

15 An ideal gas undergoes a cyclic process in three stages:

- (1) Expansion at constant pressure,
- (2) Decrease in pressure at constant volume,
- (3) Compression at constant temperature.

Which of the following must be true?

- A** There is net heat released by the gas during the cycle.
- B** The net work done on the gas during the cycle is positive.
- C** The net work done by the gas during the cycle is equal to the net heat transferred to the gas.
- D** The change in internal energy of the gas is equal to the work done during the constant pressure stage minus the work done during the constant temperature stage.