Unit 13 - Week 11: Axial Turbine, Radial Turbine and its Examples

Assignment 11

Due on 2019-10-15, 2000 IST.

1. For an axial turbine, the total temperature of the flow through turbine elements:

(a) Increases
(b) Decreases
(c) Remains constant
(d) Cannot be determined

2. The correct values of specific enthalpy at different points of axial flow turbine include:

(a) h1 = h2 = h3
(b) h1 < h2 < h3
(c) h1 > h2 > h3
(d) h1 < h2 = h3

3. Other components of axial flow turbine include:

(a) Governor
(b) Steam chest
(c) Condenser
(d) Boiler

4. The area of the rotor blade to fit on a percentage axial flow reactor turbine is:

(a) Developing type
(b) Constant type
(c) Non-suitable type
(d) None of the above

5. The velocity triangle of axial flow steam turbine shows:

(a) Velocity at inlet and outlet of the reaction turbine
(b) Velocity at inlet and outlet of the axial turbine
(c) Velocity at inlet and outlet of the reaction turbine
(d) None of the above

6. The total degree of isentropic axial flow steam turbine with 95% percentage reaction arrangement, blade loading coefficient is:

(a) 0.01
(b) 0.02
(c) 0.03
(d) None of the above

7. Choose the correct expression for reaction at 90° of an axial flow turbine:

(a) R = 0
(b) R = tan 90°
(c) R = sin 90°
(d) None of the above

8. Choose the correct expression for blade loading coefficient of an axial flow turbine:

(a) CL = 0
(b) CL = sin 90°
(c) CL = tan 90°
(d) None of the above

9. Choose the correct expression for blade loading coefficient of a radial turbine:

(a) CL = 0
(b) CL = sin 90°
(c) CL = tan 90°
(d) None of the above

10. Choose the correct expression for steam flow through a radial turbine:

(a) Q = V x A x n
(b) Q = V x A x n
(c) Q = V x A x n
(d) None of the above

11. Choose the correct expression for steam flow through a radial turbine:

(a) Q = V x A x n
(b) Q = V x A x n
(c) Q = V x A x n
(d) None of the above

12. Choose the correct expression for steam flow through a radial turbine:

(a) Q = V x A x n
(b) Q = V x A x n
(c) Q = V x A x n
(d) None of the above

13. Choose the correct expression for steam flow through a radial turbine:

(a) Q = V x A x n
(b) Q = V x A x n
(c) Q = V x A x n
(d) None of the above