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**16.** The following statements relate to the adsorption of gases on a solid surface. Identify the incorrect statement among them: **[Online April 10, 2015]**

- (a) Enthalpy of adsorption is negative
- (b) Energy appears as heat
- (c) On adsorption, the residual forces on the surface are increased
- (d) Entropy of adsorption is negative

**Ans. (c)**

**16. (c)** Adsorption is a phenomena of attracting and retaining the molecules of a substance on the surface of a liquid or a solid resulting into a higher concentration of the molecules on the surface.

After adsorption there is a decrease in the residual forces due to bond formation  $\Delta G$ ,  $\Delta H$  &  $\Delta S$  all are negative in the case of adsorption.