#### PROGRAMME - DIPLOMA IN INFORMATION TECHNOLOGY

#### PROGRAMME STRUCTURE

#### SCHEME AT A GLANCE

Level	Name of Level	Total Number of Courses offered	Number of Courses to be completed	тн	TU	PR	Total Credits	Marks
Level-1	Foundation Courses	08	08 Compulsory	14	01	16	23	800
Level-2	Basic Technology Courses	09	09 Compulsory	26		24	38	1450
Level-3	Allied courses	05	03 (02 Compulsory +01 Electives)	05		04	07	200
Level-4	Applied Technology Courses	06	06 Compulsory	10	-	10	29	700
Level-5	Diversified Courses	14	06(02compulsary+04Electives)	16	-	14	23	850
TO	)TAL	42	27 Compulsory +05Electives 32	71	01	68	120	4000
Audit cour	rses	04	04	06		02	1	
Grand Tota	al	46	36	77	01	70	120	4000

#### Abbreviations:

TH: Theory, TU: Tutorial, PR: Practical.

# PROGRAMME - DIPLOMA IN INFORMATION TECHNOLOGY PROGRAMME STRUCTURE LEVEL - 1 FOUNDATION COURSES

							TEACH SCHE								
Sr.	Course	C Tru	Course	Hou	rs pe	r wee	ek			EA	AIVIIIN	AHOr	SCH	IEVIE	
No.	Code	Course Title	Abbr.	ТН	TU	PR	Total Hours	Total Credits		eory aper	Test	PR	OR	TW	Total
									Hrs	Mark	2000		011	2,,,	20002
01	21101	Communication Skills	CMS	02		02	04	03	03	80	20	1		50	150
02	21102	Engineering Mathematics	EMT	02	01		03	03	03	80	20	ı		1	100
03	21103	Applied Mathematics	AMT	03			03	03	03	80	20	-		-	100
04	21104	Applied Physics	PHY	03	-	02	05	04	02	80#	20#	-		50	150
05	21105	Applied Chemistry	СНҮ	03		02	05	04	02	80#	20#			50	150
06	21107	Engineering Graphics	EGR			04	04	02		1	-	-		50	50
07	21111	Computer Workshop Practice	CWP			04	04	02		1	-	-		50	50
08	21112	Computer Fundamentals and Organization	CFO	01		02	03	02		1	1			50	50
	T	OTAL		14	01	16	31	23		400	100			300	800

Level: 1

Total Courses : 08 Total Credits : 23 Total Marks : 800

#### Abbreviations:

Abbreviation, TH: Theory, TU: Tutorial, PR: Practical, OR: Oral, TW: Term Work

**Course code Indication:** 

First two digit : Indicates last two digits of Year of Implementation of Curriculum

Third digit : Indicates Level.

Fourth & fifth digit : Indicates Course Number.

#### Assessment of PR / OR / TW:

1) All orals & practicals are to be assessed by external & internal examiners.

2) All TW are to be assessed by internal examiners only.

3) # indicates Online theory Examination

#### PROGRAMME - DIPLOMA IN INFORMATION TECHNOLOGY PROGRAMME STRUCTURES LEVEL-2

#### **BASIC TECHNOLOGY COURSES**

					TEA	CHI	NG SCHI	EME	EXAMINATION SCHEME						
Sr.	Course		Course	I	Hours	per v	week			EXA	MINA	TION	SCH	EME	
No.	Code	Course Title	Abbr.	ТН	TU	PR	Total	Total Credits	Theory Paper		Test	PR	OR	TW	Total
						110	Hours		Hrs	Mark	1630			1,,	Total
01	21232	Digital Techniques and Microprocessor	DTM	04		02	06	05	03	80	20		50	50	200
02	21233	Data Structures using 'c'	DST	03		04	07	05	03	80	20	25		25	150
03	21234	Database Management Systems	DBM	03		02	05	04	03	80	20		25	25	150
04	21235	Programming in C	PIC	03		04	07	05	03	80	20	50		50	200
05	21236	Object Oriented Programming	OOP	03		04	07	05	03	80	20	50		50	200
06	21237	PC Architecture and Maintenance	PCM	03		02	05	04	03	80	20			50	150
07	21238	Web Page Designing	WPD	01		02	03	02						50	50
08	21239	Operating System	OPS	03		02	05	04	03	80	20		50	50	200
09	21240	Data communication and Networking	DCN	03		02	05	04	03	80	20		25	25	150
	TO	<b>OTAL</b>	1	26	-	24	50	38		640	160	125	150	375	1450

#### Level: 2

Total Courses : 09 Total Credits :38 Total Marks : 1450

- All orals & practicals are to be assessed by external & internal examiners.
   All TW are to be assessed by internal examiners only.

#### PROGRAMME - DIPLOMA IN INFORMATION TECHNOLOGY PROGRAMME STRUCTURE LEVEL – 3 **ALLIED COURSES**

					TEA	CHI	NG SCHI	EME								
Sr.	Course		Course	]	Hour	s per	week		- EXAMINATION SCHEME							
No.	Code	Course Title	Abbr.	ТН	TU	PR	Total Hours	Total Credits	Theory Paper		Test	PR	OR	TW	Total	
				ш	10	rĸ			Hrs	Mark	Test	rĸ	OK	1 **	Total	
01	21301	Entrepreneurship and startups	EDS	01		02	03	02						50	50	
02	21308	Industrial organization and management	IOM	03			03	03	03	80	20				100	
			Elect	tive I	: An	y <b>O</b> ľ	NE of the	following								
0.4	21312	E-Commerce	ECM	01		02	03	02						50	50	
04	21313	E-Governance	EGN	01		02	03	02						50	50	
	TOTAL			05		04	09	07	03	80	20			100	200	

#### Level: 3

Total Courses : 03 Total Credits : 07 Total Marks : 200

- All orals & practicals are to be assessed by external & internal examiners.
   All TW are to be assessed by internal examiners only.

### PROGRAMME - DIPLOMA IN INFORMATION TECHNOLOGY PROGRAMME STRUCTURE

### LEVEL - 4 APPLIED TECHNOLOGY COURSES

					TEA	CHI	NG SCH	EME	EXAMINATION SCHEME						
Sr.	Course		Course	I	Hours	s per	week	Total Credits		EXA	MINA	TION	SCH	EME	
No.	Code	Course Title	Abbr.	тн	TU	PR	Total Hours	Creatis		neory aper	Test	PR	OR	TW	Total
						110			Hrs	Hrs Mark				- ''	1000
1	21410	Industrial training	ITR				35	14					100	100	200
2	21411	Project	PRO			04	04	02					50	50	100
3	21433	Software Engineering	SWE	03			03	03	03	80	20				100
4	21434	Communication Technology	CMT	03			03	03	03	80	20				100
5	21435	Java Programming	JPR	03		04	07	05	03	80	20	25		25	150
6	21436	Scripting Technology	SPT	01		02	03	02						50	50
	TOTAL		-	10	-	10	55	29	09	240	60	25	150	225	700

#### Level: 4

Total Courses : 06 Total Credits : 29 Total Marks : 700

- 1) All orals & practicals are to be assessed by external & internal examiners.
- 2) All TW are to be assessed by internal examiners only.

### PROGRAMME - DIPLOMA IN INFORMATION TECHNOLOGY PROGRAMME STRUCTURE

### LEVEL - 5 DIVERSIFIED COURSES

					TEA	CHI	NG SCHE	EME		EXA	MINA	TION	N SCE	IEME	1
Sr	Course		Course	]	Hours	s per	week	Total Credits							
No	Code	Course Title	Abbr	ТН	TU	PR	Total Hours	Credits	Pa	eory aper Mark	Test	PR	OR	TW	Total
01	21526	Advanced Java	ADJ	03		02	05	04	3	80	20	25		25	150
02	21527	Free and Open Source Software	FOS	03		02	05	04	3	80	20		25	25	150
			Elect	ive I	[:A	ny O	NE of th	ne follow	ing	I	I				
	21528	Network Administration and Management	NAM	01		04	05	03					50	50	100
03	21529	Multimedia technology	MLT	01		04	05	03					50	50	100
	21530	VB. NET Technology	VBN	01		04	05	03					50	50	100
			Electi	ve II	<b>I</b> : A	ny (	<b>NE</b> of t	he follov	ving						
	21531	Object Oriented Modeling and Design	OOM	03		02	05	04	3	80	20		50	50	200
04	21532	Information Security	IFS	03		02	05	04	3	80	20		50	50	200
	21533	Software Testing	STG	03	I	02	05	04	3	80	20		50	50	200
			Electiv	ve I	J:A	ny T	<b>WO</b> of t	he follow	ving						
	21534	PHP Programming	PHP	03		02	05	04	3	80	20			25	125
	21535	Mobile Computing and Application Development	MCD	03		02	05	04	3	80	20			25	125
05	21536	Data mining and big data	DMB	03		02	05	04	3	80	20			25	125
06	21537	Programming with Python	PIP	03	- 1	02	05	04	3	80	20			25	125
	21538	ASP.NET Technology	ASP	03		02	05	04	3	80	20			25	125
	21539	Internet of Things	ITA	03		02	05	04	3	80	20			25	125
	Artificial 21540 Intelligence and Machine Learning			03		02	05	04	3	80	20			25	125
	TO	OTAL		16		14	30	23	15	400	100	25	125	200	850

#### Level: 5

Total Courses : 06 Total Credits : 23 Total Marks : 850

- 1) All orals & practical's are to be assessed by external & internal examiners.
- 2) All TW are to be assessed by internal examiners only.

## PROGRAMME - DIPLOMA IN INFORMATION TECHNOLOGY PROGRAMME STRUCTURE AUDIT COURSES

Sr. No.	Course Code	Course Title	Contact Hours Per Week (TH)	Contact Hours Per Week (PR)	Total Contact Hours Per Week
1	21001	Environmental science	2		2
2	21002	Sports and Yoga		2	2
3	21003	Essence of Indian Knowledge and Tradition	2		2
4	21004	Indian Constitution	2	-	2

Total Courses : 04 Total Credits : Nil Total Marks : Nil

### PROGRAMME - DIPLOMA IN INFORMATION TECHNOLOGY Courses for Award of Class

			Course				EACH SCHE			EXAN	IINA'	ΓΙΟΙ	N SCI	HEM	E
Sr.No.	Course Code	Course Title	Abbr.	ТН	TU	PR	Total hrs	Total Credits		eory per Mark		PR	OR	TW	Total
01	21233	Data Structures using 'c'	DST	03		04	07	05	03	80	20	25		25	150
02	21234	Database Management Systems	DBM	03		02	05	04	03	80	20	25		25	150
03	21240	Data Communication and Networking	DCN	03		02	05	04	03	80	20		25	25	150
04	21411	PRO			04	04	02					50	50	100	
05	21434	Java Programming	JPR	03		04	07	05	03	80	20	25		25	150
06	21526	Advanced Java	ADJ	03		02	05	04	03	80	20		25	25	150
07	21527	Free and Open Source Software	FOS	03		02	05	04	03	80	20		25	25	150
08	21410	Industrial training	ITR				35	14					100	100	200
09	21433	Software Engineering	SWE	03			03	03	03	80	20				100
		Elect	tive III:	Any	On	e of	the fo	llowing	Ţ						
	21531	Object Oriented Modeling and Design	OOM	03		02	04	03	3	80	20		25	25	150
10	21532	Information Security	IFS	03		02	04	03	3	80	20		25	25	150
	21533	Software Testing	STG	03		02	04	03	3	80	20		25	25	150
		Electi	ive IV : A	Any '	TW	O of	the fo	ollowin	g						
	21534	PHP Programming	PHP	03		02	05	04	3	80	20			25	125
	21535	Mobile Computing and Application Development	MCD	03		02	05	04	3	80	20			25	125
11	21536	Data mining and big data	DMB	03		02	05	04	3	80	20			25	125
12	21537	Programming with Python	PIP	03		02	05	04	3	80	20			25	125
	21538	ASP.NET Technology	ASP	03		02	05	04	3	80	20			25	125
	21539 Internet of Things		IOT	03		02	05	04	3	80	20			25	125
	21540 Artificial Intelligence and Machine Learning					02	05	04	3	80	20			25	125
TOTA	L			30	-	26	91	56	800 200 75 250 375 170						1700

Total Courses : 12
Total Credits : 56
Total Marks : 1700
Assessment of PR / OR / TW:

- 1) All orals & practical's are to be assessed by external & internal examiners.
- 2) All TW are to be assessed by internal examiners only.

### $\begin{array}{c} \textbf{PROGRAMME - DIPLOMA IN INFORMATION TECHNOLOGY} \\ \textbf{SAMPLE PATH} \end{array}$

ENTRY LEVEL- 10+

NI 4 C	First	Year	Secon	d Year	Thir	d Year	
Nature of Course	Odd Term	Even Term	Odd Term	Even Term	Odd Term	Even Term	Total
	21102	21101	21233	21234	21301	21411	
	EMT(03)	CMS(03)	DST(05)	DBM(04)	EPS(02)	IND(14)	
	21104	21103	21232	21239	21411		
	PHY(04)	AMT(03)	DTM(05)	OPS(04)	PRO(02)		
	21107 EGR(02)	21105 CHY(04)	21236 OOP(05)	21434 CMT(03)	21526 ADJ(04)		
Compulsory	` ′	21237	21436	21433	21527		
	21111 CWP(02)	PCM (04)	SPT(02)	SWE(03)	FOS(04)		
	21112 CFO(02)	21235 PIC(05)	21240 DCN(04)	21308 IOM(3)			
		21238 WPD(02)		21435 JPR(05)			
Total credits (Compulsory)	13	21	21	22	12	14	103
			Any one from Elective: I 1.21312 ECM (02) 2.21313 EGN(02) :(02)	Any one from Elective: II: 1. 21528 NAM (03) 2. 21529 MLT(03) 3. 21530 VBN (03) :(03)	Any one from Elective: III: 1. 21531 OOM(04) 2. 21532 IFS(04) 3. 21533 STG(04) :(04)		
Electives	Nil	Nil	Nil		Any Two from Elective: IV: 1. 21534 PHP(04) 2. 21535 MCD (04) 3. 21536 DMB (04) 4. 21537 PIP(04) 5. 21538 ASP(04) 6. 21539 IOT(04) 7.21540 AIM(04) :(08)	Nil	
Total Credits (Elective)			02	03	12		17
Total Courses	05	06	06	07	07	01	32
Audit Courses	SPY(00)	EVS(00)		IKT(00)	ICN(00)		04
Total Credits (Compulsory + Elective)	13	21	23	25	24	14	120
			Grand Total	of Credits			120

Note: Figures in bracket indicates total credits.