IT Infrastructure Management

B. Sc (Information Technology)		Semester – VI	
Course Name: IT Infrastructure Management		Course Code: USIT606 (Elective-II)	
Periods per week (1 Period is 50 minutes)		5	
Credits		2	
		Hours	**Marks**
Evaluation System	Theory Examination	2½	75
	Internal	--	25

Course Objectives:

1. Understand the fundamentals of IT service management and the ITIL 4 framework.
2. Explore the various management practices in ITIL, including general management, service management, and technical management.
3. Develop an understanding of driving stakeholder value and creating value for stakeholders.
4. Gain knowledge of creating, delivering, and supporting services within the ITIL service value system.
5. Explore the concept of High-Velocity IT and the importance of continual improvement.

Unit	Details	Lectures
I	**Introduction**: IT service management in the modern world, About ITIL 4, The structure and benefits of the ITIL 4 framework. **Key concepts of service management** : Value and value co-creation, Organizations, service providers, service consumers, and other stakeholders, Products and services, Service relationships, Value: outcomes, costs, and risks. **The four dimensions of service management**: Organizations and people, Information and technology, Partners and suppliers, Value streams and processes, External factors. **The ITIL service value system :** Service value system overview, Opportunity, demand, and value, The ITIL guiding principles, Governance, Service value chain, Continual improvement.	12
II	**ITIL management practices:** General management practices, Service management practices, Technical management practices.	12
III	**Drive Stakeholder Value:** Introduction, The customer journey, Step 1: Explore, Step 2: Engage, Step 3: Offer, Step 4: Agree, Step 5: Onboard, Step 6: Co-create, Step 7: Realize.	12
IV	**Create, Delivery and Support (CDS):** Service value system key concepts and challenges, Using a shift-left approach, Plan and manage resources in the service value system, The use and value of technology across the service value system. **Value streams for new services**: Reviewing service value chains and service value streams, ITIL practices and value streams for new services, Change enablement, Service design and software development and management, Service validation and testing, Release management and deployment management	12

	Value streams for user support: ITIL practices and value streams for user support, Service desk, Incident management, Problem management, Knowledge management, Service level management and Monitoring and event management. **How to create, deliver and support services**		
V	**High-Velocity IT** : Introduction, Key concepts, culture, techniques, **Continual improvement.**		**12**

Books and References:					
Sr. No.	**Title**	**Author/s**	**Publisher**	**Edition**	**Year**
1.	ITIL Foundation 4 Edition	Roman Jouravlev, Akashay Anand, et. al	TSO, AXELOS	2	2019
2.	ITIL 4 High-Velocity IT	Akashay Anand, Dan Ashby, et. al	TSO, AXELOS	1	2020
3.	ITIL 4 Create, Delivery and Support (CDS)	Claire Agutter	AXELOS	1	2021
4.	ITIL 4 Drive Stakeholder Value	Roman Jouravlev, Pavel Demin, et. al	TSO, AXELOS	1	2020
5.	ITIL 4 Direct, Plan and Improve	Akashay Anand, Mauricio Corona, et. al	TSO, AXELOS	1	2020

Course Outcomes:
 CO 1: Apply the principles and concepts of ITIL 4 to enhance IT service management practices.
 CO 2: Demonstrate proficiency in implementing ITIL management practices.
 CO 3: Successfully drive stakeholder value and engage in value co-creation.
 CO 4: Develop the skills to create, deliver, and support services within the ITIL service value system.
 CO 5: Understand the principles and techniques of High-Velocity IT and foster a culture of continual improvement.