17. A steel wire can sustain 100 kg weight without breaking. If the wire is cut into two equal parts, each part can sustain a weight of   [Online May 19, 2012]

(a) 50 kg
(b) 400 kg
(c) 100 kg
(d) 200 kg

17. **(c)** Breaking force α area of cross section of wire
Load hold by wire is independent of length of the wire.

18. **(a)** Given: $F = 100\,\text{kN} = 10^5\,\text{N}$