GOVERNMENT POLYTECHNIC COLLEGE, KOTA (RAJ.)

SYLLABUS BREAK-UP (SESSION 2015-16)

SUBJECT CODE : ME206 SUBJECT NAME : AUTOMOBILE ENGG

FACULTY NAME : MANOJ KUMAR CHITTORA DESIGNATION : SR. LECT. (MECH.)

TOPIC	LECTURE / PRACTICAL CLASSES REQUIRED TO COVER TOPIC	MONTHS IN WHICH THE TOPIC WILL BE COVERED	ACTUAL DATE OF COVERING OF THE TOPIC	REASON FOR NOT COVERING THE TOPIC IN DUE TIME	E-CONTENTS PROVIDED TO STUDENTS RELATED TO TOPIC
CLASSIFICATION,CHASSIS &BODY OF VEHICLE	2	AUG			
LAYOUT &VARIOUS TERMINOLOGY USED,DIMENSION OF VEHICLE	2	AUG			
FUNCTION & CLASSIFICATION OF CLUTCH,REQUIREMENT OF GOOD CLUTCH	1	SEP			
CONSTRUCTION &WORKING OF VARIOUS TYPE OF CLUTCHES	3	SEP			
CONSTRUCTION OF CLUTCH PLATE	1	SEP			
FUNCTION & CLASSIFICATION OF GEAR BOX	1	SEP			
WORKING OF VARIOUS TYPE OF GEAR BOX	4	OCT			
CONSTUCTION & WORKING OF SELECTOR & INTERLOCKING MECHANISM	1	OCT			
CONSTUCTION & WORKING OF PROPELLER SHAFT, UNIVERSAL JOINT,SLIDING JOINT	2	OCT			
CONSTRUCTION &WORKING OF DIFFERENTIAL	1	OCT			
CONSTRUCTION & WORKING OF REAR AXLE	2	OCT			
PURPOSE , PRINCIPLE, CLASSIFICATION OF BRAKES	1	OCT			
CONSTRUCTION & WORKING OF MECHANICAL & HYDRAULIC BRAKE,HAND BRAKE	3	NOV			
CONSTRUCTION & WORKING OF MASTER & WHEEL CYLINDER,BLEEDING OF HYDRAULIC BRAKE	3	NOV			
BRAKE FLUID & ITS PROPERTIES,BRAKE TROUBLE &ITS REMEDIES	2	DEC			
TYPE & CONSTRUCTION OF FRONT AXLE,FRONT WHEEL STUB AXLE ASSEMBLY	2	DEC			
PURPOSE & REQUIREMENT OF STEERING SYSTEM	1	JAN			
GENERAL ARRANGEMENT OF STEERING SYSTEM,STEERING MECHANISM	2	JAN			
CONSTRUCTION & WORKING OF COMPONENTS OF STEERING SYSTEM	3	JAN			
FUNCTION & TYPE OF SUSPENSION SYSTEM WITH DESCRIPTION	3	FAB			
FUNCTION,CONSTRUCTION & WORKING OF TELESCOPIC TYPE SHOCK ABSORBER	1	FAB			
SPRUNG &UNSPRUNG WEIGHT	1	FAB			
TYPE & REQUIREMENT OF WHEELS WITH DESCRIPTION	2	FAB			
TYPE & SPECIFICATION OF TYRES	1	FAB			

TYRE MAINTENAINCE,TYRE TROUBLE &REPAIR	2	FAB			
CONSTRUCTION &CLASSIFICATION OF FRAME WIH DESCRIPTION	2	MAR			
TYPE &CONSTRUCTION OF BODY	1	MAR			
MAIN FEATURES OF BODY	1	MAR			
BODY ALINGMENT	1	MAR			
BUMPER - FUNCTION &TYPE	2	MAR			
TOTAL	54	Remaining classes for revision of syllabus.			

GOVERNMENT POLYTECHNIC COLLEGE, KOTA (RAJ.)

SYLLABUS BREAK-UP (SESSION 2015-16)

SUBJECT CODE : **ME303** SUBJECT NAME : **THERMAL ENGG &HEAT TRANSFER**

FACULTY NAME : **MANOJ KUMAR CHITTORA** DESIGNATION : **SR. LECT.(MECH.)**

TOPIC	LECTURE PRACTICAL CLASSES REQUIRED TO COVER TOPIC	MONTHS IN WHICH THE TOPIC WILL BE COVERED	ACTUAL DATE OF COVERING OF THE TOPIC	REASON FOR NOT COVERING THE TOPIC IN DUE TIME	E-CONTENTS PROVIDED TO STUDENTS RELATED TO TOPIC
STEAN TABLE & MOLLIER CHART	3	AUG			
FUNCTION & TYPE OF STEAM NOZZLE	1	SEP			
ANALYSIS OF STEAM NOZZLE	2	SEP			
NUMERICAL PROBLEM	2	SEP			
ELEMENTS OF CONDENCING PLANT	1	SEP			
FUNCTION & TYPE OF STEAM CONDENSER	1	SEP			
VARIOUS TYPE OF JET CONDENSER	2	OCT			
VARIOUS TYPE OF SURFACE CONDENSER	2	OCT			
SOURCES OF AIR LEAKAGE &ITS EFFECT,CONDENSER & VACUUME EFFICIENCE	2	OCT			
NUMERICAL PROBLEM	1	OCT			
TYPE & DESCRIPTION OF AIR PUMPS	2	NOV			
TYPE & DESCRIPTION OF COLLING TOWER	2	NOV			
MODES OF HEAT TRANSFER	2	NOV			
CONDUCTION -FOURIER LAW,HEAT CONDUCTION THROUGH PLANE &COMPOSITE WALL	2	DEC			
RADIAL HEAT CONDUCTION THROUGH THROUGH SPHER & CYLINDER	2	DEC			
OVERALL HEAT TRANSFER COEFFICIENT,CRITICAL INSULATION	1	JAN			
HEAT CONDUCTION BY FINS	2	JAN			
TYPE OF CONVECTION	2	JAN			
TYPE &ANALYSIS OF HEAT EXCHANGER	3	JAN			
FUNCTION &CLASSIFICATION OF STEAM TURBINE	2	FAB			
PRINCIPLE &OPERATION OF IMPULSE & REACTION TURBINE	2	FAB			
COMPOUNDING OF STEAM TURBINE	1	FAB			
ANALYSIS OFIMPULSE TURBINE,VELOCITY DIAGRAMME &EFF.	2	FAB			
ANALYSIS OF REACTION TURBINE,VELOCITY DIAGRAMME &EFF.	2	FAB			

BLEEDING, REHEATING, LUBRICATION OF STEAM TURBINE	1	FAB			
BLADE MATERIAL &ITS DEFECT	1	MAR			
NUMERICAL PROBLEM	3	MAR			
TERMINOLOGY USED IN RADIATION	2	MAR			
BLACK BODY, GRAY BODY,WHITE BODY	1	MAR			
LAWS OF RADIATION,SHAPE FACTOR,RADIOCITY	2	MAR			
TOTAL	54	Remaining classes for revision of syllabus.			

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SYLLABUS BREAK-UP (SESSION 2015-16)

SUBJECT CODE : **ME206** SUBJECT NAME : **AUTOMOBILE ENGG**

FACULTY NAME : **MANOJ KUMAR CHITTORA** DESIGNATION : **SR. LECT (MECH)**

TOPIC	/ PRACTICAL CLASSES REQUIRED TO COVER TOPIC	MONTHS IN WHICH THE TOPIC WILL BE COVERED	ACTUAL DATE OF COVERING OF THE TOPIC	REASON FOR NOT COVERING THE TOPIC IN DUE TIME	E-CONTENTS PROVIDED TO STUDENTS RELATED TO TOPIC
Study of conventional layout of vehicle.	1	AUG			
Study of various tools used in Auto workshop	1	SEP			
Study of clutch (single plate & multi plate).	1	SEP			
Study of sliding mesh, constant mesh and synchronous mesh gear boxes	2	OCT			
Study of Propeller shafts, Universal joints, Sliding joint, differential and rear axle.	2	NOV			
Study of mechanical and hydraulic braking system and bleeding of hydraulic braking system	2	DEC			
Study of Steering system of four wheeler.	1	JAN			
Study and inspection of suspension system of light and heavy vehicles.	1	JAN			
Study of frame & body of vehicle.	2	FAB			
Visit to near by auto workshop and service station.	2	MAR			

TOTAL	15	EACH PRACTICAL CLASS WILL BE OF TWO HOURS.			

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FACULTY NAME : **MANOJ KUMAR CHITTORA** DESIGNATION : **SR.LECT. (MECH)**

TOPIC	PRACTICAL CLASSES REQUIRED TO COVER TOPIC	MONTHS IN WHICH THE TOPIC WILL BE COVERED	ACTUAL DATE OF COVERING OF THE TOPIC	REASON FOR NOT COVERING THE TOPIC IN DUE TIME	E-CONTENTS PROVIDED TO STUDENTS RELATED TO TOPIC
Study of steam condensers, Jet condenser	4	SEP			
Study of steam condensers, surface condenser	4	OCT			
Study of air pump	4	NOV			
Study of cooling towers	4	DEC			
Study of steam turbine	5	FAB			
Study of heat transfer equipments available in the laboratory.	4	MAR			

TOTAL	25	EACH PRACTICAL CLASS WILL BE OF TWO HOURS.			