## **CRYOGENIC ENGINEERING**

## **Self Assessment**

- 1. In a perfect regeneration, the net heat energy stored by regenerator is \_\_\_\_\_.
- 2. For a given design and operating parameters, the  $\mathbf{Q}_{\mathbf{c}}$  is maximum when phase angle is \_\_\_\_\_.
- 3. The heat exchange during pressurization and depressurization is \_\_\_\_\_.
- 4. Phase shifting mechanisms are used to \_\_\_\_\_ the phase angle.
- 5. In a Basic PT Cryocooler, the phase angle is \_\_\_\_.
- 6. In Phasor Analysis, PT undergoes \_\_\_\_\_ process.
- 7. Apart from PT, all other parts undergo \_\_\_\_ process.
- 8. In \_\_\_\_, double inlet orifice and hot end orifice alter the phase angle.

## **CRYOGENIC ENGINEERING**

## **Answers**

- 1. Zero
- 2. Minimum
- 3. Same
- 4. Minimize
- 5. 90°
- 6. Adiabatic
- 7. Isothermal
- 8. DIPTC