



## **Contents for Entrance Examination for**

### **PG Diploma Courses offered by Computer Science**

- PG Diploma in IoT & Cyber Security
- PG Diploma in AI & ML
- PG Diploma in Cloud Computing
- PG Diploma in Web Technology

There will be a common entrance for all the students willing to enter into PG Diploma courses offered by department of Computer Science, CGU, Odisha. A test will be carried on the logical, analytical skills and some domain knowledge. The questions will be of MCQ type carrying 50 marks.

- **Numerical and logical aptitude Reasoning** (30 Marks)
- **Fundamental concepts on** (20 Marks)
  - Data Structures & Algorithms
  - Database Management System
  - Networking
  - Linux Commands
  - Information Security
  - Cloud Computing
  - Web Designing



## PG DIPLOMA IN TOOL DESIGN AND CAD/CAMSYLLABUS

<b>BASIC ENGG. DRAWIN</b>	<b>MANUFACTURING PROCESS/WORKSHOP TECHNOLOGY</b>	<b>STRENGTH OF MATERIAL.</b>	<b>THEORY OF MACHINE</b>
1. Design. 2. Communicating A Design. 3. Standards. 4. History Of Technical Drawing. 5. Manufacturing. 6. Engineering Drawing Format and Contents.	1. Casting 2. Labelling and Painting 3. Moulding 4. Forming 5. Machining 6. Joining 7. Manual Machine (Lathe, Milling, Grinding Etc) 8. Exposure to CNC Milling / Lathe Machine 9. Additive Manufacturing 10. CAD / Cam 11. Different Basic Measuring Instruments Used in Manufacturing (Vernier Calliper, Micrometre Etc.)	1. Classification of theory of Machines 2. Mechanisms 3. Kinematic Link	1. Classification of theory of Machines 2. Mechanisms 3. Kinematic Link

### EXAM PATTERN

<b>SECTIONS</b>	<b>TOTAL NUMBER OF QUESTIONS</b>	<b>TOTAL MARKS PER SECTION</b>
BASIC ENGG. DRAWING	10	10
MANUFACTURING PROCESS	10	20
STRENGTH OF MATERIAL.	10	10
THEORY OF MACHINE	10	10
<b>TOTAL</b>	<b>50 NOS</b>	<b>50 MARKS</b>

### PAPER PATTERN

<b>PARTICULARS</b>	<b>DETAILS</b>
TIME DURATION	60 minutes
TYPE OF QUESTIONS	Multiple choice questions (MCQ)
MARKING SCHEME	1 mark for every correct answer, no negative marking for incorrect answers



## **PG Diploma in Water Technology**

<b>Ecology and Environmental Fundamentals</b>	<b>Automation and Control Technology</b>	<b>Water Quality management and analysis</b>
<ul style="list-style-type: none"><li>• Water cycle</li><li>• Water management</li><li>• Characterization of water sample</li><li>• Sources of Water pollution</li><li>• Types of pollutants</li></ul>	<ul style="list-style-type: none"><li>• Fundamentals of pumps and valves</li><li>• Rain Water harvesting</li><li>• Open loop and closed loop control technology</li><li>• Process control Technology</li><li>• Water distribution system</li></ul>	<ul style="list-style-type: none"><li>• Hazardous waste management</li><li>• Primary treatment processes of water</li><li>• Secondary Treatment Process of Water</li><li>• Advanced treatment Processes of Water</li><li>• Water Conservation</li></ul>