

GANPAT UNIVERSITY									
FACULTY OF ARCHITECTURE DESIGN & PLANNING									
Programme	Bachelor of Architecture				Branch/Spec.	INSTITUTE OF ARCHITECTURE			
Semester	V				Version	2.0.0.0			
Effective from Academic Year		2021-22			Effective for the batch Admitted in			June 2019	
Subject code	2VA07DMM	Subject Name			Disaster Mitigation and Management				
Teaching scheme					Examination scheme (Marks)				
(Per week)	Lecture(DT)		Practical(Lab.)		Total		CE	SEE	Total
	L	TU	P	TW					
Credit	2	-	-	-	2	Theory	40	60	100
Hours	2	-	-	-	2	Practical	-	-	-
<b>Objective:</b>									
<ul style="list-style-type: none"> <li>• Introduction and Understanding Disasters.</li> <li>• Types, Trends, Causes, Consequences and Control of Disasters.</li> <li>• To understand the Disaster Management Cycle and Framework.</li> <li>• Understanding Disaster Management in India.</li> <li>• Applications of architecture and urban planning solution for Disaster Management &amp; Mitigation.</li> </ul>									
<b>Learning Outcome:</b>									
<b>LO1:</b> Understand disasters, disaster preparedness and mitigation measures									
<b>LO2:</b> Understand disaster management acts and guidelines along with role of various stack-holders during disasters									
<b>CONTENT &amp; TEACHING UNITS</b>									
<b>Unit</b>	<b>Content</b>								<b>HRS</b>
1	Understanding the Concepts and definitions of Disaster, Hazard, Vulnerability, Risk, Capacity – Disaster and Development, and disaster management								06
2	Geological Disasters (earthquakes, landslides, tsunami, mining); Hydro-Meteorological Disasters (floods, cyclones, lightning, thunder-storms, hail storms, avalanches, droughts, cold and heat waves); Biological Disasters (epidemics, pest attacks, forest fire); Technological Disasters (chemical, industrial, radiological, nuclear) and Manmade Disasters (building collapse, rural and urban fire, road and rail accidents, nuclear, radiological, chemicals and biological disasters); Global Disaster Trends – Emerging Risks of Disasters – Climate Change and Urban Disasters								06
3	Disaster Management Cycle – Paradigm Shift in Disaster Management Pre-Disaster – Risk Assessment and Analysis, Risk Mapping, zonation and Microzonation, Prevention and Mitigation of Disasters, Early Warning System; Preparedness, Capacity Development; Awareness During Disaster – Evacuation – Disaster Communication – Search and Rescue – Emergency Operation Centre – Incident Command System – Relief and Rehabilitation – Post-disaster – Damage and Needs Assessment, Restoration of Critical Infrastructure – Early Recovery – Reconstruction and Redevelopment; IDNDR, Yokohama Strategy, Hyogo Framework of Action								08
4	Disaster Profile of India – Mega Disasters of India and Lessons Learnt Disaster Management Act 2005 – Institutional and Financial Mechanism National Policy on Disaster Management, National Guidelines and Plans on Disaster Management; Role of Government (local, state and national), Non-Government and Inter-Governmental Agencies								06

5	Disaster Communication System (Early Warning and Its Dissemination), Land Use Planning and Development Regulations, Disaster Safe Designs and Constructions ,Structural and Non Structural Mitigation of Disasters	06
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Reference Books	
1	Manual on natural disaster management in India, M C Gupta, NIDM, New Delhi
2	An overview on natural & man-made disasters and their reduction, R K Bhandani, CSIR, New Delhi
3	Conservation and Planning, Allan Dobby
4	Management of Natural Disasters in developing countries, H.N. Srivastava & G.D. Gupta, Daya Publishers, Delhi, 2006,
5	National Disaster Management Policy, 2009, Gol
6	Disaster Mitigation in Asia & Pacific, Asian Development Bank

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I'VA046MC CD2	2	2	2	3	2	2	3	3	1	1	1	2
I'VA046MC CD1	2	2	2	1	2	2	1	1	2	3	2	1
I'VA046MC CD3	2	2	2	2	2	2	2	3	1	3	2	3
I'VA046MC CD4	1	2	2	2	2	1	2	2	2	2	3	1