Subject Studied						Subject for which has to appear for University Exam					
S.NO	**REGULATION_NAME**	**YEAR**	**SEMESTER**	**BRANCH**	**SUBJECT_NAME**	**Regulation**	**YEAR**	**SEMESTER**	**Branch Name**	**SUBJECT_NAME**	**Observations**
1	R09	2	1	ICE	ELECTRONIC DEVICES & CIRCUITS	R16	2	1	EIE, MCT	ELECTRONIC DEVICES & CIRCUITS	Equivalent. However unit-VII of R09 was deleted in R16 Reg
2	R09	2	1	EEE	ELECTRO MAGNETIC FIELDS	R16	2	1	EEE	ELECTRO MAGNETIC FIELDS	Equivalent. Some additional topics are added in R16 Reg-Unit-II
3	R09	2	1	MCT	THERMAL SCIENCE	R16	2	1	MCT	THERMAL SCIENCE	Equivalent. However unit-VII, VIII of R09 was deleted in R16 Reg
4	R09	2	1	MIE	DEVELOPMENT OF MINERAL DEPOSITS	R16	2	1	MIE	DEVELOPMENT OF MINERAL DEPOSITS	Equivalent
5	R09	2	1	PTM	ELEMENTS OF MECHANICAL ENGINEERING	R16	2	1	PTM	ELEMENTS OF MECHANICAL ENGINEERING	Equivalent. However Unit-IV & V of R09 was deleted in R16 Reg
6	R09	2	2	CE	BUILDING MATERIALS, CONSTRUCTION & PLANNING	R16	2	2	CEE	BUILDING MATERIALS, CONSTRUCTION & PLANNING	Equivalent
7	R09	2	2	MIM	KINEMATICS OF MACHINERY	R16	2	2	MCT, AME	KINEMATICS OF MACHINERY	Equivalent
8	R09	2	2	MCT	MACHINE DRAWING	R16	2	2	ME	MACHINE DRAWING	Equivalent
9	R09	2	2	BME	BIOTRANSDUCERS & APPLICATIONS	R16	2	2	BME	BIOTRANSDUCERS & APPLICATIONS	Equivalent. However unit-VII of R09 was deleted in R16 Reg

10	R09	3	1	CHEM	INTELLECTUAL PROPERTY RIGHTS	R16	3	1	AME	INTELLECTUAL PROPERTY RIGHTS	Equivalent
11	R09	3	1	CSE	SOFTWARE ENGINEERING	R16	3	1	CSE	SOFTWARE ENGINEERING	Equivalent
12	R09	3	2	BT	ARTIFICIAL NEURAL NETWORKS	R16	3	2	AME	ARTIFICIAL NEURAL NETWORKS	Equivalent
13	R09	3	2	CSE	OBJECT ORIENTED ANALYSIS AND DESIGN	R16	3	2	IT	OBJECT ORIENTED ANALYSIS AND DESIGN	Equivalent
14	R09	3	2	ICE	ANALYTICAL INSTRUMENTATION	R16	3	2	EIE	ANALYTICAL INSTRUMENTATION	Equivalent
15	R09	3	2	IT	COMPUTER FORENSICS	R16	3	2	IT	COMPUTER FORENSICS	Equivalent
16	R09	3	2	MMT	INTELLECTUAL PROPERTY RIGHTS	R16	3	2	CE	INTELLECTUAL PROPERTY RIGHTS	Equivalent
17	R09	3	2	PTE	NATURAL GAS PROCESSING	R16	3	2	PTE	NATURAL GAS PROCESSING	Equivalent.
18	R09	3	2	PTE	RESERVOIR ENGINEERING	R16	3	2	PTE	PETROLEUM RESERVOIR ENGINEERING	Equivalent.
19	R09	4	1	AE	SPACE MECHANICS	R15	4	1	AE	SPACE MECHANICS	Equivalent. However unit-VIII of R09 was deleted in R15 Reg
20	R09	4	1	AE	MECHANISMS AND MECHANICAL DESIGN	R15	4	1	AE	MECHANISMS AND MECHANICAL DESIGN	Equivalent
21	R09	4	1	AE	THEORY OF ELASTICITY	R15	4	1	AE	THEORY OF ELASTICITY	80% Equivalent. However unit I, V, VIII of R09 was deleted in R15
22	R09	4	1	AME	MICRO PROCESSORS AND MICRO CONTROLLERS	R15	4	1	AME	MICRO PROCESSORS AND MICRO CONTROLLERS	80% Equivalent
23	R09	4	1	AME	AUTOMOTIVE CHASSIS AND SUSPENSION	R15	4	1	AME	AUTOMOTIVE CHASSIS AND SUSPENSION	Equivalent
24	R09	4	1	AME	AUTOMOTIVE POLLUTION AND CONTROL	R15	4	1	AME	AUTOMOTIVE POLLUTION AND CONTROL	Equivalent
25	R09	4	1	AME	VEHICLE BODY ENGINEERING AND SAFETY	R15	4	1	AME	VEHICLE BODY ENGINEERING AND SAFETY	Equivalent

26	R09	4	1	CE	ADVANCED STRUCTURAL DESIGN	R15	4	1	CE	ADVANCED STRUCTURAL DESIGN	Equivalent. However unit-VII,VIII of R09 was deleted in R15 Reg and unit-III topics are additional in R15 Reg
27	R09	4	1	CE	ESTIMATING AND COSTING	R15	4	1	CE	ESTIMATING AND COSTING	Equivalent
28	R09	4	1	CE	FINITE ELEMENT METHODS	R15	4	1	CE	FINITE ELEMENT METHODS	Equivalent
29	R09	4	1	CE	WATERSHED MANAGEMENT	R15	4	1	CE	WATERSHED MANAGEMENT	Equivalent
30	R09	4	1	CSE	LINUX PROGRAMMING	R15	4	1	CSE	LINUX PROGRAMMING	Equivalent. However unit-VII of R09 was deleted in R15 Reg
31	R09	4	1	CSE	MACHINE LEARNING	R15	4	1	CSE	MACHINE LEARNING	Equivalent
32	R09	4	1	CSE	SOFT COMPUTING	R15	4	1	CSE	SOFT COMPUTING	Equivalent
33	R09	4	1	ECE	MICROWAVE ENGINEERING	R15	4	1	ECE	MICROWAVE ENGINEERING	Equivalent. However Unit-V topics additional in R15 Reg
34	R09	4	1	ECE	MULTIMEDIA AND SIGNAL CODING	R15	4	1	ECE	MULTIMEDIA AND SIGNAL CODING	Equivalnet. However Unit-VII,VIII of R09 was deleted in R15 Reg
35	R09	4	1	EEE	DIGITAL CONTROL SYSTEMS	R15	4	1	EEE	DIGITAL CONTROL SYSTEMS	Equivalent
36	R09	4	1	EEE	ELECTRICAL DISTRIBUTION SYSTEMS	R15	4	1	EEE	ELECTRICAL DISTRIBUTION SYSTEMS	Equivalent
37	R09	4	1	EEE	HIGH VOLTAGE ENGINEERING	R15	4	1	EEE	HIGH VOLTAGE ENGINEERING	Equivalent
38	R09	4	1	EEE	OPTIMIZATION TECHNIQUES	R15	4	1	EEE	OPTIMIZATION TECHNIQUES	Equivalent
39	R09	4	1	EEE	POWER SYSTEM OPERATION AND CONTROL	R15	4	1	EEE	POWER SYSTEM OPERATION AND CONTROL	Equivalent
40	R09	4	1	EEE	SWITCHGEAR AND PROTECTION	R15	4	1	EEE	SWITCHGEAR AND PROTECTION	Equivalent

41	R09	4	1	EEE	UTILIZATION OF ELECTRICAL ENERGY	R15	4	1	EEE	UTILIZATION OF ELECTRICAL ENERGY	Equivalent
42	R09	4	1	EEE	VLSI DESIGN	R15	4	1	EEE	VLSI DESIGN	Equivalent
43	R09	4	1	EIE	ANALYTICAL INSTRUMENTATION	R15	4	1	EIE	ANALYTICAL INSTRUMENTATION	Equivalent
44	R09	4	1	ETM	ADVANCED TELECOMMUNICATION TECHNOLOGIES	R15	4	1	ETM	ADVANCED TELECOMMUNICATION TECHNOLOGIES	Equivalent
45	R09	4	1	IT	HUMAN COMPUTER INTERACTION	R15	4	1	IT	HUMAN COMPUTER INTERACTION	Equivalent
46	R09	4	1	IT	IMAGE PROCESSING AND PATTERN RECOGNITION	R15	4	1	IT	IMAGE PROCESSING AND PATTERN RECOGNITION	Equivalent
47	R09	4	1	IT	MOBILE APPLICATION DEVELOPMENT	R15	4	1	IT	MOBILE APPLICATION DEVELOPMENT	Equivalent
48	R09	4	1	IT	SCRIPTING LANGUAGES	R15	4	1	IT	SCRIPTING LANGUAGES	Equivalent
49	R09	4	1	IT	SEMANTIC WEB AND SOCIAL NETWORKS	R15	4	1	IT	SEMANTIC WEB AND SOCIAL NETWORKS	Equivalent
50	R09	4	1	IT	WIRELESS NETWORKS AND MOBILE COMPUTING	R15	4	1	IT	WIRELESS NETWORKS AND MOBILE COMPUTING	Equivalent
51	R09	4	1	MCT	ADVANCED KINEMATICS AND DYNAMICS OF MACHINERY	R15	4	1	MCT	ADVANCED KINEMATICS AND DYNAMICS OF MACHINERY	Equivalent
52	R09	4	1	MCT	FLEXIBLE MANUFACTURING SYSTEM	R15	4	1	MCT	FLEXIBLE MANUFACTURING SYSTEM	Equivalent
53	R09	4	1	MCT	MOTION CONTROL DESIGN	R15	4	1	MCT	MOTION CONTROL DESIGN	Equivalent
54	R09	4	1	MCT	RENEWABLE ENERGY SOURCES	R15	4	1	MCT	RENEWABLE ENERGY SOURCES	Equivalent
55	R09	4	1	ME	AUTOMATION IN MANUFACTURING	R15	4	1	ME	AUTOMATION IN MANUFACTURING	Equivalent
56	R09	4	1	ME	DESIGN FOR MANUFACTURING	R15	4	1	ME	DESIGN FOR MANUFACTURING	Equivalent
57	R09	4	1	ME	INSTRUMENTATION AND CONTROL SYSTEMS	R15	4	1	ME	INSTRUMENTATION AND CONTROL SYSTEMS	Equivalent
58	R09	4	1	ME	MECHANICAL VIBRATIONS	R15	4	1	ME	MECHANICAL VIBRATIONS	Equivalent
59	R09	4	1	ME	OPERATIONS RESEARCH	R15	4	1	ME	OPERATIONS RESEARCH	Equivalent
60	R09	4	1	ME	POWER PLANT ENGINEERING	R15	4	1	ME	POWER PLANT ENGINEERING	Equivalent

61	R09	4	1	ME	ROBOTICS	R15	4	1	ME	ROBOTICS	Equivalent
62	R09	4	1	ME	UNCONVENTIONAL MACHINING PROCESSES	R15	4	1	ME	UNCONVENTIONAL MACHINING PROCESSES	Equivalent
63	R09	4	1	MIE	MINE CONSTRUCTION ENGINEERING	R15	4	1	MIE	MINE CONSTRUCTION ENGINEERING	Equivalent
64	R09	4	1	MIE	MINE LEGISLATION	R15	4	1	MIE	MINE LEGISLATION	Equivalent
65	R09	4	1	MIE	MINE SUBSIDENCE ENGINEERING	R15	4	1	MIE	MINE SUBSIDENCE ENGINEERING	Equivalent
66	R09	4	1	MIE	MINERAL PROCESSING	R15	4	1	MIE	MINERAL PROCESSING	Equivalent
67	R09	4	1	MIE	ROCK EXCAVATION ENGINEERING	R15	4	1	MIE	ROCK EXCAVATION ENGINEERING	Equivalent
68	R09	4	1	MIE	ROCK FRAGMENTATION ENGINEERING	R15	4	1	MIE	ROCK FRAGMENTATION ENGINEERING	Equivalent
69	R09	4	1	MIE	ROCK MECHANICS	R15	4	1	MIE	ROCK MECHANICS	Equivalent
70	R09	4	1	MIE	ROCK SLOPE ENGINEERING	R15	4	1	MIE	ROCK SLOPE ENGINEERING	Equivalent
71	R09	4	1	MIE	STRATA CONTROL TECHNOLOGY	R15	4	1	MIE	STRATA CONTROL TECHNOLOGY	Equivalent
72	R09	4	1	MIE	TUNNELING ENGINEERING	R15	4	1	MIE	TUNNELING ENGINEERING	Equivalent
73	R09	4	1	MMT	METALLURGICAL PROBLEMS	R15	4	1	MMT	METALLURGICAL PROBLEMS	Equivalent
74	R09	4	1	MMT	NON DESTRUCTIVE TESTING	R15	4	1	MMT	NON DESTRUCTIVE TESTING	Equivalent
75	R09	4	1	MMT	POLYMERIC MATERIALS	R15	4	1	MMT	POLYMERIC MATERIALS	Equivalent
76	R09	4	1	MMT	SEMI CONDUCTORS AND MAGNETIC MATERIALS	R15	4	1	MMT	SEMI CONDUCTORS AND MAGNETIC MATERIALS	Equivalent
77	R09	4	1	MSNT	CARBON NANO TUBES AND THEIR APPLICATIONS	R15	4	1	MSNT	CARBON NANO TUBES AND THEIR APPLICATIONS	Equivalent
78	R09	4	1	MSNT	METROLOGY AND INSTRUMENTATION	R15	4	1	MSNT	METROLOGY AND INSTRUMENTATION	Equivalent
79	R09	4	1	MSNT	NANO SENSORS AND ACTUATORS	R15	4	1	MSNT	NANO SENSORS AND ACTUATORS	80% Equivalent
80	R09	4	1	MSNT	SURFACE ENGINEERING	R15	4	1	MSNT	SURFACE ENGINEERING	Equivalent
81	R09	4	1	PTM	CHEMICAL REACTION ENGINEERING	R15	4	1	PTM	CHEMICAL REACTION ENGINEERING	Equivalent

82	R09	4	1	PTM	HEALTH, SAFETY & ENVIRONMENT IN PETROLEUM INDUSTRY	R15	4	1	PTM	HEALTH, SAFETY & ENVIRONMENT IN PETROLEUM INDUSTRY	Equivalent
83	R09	4	1	PTM	OFFSHORE ENGINEERING	R15	4	1	PTM	OFFSHORE ENGINEERING	Equivalent
84	R09	4	2	AE	AIRPORT PLANNING AND OPERATIONS	R13	4	2	AE	AIRPORT PLANNING AND OPERATIONS	Equivalent
85	R09	4	2	AE	HELICOPTER ENGINEERING	R13	4	2	AE	HELICOPTER ENGINEERING	Equivalent
86	R09	4	2	AE	HYPERSONIC AERODYNAMICS	R13	4	2	AE	HYPERSONIC AERODYNAMICS	Equivalent
87	R09	4	2	AE	LAUNCH VEHICLE AND MISSILE TECHNOLOGY	R13	4	2	AE	LAUNCH VEHICLE AND MISSILE TECHNOLOGY	Equivalent. However unit-V of R09 was deleted in R13 Reg.
88	R09	4	2	AE	ANALYSIS OF COMPOSITE STRUCTURES	R13	4	2	AE	ANALYSIS OF COMPOSITE STRUCTURES	Equivalent
89	R09	4	2	AE	HEAT TRANSFER	R13	4	2	AE	HEAT TRANSFER	Equivalent
90	R09	4	2	AME	VEHICLE TRANSPORT MANAGEMENT	R13	4	2	AME	VEHICLE TRANSPORT MANAGEMENT	Equivalent
91	R09	4	2	AME	ALTERNATE FUELS FOR AUTOMOBILES	R13	4	2	AME	ALTERNATE FUELS FOR AUTOMOBILES	80% Equivalent
92	R09	4	2	AME	AUTOMATION IN MANUFACTURING	R13	4	2	AME	AUTOMATION IN MANUFACTURING	Equivalent. However unit V added in R13 Reg
93	R09	4	2	AME	PRODUCT DESIGN AND ASSEMBLY AUTOMATION	R13	4	2	AME	PRODUCT DESIGN AND ASSEMBLY AUTOMATION	Equivalent. However unit II of R09 was deleted in R13 Reg.
94	R09	4	2	CE	DESIGN AND DRAWING OF IRRIGATION STRUCTURES	R13	4	2	CE	DESIGN AND DRAWING OF IRRIGATION STRUCTURES	Equivalent
95	R09	4	2	CE	REHABILITATION AND RETROFITTING OF STRUCTURES	R13	4	2	CE	REHABILITATION AND RETROFITTING OF STRUCTURES	Equivalent
96	R09	4	2	CEE	GROUND WATER POLLUTION	R13	4	2	CEE	GROUND WATER POLLUTION	Equivalent. However unit VII & VIII of R09 was deleted in R13 Reg.

97	R09	4	2	CEE	WATER QUALITY MANAGEMENT	R13	4	2	CEE	WATER QUALITY MANAGEMENT	Equivalent
98	R09	4	2	CSE	ADHOC & SENSORS NETWORKS	R13	4	2	CSE	ADHOC & SENSORS NETWORKS	Equivalent
99	R09	4	2	CSE	DATABASE SECURITY	R13	4	2	CSE	DATABASE SECURITY	Equivalent
100	R09	4	2	CSE	EMBEDDED SYSTEMS	R13	4	2	CSE	EMBEDDED SYSTEMS	Equivalent
101	R09	4	2	CSE	MULTIMEDIA & RICH INTERNET APPLICATION	R13	4	2	CSE	MULTIMEDIA & RICH INTERNET APPLICATION	Equivalent
102	R09	4	2	CSE	SCRIPTING LANGUAGES	R13	4	2	CSE	SCRIPTING LANGUAGES	Equivalent
103	R09	4	2	CSE	STORAGE AREA NETWORKS	R13	4	2	CSE	STORAGE AREA NETWORKS	Equivalent
104	R09	4	2	CSE	WEB SERVICES	R13	4	2	CSE	WEB SERVICES	Equivalent. However some topics added in unit-II R13 Reg.
105	R09	4	2	EEE	EHV AC TRANSMISSION	R13	4	2	EEE	EHV AC TRANSMISSION	Equivalent
106	R09	4	2	EEE	NEURAL NETWORKS AND FUZZY LOGIC	R13	4	2	EEE	NEURAL NETWORKS AND FUZZY LOGIC	Equivalent
107	R09	4	2	EIE	RELIABILITY ENGINEERING	R13	4	2	EIE	RELIABILITY ENGINEERING	Equivalent
108	R09	4	2	ETM	NETWORK SECURITY	R13	4	2	ETM	NETWORK SECURITY	Equivalent
109	R09	4	2	ETM	CELLULAR & MOBILE COMMUNICATIONS	R13	4	2	ETM	CELLULAR & MOBILE COMMUNICATIONS	Equivalent
110	R09	4	2	ETM	MICROWAVE ENGINEERING	R13	4	2	ETM	MICROWAVE ENGINEERING	Equivalent. However unit-II of R09 was deleted in R13 Reg. and some additional topics are added in R13 Reg
111	R09	4	2	ETM	RADAR SYSTEMS	R13	4	2	ETM	RADAR SYSTEMS	Equivalent
112	R09	4	2	ETM	RF CIRCUIT DESIGN	R13	4	2	ETM	RF CIRCUIT DESIGN	Equivalent
113	R09	4	2	ETM	SATELLITE COMMUNICATIONS	R13	4	2	ETM	SATELLITE COMMUNICATIONS	Equivalent
114	R09	4	2	IT	E-COMMERCE	R13	4	2	IT	E-COMMERCE	Equivalent
115	R09	4	2	IT	MIDDLEWARE TECHNOLOGIES	R13	4	2	IT	MIDDLEWARE TECHNOLOGIES	Equivalent

116	R09	4	2	MCT	MEMS DESIGN	R13	4	2	MCT	MEMS DESIGN	Equivalent
117	R09	4	2	MCT	AUTOMATION IN MANUFACTURING	R13	4	2	MCT	AUTOMATION IN MANUFACTURING	80% Equivalent
118	R09	4	2	MCT	CONCURRENT ENGINEERING	R13	4	2	MCT	CONCURRENT ENGINEERING	Equivalent
119	R09	4	2	MCT	MATHEMATICAL MODELING AND SIMULATION	R13	4	2	MCT	MATHEMATICAL MODELING AND SIMULATION	Equivalent
120	R09	4	2	MCT	PLANT ENGINEERING & MAINTENANCE	R13	4	2	MCT	PLANT ENGINEERING & MAINTENANCE	Equivalent
121	R09	4	2	MCT	PRODUCTION PLANNING AND CONTROL	R13	4	2	MCT	PRODUCTION PLANNING AND CONTROL	Equivalent
122	R09	4	2	ME	COMPUTATIONAL FLUID DYNAMICS	R13	4	2	ME	COMPUTATIONAL FLUID DYNAMICS	Equivalent. However unit VII of R09 was deleted In R13 Reg.
123	R09	4	2	ME	GAS DYNAMICS	R13	4	2	ME	GAS DYNAMICS	Equivalent
124	R09	4	2	ME	JET PROPULSION & ROCKET ENGINEERING	R13	4	2	ME	JET PROPULSION & ROCKET ENGINEERING	80% Equivalent. However unit VIII of R09 was deleted in R13 Reg.
125	R09	4	2	ME	RENEWABLE ENERGY SOURCES	R13	4	2	ME	RENEWABLE ENERGY SOURCES	Equivalent
126	R09	4	2	MIE	DEEP SEAM MINING	R13	4	2	MIE	DEEP SEAM MINING	Equivalent
127	R09	4	2	MIE	GEOLOGICAL & TECHNOLOGICAL FACTORS OF COAL GASIFICATION CBM, SHALE GAB	R13	4	2	MIE	GEOLOGICAL & TECHNOLOGICAL FACTORS OF COAL GASIFICATION CBM, SHALE GAB	Equivalent
128	R09	4	2	MIE	MINE ELECTRICAL ENGINEERING	R13	4	2	MIE	MINE ELECTRICAL ENGINEERING	Equivalent
129	R09	4	2	MIE	MINE GROUND CONTROL	R13	4	2	MIE	MINE GROUND CONTROL	Equivalent
130	R09	4	2	MIE	MINE HEALTH & SAFETY ENGINEERING	R13	4	2	MIE	MINE HEALTH & SAFETY ENGINEERING	Equivalent
131	R09	4	2	MIE	PLANNING OF SURFACE MINING PROJECT	R13	4	2	MIE	PLANNING OF SURFACE MINING PROJECT	Equivalent

132	R09	4	2	MIE	PLANNING OF UNDERGROUND COAL MINING PROJECT	R13	4	2	MIE	PLANNING OF UNDERGROUND COAL MINING PROJECT	Equivalent
133	R09	4	2	MMT	COMPOSITE MATERIALS	R13	4	2	MMT	COMPOSITE MATERIALS	Equivalent. However unit VIII of R09 was deleted in R13 Reg.
134	R09	4	2	MMT	FERRO ALLOY TECHNOLOGY	R13	4	2	MMT	FERRO ALLOY TECHNOLOGY	90% Equivalent. However Unit VII is deleted in R09 Reg & Additional topics in V unit of R13 Reg are added
135	R09	4	2	MMT	NUCLEAR METALLURGY	R13	4	2	MMT	NUCLEAR METALLURGY	Equivalent. However unit VII of R09 was deleted in R13 Reg.
136	R09	4	2	MSNT	BIOMEDICAL APPLICATIONS OF NANOTECHNOLOGY	R13	4	2	MSNT	BIOMEDICAL APPLICATIONS OF NANOTECHNOLOGY	Equivalent
137	R09	4	2	MSNT	NANO COMPOSITES	R13	4	2	MSNT	NANO COMPOSITES	Equivalent
138	R09	4	2	MSNT	NANOTECHNOLOGIES FOR WATER AND ENVIRONMENT APPLICATIONS	R13	4	2	MSNT	NANOTECHNOLOGIES FOR WATER AND ENVIRONMENT APPLICATIONS	Equivalent. However unit VI of R09 was deleted in R13 Reg.
139	R09	4	2	MSNT	NANOTECHNOLOGY FOR ENERGY SYSTEMS	R13	4	2	MSNT	NANOTECHNOLOGY FOR ENERGY SYSTEMS	Equivalent. However unit VII & VIII of R09 was deleted in R13 Reg.
140	R09	4	2	PTM	PETROLEUM ENGINEERING ECONOMICS, POLICIES & LAWS	R13	4	2	PTM	PETROLEUM ENGINEERING ECONOMICS, POLICIES & LAWS	Equivalent
141	R09	4	2	PTM	RESERVOIR STIMULATION	R13	4	2	PTM	RESERVOIR STIMULATION	Equivalent