



Fig. 5 – Sensitivity analysis of pulse injection time (t_{pulse}) values of 27.2 h, 38.4 h and 57.6 h while using Microbe 3 and $d_x = 2.88 \times 10^{-2} \text{ h}^{-1}$ for MEOR within sandstone core under varying temperature, salinity and pH conditions: temporal distributions of (a) microbial concentration at $x = 0.2 \text{ m}$ from the influent point; (b) total volume fraction of microbes attached reversibly and irreversibly onto sandstone porous rock surface at $x = 0.004 \text{ m}$; (c) effective porosity of the sandstone core at $x = 0.004 \text{ m}$; (d) intrinsic or absolute permeability of the sandstone core at $x = 0.004 \text{ m}$; and (e) *in-Situ* produced biosurfactant concentration at $x = 0.4 \text{ m}$.