## **CONTENTS**

## TECHNICAL SESSION-I : PLANNING FOR SUSTAINABLE DEVELOPMENT & ENERGY CONCERNS

1.	Sustainable Development of Urban Areas: The Emerging Strategies Shri Dilip Biswas & Shri N. Raghu Babu	
2.	A New Language of Architecture: In Quest for A Sustainable Future Prof. Dr. Arvind Krishan	;
3.	Planning of Cities for Sustainable Urban Development  Shri J.K. Gupta	18
4.	Planning for Sustainable Built Environment Shri A.G. Krishna Menon	23
5.	Sustainability of Buildings Shri C.V. Kand	29
6.	Planning Concepts for Sustainable Development in Built Environment Dr. R.B. Sharma & Shri Lokendra Thakkar	37
7.	A Sustainable Vision for Urban India Shri A.K. Jain	40
8.	Cost-effective Building Technologies for Sustainable Future Shri V. Sriraman	48
9.	An Initiative for Energy Efficient Buildings Shri Bibek Bandyopadhyay	55
10.	Energy Conservation in Operation of Hotel Buildings Shri Virendra K. Paul, Prof.(Dr.) V. Thiruvengadam & Prof. P. Krishnan	61
11.	Energy Conservation Shri K. Krishna Murthy	67
12.	Sustainable Development & Mother Nature Shri H.C. Gupta	72
13.	Sustainable Built Environment through Sustainable Building Design Shri Vinod Kumar & Shri A.K. Sachin	78

		· ·	
	14.	Sustainability with High Rise High Density Development Shri S.S. Mann	86
	15.	Sustainable Development of Urban-Rural Areas Shri Rajiv Gupta, Shri Narendar Panwar, Shri Chetan P. Gupta & Shri Ashutosh Bhardwaj	91
1	16.	Future Planning for Sustainable Built Environment in Development of Urban Extension Area of Delhi Shri Ashok Bhattacharjee	96
8	17.	Sustainable Development, A need for the Future Planning - Case Study Uttarakashi Shri V.K. Agarwal & Shri R.D. Singh	103
18	18.	Effective Planning, Appropriate Technology and Community Participation: Ways to Sustainable Development  Shri Manoj Choubey & Shri Sachin Paliwal	109
23	19.	Sustainable Consumption Strategy for Sustainable Environment Er. Vijay Gupta, Er. O.P. Gupta VSM & Er. D. Mukhopadhay&	115
29	TEC	HNICAL SESSION-II : ENVIRONMENT CONCERNS	
37	20.	Environmental Considerations in Development Projects Dr. D.K. Pandey, Shri A.D. Narain & Ms. Nilanjana Rao	121
40	21.	Environmental Appraisal of Road Projects - Issue and Approach Shri S.K. Aggarwal	127
48	22.	Clean & Green – A Package to Environmental Management Dr. N. Ashok Kumar	131
55	23.	Bio-Medical Waste Mismanagement - A Hazard in Built Environment Shri H.K. Munjal	136
61	24.	Environmental Impact Assessment – A Vital Tool for Environment Protection and Sustainable Development  Prof. P. K. Khitoling, Shri S. N. Magna, & Shri Kamal Kuman	1.4.1
67	25.	Prof. R.K. Khitoliya, Shri S.N. Meena & Shri Kamal Kumar  Environmental Management of Biomedical Waste  Er. G.S. Rosha & Er. Parampreet Kaur Ahuja	141
72 <b>7</b> 0	26.	Planning for Sustainable Industrial Development  Shri Sanjay P. Pathak	153
78	27.	Cementitious Binders from Waste Phosphogypsum Shri Manjit Singh & Shri Mridul Garg	157
	28.	Fly Ash Utilization for Sustainable Development Dr. S. Kothandaraman	164

VII

## TECHNICAL SESSION-III: BUILDING MATERIALS

TECH	INICAL SESSION-III . DOLLDEN C	
29.	Sustainable Development through Recycling of Aggregates Shri A.B. Pawar, Shri S.R. Nandargikar & Shri V.P. Ramgude	169
30.	Alternative Building Materials for Eco-Friendly Construction Dr. S. Krishnamurthy, Shri R. Subramanian & Shri Sanjay Sharma	176
31.	Improvement in Concrete Construction & Maintenance for Sustainable Development Shri J. Bhattacharjee	182
32.	Building Materials for Sustainable Development Dr. K.M. Soni	187
33.	Value Added Building Materials from Industrial Wastes for Sustainable Development Shri S.K. Malhotra & Shri C.L. Verma	192
34.	Composites - The future Building Material  Ms. Soumitra Biswas, Shri Atul Mittal & Shri Gudavalli Srikanth	199
35	Appropriate Cost Effective Building Materials and Technologies Shri Suresh G. Dave & Er A.K. Jain	207
TEC	CHNICAL SESSION-IV : GOVERNANCE FOR SUSTAINABLE DEVELOPMENT	
36.	Governance for Sustainable Development in Built Environment Shri Harjit Singh & Ms. Rakhi Gupta	212
37.	Government's Efforts Towards Sustainable Development Shri Deepak Narayan	218
38.	Project Finance and the Principles of Sustainability an Integrated Approach to Planning Shri J.P. Singh & Shri Vibhu R. Kapila	224
39.	Integrated Water Management for Sustenance of Built Environment Shri R.S. Goel	230
40.	Maintenance Management – A Tool of Sustainable Development of Built Environment Dr. Ravindra Nath Munshi	235
41.	Use of Available Land for Buildings on Expansive Clays - A Case Study Er. R. Subramanian, Er. A.K. Sharma & Er. Bhagwan Singh	242
42.	Shri Rajiv Nehru	252
43.	Sustainable Deveopment in Built Enviornment Conflicting Interests, A Challenge Shri A.K. Khanna	256