Committee (SPIC) of the project polytechnic.
5.	The criteria for successful completion of training is every trainee should score 50% of marks in theory and practical examination.
6.	On successful completion of training , Certificate will be issued to the participants by the Directorate of Technical Education through the Project Polytechnic.

END EXAMINATION

ALLOCATION OF MARKS

S.No	Description	Max.Marks
1.	Theory Examination	20
2.	Practical Examination	
	a)Procedure	10
	b)Execution	30
	c)Output	20
	d)Record	20
	Total Marks	**100**

CSE/2020/002 - PRINTER SERVICING

(Maximum Marks : 20)

(N.B: Answer any **twenty** questions)   **20 x 1 = 20 Marks**

1. What is a printer?

2. ----------- is an example of character printer.

3. What is CPS rate?

4. Expand : dpi

5. List the printer components.

6. What is an impact printer?

7. What are the advantages of laser printer?

8. What is the use of ribbon in a printer?

9. What is the use of solenoid in a printer?

10. What are the types of roller in printer?

11. What is thermal printer?

12. What do you mean by monochrome printer?

13. What is another name for a dot-matrix printer?

14. What is line printer?

15. What is the multi function printer?

16. What is the use of buffer in printer?

17. What is the role of print head?

18. Who invented laser printer?

19. What are wireless printers?

20. Mention some of the uses of printer in our daily life.

21. What is meant by 'ppm' in measuring a printer speed?

22. What is paper jams in printer?

23. What is the basic concept used in inkjet printer?

24. What are printer driver problems?

25. List some of the printer hardware problems.