B. Voc. Courses

Revised curriculum and Syllabi for All other UG/PG/Diploma/B.Voc Courses - 2018
Department of Computer Science and Applications, GRI (DU).

THE GANDHIGRAM RURAL INSTITUTE

(Deemed to be University)

DEPARTMENT OF COMPUTER SCIENCE AND APPLICATIONS

Computer Courses for All Other B. Voc. Courses

S. No	Dept	Course name	Course code	Credits	Lecture hours	Lab hours/ week	Theory		Practical		Total
							CFA	ESE	CFA	ESE	
SEMESTER –I/II/III											
1	**B.VOC (FP)**	COMPUTER FUNDAMENTALS AND OFFICE AUTOMATION	**18CSAU01A1/ 18CSAU02A1/ 18CSAU03A1**	3+1	3	2	24/30	36/40	24/30	16/0	100
2	**B.VOC (FTQE)**			3+1	3	2	24/30	36/40	24/30	16/0	100
3	**B.VOC (MMPT)**			3+1	3	2	24/20	36/60	24/20	16/0	100
4	**B.VOC (DPT)**			3+1	3	2	24/20	36/60	24/20	16/0	100
5	**B.VOC (FEOM)**			3+1	3	2	24/20	36/60	24/20	16/0	100
6	**B.VOC (RE)**			3+1	3	2	24/20	36/60	24/20	16/0	100
7	**B.VOC (OA)**			3+1	3	2	24/20	36/60	24/20	16/0	100
SEMESTER – III/IV/V											
1	**B.VOC (FP)**	INTERNET AND WEB TECHNOLOGY	**18CSAU04A2/ 18CSAU04N2/**	3+1	3	2	24/20	36/60	24/20	16/0	100
2	**B.VOC (FTQE)**			3+1	3	2	24/20	36/60	24/20	16/0	100
3	**B.VOC(MMPT)**			3+1	3	2	24/20	36/60	24/20	16/0	100
4	**B.VOC (DPT)**			3+1	3	2	24/20	36/60	24/20	16/0	100
5	**B.VOC(FEOM)**			3+1	3	2	24/20	36/60	24/20	16/0	100
6	**B.VOC (RE)**			3+1	3	2	24/20	36/60	24/20	16/0	100
7	**B.VOC (OA)**			3+1	3	2	24/20	36/60	24/20	16/0	100

COMPUTER FUNDAMENTALS AND OFFICE AUTOMATION- (B. Voc. Programme)										
Course Code	**Department**	**Semester**	**Credits**	**Hours**		**Theory**		**Practical**		**Total**
				T	**P**	**Mid-Sem.**	**ESE**	**Mid-Sem.**	**ESE**	
18CSAU02A1	B. Voc. (FEOM)	II	3+1 / 4	2	2	24 / 20	36 / 60	24 / 20	16 / 0	100
18CSAU03C1/ 18CSAU03A1	B. Voc. (DPT)	III	3+1 / 4	2	2	24 / 20	36 / 60	24 / 20	16 / 0	100
18CSAU01A1	B. Voc. (MMPT)	I	3+1 / 4	2	2	24 / 20	36 / 60	24 / 20	16 / 0	100
18CSAU02A1	B. Voc. (OA)	II	3+1 / 4	2	2	24 / 20	36 / 60	24 / 20	16 / 0	100
18CSAU02A1	B. Voc. (FTQE)	II	3+1 / 4	2	2	24 / 30	36 / 40	24 / 30	16 / 0	100
18CSAU02A1	B. Voc. (FP)	II	3+1 / 4	2	2	24 / 30	36 / 40	24 / 30	16 / 0	100
18CSAU02A1	B. Voc. (RE)	II	3+1 / 4	2	2	24 / 20	36 / 60	24 / 20	16 / 0	100
Cognitive Level	**K-1** Recall the basic definitions and terminologies of computer. **K-2** Summarize the knowledge on software and hardware. **K-3** Prepare documents using Office Automation Packages.									
Course Objectives	**The Course aims to** • Introduce the concepts of computer basics and terminologies. • Identify hardware, software and operating system needed for personal computer. • Provide an in-depth training in use of office automation packages.									

UNIT	CONTENT	No. of Hours
I	**Computer concepts** • Definition of a computer –Origin of Computer- Characteristics • Computer terminologies • Anatomy of a computer - generations of computers • Types of computers- types of operating system • Types of programming languages • Assembler - translator • Compiler – cross compiler • Discussion on recent trends and technology	11
II	**Hardware devices** • Input devices –Keyboard-mouse-pointing devices • Output devices - printers- plotters- monitors • Storage devices - Floppy – Compact disk – external Hard disk – Pen drives – Flash Drive • Source data entry devices – Digital camera – Scanners – Voice Recognition System – fax machine - microphone • Surprise test/ slip test	8
III	**MS-Word** • MS-Word: Introduction - features • Document creation - Document editing: cursor movements • Selecting text - copying text - moving text • Finding and replacing text - Spelling and Grammar • Page setup - Table creation. • Mail Merge • Test on MS word shortcut keys Lab Exercises: Preparation of Bio Data , Agenda, Minutes, Circular Letters, Letters to Various Sectors, Mail Merge, Designing a News Paper	8
IV	**MS-Excel** • MS-Excel : Introduction - Advantages & applications • Organization of workbook - Editing a worksheet - • Range - Formatting worksheet - • Chart: creation - changing type - Print options • Built-in functions. • Test on Excel Functions Lab Exercises: Preparation of Payrolls, Invoice, Stock Maintenance, Charts for Business Analysis, Use of Financial Functions.	7
V	**MS-Power Point** • MS-Power Point: Introduction - features – • Creating presentation - viewing - saving and close presentation • Changing Layout - Changing Designs - Slide transition • Adding animation effects • Inserting table, charts, pictures, clipart in presentation. • Checking the creativity of Students Lab Exercises: Preparation of The Advertisement, Animation, Transition Effects, Display Board, Audio & Video Presentation	8
Total Contact Hours		**42**

References: 1. Fundamentals of Information Technology, S.K.Bansal, A.P.H. Publishing company, New Delhi, 2002. 2. 2007 Microsoft Office System step by step, Joyce Cox, Joan Preppernau, Steve Lambert and Curtis Frye, 2007.	
Course Outcomes	**On completion of the course, students should be able to** **CO1:** Recall the fundamental concept of computer with present level of knowledge of the students. **CO2:** Recognize the purpose of operating systems, programming languages and basic peripheral devices. **CO3:** Create document in MS-Word. **CO4:** Perform the statistical calculations and draw chart using MS-Excel. **CO5:** Design presentation & using MS-PowerPoint.

INTERNET AND WEB TECHNOLOGY										
Course Code	**Department**	**Semester**	**Credits**	**Hours**		**Theory**		**Practical**		**Total**
				T	**P**	**Mid- Sem.**	**ESE**	**Mid- Sem.**	**ESE**	
18CSAU04A2/ 18CSAU04D1	B. Voc. (FP)	III	2+2	3	2	24 / 20	36 / 60	24 / 20	16 / 0	100
18CSAU04A2/ 18CSAU04N2	B.VOC(FEOM)	IV	3+2	3	2	24	36	24	16	100
18CSAU04D1/ 18CSAU04A2	B. Voc. (FTQE)	II	2+2	3	2	24 / 20	36 / 60	24 / 20	16 / 0	100
18CSAU04A2/ 18CSAU04N2	B. Voc. (RE)	II	3	3	0	24 / 40	36 / 60	24 / 0	16 / 0	100
Cognitive Level	K-1 Define network types, topologies and structural arrangements. K-2 Describe various graphics & animation effects and techniques using Multimedia tools. K-3 Practise to develop a webpage by using HTML. K-4 Outline the privacy, security issues and social impacts of web technology									
Course Objectives	**The Course aims to** • Enable the students with the knowledge of Network, Internet and Its Applications • Make the students familiar with multimedia tools. • Gain the skills and project-based experience needed for entry into web application and development career.									

UNIT	CONTENT	No. of Hours
I	**Information Technology** • Information Technology Introduction • Information systems and its components • Types of information systems • IT in business and industries • Application areas of IT – Education, Training, CAD&CAM • Application areas of IT- Entertainment, arts and science • GPS (Global positioning System)- Working method and its applications	9
II	**Internet and Communication Technology** • Internet basics and Internet terminologies • Network basics and its terminologies introduction • Advantages of networks • Types of networks – WAN structure and its working principle • Network topologies – Bus, Star, Ring, Tree and Mesh • Communication channels - twisted pair, co-axial and fibre optics • Internetworking devices - bridges, routers and gateways.	10
III	**Introduction to HTML** • History of HTML- Generations- Anchor Tag • Hyper Links • Head and body Sections: Header Section-Title-Prologue • Designing the Body Section: Aligning, Horizontal Rule, Paragraph, Tab Setting and Images and Pictures • Ordered List, Unordered List and Nested Lists • Table creation in HTML • Example Programs	10
IV	**Multimedia** • Multimedia basics • Paint and draw applications of multimedia basics and its applications • Various graphics effects and techniques and its variations • Sound and music and video tool of multimedia, various compression techniques • Multimedia authoring tools types • Various devices used in delivering multimedia • Role of multimedia in web designing	9
V	**Personal, social and ethical issues** • Personal, social and ethical issues- computers and operator health • Viruses – worms – malware-anti-virus • computer crime basics, types of crimes, security techniques • Cryptography – importance, techniques	5
	Lab Exercises:	

	1. HTML heading styles 2. Web pages Designing using Text formatting Tags 3. Web designing using Order list Un order list Definition list 4. Table tags in HTML 5. Link web pages 6. Designing photo gallery web page using image Tag 7. Embedding video in a web page 8. Image editing using Photoshop 9. Creating simple animation using Flash - 8 10. Creating gif file.	
Total Contact Hours		**43**
Course Outcomes	**On completion of the course, students should be able to** **CO1:** Understand the Fundamentals of Information Technology, Information Systems and Its Applications **CO2:** Apply various networks topologies and its applications **CO3:** Familiar with internet technologies **CO4:** Gather clear idea on multimedia tools **CO5:** Know the ethical and social problems of information technology	