

THERMAL ENGINEERING



Question No.	Question
1	The efficiency of Otto cycle depends on: a) Cut off ratio b) Clearance ratio c) compression ratio d) ratio of specific heats
2	The work required to run the reciprocating air compressor is minimum if the compression is: a) polytropic b) adiabatic c) isobaric d) isothermal
3	Morse test is used for multi cylinder S.I. engine to determine: a) thermal efficiency b) volumetric efficiency c) relative efficiency d) mechanical efficiency
4	The actual power production inside the cylinder of an I.C engine is known as: a) Brake horse power b) Frictional horse power c) Indicated horse power d) Indicates horse power + frictional power
5	The term bleeding is associated with: a) Gas engine b) Steam turbine c) Diesel engine d) Gas turbine
6	Compression ratio is the ratio between a) Total volume to stroke volume b) Clearance volume to stroke volume c) Total volume to Clearance volume d) stroke volume to bore volume
7	Diesel cycle is: a) constant volume cycle b) constant pressure cycle c) constant temperature cycle d) all the above



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8	In the process of adiabatic expansion: a) heat is not supplied or rejected b) heat is supplied or rejected c) hot and cold body are rejected d) none of these
9	PV diagram of Otto cycle have: a) 2 constant volume and 2 adiabatic b) 2 constant pressure and 2 adiabatic c) 1 constant pressure and 1 constant volume d) 1 constant pressure, 1 constant volume and 2 adiabatic
10	Frictional power is: a) BP+FP b) 1P-BP c) 1P+FP d) BP-FP
11	What is indicated by the power output per unit of engine Displacement? a) Maximum effective power output produced by each litre of engine size b) Weight propelled by each KW developed by engine c) Displacement per power output d) Power output per litre of fuel consumption
12	The ratio of the brake horse power to the indicate horse power is called: a) Overall efficiency b) mechanical efficiency c) volumetric efficiency d) relative efficiency
13	The IHP, BHP & FHP of an IC engine are related by a) $IHP = BHP - FHP$ b) $IHP = BHP + 2 \times FHP$ c) $IHP = BHP + FHP$ d) $IHP = BHP - 2 \times FHP$
14	Which of the following types of energy is stored in an accumulator? a) Pressure energy b) Kinetic energy c) Potential energy d) Strain energy
15	A steam nozzle convert heat energy into: a) Pressure energy b) Velocity energy c) Potential energy d) Strain energy
16	For supplying intermittent small quantity of air at high pressure



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	<p>following compressor is best suited:</p> <ul style="list-style-type: none">a) Reciprocatingb) Centrifugalc) Axiald) screw
17	<p>The rate of flow heat through a metal bar of area of cross section 1m^2 when temp gradient is $1^\circ\text{C}/\text{m}$ under steady state is called:</p> <ul style="list-style-type: none">a) thermal resistanceb) thermal conductivityc) diffusivityd) resistivity
18	<p>A condenser which circulates water which flows through tubes which are surrounded by steam, is known as:</p> <ul style="list-style-type: none">a) Surface condenserb) Jet condenserc) Barometric condenserd) Evaporative condenser
19	<p>The compressor efficiency is:</p> <ul style="list-style-type: none">a) Isothermal power / shaft powerb) Isothermal power / indicated powerc) Adiabatic power / brake powerd) I.P of compressor / I.P of prime mover
20	<p>The rotary compressors are used for delivering</p> <ul style="list-style-type: none">a) small quantities of air at high pressureb) large quantities of air at high pressurec) small quantities of air at low pressured) large quantities of air at low pressure