

## Model Question Paper-1 with effect from 2019-20 (CBCS Scheme)

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### Fourth Semester B.E. Degree Examination AUTOMOTIVE ENGINES

TIME: 03 Hours

Max. Marks: 100

- Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.  
02. Draw a neat diagram where ever required.

		Module -1	CO	*Bloom's Taxonomy Level	MARKS
Q.01	a	With a neat diagram explain the terminologies (Nomenclature) of IC engine	CO1	L1,L2	10
	b	With a neat line diagram explain the working principle and construction of 4-stroke SI engine	CO1	L1,L2	10
		OR			
Q.02	a	Write the comparison between 2-stroke and 4-stroke engine	CO1,CO2	L2	10
	b	With a neat diagram explain the actual valve timing diagram.	CO1	L1	10
		<b>Module-2</b>			
Q. 03	a	With a neat diagram explain LUCAS petrol injection system	CO2	L2	10
	b	With a neat diagram explain Distributor type pump	CO2	L2	10
		OR			
Q.04	a	Name different type of Nozzles and with a neat diagram explain any two	CO1	L1,L2	10
	b	With a neat diagram explain Mechanical governor	CO1	L1,L2	10
		<b>Module-3</b>			
Q. 05	a	With a neat diagram explain the construction and working of pressurized water cooling	CO3	L1,L2	10
	b	Write the comparison of air and water cooling	CO3	L1,L2	10
		OR			
Q. 06	a	Write a short note on Lubrication of i) piston rings ii) bearings	CO3	L1,L2	10
	b	Name different lubricant additives and explain any three	CO3	L1,L2	10
		<b>Module-4</b>			
Q. 07	a	With a neat diagram explain centrifugal supercharger	CO4	L1,L2	10
	b	List the limitations of Turbocharger on petrol and diesel engine	CO4	L1,L2	10
		OR			
Q. 08	a	Name different methods of supercharging and with a neat diagram explain any two	CO4	L1,L2	10
	b	Write a short note on effect on the performance by turbocharger	CO4	L1,L2	10
		<b>Module-5</b>			
Q. 09	a	Name different types of scavenging system, with necessary sketches explain them	CO1	L1,L2	10
	b	Write a short note on Symmetrical & unsymmetrical port timing	CO1	L1,L2	10
		OR			
Q. 10	a	Write a short note on i) port design, ii) scavenging pumps	CO1	L1,L2	10
	b	Write Comparison of Different Scavenging Systems	CO1	L1,L2	10