

List of Figures

	Page no.
Figure 1.1: Location map of the study area.....	6
Figure 1.2: Drainage and Transport map of the study area.....	11
Figure 1.3: Methodological flowchart.....	20
Figure 2.1: Circuit of the Chapter.....	24
Figure 2.2: Digital Elevation Model (DEM) of the study area.....	27
Figure 2.3: Contour map of the study area.....	28
Figure 2.4: Slope map of the study area.....	29
Figure 2.5: Aspect map of the study area.....	29
Figure 2.6: Sample site location map.....	30
Figure 2.7: Digital Elevation Model for Sample Site 1 on 2015 and 2018.....	32
Figure 2.8: Volume zonation map of Sample Site 1.....	34
Figure 2.9: Digital Elevation Model for Sample Site 2 on 2015 and 2018.....	35
Figure 2.10: Volume zonation map of Sample Site 2.....	36
Figure 2.11: Digital Elevation Model for Sample Site 3 on 2015 and 2018.....	38
Figure 2.12: Volume zonation map of Sample Site 3.....	39
Figure 2.13: Digital Elevation Model for Sample Site 4 on 2015 and 2018.....	40
Figure 2.14: Volume zonation map of Sample Site 4.....	40
Figure 2.15: Distribution of crab holes in Grid A according to size.....	54
Figure 2.16: Beach mapping through grid method.....	58
Figure 2.17: Zonation map showing erosive and depositional beach (according to sample sites).....	61
Figure 2.18: Erosion and accretion concentration zones along the beach-dune interface.....	63
Figure 2.19: Grain size distribution of Sample Site 1.....	64
Figure 2.20: Grain size distribution of Sample Site 2.....	64
Figure 2.21: Grain size distribution of Sample Site 3.....	65
Figure 2.22: Grain size distribution of Sample Site 4.....	65
Figure 2.23: Ternary diagram showing concentration of sand particles.....	66
Figure 2.24: Stratigraphical representation of back dune fringe area.....	68
Figure 2.25: Relationship between various hydrodynamic variables.....	69
Figure 2.26: Relationship between wave length and wave depth.....	69

Figure 2.27: Relationship between swash and backwash length.....	70
Figure 2.28: Relationship between wave height and wave breaking height with wind speed.....	71
Figure 2.29: Relationship between wind speed and wave velocity.....	72
Figure 2.30: Nearest Neighbour Index.....	73
Figure 2.31: Micro geomorphic features of dune.....	78
Figure 2.32: Micro geomorphic features of wetland.....	78
Figure 2.33: Beach-Dune Stage Model.....	79
Figure 2.34: Relationships between the external forces and local morphological features and their interplaying processes.....	80
Figure 2.35: Tidal channels shifting through years.....	81
Figure 3.1: Map showing mouza wise distribution of population in the study area (1991).....	88
Figure 3.2: Map showing mouza wise distribution of population in the study area (2001).....	89
Figure 3.3: Map showing mouza wise distribution of population in the study area (2011).....	89
Figure 3.4: Land Use Land Cover of 2009.....	91
Figure 3.5: Land Use Land Cover of 2018.....	91
Figure 3.6: Line diagram showing distance between hotels and HTL.....	95
Figure 3.7: Inverted conical bar diagram showing depth of ground water extraction by hoteliers.....	95
Figure 3.8: Landscape Ecological Units of Dakshin Purushottampur village near Soula river mouth.....	99
Figure 4.1: Stages of ICZM cycle (GESAMP, 1996).....	110
Figure 4.2: Morphogenetic regions of study area.....	111
Figure 4.3: CRZ map of study area.....	112
Figure 4.4: Environment zoning of study area.....	114