(UNIT-BITT)

BITT POLYTECHNIC
Getlatu, Ranchi- 835217

BITT-P/NOTICE/2024 – 25/ 11005
Date: 27.12.2024

NOTICE

Subject: Schedule of 1st Assignment Submission for Diploma 5th Semester Students (Session: 2022 – 2025)

It is hereby informed to all Diploma 5th Semester (Session: 2022 – 2025) Students that submit their 1st assignment in given schedule & format. Assignment questions are attached below.

Date of Assignment Submission: 06.01.2025

Format of Assignment: Write in A4 Paper and attached with Stick file.

for
Principal
BITT Polytechnic
Getlatu, Ranchi

Principal
BITT Polytechnic

Copy to,

1. Hon'ble Chairman, BITTGOI
2. Principal
3. Assistant Registrar
4. All HoDs
5. Controller of Examinations
6. Accounts Department
7. Workshops
8. Library
9. Notice Board
10. Website

Assignment Questions

Branch: Civil Engineering
Subject: Irrigation Engineering
Subject Code: CIV503

1. **Write short notes on Irrigation and irrigation engineering.**
2. **Write the types of irrigation project.**
3. **What is the method of irrigation?**
4. **Write definition of rainfall. Write and explain different types of rain gauges.**
5. **Describe calculation of run off by run of coefficient, Inglis' formula.**

Branch: Civil Engineering
Subject: RCC DESIGN
Subject Code: CIV 504

1. **What is Reinforced cement concrete? Write concept of composite material.**
2. **What is the Purpose of providing reinforcement materials used in R.C.C and their requirement?**
3. **Write about different grades of cement and steel.**
4. **What are the types of loads on structures as per (IS: 875)?**
5. **Write about Assumption made in the working stress method?**

Branch: Civil Engineering
Subject: Advance Surveying
Subject Code: CIV505

1. **Write need and definition of a simple circular curve.**
2. **Write the elements of simple circular curves.**
3. **Write about degree of the curve, radius of curve, tangent length, and point of intersection.**
4. **Write the Elements and Parts of compound curve.**
5. **Write the relation between parts of compound curve and methods of setting.**

Branch: Civil Engineering
Subject: Environmental Engineering
Subject Code: CIV506

1. **Describe public water supply system?**
2. **Write the Sources of water and their characteristics?**
3. **Write construction and working of water treatment plant.**
4. **Design and drawing of sedimentation tank.**
5. **Write about Systems of plumbing and drawings of types of plumbing.**

Branch: Civil Engineering
Subject: Advance Construction Methodology & Equipment
Subject Code: CIV508

1. **What are the types of Fibers?**
2. **What is Steel? Write and explain types of steel.**
3. **Describe different types of plastics.**
4. **Write Properties and uses of artificial timber.**
5. **What are the Properties and uses of acoustics materials?**

Branch: Computer Science Engineering
Subject: E Commerce
Subject Code: CSE 511

1. **Explain the key concepts of EDI?**
2. **Write the advantages and the disadvantages of e-cash?**
3. **Explain the models of E-Commerce?**
4. **What are the advantages and limitations of E-Commerce?**
5. **Explain about the Web-based E-commerce architecture? (OR) What are the requirements of web-based E-commerce?**

Branch: Computer Science Engineering
Subject: Java Programming
Subject Code: CSE 504

1. **WAP to enter any 10 numbers and find or search specific elements in an array of objects with the help of Binary search method in Java.**
2. **What do you mean by Constructor and types of constructors with one example of parametric constructor with the help of program?**
3. **What is Java API and define Utility package and language support package with the help of example.**
4. **What menu driven program in Java for Arithmetic calculation using switch case.**
5. **What do you mean by class of Object and how you will call the property and method within class with the help of one program?**

Branch: Computer Science Engineering
Subject: Mobile Computing
Subject Code: CSE 506

1. What is difference between wireless and wired network?
2. Explain Cellular Concept.
3. Explain DHCP.
4. Write the name of wireless devices.
5. What is mobile TCP?

Branch: Computer Science Engineering
Subject: Computer Graphics
Subject Code: CSE505

1. Write short notes on computer graphics & graphics systems.
2. Write about plotters, printers, digitizers, and light pens.
3. What is an active & passive graphics device?
4. Write about Points & lines, Line drawing algorithms.
5. Write about Bresenham's line algorithm.

Branch: Computer Science Engineering
Subject: Microprocessor & Microcontroller
Subject Code: CSE503

1. **Write short notes on Microprocessor architecture.**
2. **Explain interrupts and interrupt service routines.**
3. **Write and sketch pin out diagram?**
4. **Write about assembly language programming.**
5. **Write about Modular Programming.**

Branch: Electrical Engineering
Subject: Power System -II
Subject Code: ELE503

1. **Write Elements of Power System dynamics.**
2. **Write Computer methods in Power System Analyses.**
3. **Write Electrical characteristics of overhead lines and cables.**
4. **State performance of transmission network.**
5. **Describe methods of active and reactive power control.**

Branch: Electrical Engineering
Subject: Electrical Machine -II
Subject Code: ELE504

1. **Write construction & working of three phase induction motor.**
2. **Write Torque equation of three phase induction motor.**
3. **What is the effect of change in rotor circuit resistance on torque-slip characteristics?**
4. **Write three phase induction motor principle of working/operation.**
5. **Write applications of three phase induction motor.**

Branch: Electrical Engineering
Subject: Traction
Subject Code: ELE 505

1. **Explain the present scenario of Indian Railways.**
2. **Detail the latest trends in traction- Metro, monorail, Magnetic levitation Vehicle.**
3. **Explain types of traction systems and their significance.**
4. **Draw the speed time curve related to different traction system.**
5. **State the factors affecting Specific energy consumption -Specific energy consumption and factors affecting it.**

Branch: Electrical Engineering
Subject: Illumination Engineering
Subject Code: ELE 506

1. **What do you mean by Illumination Terminology and its Laws of Illumination?**
2. **Write the Advantages and Disadvantage of good Illumination scheme.**
3. **What are Lamps, Lighting and Accessories? Its types**
4. **Write the Halogen Lamps. Also Construction, working principle, advantages and disadvantages.**
5. **Write the Purpose of lighting control.**

Branch: Electrical Engineering
Subject: Maintenance of Electrical Machines
Subject Code: ELE507

1. **Definition of terminology used in safety, hazard & accident.**
2. **Write the causes of electrical accidents, preventive measures, electrical shocks, and precaution to be taken against electrical shock, treatment for electrical shock.**
3. **Write the general concept of routine, preventive and breakdown maintenance.**
4. **Write about Safety precautions in lab while doing electrical work and Safety equipments study.**
5. **What do you mean by responsibility, authority, accountability and monitoring**

Branch: Mechanical Engineering
Subject: Power Engineering
Subject Code: MEC503

1. **Difference between Two strokes and four stroke Engines Construction and working, comparison, valve timing Diagram, Turning moment diagram.**
2. **Determination of I.H.P., B.H.P. and F.H.P. & mechanical efficiency, indicated thermal efficiency.**
3. **Write the classification of combustion chamber in C.I engine?**
4. **What are the advantages and disadvantages of open combustion chamber type?**
5. **Construction and working 4 stroke Petrol and Diesel Engine.**

Branch: Mechanical Engineering
Subject: Advance Manufacturing Processes
Subject Code: MEC504

1. **Write the Unconventional machining process – Need, Classification and its uses.**
2. **Describe the Abrasive Jet Machining (AJM) with diagram.**
3. **Describe the working principle of Ultrasonic Machining.**
4. **What do you mean by CNC lathe with used and diagram.**
5. **What is Maintenance of Machine Tools its Types?**

Branch: Mechanical Engineering
Subject: Metrology and Quality control
Subject Code: MEC505

1. **Define the terms of metrology and its uses.**
2. **What do you mean by Limits, Fits, and Tolerance?**
3. **Explains the terms of Accuracy, Sensitivity and Readability.**
4. **Definition and introduction to line standard, end standard.**
5. **Describe the terms of "Taylor's Principle".**

Branch: Mechanical Engineering
Subject: Electronics Engineering
Subject Code: MEC506

1. **What is Semiconductor? Also explain Intrinsic and extrinsic.**
2. **What do you mean by P N Junction with diagram?**
3. **Describe the following term of Bipolar Junction Transistors.**
4. **Explains the logic gate - AND, OR, NAND, NOR.**
5. **Write the Physical operation of p-n junction diodes, Characteristics of p-n junction diodes and Zener diode.**

Branch: Mechanical Engineering
Subject: Automobile Engineering
Subject Code: MEC508

1. **Construction and working of 2 stroke and 4 stroke (petrol and diesel) & comparison.**
2. **Layout of vehicle such as front engine rear wheel drive, front engine front wheel drive, rear engine rear wheel drive, four wheels drive.**
3. **Write the Need and principle of transmission system. Its components and their functions.**
4. **What is Clutch? Its Function and purpose of clutch, types and construction of clutches as plate type.**
5. **Write the Differential-need, construction and working principle.**