

These are sample MCQs to indicate pattern, may or may not appeared in examination

UNIVERSITY OF MUMBAI

Examination 2020 under cluster 9 (FAMT)

Program: BE Automobile Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester V

Course Code:AEC 501

Course Name:

IC Engine

Max. Marks:

50

Time: 1hour

Question No	Question	Option A:	Options B:	Options C:	Options D:
Q1.	For the same peak pressure and work output _____.	Otto Cycle >Dual Cycle > Diesel Cycle	Otto Cycle >Diesel Cycle > Dual Cycle	Diesel Cycle > Otto Cycle > Dual Cycle	Diesel Cycle > Dual Cycle > Otto Cycle
Q2.	During which condition of the vehicle does NOx emission in SI engine will be lowest?	Accelerating	Decelerating	Cruising	Idling
Q3.	The function of the ignition system is to _____ the flame propagation process.	stop	initiate	balance	increase
Q4.	In a petrol engine, the mixture has the lowest pressure at the _____	beginning of suction stroke	end of suction	beginning of compression	end of compression
Q5.	This is also called a biogas.	biobutanol	biodiesel	bioethanol	biomethane
Q6.	The function of a float chamber in a carburetor is to supply the fuel to the nozzle at a _____.	constant volume head	constant pressure head	variable volume head	variable pressure head
Q7.	For a constant speed diesel engine with governor, when the load on engine increases, volumetric efficiency will _____.	Increase	Increases till attained its maximum value then decreases	decrease	be un-affected
Q8.	_____ battery ?	vehicle	vehicle	Scooty	Bikes
Q9.	_____ is the difference between indicated and brake power of an engine.	Air flow	Emissions	Friction power	BMEP

Q10.	Which of the following types of superchargers are not preferred?	Root blower	Piston cylinder type	Vane type blower	Centrifugal compressor
Q11.	A 40 kW engine has a mechanical efficiency of 80%. If the frictional power is assumed to be constant with load, what is the approximate value of the mechanical efficiency in gasoline, due to its fouling effects on catalytic converters?	45%	55%	65%	75%
Q12.	Diesel knock is the sound produced by the very rapid rate of pressure rise during the early part of the _____.	Methyl tert-butyl ether	Lead	Alcohol	Sulphur
Q13.	_____.	first phase of combustion	controlled phase of combustion	uncontrolled phase of combustion	incomplete combustion
Q14.	Which of the following statement is not correct with respect to alcohols as alternate fuel in IC engines ?	camshaft	crankshaft	pully	gear mechanism
Q15.	By higher octane number of SI fuel, it is meant that the fuel has _____.	anti-knock characteristics of alcohol is poor	alcohol contains about half the heat energy of	alcohol does not vaporize as easily as gasoline	alcohols are corrosive in nature
Q16.	A two stroke cycle engine gives _____ the number of power strokes as compared to the four stroke cycle engine, at the same engine speed	Higher heating value	higher flash point	Lower volatility	longer ignition delay
Q17.	Why are the detergents used as oil additives?	Half	Same	Doubled	Four times
Q18.	Which one of the following events would reduce the volumetric efficiency of a vertical compression ignition engine?	To increase fire point	To prevent foaming	sludge formation	To reduce viscosity
Q19.	Following data pertains to otto cycle:- Temperature at the end of isentropic compression = 629.5 K , pressure at the end of adiabatic compression = 15 bar , Heat is added at constant volume until the pressure rises up to 40bar. Calculate the heat supplied in kJ/kg (Select	Inlet valve closing after bottom dead	Inlet valve closing before bottom dead	Inlet valve opening before top dead	Exhaust valve closing after top dead centre
Q20.	_____.	785.25	762.35	778.25	752.35
Q21.	Which part is not lubricated by Pressure feed system ?	Rocker arms	Main bearings of crankshaft	Valve rods and Push rods	Timing gears

Q22.	A glow plug is provided in which type of indirect injection chamber?	Pre-combustion chamber	Swirl Chamber	Air Cell Chamber	Hemispherical chamber
Q23.	Intercooling is due to _____.	reduce temperature of air	decrease volumetric efficiency	increase knocking	increase temperature of air
Q24.	compression ratio, with increase in cut-off ratio will _____.	increase	decrease	be independent	Become twice
Q25.	Air cooled engines are _____.	noisy	silent	compact	free