Curriculum Plan (ODD SEM 2026-27): B.Sc.(H) Mathematics III Sem

GE-3(ii): Lattices and Number Theory

Teacher'S Profile

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Marks Distribution	**Theory**	90 Marks
	Internal Assessment	30 Marks
	Continuous Assessment	40 Marks
		Assignments -12 Marks
		Test - 12 Marks
		Attendance - 6 Marks
Classes Assigned	**Lectures**	1 Per Week
	Tutorial	

Essential Readings

1. Davey, B A., & Priestley, H. A. (2002). Introduction to Lattices and Order (2nd ed.), Cambridge University Press, Cambridge.
2. Lidl, Rudolf & Pilz, Günter. (1998). Applied Abstract Algebra (2nd ed.), Undergraduate Texts in Mathematics, Springer (SIE), Indian Reprint 2004.
3. Burton, David M. (2012). Elementary Number Theory (7th ed.), Mc-Graw Hill Education Pvt. Ltd. Indian Reprint.

Week	Topics
1st Week (28 JUL-01 AUG)	Definitions, Examples and basic properties of partially ordered sets
2nd Week (03-08 AUG)	Order isomorphism, Hasse Diagram,
3rd Week (10-15 AUG)	Maximal and minimal elements
4th Week (17-22 AUG)	Dual of an ordered set, Duality principle
5th Week (24-29 AUG)	Statements of Well Ordering Principle and Zorn's Lemma
6th Week (31 AUG-05 SEP)	Lattices as ordered sets
7th Week (07- 12 SEP)	Lattices as ordered sets
8th Week (14-19 SEP)	Lattices as algebraic structures
9th Week (21-26 SEP)	Lattices as algebraic structures
10th Week (28 SEP-03 OCT)	Sublattices
11th Week (05 -10 OCT)	Sublattices
12th Week (12-17 OCT)	Products and homomorphisms
13th Week (26-31 OCT)	Products and homomorphisms
14th Week (02-07 NOV)	Distributive lattices.
15thWeek (09–14 NOV)	Revision
16th Week (16-20 NOV)	Revision