DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Session - (2018-2019)

Programme Name:

Student's Name:

Father's Name:

Enrollment Number:

Course Name:

Course Code:

Assignment Number:

Date of Submission:

Course Faculty Signature

DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:- 10/04/2019

Course: BTME 221 – Applied Thermodynamics

Assignment No: 2

Due date of submission: **22/04/2019**

Instructions

1. Write the responses to the assignment in your own handwriting & don't copy from other's assignment.
2. Submit the responses to your **"course faculty"** within due date.
3. Write your name, programme, and Enrollment no. clearly at the top of the page.
4. Each question's part carries 5 marks.

Q.1

(a) You are aware about steam condenser. Explain the working principle of jet condenser with neat sketch.

(b) You are familiar about steam engine. Explain basic component of a steam power plant with neat diagram.

Q.2

(a) You know about Rankine cycle. Explain the processes involved in it with the help of neat T-S diagram.

(b) You are aware about steam nozzle. Derive the required conditions for maximum mass flow rate in case of nozzles.

DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:- 10/04/2019

Course: BTME 222 – TOM-1

Assignment No: 2

Due date of submission: **22/04/2019**

Instructions

1. Write the responses to the assignment in your own handwriting & don't copy from
2. other's assignment.
3. Submit the responses to your **"course faculty"** within due date.
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Q1

(a) As you already know about friction. Explain the types of friction.

(b) As you already know about gears. Differentiate between a spur gear and a helical gear.

Q2.

(a) As you are familiar with the concept of friction. Explain the laws of friction.

(c) As you already know the concept of free body diagram. Calculate the weight and coefficient of friction of a body if 320 N force at 300 is required to just move it while pushing; whereas 380 N force at same angle is required for pulling.

DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY,HAPUR

Dated:-10/04/2019

Course: BTME-223 Measurement and Instrumentation.

Assignment No: 2

Due date of submission: 22/04/2019

Instructions

1. Write the responses to the assignment in your own handwriting& don't copy from other's assignment.
2. Submit the responses to your **faculty** within due date.
3. Write your name, programme, and Enrollment no. clearly at the top of the page.
4. Each question's part carries 5 marks.

Q.1

(a) You are aware about pneumatic load cell. Describe the working principle of pneumatic load cell.

(b) You know about thermistor. Write short note on thermistor.

Q.2

(a) You are aware about piezometer tube. Describe it with neat sketch.

(b) You are aware about total radiation pyrometer. Describe the working principle of total radiation pyrometer.

DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:-10/04/2019

Course: BTME-224-Fluid Machines

Assignment No: 2

Due date of submission: **22/04/2019**

Instructions

1. Write the responses to the assignment in your own handwriting& don't copy from other's assignment.
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3. Write your name, programme, and Enrollment no. clearly at the top of the page.
4. Each question's part carries 5 marks.

Q.1

(a) You are aware about the centrifugal pump. If yes, then explain different type of centrifugal part.

(b) You know about reciprocating pump. Describe the main parts of the reciprocating pump.

Q.2

(a) You know about draft tube. Why is it used in a reaction turbine?

(b) You are familiar about specific speed and unit quantities of turbine. Explain the specific speed of pump and turbine of both the turbines.

DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:-10/04/2019

Course: BTME-225 Manufacturing Technology-I

Assignment No: 2

Due date of submission: **22/04/2019**

Instructions

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4. Each question's part carries 5 marks.

Q.1

(a) I know you are aware about welding process. Define the advantages of welding process.

(b) I know you are familiar with Oxy-acetylene welding. Define the working principle of Oxy-acetylene welding.

Q.2

(a) You are very well familiar powder metallurgy. Elaborate powder metallurgy.

(b) You know about utilization of drilling machining. Define the operations of drilling machine.

DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:-10/04/2019

Course: ES 224 - Electrical Machines & Automatic Control

Assignment No: 2

Due date of submission: **22/04/2019**

Instructions

1. Write the responses to the assignment in your own hand writing & don't copy from other's assignment.
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3. Write your name, programme, and Enrollment no. clearly at the top of the page.
4. Each question's part carries 5 marks.

Q.1

(a) Explain in details AC servomotor.

(b) Explain the starting methods of Synchronous motor.

Q.2

(a)What do you mean by synchronous condenser?

(b) Explain the open loop and close loop control system with example.

DEPARTMENT OF MECHANICAL ENGINEERING
MONAD UNIVERSITY, HAPUR

Dated:-10/04/2019

Course: BCOM 221 - Business Economics &Accounting

Assignment No: 2

Due date of submission: **22/04/2019**

Instructions

1. Write the responses to the assignment in your own hand writing & don't copy from other's assignment.
2. Submit the responses to your **"course faculty"** within due date.
3. Write your name, programme, and Enrollment no. clearly at the top of the page.
4. Each question's part carries 5 marks.

Q 1

a) What is Monopolistic competition? Discuss the main features of monopolistic competition.

b) Differentiate between monopolistic competition & Monopoly.

Q 2

a) Discuss Ricardian classical theory of Rent. Also point out its assumption.

b) What is meant by term INTEREST? Also explain Net interest & Gross interest.