LIST OF TABLES

Page No.

Table 2.1 Stratigraphic framework of the Saurashtra region (after Merh, 1995, Bhatt, 2000, Sharma et al., 2017) **18**

Table 2.2 Summary of geophysical and structural data generated by previous workers in Saurashtra (compiled by Vanik et al., 2021) **22**

Table 5.1 Fault slip analysis performed with T-Tecto studio X5, Win-Tensor and FaultKin for heterogeneous fault-slip data (as in Delvaux and Sperner, 2003; Allmendinger et al., 2012). The results are given as homogeneous subsets divided in Phase 1 and Phase 2 deformation. n: number of fault-slip data used in the inversion. σ1, σ2 and σ3: principal stress axes. Stress ratio R = (σ2 − σ3) × (σ1 − σ3) −1. Meaning of "Magnitude": for example for the underlined magnitude, 94% out of 23 fault data can be represented by 315° trend and 0° plunge (Vanik et al., 2018). **56**

Table 7.1 Geomorphic indices of the drainage basin with units along with its mathematical expression and references. **72**

Table 7.2 Morphometric parameters with its mathematical formula utilized in the present study. **76**

Table 7.3 Geomorphic indices results of Malan, Raidi and Dhantarvadi river flowing in morphotectonic domain-I. **78**

Table 7.4 Bifurcation ratio (Rb) and Mean bifurcation ratio (Rbm) calculated for Malan, Raidi and Dhantarvadi drainages. Note 4th and 5th order streams with highest value indicating strong structural control. **79**

Table 7.5 Areal aspects parameters for calculating the shape of the drainage basin. **79**

Table 7.6 Valley floor width to height ratio, Asymmetric factor and Hypsometric integral calculated for river flowing in morphotectonic domain-I. **84**

Table 9.1 Morphostratigraphy of the Quaternary miliolite deposits observed in the present study area. **111**

Table 9.2 Table showing the chronological data of Quaternary miliolites covering the present study area. **112**

Table 11.1 Geomorphic indices calculated for rivers originating in trappean terrain (category-I) flowing in morphotectonic domain-II. **126**

Table 11.2 Results of Bifurcation ratio (Rb) and Mean Bifurcation ratio (Rbm) calculated of rivers originating in trappean terrain in morphotectonic domain-II. **127**

Table 11.3 Basin shape index (Bs) values calculated and other areal parameters for rivers arising in trappean upland. **128**

Table 11.4 Geomorphic indices calculated for rivers flowing mostly in miliolitic terrain in morphotectonic domain-II. **130**

Table 11.5 Results of Bifurcation ratio (Rb) and Mean Bifurcation ratio (Rbm) for rivers flowing mostly in miliolitic terrain in morphotectonic domain-II. **131**

Table 11.6 Basin shape index (Bs) values calculated for rivers mostly flowing in miliolitic terrain. **132**

Table 11.7 Valley floor width to height ratio, Asymmetric factor and Hypsometric integral calculated for river flowing in morphotectonic domain-II. **139**