# JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE - 641 105

### SUMMARY SHEET

## 2.5. Evaluation Process and Reforms

| S.NO | CRITERIA   | PAGE NO |
|------|--|---------|
| 1    | 2.5.1 Reforms in Continuous Internal Evaluation (CIE)<br>System at the Institutional level               | 1       |
| 2    | 2.5.2 Mechanism of internal assessment is transparent and<br>robust in terms of frequency and variety    | 26      |
| 3    | 2.5.3 Mechanism to deal with examination related grievances<br>is transparent, time- bound and efficient | 53      |
| 4    | 2.5.4 The Institution adheres to the academic calendar for the conduct of CIE                            | 77 .*   |

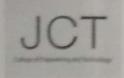
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Ort.G. Resmorth, M.E. Ph.D., PRINOPAL JCT College of Engineering and Technology Pichenut, Colmbatore - 641 105

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JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

Department of Petroleum Engineering

Pichanur, Coimbatore - 641105

#### CIRCULAR

### Ref: Cirl/HoD/PE/2/2019

27.02.2019

### Sub: Third Internal Test - Reg.

This is to inform that Internal Test – III is scheduled from 04.03.19 to 06.03.19 (11:00 am to 12:30 pm and 02:30 pm to 04:00 pm). All the students should attend the test compulsorily. (To be read in the class room)

#### Epr Faculty:

The Faculty members are asked to set the question paper with answer key for 4 units and get the sign from HOD then submit the question paper to the Department Exam cell on or before 01.03.19 by 1.00 pm.

Class advisors are requested to submit the result analysis for the CIA-III on or before 09.03.2019.

#### **Circulation** to:

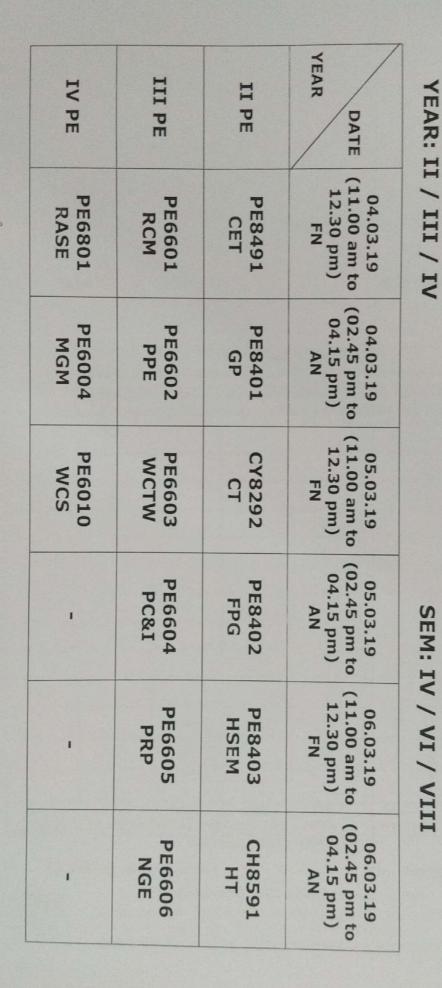
- Faculty members through HOD
- MBis(Test II Schedule).
- > II, III, IV year students through HODs (To be read in the class room)

HOD

TEST COORDINATOR

Nehop

F.



JCT COLLEGE OF ENGINEERING AND TECHNOLOGY Pichanur, Coimbatore - 641105

INTERNAL TEST- III TIME TABLE

ACADEMIC YEAR: 2018 - 2019 (ODD SEMESTER)

AUSTRIA

### JCT COLLEGE OF ENGINEERING AND TECHNOLOGY,

PICHANUR, COIMBATORE - 641105 DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING DUTY ALLOCATION LIST FOR FACULTY



**INTERNAL EXAM - III** 

**SEM : EVEN SEMESTER** 

### ACADAMIC YEAR : 2018-19

S.N NAME OF THE 04.03.19 04.03.19 05.03.19 05.03.19 06.03.19 06.03.19 FACULTY / DATE (FN) 0. (AN) (FN) (AN) (FN) (AN) 1 G.Balachandran D D 2 Mr.G.Mahendran D D D 3 Mr.S.Jenish D D D 4 Mr.N.Aravindh D D 5 V.Purushothaman D Di 6 D Arun Ammaiappan D D 7 Shabil John J P D D 8 Gengadevi R D 9 Bharathiraja P D 11 K Jayajothi D 12 G Sarojini D 13 Thahseen D 14 A.Kousalaya D \*\* All the invigilators are requested to report the invigilation duty by 10.50 am and 2.40 pm in the Department examination section without fail.

\*\* HOD are requested to ensure that the altered duty by their faculty before sanctioning the leave.

**ORDINATOR** 

CIRCULATION TO : FACULTY THROUGH HOD Department & Petroleurn Engg.

II-YEAR, IV- SEM CIA-IV ATTENDANCE SHEET

|     |              | SUBJECT NAME           | 04.03.19      | 04.03.19     | 05.03.19    | 05.03.19<br>AN | 06.2.19<br>FN | 06.2.19<br>AN |
|-----|--------------|------------------------|---------------|--------------|-------------|----------------|---------------|---------------|
| .NO | REG NO       | NAME                   | FN            | AN           | FNUP        | A VO           |               |               |
| 1   | 720917219001 | ADARSH CHANDRAN        | ETA.          | AB           | AB          | AB             |               |               |
| 2   | 720917219002 | ADHIDEV KRISHNA P<br>J | AB            | AB           | Johnster    | AB             | R             |               |
| 3   | 720917219003 | AISWARYA B             | B. Aug        | B. Duge      | B. Augr     | B. Aing        | B-Big         | -             |
| 4   | 720917219004 | AJAY S M               | Afay          | AB           | ajaz        | 'AD            | apo           | -             |
| 5   | 720917219005 | AJAY C SURESH          | Que M         | AB           | Quit        | 200            | folth.        | 1. 1.         |
| 6   | 720917219006 | AKILESH K              | OTH:          | AB           | Jeffel,     | put.           | × 11 60       |               |
| 7   | 720917219007 | AMRITHA N KRISHNA      | derhander     | to the fries | distantion  | doillabar      | doute times   |               |
| 8   | 720917219008 | ANAND M.V              | AB.           | AB           | AB          | AB             | ~             | -             |
| 9   | 720917219010 | ARUN CHAND             | AB            | AB           | AB          | AB.            |               |               |
| 10  | 720917219011 | ASHIN.S.S              | AB            | TAB          | AB,         | BB             | and           | ~             |
| 11  | 720917219012 | ASHOK KUMAR V          | AB            | AB           | July        | AB             | hily          |               |
| 12  | 720917219013 | BRIGHTON BALAN.J       | AB            | MAB          | AB          | BB             | 1             |               |
| 13  | 720917219014 | DHANUSH.P              | P.M           | AB           | P.DFT       | P-257          | p. p.7        |               |
| 14  | 720017219015 | DHINESHKUMAR G         | OFTB          | AB           | BB          | 083            |               |               |
| 15  | 720917219016 | DHIVAKAR.S             | Divaka        | Divater      | Diveter     | Divole         | Livakan       |               |
| 16  | 720917219017 | DIBISH.J               | Jun-          | AB           | Per-        | Pur.           | Rh :          |               |
| 17  | 720917219019 | ESAKKI SELVAM.M        | lellser .     | Jul Asl      | Well Sell   | DESEL          | IN Sold       |               |
| 18  | 720917219020 | GNANASEKARAN.S         | anavelle rais | Cincellerous | BB          | AB             |               |               |
| 19  | 720917219022 | HARIKRISHNAN.V         | AB            | AB           | 4200        | AB             | 16209         | 7             |
| 20  | 720917219023 | HARIKRISHNAN.N.VIN     | Je:           | TAB          | Le.         | (b.            | +             |               |
| 21  | 720917219024 |                        | -thathe!      | though .     | : that.     | thatht         | that          |               |
| 22  | 720917219025 | JUTEN PETER LEON       | <b>B</b> D    | AB           | All.        | RB             | 10001.        |               |
| 23  | 720917219026 | KANNAN.V.S             | AB            | TAB          | sel.        | AB             | 36.1.         |               |
| 24  | 720917219027 | KAVIYARASU.M           | SAD 1         | 1000         | Jong        | Ma             | To the        | -             |
| 25  |              | KISHORE C              | Quet          | AB           | And         | Ac             | 6 horse       |               |
| 26  |              | LAVANYA B              | Lavanja       | 8 Loranter 8 | - Jaraujans | 200            | Kures .       |               |
| 27  | 700047040020 | LIBIN JOSEPH           | AB            | AB           | Altoine .   | forrautes      | Lowanters     |               |

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### JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE-641105 DEPARTMENT OF PETROLEUM ENGINEERING



| T.        | nate / Session     | : 25/01/2019      | )                     | Duration         | : 90 Minutes |       |
|-----------|--------------------|-------------------|-----------------------|------------------|--------------|-------|
| xam I     | nation :           | CIA-I             |                       | Department       | : PE         |       |
|           | Title              | : NATURAL GA      | S ENGINEERING         | Course Code      | : PE6606     |       |
| -         | Sem                | : III/VI          |                       | Maximum Marks    | : 50         |       |
| Carl Carl | vic vear           | : 2018-2019       |                       | Semester Type    | : EVEN       |       |
| OURS      | E OUTCOMES         | C315              |                       |                  |              |       |
| -         |                    |                   | ANSWER ALL            | QUESTIONS        |              |       |
| NO        | Course<br>Outcomes | Bloom<br>Taxonomy |                       | Questions        |              | Marks |
| 1         | C315.1             | R                 | Explain about sedimen | ntation process. |              | 2     |

List the various sources of information for natural gas and its

| 7    | 3   |        | U                            |  |    |
|------|-----|--------|------------------------------|--|----|
|      | 4   | C315.1 | R                            | What are the various applications of natural gas.  | 2  |
|      | a 5 | C315.1 | U                            | Define petroleum reservoir.  | 2  |
|      |     | 1      |                              | PART-B   |    |
|      | 6   | C315.1 | R                            | Briefly explain about the various branches of petroleum industry.  | 10 |
| rea  | R   | C315.1 | R                            | Explain about the various theories describing the origin of petroleum.                                     | 10 |
|      | 8   | C315.1 | U                            | Difference between natural gas, compressed natural gas, Liquefied natural gas and liquefied petroleum gas. | 10 |
| -) ' | k°  |        | 0                            | How earth temperature and earth pressure influenced the oil and gas  | 10 |
|      | 9   | C315.1 | U                            | production with example.   | 10 |
|      |     |        | and the second second second |  |    |

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C315.1

C315.1

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application.

U - UNDERSTANDING

E- EVALUATING

Define historical geology.

COURSEINCHARGEHOD

AP- APPLYING C - CREATING n

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S. Sarawana Kuma 720916219034 Natural Gras Engenciny Interal test I Natural Gas Engrowing. petroleum rerevoi 21-1-19 Petrolum reservoir is an Other wise Known as 07 2 gas rerevoir. The petroleum rescuoir is an Study of oil 2 gas from Jub Surfac & production or crabb to reater daily l'é ware called petrobum l'serroci. The Sunsident of oils gas emploration for boctom hab to top hole exploration were called pertrolum servoir 01 Vaious application of Natural Gras The Natural bias were implided in Several way of human life . They wer. unes 1. mainly und for JPG1. LNG1. System. 2. mainly gather for hospital & Other industrial Confirmed. Jedument procem The Sectionment process were caud, the Soil or Other particle that Sedement by the floar of hely that Water & air & other contemption.

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Vavious branches of petrolum Inderstry: In a reservoir that petrolum industry have Sevearly type of proun to handle the Sauce attained. They over 1. Surveying a land Surfar. 2. Confinuvind the Greo logist 3. Confiniament the Socurle 9 hydrocarbon. 4. Study the Land Surface of liseroui portion. 5. Cost were estimateu dos the development dos Hydro larbon. 6. Exploration of Hydrocarbon Sample Collection 7. Reservouri Simalation handle. 9. Stimulation of wave auangment for blu the Seismic waves. a. Well Completition & coorking System for the referous procen.

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10 Secondary, primary oil Relovery procen. 11. Inhanced oil formation ellover. 12. Refinary Calibaration Superation.

oil beloving procen In an petroleur production à contronosly Calculated the lifer time after reduced the production to relating procen in plude they war. upon Eleon LUUUU On Drene plutity of petrolum oil recovery ype bon 1. primary oil relover. W Bail Relovey 2. Suonday oil ai ellora. 3. Thermal The primary Di lelovery that lequied by the 00 injution The Sconday of Money that Liquic by the gan injustion

8 Natural gam The orginaly of watural gain is an of auigra gas, Mixture of hydro campon, of any composity & maisly composition It's of otheryan composity & maisly composition It's nuthane, & Con are Source of Natural Jan Muthane, & Con

composition 9 - Natural gas. In's an The compasition of Natural gas werdensity

Sevail percentage.

larbon- 83-87%. Hydroger - 12 to 14.1. nuthani - 1.25 % Ethoani - 0.60% Cor - 0.0281.

Prattina - 0.05 10 0.281.

Comprem Natural gas

Influence of wateral gas that cont numani, Ethans & Coz, oxygen were of wateral gas. They were reamily used to petrolem & Nacdural gar.

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Cj Temper aten volum 5.1 9 Tampucetter. う où s gas production lecow. 1. primary Delover 2. Sclonday Moory le cony 3. Thermal gan inj or with Thermod Sword hum prum an Quer Tonger eren prus -)

Gely col /amine process:

It is the components having 45 - 85%. of Citycol Amine 5 - 25 %. of water 10 - 30%. of Gelyco).

Advantages,

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It is the combination of deby deation cand composition of the anune fliels.

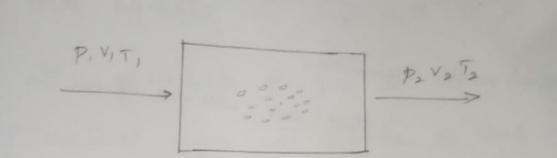
Disadvantages: It is the having high toaming and uttility process.

Sulfinol process\_ It has the base components of

Sulphinol and Dur propa (DIPA)

Advantages :.

high toaming high ultility Lou pressure performance.



At constant  $p, T_1 \rightarrow T_2 \quad V_1 \rightarrow V'$ 

At constant T, P, -> P2 V' -> T2

By the iges laws, cassumption,

?) moleular WE as nege infinitely small .

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9?) Ideal gas laws behavious.

P. V. = P2 V2  $v' = \frac{T_2 v_2}{T_1}$ 

PIV' = P2V2 => PT F Grath Co TI T2

PV = R.

6. Gras hydrates

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\* Hy diates of gas up the formations of neutrual agas is schular to that of the

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potroleum. \* By the egas hydrates of natural igas hydrates it may varies with the normal bance components.

Types of gas hydrates.

\* Eathane \* Methane \* Carbon de orede \* Hydrogen sulphete

Eathene gas hy drates. It is the barre of call

rand common of all in the hydrote

-gau Types of condensate statellyation þ ?) flash vapourization suible N 91°) Gelycol vajourization bstan Gear sweatening process: 3. in wi Removal of sour gas or audio igas/solution from the natural igas in that / Called gas dweetening projects. Various composition of natural gas: nable Methane and higher alkanes consta Has, Nitrogen, and CO2. Suspen Grathering lines :. which us used to connect the other targets connection of two targets Transition lineso. is the transition lines

JUI Gelycol l'amine processor It is the reald treating process 5. componente 10 - 30%. of Gily col (any 45 - 85 7 - of Amune 5-25% of water It was combination of both dehad They are and hydrate process Mapoul C men The comp o douge o small a 72 10 AL REAL Est

| <b>T</b><br><b>T</b><br><b>T</b><br><b>T</b><br><b>T</b><br><b>T</b><br><b>T</b><br><b>T</b>  |              | 10    | Derive fundamental equation of flow of fluid dynamics (Continuity,<br>Momentum and energy equations) | Derive fundamental equation of flo<br>Momentum and energy equations) | U           | C315.3       | 98     |
|---|--------------|-------|--|--|-------------|--------------|--------|
| ICT COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COINBATORE-641103  ILIVINAL CASE ENGINEERING  ILIVINAL GAS ENGINE TADO  ILIVINAL GAS ENGINE TADO  ILIVINAL GAS ENGINE TADO  ILIVINAL GAS ENGINE T  |              | 10    | equation for compressible flow in pipes.   | Derive the general e   | C           | C315.3       | 69     |
| UC COLLEGE OF ENGINEERING AND TECHNOLOGY<br>DEPARTMENT OF PETROLEUM ENGINEERING<br>an Date / Session : 19 /02/2019  Duration  : UD/UL<br>Sender  Duration  : So Minutes    mination  : CA-III  Duration  : So Minutes  Department  : PE    se Title  : NATURAL GAS ENGINEERING  Course Code  : PE6606    : III/VI  Emilityear  : 2019-2019  Maximum Marks  : So    : OUTCOMES:  : 2019-2019  Marks  : 2019-2019    : OUTCOMES:  : 2019-2019  What are the advantages of gas compressor.  : 2    : OUTCOMES:  : 400  What are the advantages of gas compressor.  : 2    : OUTCOMES:  : 400  : 400  : 2    : OUTCOMES:  : 400  : 2  : 2    : OUTCOMES:  : 400 <t< td=""><td></td><td>10</td><td>quation to calculate the power requirement</td><td>Derive the general e</td><td>R</td><td></td><td>7</td></t<>   |              | 10    | quation to calculate the power requirement   | Derive the general e   | R           |              | 7      |
| UCT COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COIMBATORE-641105  TUP    n Date / Session : 19 /02/2019  Imation  : 19 /02/2019  Imation    inhabion  : CLA-III  Imation  : So Minutes    ise Title  : NATURAL GAS ENGINEERING  Duration  : So Minutes    Seminic Vear  : 2018-2019  Maximum Marks  : So    3  C315  ANSWER ALL QUESTIONS  Course Code  PE6606    Course  Bloom  Questions  Marks    C315.3  R  Define natural gas compression  2    C315.3  R  What are the advantages of gas compressor.  2    C315.3  U  What is meant by positive displacement compressor.  2    V  What are the factor to be consider while selecting a compressor.  2    PART-B  V  PART-B  |              | 10    | nt types of compressor? Briefly explain about<br>sor with neat diagram.                              | What are the different centrifugal compress                          | R           | C315.3       | gn.    |
| UCL COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COMBATORE-641105<br>DEPARTMENT OF PEROLEUM ENGINEERING<br>DEPARTMENT OF PEROLEUM ENGINEERING  Introduction    nable  Session:  19 /02/2019  Duration  Introduction    nable  CLA-TIT  Duration  19 /02/2019  Duration  10 /01    set Tible  :  CLA-TIT  Department  :  PE    /Sem  :  ITT/VI  Department  :  PE    /Sem  :  ITT/VI  Maximum Marks  :  50    Semonry  Caurse  Bloom  AnSWER ALL QUESTIONS  Marks  :    Outcommes  Taxonomy  Questions  Marks    Q15.3  R  Define natural gas compression  2    Q15.3  R  What are the advantages of gas compressor.  2    Q15.3  Q  What are the advantages of gas compressor.  2    Q15.3  Q  What are the advantages of gas compressor.  2    Q15.3  Q  U  What are the factor to be consider while selecting a compressor.  2  |              |       | RT-B   | PAI  |             |              |        |
| JCT COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COIMBATORE-641105<br>DEPARTMENT OF PETROLEUM ENGINEERING  TUTUAL<br>DEPARTMENT OF PETROLEUM ENGINEERING    nate  / Session : 19 /02/2019  Duration  : UTUAL<br>DEPARTMENT OF PETROLEUM ENGINEERING  Importantion    nate  / Session : 19 /02/2019  Duration  : OMinutes  Importantion    se Tible  : NATURAL GAS ENGINEERING  Ourse Code  : Po Minutes    / Sem  : ITI/VI  Department  : PE    / Semont  : 2013-2019  Maximum Marks  : 50    / Semont  : 2013-2019  Maximum Marks  : 50    / Semont  : 2013-2019  Semester Type  : EVEN    3  C315  R  Define natural gas compression  Marks    C315.3  R  Define natural gas compression  2    Q15.3  N  What are the advantages of gas compressor.  2    Q15.3  N  What are the advantages of gas compressor.  2    Q15.3  R  Define vanable density flow  2   |              | 2     | to be consider while selecting a compressor.   | What are the factor t  | C           | G153         | un.    |
| UT COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COIMBATORE-641105<br>DEPARTMENT OF PETROLEUM ENGINEERING  TUN<br>DEPARTMENT OF PETROLEUM ENGINEERING    nate  Session:  19 /02/2019  Duration  Sum    nination  : CIA-III  Duration  : Ominutes    se Title  : NATURAL GAS ENGINEERING  Duration  : 90 Minutes    Sem  : III/VI  Department  : PE    Sem  : III/VI  Course Code  : PE6606    Semic (year  : 2018-2019  Maximum Marks  : 50    Gails:3  R  Define natural gas compression  Marks    Gails:3  R  Define natural gas compression  : 2    U  What are the advantages of gas compressor.  : 2  |              | 2     | ity flow   | Define variable dens   | 70          | C315.3       | 4      |
| JCT COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COIMBATORE-641105  TUY<br>PICHANUR, COIMBATORE-641105    n Date / Session : 19 /02/2019  Imation  Imation    inination  : CLA-III  Imation  Imation    se Title  : NATURAL GAS ENGINEERING  Imation  : 90 Minutes    /Sem  : III/VI  Imation  : 90 Minutes    /Sem  : III/VI  Ourse Code  : PE6606    /Sem  : III/VI  Maximum Marks  : 50    SEE OUTCOMES:   |              | 2     | sitive displacement compressor.  | What is meant by po  | C           | C315.3       | ω.     |
| Course  Bloom  Course  Bloom  Answer All questions  Maximum Marks : 50<br>Semination 2015  Course of taxonomy  Answer All questions  Marks : 20   |              | 2     | ages of gas compression  | What are the advant  | R           | C315.3       | 2      |
| JCT COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COIMBATORE-641105  TUN    nation  : 19 /02/2019  Imation  Imation    ination  : CIA-III  Imation  : OMinutes    se Title  : NATURAL GAS ENGINEERING  Department  : PE    /SEE OUTCOMES:  : 2018-2019  Maximum Marks  : 50    SE Clurse  Bloom  ANSWER ALL QUESTIONS  Marks   | C7           | 2     | ompression   | Define natural gas co  | R           | C315.3       | 120    |
| JCT COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COIMBATORE-641105    TUY<br>PICHANUR, COIMBATORE-641105      / Session : 19 /02/2019    Image: CIA-III    Image: CIA-III      e    : CIA-III    Image: CIA-III    Image: Colored and technology    Image: Colored and technology      e    : NATURAL GAS ENGINEERING    Image: Colored and technology    Image: Colored and technology    Image: Colored and technology      image: CIA-III    image: Colored and technology    Image: Colored and   |              | Marks | Questions  |  | Тахопоту    | Outcomes     | No     |
| JCT COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COIMBATORE-641105<br>DEPARTMENT OF PETROLEUM ENGINEERING<br>n : CIA-III<br>e : NATURAL GAS ENGINEERING<br>i : III/VI<br>(Cais<br>Cais<br>Cais<br>Cais  |              |       | LQUESTIONS   | ANSWER ALI   | 2           | Courses      |        |
| JCT COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COIMBATORE-641105<br>DEPARTMENT OF PETROLEUM ENGINEERING<br>Session: 19 /02/2019<br>n : CIA-III<br>e : NATURAL GAS ENGINEERING<br>L: III/VI<br>(ear : 2018-2019<br>Department : PE<br>Course Code : PE6606<br>Maximum Marks : 50<br>Semester Type : EVEN   | -            |       |  |  | G15         |              | 4      |
| JCT COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COIMBATORE-641105<br>DEPARTMENT OF PETROLEUM ENGINEERING<br>Session : 19 /02/2019<br>m : CIA-III<br>e : NATURAL GAS ENGINEERING<br>III/VI<br>Maximum Mathematic for<br>Maximum Mathematic for<br>Maximum Mathematic for<br>Maximum Mathematic for<br>Maximum Mathematic for<br>Maximum Mathematic for<br>Maximum Mathematic for<br>DIT COLLEGE OF ENGINEERING<br>DEPARTMENT OF PETROLOGY<br>DEPARTMENT OF PETROLEUM ENGINEERING<br>Duration : 90 Minutes<br>Department : pe<br>III/VI<br>Maximum Mathematic for<br>Maximum Mathematic for<br>PICHANUR, COIMBATORE-641105<br>DEPARTMENT OF PETROLEUM ENGINEERING<br>Duration : 90 Minutes<br>PICHANURAL GAS ENGINEERING<br>Department : pe<br>III/VI<br>Maximum Mathematic for<br>PICHANURAL GAS ENGINEERING<br>Maximum Mathematic for<br>PICHANURAL GAS ENGINEERING<br>PICHANURAL GAS ENGINEERING<br>PICH  |              |       | KS   |  | 6107-0105 - | OUTCOMES:    | URSE   |
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| JCT COLLEGE OF ENGINEERING AND TECHNOLOGY<br>PICHANUR, COIMBATORE-641105<br>DEPARTMENT OF PETROLEUM ENGINEERING<br>Session : 19 /02/2019  |              |       |  |  | 1           | tion         | amina  |
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COURSE ENCHARGE

AN - ANALYSING R- REMEMBERING

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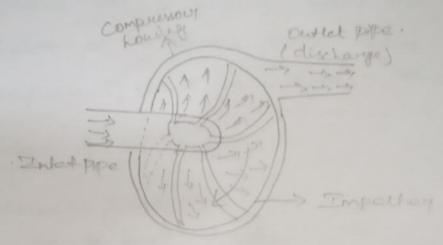
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\* It is used for restating the fluid at a high speed from opene place to a another place.

\* The flow le merde the compresson housing which flow towards the Empeller to the discharging tabe.

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### JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE-641105 DEPARTMENT OF PETROLEUM ENGINEERING



150 001

Exam Date / Session : 05/02/2019 : 90 Minutes Duration Examination : CIA-II Department : PE Course Title : NATURAL GAS ENGINEERING : PE6606 Course Code

Year / Sem : III/VI Maximum Marks : 50 Academic year : 2018-2019 Semester Type : EVEN COURSE OUTCOMES: C315 2

|      |                    |                   | ANSWER ALL QUESTIONS   |       |
|------|--------------------|-------------------|--|-------|
| 5.No | Course<br>Outcomes | Bloom<br>Taxonomy | Questions  | Marks |
| 1    | C315.2             | R                 | Explain about gathering lines and transition lines.  | 2     |
| 2    | C315.2             | R                 | List the types of condensate stabilization.  | 2     |
| 3    | C315.2             | U                 | Define gas sweetening process.   | 2     |
| 4    | C315.2             | R                 | Explain the various compositions of natural gas  | 2     |
| 5    | C315.2             | U                 | Explain glycol amine process.  | 2     |
|      |                    |                   | PART-B   |       |
| 6    | C315.2             | R                 | Briefly explain about gas hydrates and its types. Also explain about the hydrate formation condition and hydrate preventing methods. | 10    |
| 7    | C315.2             | R                 | Explain about Condensate stabilization and its types. Briefly explain about flash vaporization process.                              | 10    |
| 8    | C315.2             | U                 | Briefly explain about Acid gas treatment process and its types   | 10    |
| 9    | C315.2             | U                 | Derive general equation of state for an cubic equation.  | 10    |

AN - ANALYSING

R- REMEMBERING U - UNDERSTANDING E- EVALUATING AP- APPLYING C - CREATING

COURSEINCHARGE

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re satio \* Figue of all, the food of the flash v on te vapourization is the condensate from the un let flow \* that us feed into the Hp flash tanks ation which contains flash sweetening get cand a compressos at the top of the tank. \* The sest of the feed is to the and Hp low pre full up syster flash tank at a high presure full yas systems with a compressor that are also connected to the next low pressure flash tank. \* The lp flash tank is connected to the previous up flash tank. That is by the compresses.

At the remaining feed is to a stripper of the remaining feed is to a stripper full which absorbes most that at low pressure full

egas system. \* After that, that is stored in a

Storage tank.

onate

pper

Acid ugas freatment:-\* Has and con is presenting 8. natural upas # (i.e) is called Aced gas , Addie dolution in the presence of west \* It is a "poisonous yas". \* If it used cas a relementie four it may cause severe problems and lines the \* while using natural you a doment fuel, of it may check that a feer from that ar co2/ combline with the

# Types of Acid you treatmente.

There are of types,

\* Iron - sponge sweetening \* Alkanolamine sweetening

\* alyes/anune process \* sulfine! process