

RGPV (DIPLOMA WING) BHOPAL		OBE CURRICULUM FOR THE COURSE		FORMAT-3	Sheet No. 1/5
Branch	AUTOMOBILE ENGINEERING			Semester	Fifth
Course Code	504	Course Name	TRACTORS AND EARTHMOVERS		
Course Outcome 1	Student will be able to explain the construction/ working/ components of the given hydraulic control system			T-L Hrs	Marks
Learning Outcome 1	Student will be able to explain the construction / working/ components of the basic hydraulic control circuit			7	10
Contents	Introduction to basic hydraulic control system, purpose, construction, working and components with schematic & flow diagram and applications				
Method of Assessment	Theory exam				
Learning Outcome 2	Student will be able to identify the main components of the given hydraulic control system			7	10
Contents	Main components used in basic hydraulic control systems, their purpose, construction with neat sketch and working				
Method of Assessment	Laboratory exam				
Learning Outcome 3	Student will be able to develop simple hydraulic control circuit for the given purpose and operational conditions			7	10
Contents	Introduction to development of various types of simple logical control circuits for the given purpose and operational conditions in hydraulics mode.				
Method of Assessment	Theory exam				

RGPV (DIPLOMA WING) BHOPAL		OBE CURRICULUM FOR THE COURSE		FORMAT-3	Sheet No. 2/5
Branch	AUTOMOBILE ENGINEERING		Semester	Fifth	
Course Code	504	Course Name	TRACTORS AND EARTHMOVERS		
Course Outcome 2	Student will be able to explain the construction / working /systems / components / specifications of the given tractor			T-L Hrs	Marks
Learning Outcome 1	Student will be able to classify the various tractors on basis of their use / technology adopted/ special features			10	15
Contents	Introduction, development, purpose, applications and classifications of tractor on the basis of various features.				
Method of Assessment	Paper-pen test				
Learning Outcome 2	Student will be able to explain the construction / working/ systems / components / specifications of the basic tractor			7	10
Contents	Working of various systems of basic tractor with layout. Main components and their functions. Technical specifications of basic tractor.				
Method of Assessment	Theory exam				
Learning Outcome 3	Student will be able to identify various system / components of the given tractor			7	10
Contents	Demonstration of various system and components of a tractor				
Method of Assessment	Laboratory exam				

RGPV (DIPLOMA WING) BHOPAL		OBE CURRICULUM FOR THE COURSE		FORMAT-3	Sheet No. 3/5
Branch	AUTOMOBILE ENGINEERING		Semester	Fifth	
Course Code	504	Course Name	TRACTORS AND EARTHMOVERS		
Course Outcome 3	Student will be able to explain the construction / working/ components of the special purpose systems of the given tractor			T-L Hrs	Marks
Learning Outcome 1	Student will be able to explain construction/ working / main components of the transmission system / power take off unit / hydraulic control system / ballasting of the given tractor			13	20
Contents	Main components of the transmission system, gear shift pattern, gear box layout, power take off (PTO) unit, ballasting, braking and hydraulic control system.				
Method of Assessment	Theory exam				
Learning Outcome 2	Student will be able to identify the various components of the transmission system / power take off unit / hydraulic control system of the given tractor			8	10
Contents	Demonstration of the transmission system, gear shift pattern, gear box layout, power take off (PTO) unit, wheel, and braking and hydraulic control system.				
Method of Assessment	Laboraory exam				

RGPV (DIPLOMA WING) BHOPAL		OBE CURRICULUM FOR THE COURSE		FORMAT-3	Sheet No. 4/5
Branch	AUTOMOBILE ENGINEERING		Semester	Fifth	
Course Code	504	Course Name	TRACTORS AND EARTHMOVERS		
Course Outcome 4	Student will be able to explain the construction / working / systems / main components / specifications of the given earthmover			T-L Hrs	Marks
Learning Outcome 1	Student will be able to classify different earthmovers on basis of their application/ technology used / special features			10	15
Contents	Introduction, purpose, applications and classifications of earthmovers on the basis of various features.				
Method of Assessment	Paper-pen test				
Learning Outcome 2	Student will be able to explain the construction /working / main components/ specifications of the given power shovel/ backhoe / bulldozer			7	10
Contents	Main components and their functions of power shovel, backhoe and bulldozer with labelled diagram.				
Method of Assessment	Theory exam				
Learning Outcome 3	Student will be able to identify various system / components of the given tractor			7	10
Contents	Demonstration of various system and their components of power shovel, backhoe and bulldozer				
Method of Assessment	Laboratory Test by Observation				

RGPV (DIPLOMA WING) BHOPAL		OBE CURRICULUM FOR THE COURSE		FORMAT-3	Sheet No. 5/5
Branch	AUTOMOBILE ENGINEERING		Semester	Fifth	
Course Code	504	Course Name	TRACTORS AND EARTHMOVERS		
Course Outcome 5	Student will be able to explain the construction / working / components / specifications of special purpose systems used on the earthmovers			T-L Hrs	Marks
Learning Outcome 1	Student will be able to explain the construction / working / components / specifications of special purpose systems (three systems) used on the earthmovers			8	10
Contents	Construction, working, components and specifications of special purpose systems used in power shovel, backhoe and bulldozer with diagrams.				
Method of Assessment	Theory exam				
Learning Outcome 2	Student will be able to identify the components of given special purpose system used in earth movers			7	10
Contents	Demonstration of special purpose systems and their components of power shovel, backhoe and bulldozer				
Method of Assessment	Laboratory Test by Observation				