

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

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Q.3 Which of the following option is correct when diesel is compared to petrol?

- a) highly ignitable
- b) more difficult to ignite
- c) less difficult to ignite
- d) none of the mentioned

Q.4 Cooling water is sprayed into the exhaust steam in __

- a) steam condensers
- b) surface condensers
- c) jet condensers
- d) jet condensers and high condensers

Q.5 Gas turbine is also called as which of the following?

- a) Steam turbine
- b) Combustion turbine
- c) Velocity turbine
- d) None of the mentioned

SECTION-B

Note: Objective type questions. All questions are compulsory $(5 \times 1 = 5)$

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. $(6 \times 5 = 30)$

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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