Questions for self assessment

- 1. How are welding power-sources different from conventional domestic supply power sources?
- 2. Describe the common welding power sources namely welding transformer, welding generator and rectifier.
- 3. How can welding power sources be classified?
- 4. What are basic characteristics of welding power sources?
- 5. Describe the following characteristics of welding power sources along with their significance in welding
 - i. Open circuit voltage
 - ii. Power factor
 - iii. Dynamic characteristics
 - iv. Static characteristics
- 6. What is operating point in arc characteristic curve for given welding power sources? How is operating point affected by arc length?
- 7. What is self regulating arc and how can it be achieved in SAW/GMAW processes?
- 8. Describe methods used for maintaining the arc length.
- 9. Why is dynamic characteristic of a welding power source important for arc welding?
- 10. What are the factors affecting duty cycle for a power source at a welding current?
- 11. What is high frequency unit and how is does work?
- 12. Describe static characteristics of welding power sources that are commonly used for consumable and non-consumable arc welding processes?