INSTITUTE OF PETROLEUM ENGINEERS, DEHRADUN

PRODUCTION OPERATIONS

RESOURCES

GATE PETROLEUM

FACULTY

1. MR. AYUSH PATEL (AEE PRODUCTION ONGC)

GATE RANK – 1

2. MR. GAURAV SAINI (AEE PRODUCTION ONGC)

GATE RANK – 5

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GATE AIR – 11

LECTURE	TOPIC (BILINGUAL)
1	Gaurav Saini Journey GATE 2020
2	Basics of Petroleum Engineering
3	INTRODUCTION TO PRODUCTION ENGINEERING
4	Reservoir Deliverability
5	Flow Regime
6	Transient Flow Regime
7	Unit Conversion
8	Steady State Flow
9	Pseudosteady State
10	Derivation of steady state equation
11	Transient State numerical
12	Stabilized State numerical
13	Pseudo steady state numerical
14	Productivity Index
15	Productivity Index numerical
16	IPR ONE-PHASE
17	IPR 2 Phase
18	GATE 2018 VOGEL numerical
19	Partial two phase IPR
20	Partial two phase Numerical
21	Future IPR
22	Fetkovich Equation
23	Fetkovich Equation numerical new
24	Wellbore performance intro
25	ENERGY BALANCE
26	Pressure drop due to friction, unit Conversion gc
27	Poiseullie Derivation
28	Poiseulles numerical

29	VLP Plotting
30	LIQUID HOLDUP & NUMERICAL
31	multiphase flow vertical
32	Multiphase flow horizontal
33	VLP MODELS
34	Nodal Analysis part 1
35	Nodal Analysis part 2
36	Nodal Analysis part 3
37	Wellbore Deliverability
38	Artificial Lift Introduction
39	AL Active Well Dead Well
40	SRP INTRODUCTION
41	Types of SRP API name Pump Displcement
42	Effective Stroke Length
43	SHM MOTION
44	Conventional motion
45	Maximum and Minimum Acceleration
46	PPRL and MPRL
47	PPRL MPRL Numerical
48	SRP Dis advantages and advantages
49	Gas Lift Introduction
50	Gas Lift Working
51	Gas Lift valve opening closing
52	Gas Lift IPR VLP
53	ESP
54	ESP Total Dynamic Head pressure
55	ESP | Pump characteristics
56	ESP NUMERICAL 1
57	ESP NUMERICAL 2 GATE
58	ESP Advantages Disadvantages
59	Plunger Lift

60	Progressive Cavity Pump
61	PCP Geometry
62	Jet Pump
63	Velocity Profile Common Doubt Gate-2020
64	Well Completion-A
65	Well Completion-B
66	Well Activation
67	Skin
68	Formation Damage
69	Perforation
70	Hydrofracking
71	Hydro frack Numerical
72	Acidization
73	Paraffins and Asphaltenes
74	Scales
75	Sand Control and Gravel Pack
76	Gravel Pack & Seive analysis
77	Workover Operations
78	Workover fluids
79	Wireline and Slickline and CTU
80	Introduction Surface Facilities
81	Concept of Multi Stage Separator
82	Different type of section in separator
83	Types of Separator
84	Seperator vessel internal
85	Potential Operating Problems
86	Packer calculation
87	Separator Design
88	Three Phase Separator
89	Emulsion
90	Emulsion Treatment Surface Facilities

91	Packer
92	Heat Exchanger
93	Pumps
94	NPSHA numerical
95	compressor
96	Compressor Numerical
97	Storage Tank
98	LNG
99	Metering
98	Q. 30 of quiz -2 and vertical separator
100	3 phase separator
101	Well Completion Introduction
102	Well Completion 1
103	Well Completion 2
104	Well Completion 3
105	WELL COMPLETION 5
106	WELL COMPLETION 4

LECTURE	TOPIC (ENGLISH)
1	WELL EQUIPMENT THEORY 1
2	Well equipment numerical 1
3	Well equipment numerical 2
4	WELL EQUIPMENT THEORY 2
5	Acidization theory
6	ACIDIZATION NUMERICAL
7	Hydraulic fracturing 1
8	Hydraulic fracturing 2
9	Hydraulic fracturing 3
10	Hydraulic fracturing 4
11	Hydraulic fracturing 4 continued
12	Acidization
13	Surface Facility
14	GAS LIFT
15	FLOW METER
16	SICK WELL ANALYSIS
17	NODEL ANALYSIS
18	Hydraulic fracturing 5
19	MULTIPHASE 1
20	MULTIPHASE 2
21	MULTIPHASE 3
22	SRP 1
23	SRP 2
24	SRP 3
25	SRP 4
26	SRP 5

27	SRP 6
28	SRP 7
29	SRP 8
30	GAS LIFT 1
31	Gas lift 2
32	gas lift 3
33	Gas lift 4
34	Gas lift 5
35	FLOW EFFICIENCY NUMERICAL
36	ESP 1
37	|ESP 1 continued
38	ESP 2
39	Heat Exchanger1
40	HeatExchanger 2
41	||HeatExchanger2 continued
42	HeatExchanger_3
43	HeatExchanger_4
44	Formation Damage 1
45	Formation Damage 2
46	Formation Damage 3
47	Formation Damage 4
48	Formation Damage 5
49	Choke performance
50	Production system analysis
51	Bernoulli's equation 1
52	Bernoulli's equation 2
53	Pressure vessels 1
54	Pressure vessel 2
55	Lecture 42 || Pressure vessel 3
56	Lecture 43 || Pump 1
57	Lecture 44 || Pump 2

58	Lecture 45 || Pump 3
59	Lecture 46 || Pump 4
60	Lecture 47 || Pump 5
61	Lecture 48 || pump 6
62	LECTURE 49||WELL COMPLETION
63	LECTURE 50||Product testing 1
64	Product testing 2
65	Well Completion
66	IPR
67	EXTRA NUMERICAL
68	EXTRA NUMERICAL

NOTE:

1.MORE LECTURES WILL BE UPLOADED AS PER THE NEED OF THE STUDENTS OR CHANGES IN SYLLABUS.

2.MORE NUMERICAL DISCUSSION LECTURES WILL BE UPLOADED REGULARLY.