### THIRD YEAR: INFORMATION TECHNOLOGY SCHEME OF INSTRUCTION AND EXAMINATION

(RC 2019-20)

#### SEMESTER - V

Course			eme ruct /We	ion	Scheme of Examination							
Code	tne Course	L	Т	Р	Duration			Mark	S		Credits	
		_	•		(Hrs)	Th	IA	TW*	Р	Total		
	Database									125		
	Management											
IT510	System	3			3	100	25				3	
	Theory of									125	3	
IT520	Computation	3			3	100	25				3	
IT531	Cloud Computing											
	Software Testing											
	& Quality											
IT532	Assurance											
	Digital Signal											
IT533	Processing	3										
IT534	Internet of Things				3	100	25			125	3	
	Computer											
IT541	Graphics											
	Statistical Models											
	for Information											
IT542	Science											
	Advanced											
	Computer											
IT543	Architecture											
IT544	Graph Theory	3			3	100	25			125	3	
	Database										2	
IT550	Application Lab			4				25	50	75		
	Modelling &										2	
IT560	Computing Lab			4				25	50	75		
**	Open Elective	3			3	100	25			125	3	

	Ethics &										2
HM009	Entrepreneurship	3			3	100	25			125	3
	<u>TOTAL</u>	<u>18</u>	<u>0</u>	<u>8</u>		600	150	50	100	900	22

<sup>\*</sup>Term Work marks are to be awarded through continuous evaluation

L	Т	Р	P O		TW	IA	
Lecture	Tutorial	Practical	Oral	Theory	Term Work	Internal Assessment	

<sup>\*\*</sup> Student will have to enter the course code that he/she takes as part of the open elective

## THIRD YEAR: INFORMATION TECHNOLOGY SCHEME OF INSTRUCTION AND EXAMINATION (RC 2019-20)

#### SEMESTER – VI

Course	Course Nomenclature of the Code Course			of ion ek	Scheme of Examination							
Code	Course	L	т	Р	Duration			Mark	S		Credits	
		_	'	F	(Hrs)	Th	IA	TW*	Р	Total		
	Principles of									125	3	
IT610	Compilers	3			3	100	25				5	
IT620	Web Technology	3			3	100	25			125	3	
	Natural Language											
IT631	Processing											
	Artificial Intelligence											
IT632	and Fuzzy Logic											
IT633	Distributed System											
	Queuing theory and											
IT634	modelling	3			3	100	25			125	3	
IT641	Java Programming											
	Open Source s/w											
IT642	development											
	Computer Forensics											
IT643	and Cyber Security											
IT644	E Commerce	3			3	100	25			125	3	
	Web Development										1	
IT650	Lab			4				25	50	75	2	
	Software										2	
IT660	Applications Lab			4				25	50	75	<u> </u>	
**	Open Elective	3			3	100	25			125	3	
	Technical English &										3	
HM002	Report Writing	3			3	100	25			125	<b>.</b>	
	TOTAL	<u>18</u>	<u>0</u>	<u>8</u>		600	150	50	100	900	22	

<sup>\*</sup>Term Work marks are to be awarded through continuous evaluation

<sup>\*\*</sup> Student will have to enter the course code that he/she takes as part of the open elective.

L	T	Р	0	Th	TW	IA	
Lecture	Tutorial	Practical	Oral	Theory	Term Work	Internal Assessment	

#### FOURTH YEAR: INFORMATION TECHNOLOGY

#### **SCHEME OF INSTRUCTION AND EXAMINATION**

(RC 2019-20)

#### SEMESTER - VII

Course	Nomenclature of the Course		Scheme of Instruction Hrs/Week		Scheme of Examination							
Code	the Course	L	Т	Р	Duration	Marks					Credits	
		-	<b>'</b>  '		(Hrs)	Th	IA	TW*	0	Total		
IT710	Image Processing	3			3	100	25			125	3	
	Professional											
	Elective V											
IT721	Data Analytics											
	Wireless Sensor											
IT722	Networks											
	Genetic											
IT723	Algorithms											
	Ad hoc and											
IT724	sensor networks	3			3	100	25			125	3	
	Advanced											
IT730	Computing Lab			4				25	50	75	2	
**	Open Elective III	3			3	100	25			125	3	
IT740	Internship			6				50	50	100	3	
IT750	Project Work -I			6				50	75	125	3	
	<u>TOTAL</u>	<u>9</u>	<u>0</u>	<u>16</u>		300	75	125	175	675	17	

<sup>\*</sup>Term Work marks are to be awarded through continuous evaluation

Abbrevia tion	Description
L	Lecture
Т	Tutorial
Р	Practical
0	Oral

<sup>\*\*</sup> Student will have to enter the course code that he/she takes as part of the open elective.

Th	Theory
TW	Term Work
IA	Internal Assessment

# Annexure -I INFORMATION TECHNOLOGY COURSE SCHEME OF INSTRUCTION AND EXAMINATION REVISED COURSE 2019-2020 SEMESTER – VIII

Cours e Code	Nomenclatur e of the Course	In	Scheme of Instructio n Hrs/Week		Duratio n (Hrs)	Scheme of Examination						
		L					Marks					Credit
			-	•		Th	IA	TW	0	ОС	Tota	s
								*		S	ı	
IT810	Cryptography	3	0	0	3	10	2	0	0		125	3
	and Network					0	5					
	Security											
IT821	Computer	3	0	0	3	10	2	0	0		125	3
	Vision					0	5					
IT822	Mobile											
	Computing											
IT823	Advanced											
	Data											
	Structures											
IT824	Social											
	Networking											
IT830	#Elective -	3	0	0		0	0	25#	0	75#	100	3
	NPTEL /											
	MOOC/											
	SWAYAM											
IT840	Project Work	0	0	18		0	0	200	20		400	9
	- Phase II								0			
	<u>TOTAL</u>	9	0	18		20	5	225	20	75	750	18
						0	0		0			

<sup>\*</sup> Term Work marks are to be awarded through continuous evaluation

# Students should mandatory undertake one NPTEL course of only 3 credits from the list of approved online courses of Goa University during their 5<sup>th</sup> semester to 7<sup>th</sup> semester.

#Online **Assignments** Score obtained will be considered/scaled accordingly for Term Work (TW) and **Proctored Exam** Score will be considered/scaled accordingly for Online Course Score (OCS) of NPTEL / MOOC / SWAYAM certification course. The score obtained shall be rounded to near higher integer.

Abbrevia tion	Description
L	Lecture
Т	Tutorial
Р	Practical
0	Oral
Th	Theory
TW	Term Work
IA	Internal Assessment
OCS	Online Course Score