University of Mumbai

Examination 2020

Program: Automobile Engineering
Curriculum Scheme: Rev2016
Examination: Third Year Semester V
Course Code: AEC501 and Course Name: Internal Combustion Engines

Time: 1 hour Max. Marks: 50

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For the students:- All the Questions are compulsory and carry equal marks .

Q1.	One power stroke is obtained after every ----revolution of cranckshaft in 4 stroke engines
Option A:	Two
Option B:	One
Option C:	Half
Option D:	One fourth
Q2.	During Intake stroke of piston
Option A:	Inlet valve opens
Option B:	Exhaust valve opens
Option C:	Intake and exhaust both are open
Option D:	Intake and exhaust both are closed
Q3.	The S.I.engine works on
Option A:	otto cycle
Option B:	diesel cycle
Option C:	dual cycle
Option D:	carnot cycle
Q4.	The air fuel mixture is controlled in SI engines using
Option A:	throttle valve
Option B:	injectors
Option C:	spark plug
Option D:	FIP
Q5.	The time during inlet and exhaust valve remains open for same instant is called
Option A:	valve lag
Option B:	valve advance

Option C:	valve retard
Option D:	valve overlap
Q6.	chemically correct ratio is
Option A:	15:10
Option B:	14:10
Option C:	16:10
Option D:	13:10
Q7.	Engine runs without load condition is called
Option A:	Idling
Option B:	accelerating
Option C:	Cold starting
Option D:	Normal load
Q8.	The function of the ignition system is to _____ the flame propagation process.
Option A:	stop
Option B:	initiate
Option C:	balance
Option D:	increase
Q9.	In magneto ignition system, as the engine speed increases the flow of current
Option A:	increases
Option B:	decreases
Option C:	remains same
Option D:	stops
Q10.	In spark ignition engines a nearly _____ mixture of air and fuel is formed in the carburettor.

Option A:	heterogenous
Option B:	homogenous
Option C:	solid
Option D:	none of these
Q11.	The flame propagation velocities range from
Option A:	15 to 70 m/s
Option B:	20 to 80 m/s
Option C:	10 to 15 m/s
Option D:	30 to 900 m/s
Q12.	The addition of extra pressurised sir inside the engine is called
Option A:	scavenging
Option B:	turbulance
Option C:	supercharing
Option D:	pre-ignition
Q13.	Intercooling is due to
Option A:	reduce temperature of air
Option B:	decrease volumetric efficiency
Option C:	increase knocking
Option D:	increase temperature of air
Q14.	In Diesel engine, during supercharging
Option A:	Air is compressed
Option B:	fuel is compressed
Option C:	air fuel is compressed
Option D:	fuel is injected

Q15.	The turbocharger uses
Option A:	Engine energy
Option B:	energy of exhaust gas
Option C:	steam energy
Option D:	water energy
Q16.	Which type of lubrication system is used in two-stroke engine?
Option A:	Mist lubrication system
Option B:	Wet sump lubrication system
Option C:	Dry sump lubrication system
Option D:	Splash lubrication system
Q17.	The pressure inside the lubrication system is controlled by _____
Option A:	Oil pump
Option B:	Oil filter
Option C:	Relief valve
Option D:	Supply voltage
Q18.	_____ is the difference between indicated and brake power of an engine.
Option A:	Air flow
Option B:	Emissions
Option C:	Friction power
Option D:	BMEP
Q19.	the internal losses in an engines are
Option A:	pumping loss
Option B:	Brake loss
Option C:	combination loss

Option D:	heat balance sheet
Q20.	If the speed of the engine is increased, the indicated power will
Option A:	increases
Option B:	decreases
Option C:	remains same
Option D:	stops
Q21.	The amount of CO formed _____ as the mixture becomes more and more rich in fuel.
Option A:	increases
Option B:	decreases
Option C:	remains same
Option D:	stops
Q22.	NO_x is reduced in a CI engine by the use of EGR.
Option A:	increases
Option B:	decreases
Option C:	remains same
Option D:	stops
Q23.	Fuel cells offer an excellent method for the use of the _____
Option A:	Chemical
Option B:	fossil fuel
Option C:	bio fuel
Option D:	any fuel
Q24.	_____ is in high concentration in methanol that is why it is used as an excellent fuel.

Option A:	oxygen
Option B:	chlorine
Option C:	hydrogen
Option D:	ozone
Q25.	At normal ambient temperature and atmospheric pressure, in which form LPG is obtained?
Option A:	SOLID
Option B:	LIQUID
Option C:	GASEOUS
Option D:	SOLID-LIQUID