

### SECTION-D

**Note:** Long answer type questions. Attempt any one questions out of two questions. (1x10=10)

Q.19 Explain the construction and working of Babcock & Wilcox boiler.

Q.20 What is the role of compounding in steam turbine also explain the pressure velocity compounding in steam turbines?

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**Level 5 / 1st. Sem. / DVOC**

**Production Tech.**

**Subject : General Mechanical Engineering - II**

Time : 2 Hrs.

M.M. : 50

### SECTION-A

**Note:** Multiple-choice questions. All questions are compulsory (5x1=5)

Q.1 What is thermodynamics?

- a) study of the relationship between heat and other forms of energy
- b) study of the conversion of chemical energy to other forms of energy
- c) study of the relationship between mechanical energy to other forms of energy
- d) study of the conversion of mechanical energy to other forms of energy

Q.2 A reversible cycle has following processes

- a) 4 isothermal processes
- b) 4 adiabatic processes
- c) 2 isothermal and 2 adiabatic processes
- d) none of the mentioned

- Q.3 Which of the following option is correct when diesel is compared to petrol?
- highly ignitable
  - more difficult to ignite
  - less difficult to ignite
  - none of the mentioned
- Q.4 Cooling water is sprayed into the exhaust steam in \_\_\_\_
- steam condensers
  - surface condensers
  - jet condensers
  - jet condensers and high condensers
- Q.5 Gas turbine is also called as which of the following?
- Steam turbine
  - Combustion turbine
  - Velocity turbine
  - None of the mentioned

### SECTION-B

**Note:** Objective type questions. All questions are compulsory (5x1=5)

- Q.6 Universal gas constant

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- Q.7 Isochoric
- Q.8 Internal combustion
- Q.9 Steam generator
- Q.10 Gas turbine

### SECTION-C

**Note:** Short answer type questions. Attempt any six questions out of eight questions. (6x5=30)

- Q.11 Discuss thermal and chemical equilibrium with suitable examples.
- Q.12 Explain first law of thermodynamics.
- Q.13 How quantity of heat is determined?
- Q.14 What do you understand by the change in the state of Ideal gas?
- Q.15 Write the important differences between External and Internal combustion engines.
- Q.16 What do you understand by CRDI system give its salient features.
- Q.17 Explain the function of boiler mountings. Can a boiler work without mountings?
- Q.18 Explain the principle of operation of steam turbine.

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