

**SCHEME OF EXAMINATION**

Subject Code	Subject	Hrs. of Instruction	Exam Duration (Hrs)	Max Marks			Credits
				CA	CE	Total	
<b>First Semester</b>							
<b>Part I</b>							
18UTALA101/ 18UHILA101/ 18UFRLA101	Tamil-I/ Hindi-I/ French-I	5	3	25	75	100	3
<b>Part II</b>							
18UENLA101	Foundation English I	5	3	25	75	100	3
<b>Part III</b>							
20UDSM101	Core I: Programming in C	5	3	25	75	100	4
20UDSM102	Core II: Introduction to Data Science	4	3	25	75	100	3
20UMADSA101	Allied I: Discrete Mathematics	5	3	25	75	100	4
20UDSMP101	Core Practical I: Programming in C	2	3	40	60	100	2
20UDSMP102	Core Practical II: Data Analysis in Excel	2	3	40	60	100	2
<b>Part IV</b>							
18UVE101	Value Education I: Yoga	2	3	25	75	100	2
		<b>30</b>				<b>800</b>	<b>23</b>
<b>Second Semester</b>							
<b>Part I</b>							
18UTALA201/ 18UHILA201/ 18UFRLA201	Tamil-II/ Hindi-II/ French-II	5	3	25	75	100	3
<b>Part II</b>							
18UENLA201	Foundation English II	5	3	25	75	100	3
<b>Part III</b>							
20UDSM201	Core III: Object Oriented Programming with C++	5	3	25	75	100	4

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20UDSM202	Core IV: Data Structures	5	3	25	75	100	3
20UMADSA201	Allied II: Statistics I	5	3	25	75	100	4
20UDSMP201	Core Practical III: Programming in C++	3	3	40	60	100	2
<b>Part IV</b>							
18UVE201	Value Education II: Environmental Studies	2	3	25	75	100	2
		<b>30</b>				<b>700</b>	<b>21</b>
<b>Third Semester</b>							
<b>Part I</b>							
18UTALA301/ 18UHILA301/ 18UFRLA301	Tamil-III/ Hindi-III/ French-III	5	3	25	75	100	3
<b>Part II</b>							
18UENLA301	Foundation English III	5	3	25	75	100	3
<b>Part III</b>							
20UDSM301	Core V: Programming in Java	4	3	25	75	100	4
20UDSM302	Core VI: Big Data Analytics	4	3	25	75	100	3
20UMADSA301	Allied III: Statistics II	4	3	25	75	100	4
20UDSMP301	Core Practical IV: Programming in Java	2	3	40	60	100	2
<b>Part IV</b>							
20UDSSBP301	SBC Practical I: Web Designing using HTML, CSS (Internal Evaluation)	2	3	100	-	100	2
	NMEC I	2	3	25	75	100	2
<b>Non Credit</b>							
18ULS301	Career Competency Skills I	1	-	-	-	-	-
	Add-On Course I	<b>1</b>	3	40	60	100	-
		<b>30</b>				<b>900</b>	<b>23</b>

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<b>Fourth Semester</b>							
<b>Part I</b>							
18UTALA401/ 18UHILA401/ 18UFRLA401	Tamil-IV/ Hindi-IV/ French-IV	5	3	25	75	100	3
<b>Part II</b>							
18UENLA401	Foundation English IV	5	3	25	75	100	3
<b>Part III</b>							
20UDSM401	Core VII: Programming in .NET (VB.NET &ASP.NET)	4	3	25	75	100	4
20UDSM402	Core VIII: Relational Database Management Systems	4	3	25	75	100	3
20UMADSA401	Allied IV: Operations Research	4	3	25	75	100	4
20UDSMP401	Core Practical V: Programming in .NET	2	3	40	60	100	2
<b>Part IV</b>							
20UDSSBP401	SBC Practical II: JavaScript(Internal Evaluation)	2	3	100	-	100	2
	NMEC II	2	3	25	75	100	2
<b>Non Credit</b>							
18ULS401	Career Competency Skills II	1	-	-	-	-	-
	Add-On Course II	1	3	40	60	100	-
		<b>30</b>				<b>900</b>	<b>23</b>

<b>Fifth Semester</b>							
<b>Part III</b>							
20UDSM501	Core IX: Data Mining and Warehousing	6	3	25	75	100	5
20UDSM502	Core X: Software Engineering	5	3	25	75	100	5
20UDSM503	Core XI: Operating Systems	5	3	25	75	100	4
	Elective : I	5	3	25	75	100	4
20UDSMP501	Core Practical VI: R Programming	3	3	40	60	100	2
20UDSMP502	Core Practical VII: Computer Hardware	3	3	40	60	100	2
<b>Part IV</b>							
20UDSSBP501	SBC Practical III: MySQL (Internal Evaluation)	2	3	100	-	100	2
<b>Part V</b>							
20UDSE501	Extension Activity	-	-	-	-	-	2
<b>Non Credit</b>							
18ULS501	Career Competency Skills III	1	-	-	-	-	-
		<b>30</b>				<b>700</b>	<b>26</b>
<b>Sixth Semester</b>							
<b>Part III</b>							
20UDSM601	Core XII: Python Programming	6	3	25	75	100	5
20UDSM602	Core XIII: Computer Networks [Fifth Unit as Self- study]	6	3	25	75	100	4
	Elective II	6	3	25	75	100	4
20UDSMP601	Core Practical VIII: Python Programming	3	3	40	60	100	2
20UDSMP602	Core Practical IX: Computer Networking	3	3	40	60	100	2
20UDSPR601	Project Work	3	3	40	60	100	5

Part IV							
20UDSSBP601	SBC Practical IV: PHP(Internal Evaluation)	2	3	100	-	100	2
Non Credit							
18ULS601	Career Competency Skills IV	1	-	-	-	-	-
		<b>30</b>				<b>700</b>	<b>24</b>
<b>Grand Total</b>						<b>4700</b>	<b>140</b>

### ADD-ON COURSE

The department offers the following two subjects as ADD-ON Course in third and fourth semester.

S.No.	Semester	Subject Code	Subject
1	III	20UDSAC301	SCILAB
2	IV	20UDSAC401	SPSS

### ADVANCED LEARNER COURSE

The department offers the following two subjects as Advanced Learners Course in fourth and fifth semesters.

S.No.	Semester	Subject Code	Subject
1	IV	20UDSAL401	Information Security
2	V	20UDSAL501	Cyber Security
3	<b>Online Certification Courses</b>		

### **NON MAJOR ELECTIVE COURSE**

The department offers the following two subjects as Non Major Elective Course for other than the computer science – data science students for third and fourth semesters.

<b>S.No.</b>	<b>Semester</b>	<b>Subject Code</b>	<b>Subject</b>
1	III	20UDSNM301	Internet Technology
2	IV	20UDSNM401	Principles of Web Design

### **ELECTIVE I**

(Student shall select any one of the following subject as Elective in fifth semester)

<b>S.No</b>	<b>Subject Code</b>	<b>Subject</b>
1.	20UDESEL501	Social Media Mining
2.	20UDESEL502	Natural Language Processing

### **ELECTIVE II**

(Student shall select any one of the following subject as Elective in sixth semester)

<b>S.No</b>	<b>Subject Code</b>	<b>Subject</b>
1.	20UDESEL601	Artificial Intelligence and Expert Systems
2.	20UDESEL602	Information Retrieval Techniques

## **FOR COURSE COMPLETION**

Student shall complete:

- Language subjects (Tamil/Hindi/French, English) in I, II, III and IV semester.
- All Major papers.
- Value Education: Yoga and Environmental Studies in I and II semester respectively.
- Allied subjects in I, II, III and IV semester.
- Skill Based Course in III, IV, V and VI semester.
- Non-Major Elective Course in III and IV semester.
- Career Competency Skills in III, IV, V and VI semester.
- Add-on Course in III and IV semester.
- Advanced Learners Course in IV and V semester.
- Extension activity in V semester.
- Elective subjects in V and VI semesters.
- An In-House project and viva-voce in VI semester.

**TOTAL CREDITS DISTRIBUTION**

Components	Subjects	No. of Subjects x Marks	Total	Credits x Papers	Credits
<b>Part - I</b>	Tamil	4 x 100 =	400	3 x 4 papers	12
<b>Part - II</b>	Foundation English	4 x 100 =	400	3 x 4 papers	12
<b>Part - III</b>	Core	13 x 100 =	1300	5 x 3 papers	15
				4 x 6 papers	24
				3 x 4 papers	12
	Project	1 x 100 =	100	5 x 1 paper	05
	Core Practical	9 x 100 =	900	2 x 9 papers	18
	Elective	2 x 100 =	200	4 x 2 papers	08
	Allied	4 x 100 =	400	4 x 4 papers	16
<b>Part - IV</b>	VE (Yoga, EVS)	2 x 100 =	200	2 x 2 papers	04
	SBC	4 x 100 =	400	2 x 4 papers	08
	NMEC	2 x 100 =	200	2 x 2 papers	04
<b>Part - V</b>	Extension Activity	-	-	2 x 1 activity	02
<b>Total</b>		<b>45 x 100 =</b>	<b>4500</b>		<b>140</b>