Aqueous extract of Cnestis ferruginea root was investigated for its effects on biochemical and clinical parameters of rat model with polycystic ovarian syndrome (PCOS). Female animals (150.46 ± 2.31 g) in groups A (non PCOS-induced), B, C, D, E and F (induced with PCOS by oral administration of 0.5 mg/kg body weight of anastrozole dissolved in 1% CMC (2 mL/kg) daily for 21 days) received 0.5 ml of distilled water, 25, 50, 100 mg/kg body weight (b.w) of the extract and 7.14 mg/kg b.w of metformin respectively, once daily for thirty days. Weight of the animals, vaginal cytology and level of some serum reproductive hormones were determined. The extract contained alkaloids (2.68 %), tannins (0.01 %), saponins (0.46 %), flavonoids (1.46 %) and anthraquinones (0.03 %). The irregular and lengthened oestrous cycle, absence of follicles in their ovarian stroma, elevated (P<0.05) serum testosterone and reduced (P<0.05) serum progesterone, LH and FSH in the PCOS induced animals were reversed and or attenuated by the extract in a manner similar to metformin. The increases in body weights of the animals were not significantly different from each other. The extract reversed the hyperandrogenemia and attenuated the irregular oestrus cycle in PCOS-induced rats. The clinical benefits of Cnestis ferruginea roots in the management of PCOS may be due to the presence of flavonoids in the plant.