GOVERNMENT POLYTECHNIC, NAGPUR.
(An Autonomous Institute of Govt. of Maharashtra)

COURSE CURRICULUM

PROGRAMME   **: DIPLOMA IN COMPUTER ENGG.**

LEVEL NAME   **: PROFESSIONAL COURSES**

COURSE CODE   **: CM410E**

COURSE TITLE   **: E-COMMERCE**

PREREQUISITE   **: NIL**

TEACHING SCHEME : TH: 03; TU: 00; PR: 00 (CLOCK HRs.)

TOTAL CREDITS   **: 03** (1 TH/TU CREDIT = 1 CLOCK HR., 2 PR CREDIT = 1 CLOCK HR.)

TH.TEE   **: 03 HRs**

PR.   **: NIL**

PT.   **: 01 HRs**

❖ **RATIONALE:-**

       In the Era of Web Technology it is essential for every Diploma Engineering to have the knowledge of E-Commerce. This course covers from basics of Internet to establishing your business on Internet. This course also covers security system for business over Internet and business in India.

.

❖ **COURSE OUTCOMES:-**

After completing this course students will be able to–

1. Identify the requirements to carry out business over internet.
2. Identify difference between Traditional Business and Business on the Internet.
3. Apply various security systems needed for safely carrying out the business.
4. Analyse different methods to carry E- commerce business.
5. Select proper method to maintain Website and Set Business on Internet.
6. Design and implement an E-commerce application with a shopping cart.

❖ **COURSE DETAILS:**

A.THEORY:

Units	Specific Learning Outcomes (Cognitive Domain)	Topics and subtopics	Hrs.
1.Introduction to E-Commerce	1. Define E-Commerce 2. State different types of E-Commerce 3. State different Perspectives of E-Commerce 4. Describe Conceptual framework of E Commerce 5. Describe entities involved in Business operation.	1.1 Definition of E-Commerce 1.2 Types of E-Commerce-B2B,B2C, C2B, C2C 1.3 Business operation-employee, Customers, channel partner, suppliers, service provider, regulatory authority 1.4 Perspectives of E-Commerce 1.5 Conceptual framework of E-Commerce 1.6 Information Management -An Ecommerce Set up 1.7 Definition of M-Commerce	**4**
2.Emergence of E-Commerce	1. Define EDI 2. Describe E-commerce on private network 3. State Applications and benefits of EDI 4. Describe Electronic payment system	2.1 E-commerce on private network 2.2 EDI(Electronic Data Interchange) :Definition of EDI,EDI in action, Basics, EDI standards, financial 2.3 EDI, Applications of EDI, Benefits of EDI, Future of EDI 2.4 Electronic payment system: electronic funds transfer, credit card payment 2.5 E-commerce on the web: internet-the new media, open standards	**4**
3. Working of E-Commerce	1. Compare public and private information 2. Define Firewalls & its types 3. Define Encryption 4. Differentiate between Secret-key and Public-key encryption 5. Describe Digital signatures & digital certificate with diagram 6. Define Cybercash and Smart cards 7. State uses of ATM machine 8. Apply various security	3.1 Public Information, private information 3.2 Firewalls, tunnels 3.3 Encryption: Secret-key encryption, Public-key encryption, 3.4 Digital signatures, digital certificate, SSL(secure socket layer) 3.5 Working of SSL: credit card transaction, secure hypertext transfer protocol(SHTTP),Electronic payment system, secure electronic transaction(SET) 3.6 Article numbering, bar coding	**12**

	systems needed for carrying out e-business	3.7 Cybercash 3.8 Smart cards 3.9 ATM Machine, Uses of ATM machine	
4. Setting Up Business On The Internet	1. List out Business objective while establishing business on Internet. 2. Describe integration with operational databases 3. Compare static and dynamic website 4. Describe the creation of business model and strategy 5. Analyse the different methods to carry e-commerce business.	4.1 Business on Internet-Web development and maintenance, static webpages, integration with operational databases, dynamic web site, customer transactions, transaction processing/payment, merchant account, transaction processing, 4.2 Establishing business objective investment, web hosting and administration 4.3 Web designing and development, online transactions, marketing and branding, training and development ,management and control, marketing, market share 4.4 Understanding legal and security issues 4.5 Creating business model and strategy	**6**
5.Marketing The Web Site	1. List out traditional methods of promotion 2. Describe online promotion on the website 3. Describe listing on search engines during promotion 4. Describe the points regarding building trust during promotion. 5. Select proper method to maintain website and set business on internet.	5.1 Promotion: online promotion on the website, listing on search engines, banners, link exchange programme, affiliate programme, directory listing 5.2 traditional methods of promotion 5.3 build ingtrust: branding, navigation, presentation, fulfilment, logos of security 5.4 building loyalty	**8**
6.Issues Under Consideration	1. Compare Issues perceived by consumers, Business and Industries 2. Define the term: Privacy, confidential, security, redressal. 3. Describe security issues of network perceived by business. 4. Illustrate the various	6.1 Issues perceived by consumers: Privacy and confidential, security, redressal 6.2 Issues perceived by Business: integration of existing systems, human resource availability and development, security of the networks	**14**

	issues perceived by consumer, Business and Industries.	6.3 Issues perceived by Industries: management of change, multi-cultural implications 6.4 Issues perceived by nations and international community: legal contracts, insurance, multiple currencies, taxation in cyberspace, trademark, copyright, cyber crime 6.5 Introduction to E-Governance	
		Total Hrs.	**48**

❖ **LIST OF PRACTICALS/LABORATORY EXPERIENCES/ASSIGNMENTS:**

Practical	Specific Learning Outcomes (Psychomotor Domain)	Units	Hrs.
	NIL		
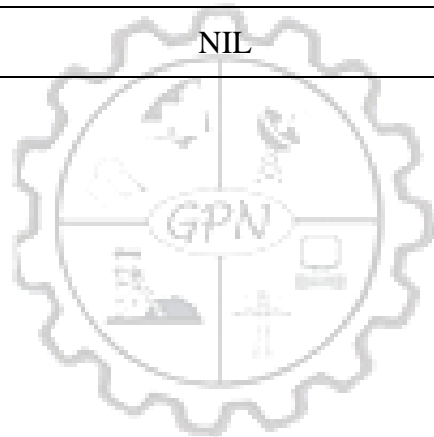
❖ **SPECIFICATION TABLE FOR THEORY PAPER:**

Unit No.	Units	Levels from Cognition Process Dimension			Total Marks
		R	**U**	**A**	
01	Introduction To E-Commerce	02(00)	04(04)	00(00)	**06(04)**
02	Emergence Of E-Commerce	02(00)	08(04)	00(00)	**10(04)**
03	Working Of E-Commerce	02(02)	04(04)	06(00)	**12(06)**
04	Setting Up Business On The Internet	02(00)	08(04)	12(06)	**22(10)**
05	Marketing The Web Site	00(02)	08(04)	06(06)	**14(12)**
06	Issues Under Consideration	02(00)	04(04)	00(00)	**06(04)**
	Total	**10(04)**	**36(24)**	**24 (12)**	**70 (40)**

R – Remember   U – Understand   A – Analyze / Apply

❖ **QUESTION PAPER PROFILE FOR THEORY PAPER:**

Q. No	Bit 1			Bit 2			Bit 3			Bit 4			Bit 5			Bit 6			option
	T	**L**	**M**	**T**	**L**	**M**	**T**	**L**	**M**	**T**	**L**	**M**	**T**	**L**	**M**	**T**	**L**	**M**	
01	1	R	2	2	R	2	3	R	2	4	R	2	6	R	2	3	R	2	**5/7**
	5	R	2																
02	1	U	4	2	U	4	2	U	4	2	U	4	1	U	4				**3/5**
03	3	U	4	4	U	4	4	U	4	3	U	4	4	U	4				**3/5**
04	5	U	4	5	U	4	6	U	4	5	U	4	6	U	4				**3/5**
05	3	A	6	4	A	6	4	A	6										**2/3**
06	4	A	6	5	A	6	5	A	6										**2/3**

T= Unit/Topic Number   L= Level of Question   M= Marks

R-Remember   U-Understand   A-Analyze/ Apply

❖ **ASSESSMENT AND EVALUATION SCHEME:**

		What	**To Whom**	**Frequency**	**Max Marks**	**Min Marks**	**Evidence Collected**	**Course Outcomes**
Direct Assessment Theory	**CA (Continuous Assessment)**	Progressive Test (PT)	Students	Two PT (average of two tests will be computed)	20	--	Test Answer Sheets	1, 2, 3, 4,5,6
		Assignments		Continuous	10	--	Assignment Book / Sheet	1, 2, 3, 4,5,6
	TEE (Term End Examination)	End Exam	Students	End Of the Course	**70**	**28**	Theory Answer Sheets	1, 2, 3, 4,5,6
				Total	**100**	**40**		
Direct Assessment Practical	**CA (Continuous Assessment)**	Skill Assessment	Students	Continuous	--	--	--	--
		Journal Writing		Continuous	--	--	--	--
				TOTAL	**--**	**--**	--	--
	TEE (Term End Examination)	End Exam	Students	End Of the Course	**--**	**--**	--	--
Indirect Assessment		Student Feedback on course	Students	After First Progressive Test	Student Feedback Form			1, 2, 3, 4,5,6
		End Of Course		End Of The Course	Questionnaires			

❖ **SCHEME OF PRACTICAL EVALUATION:**

S.N.	Description	Max. Marks
	NIL	

❖ **MAPPING COURSE OUTCOMES WITH PROGRAM OUTCOMES:**

Course Outcomes	Program Outcomes (POs)										PSOs	
	1	2	3	4	5	6	7	8	9	10	1	2
1	-	3	-	-	-	-	-	-	-	3	-	3
2	-	3	-	-	-	-	-	-	-	3	-	3
3	-	3	-	-	-	-	-	-	-	3	-	3
4	-	3	-	-	-	-	-	3	3	3	2	3
5	-	3	-	-	-	-	-	3	3	3	2	3
6	-	3	-	-	-	-	-	3	3	3	2	3

1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

❖ **REFERENCE & TEXT BOOKS:**

S.N.	Title	Author, Publisher, Edition and Year Of publication	ISBN Number
1.	Business on the Net : Ecommerce	Kamlesh Agrawala, Amit Lal,macmillan,1st Edition, 2005	10:0333934342
2.	Instant E-commerce	Kate J Chase, Bpb Publications,1st Edition, 2001	10:8176564141
3.	E-commerce	Kamlesh K Bajaj, Tata McGraw-Hill, 2nd Edition,2005	10:0074635409

❖ **E-REFERENCES:**

- http://www.ecommercebytes.com/cab/abu/y212/m01/abu0302/s02 , assessed on 14th july2016
- https://www.youtube.com/watch?v=9UWnLMG5cII, assessed on 14th july 2016

❖ **LIST OF EXPERTS & TEACHERS WHO CONTRIBUTED FOR THIS CURRICULUM:**

S.N.	Name	Designation	Institute / Industry
1.	Mr.S.P. Lambhade	Head of Computer Engg.	Government Polytechnic, Nagpur
2.	Dr.A.R.Mahajan	Head of Information Technology	Government Polytechnic, Nagpur
3.	Ms.I.G.Lokhande	Lecturer in Information Technology	Government Polytechnic, Nagpur.

4.	Mr.R.L.Meshram	Lecturer in Information Technology	Government Polytechnic, Nagpur.
5.	Shri. Atul Upadhay	CEO	Vista computers, Ramnagar, Nagpur
6.	Shri. N. V Chaudhari	Asst. Professor (CSE)	DBACEO ,Wanadongri, Nagpur
7.	Shri. Manoj Jethawa	HOD, Computer Science	Shri Datta Meghe Polytechnic, Nagpur

_____   _____

(Member Secretary PBOS)   **(Chairman PBOS)**