

GOVERNMENT POLYTECHNIC COLLEGE, KOTA (RAJ.)

SYLLABUS BREAK-UP (SESSION 2015-16)

SUBJECT CODE : **PL 306**

SUBJECT NAME : **DESIGN OF DIES AND MOULDS**

FACULTY NAME : **NEERAJ KUMAR**

DESIGNATION : **H.O.D.(PLASTIC TECHNOLOGY)**

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
INTRODUCTION TO BASIC PRINCIPLES	1				
SHRINKAGE & POST-MOULDING SHRINKAGE	2				
PARTING LINES & RADII	2				
DRAFT / TAPER & DIMENSIONAL TOLERANCES	2				
RIBS & BOSSES	2				
SINK MARKS & WALL THICKNESS	2				
VENTING OF MOULDS	1				
MOULDED HOLES	2				
MOULDED THREADS	2				
INSERTS	1				
EJECTOR MECHANISM	1				
FLASH TYPE COMPRESSION MOULD	1				
POSITIVE TYPE COMPRESSION MOULD	1				
LANDED POSITIVE COMPRESSION MOULD	1				
SEMI POSITIVE COMPRESSION MOULD	1				
DESIGN OF TRANSFER MOULDS	3				
INTRODUCTION TO BLOW MOULDS	1				
INTRODUCTION TO VACUUM FORMING MOULDS	2				
TYPES OF INJECTION MOULDS	2				
FEEDING SYSTEM & WORKING OF INJECTION MOULDS	3				
GENERAL FEATURES OF EXTRUSION DIES	2				
DIE DESIGN FOR PIPES	2				
DIE DESIGN FOR SOLID RODS	1				
DIE DESIGN FOR FILM & SHEETS	2				

DIE DESIGN FOR BLOWN FILM	2				
DIE DESIGN FOR WIRE &CABLE COATING	2				
DIE DESIGN FOR PROFILES	2				
MATERIALS FOR CONSTRUCTION OF MOULDS	2				
FINISHING & POLISHING OF MOULDS	2				
REVIEW & REVISION OF SYLLABUS,PREVIOUS YEARS PAPER SOLVING CLASS TESTS	10				
TOTAL	60				

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GOVERNMENT POLYTECHNIC COLLEGE, KOTA (RAJ.)

SYLLABUS BREAK-UP (SESSION 2015-16)

SUBJECT CODE : **PL 205**

SUBJECT NAME : **POLYMERISATION ENGINEERING**

FACULTY NAME : **NEERAJ KUMAR**

DESIGNATION : **H.O.D.-PLASTIC TECHNOLOGY**

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
CHEMISTRY & MONOMER PREPARATION OF H.D.P.E.	2				
POLYMERISATION PROCESSES & FLOW SHEET OF H.D.P.E.	2				
PROPERTIES & APPLICATIONS OF H.D.P.E.	2				
CHEMISTRY & MONOMER PREPARATION OF L.D.P.E.	2				
POLYMERISATION PROCESSES & FLOW SHEET OF L.D.P.E.	2				
PROPERTIES & APPLICATIONS OF L.D.P.E.	1				
CHEMISTRY, MONOMER PREPARATION OF POLYPROPYLENE	2				
POLYMERISATION PROCESSES, FLOW SHEET, PROPERTIES & APPLICATIONS OF POLYPROPYLENE	2				
CHEMISTRY & MONOMER PREPARATION OF P.V.C.	2				
POLYMERISATION PROCESSES & FLOW SHEET OF P.V.C.	2				
PROPERTIES & APPLICATIONS OF P.V.C.	2				
CHEMISTRY & MONOMER PREPARATION OF POLYSTYRENE	1				
POLYMERISATION PROCESSES & FLOW SHEET OF POLYSTYRENE	3				
PROPERTIES & APPLICATIONS OF POLYSTYRENE AND H.I.P.S.	2				
CHEMISTRY, MONOMER PREPARATION, FLOW SHEET, PROPERTIES & APPLICATIONS OF	3				
CHEMISTRY, MONOMER PREPARATION, FLOW SHEET, PROPERTIES & APPLICATIONS OF	2				
CHEMISTRY, MONOMER PREPARATION, POLYMERISATION PROCESS, PROPERTIES & APPLICATIONS	2				
CHEMISTRY, MONOMER PREPARATION, POLYMERISATION PROCESS, PROPERTIES & APPLICATIONS	2				
CHEMISTRY, PROPERTIES & APPLICATIONS OF ABS	2				
CHEMISTRY, PROPERTIES & APPLICATIONS OF NYLON-6 & NYLON-6,6	2				
CHEMISTRY, PROPERTIES & APPLICATIONS OF PAN	2				
CHEMISTRY, PROPERTIES & APPLICATIONS OF SILICON	2				
CHEMISTRY, PROPERTIES & APPLICATIONS OF POLYURETHANE	2				
CHEMISTRY, PROPERTIES & APPLICATIONS OF PMMA	2				

CHEMISTRY,PROPERTIES & APPLICATIONS OF UF	1				
CHEMISTRY,PROPERTIES & APPLICATIONS OF MF	1				
REVIEW & REVISION OF THE SYLLABUS,PREVIOUS YEARS PAPER SOLVING CLASS TESTS	10				
TOTAL	60				

GOVERNMENT POLYTECHNIC COLLEGE, KOTA (RAJ.)

SYLLABUS BREAK-UP (SESSION 2015-16)

SUBJECT CODE : **PL 208**

SUBJECT NAME : **TESTING OF POLYMERS**

FACULTY NAME : **NEERAJ KUMAR**

DESIGNATION : **H.O.D.(PLASTIC TECHNOLOGY)**

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
INTRODUCTION OF MECHANICAL PROPERTIES	1				
TENSILE STRENGTH TEST	2				
IZOD IMPACT TEST	2				
CHARPY IMPACT TEST	1				
FALLING DART IMPACT TEST	2				
FLEXURAL STRENGTH TEST	2				
ROCKWELL HARDNESS TEST	2				
SHORE-A & SHORE-D HARDNESS TEST	1				
ABRASION RESISTANCE TEST	2				
ENVIRONMENTAL STRESS CRACKING RESISTANCE TEST	2				
BURST STRENGTH TEST	2				
TEAR STRENGTH TEST	1				
CREEP TEST	2				
TEST FOR MELTING POINT	2				
HEAT DISTORTION TEMPERATURE TEST	2				
MELT FLOW INDEX TEST	2				
K - VALUE	1				
CUP FLOW TEST	2				
DIELECTRIC STRENGTH TEST	2				
ARC RESISTANCE TEST	2				
VOLUME & SURFACE RESISTIVITY TEST	1				
LIGHT TRANSMITTANCE & HAZE TEST	2				
FLAMMABILITY TEST FOR FLEXIBLE PLASTICS	2				
OXYGEN INDEX TEST	2				

SMOKE GENERATION TEST	2				
EFFECT OF FUNGI	1				
EFFECT OF BACTERIA	1				
WATER ABSORPTION TEST	2				
ACCELERATED WEATHERING TEST	2				
REVIEW & REVISION OF SYLLABUS,PREVIOUS YEARS PAPER SOLVING CLASS TESTS	10				
TOTAL	60				