$$\lim_{(x,y)\to(0,0)} \frac{x^2-y^2}{\sqrt{x}-\sqrt{y}} = \frac{(x-y)(x+y)}{\sqrt{x}-\sqrt{y}}$$

$$\Rightarrow \lim_{(x,y)\to(0,0)} \frac{(\sqrt{x}-\sqrt{y})(\sqrt{x}+\sqrt{y})(x+y)}{(\sqrt{x}-\sqrt{y})}$$

$$= \lim_{(x,y)\to(0,0)} (\sqrt{x}+\sqrt{y})(x+y) = 0 \quad \text{Ans}$$

(2)

$$\lim_{(x,y)\to(2,2)} \frac{x+y-4}{\sqrt{x+y}-2} \qquad \left(\because (a^2-b^2)=(a-b)(a+b)\right.$$

$$= \lim_{(x,y)\to(2,2)} \frac{(\sqrt{x+y}-2)(\sqrt{x+y}+2)}{(\sqrt{x+y}-2)}$$

$$= \lim_{(x,y)\to(2,2)} (\sqrt{x+y}+2)$$

$$= 4 \quad \text{Ans}$$