

**Department of Chemical Engineering**  
**Sant Longowal Institute of Engineering & Technology**  
**ICD 1<sup>st</sup> Year (DCT-CPT/ 2020)**  
**Two Weeks In-house Training during summer vacations (80 hrs.)**  
**(July 1-14, 2021)**  
**Faculty Coordinator (Summer Training): Ms. Subita Bhagat**

Due to the present Covid-19 situation, all the students are at their respective home places. As per course requirement, the students must complete their respective In-House training, Industrial training and Project work, which is the mandatory course requirement in order to get certificate and Diploma. For this, the department has planned certain topics in the areas Chemical Engineering (specially focused on paper technology) and topics related to present Covid-19 scenario. The students have to write report in the prescribed format. The report in the document and pdf format has to be submitted to their respective Faculty Mentor (Summer Training) in google classroom in a time bound manner as per notified by institute.

**Objectives:** The student must be able to

1. To become familiar with basic glassware of chemical engineering labs.
2. To understand the working of a paper and paper board industry
3. To know basic working steps of important equipments of paper industry
4. To understand and evaluate skills required by a diploma engineer – Hard skills and soft skills
5. To be able to understand the safety issues in a paper and other allied industry
6. To understand and analyze the situation of COVID-19 and lifestyles and measures after lockdown period w.r.t. campus living like academics, hostel etc.
7. Any innovative product development process for handling new challenges due to COVID-19.

<b>S. No.</b>	<b>Topics</b>	<b>Max. Marks</b>	<b>Report Submission</b>	<b>Days of activity</b>	<b>Day of Report Submission</b>
1	Draw the diagrams of various types of glassware used in laboratories of Chemical Engineering. What are the experiments in which that selected glassware can be used?	10	10-12 pages report	Day 2-3	Day 4
2	List the name of equipments and explain the equipments used in carrying out experiments in paper technology laboratory of chemical Engineering Department? Write the operating instructions of equipments with labelled diagrams? Write the experiments which can be carried out on these equipments?	20	20-30 pages report	Day 3-8	Day 9
3	Mention the names of different labs in chemical Engineering department. How the sanitation and cleanliness can be maintained while working in various laboratories of chemical Engineering Department? What are various measures which can be taken to ensure cleanliness inside the laboratories? Write precautions to be taken while working inside the laboratories?	10	5-6 pages report	Day 8-9	Day 10
4	Prepare detailed report for safety measures while working on different equipments used in a pulp and paper industry. Give safety measures for working in paper technology and at least one more laboratory in department of chemical engineering.	10	4-5 pages report	Day 10-11	Day 12
5	Explore the websites of the reputed chemical industries and study about their administrative structure and functions, products, Employability options for Chem. Engg. Diploma holders.	06	5-6 pages report	Day 4-5	Day 6
6	Explore and analyse Job advertisements for Diploma in Chemical Engineering posted in the past 5 years (at least 20 nos.)	04	4-5 pages report	Day 6-7	Day 8
7	Study the paper manufacturing industry. Draw flow sheet of Pulp and Paper Industry and describe all the operations one by one.	15	20-25 pages report	Day 7-13	Day 14
8	Online course on Soft/Life Skills for engineers (To be explored/ arranged by department)	20	Daily report	Day 1-14	Day 15
9	Give your suggestions and ideas in maintaining physical distance in hostel rooms. Identify physical contact points in room, corridor, mess, common places like TV room, reading room, sports room, main gate of hostel etc. Suggest methods to minimize the touch in all these places and preventive measures, which could be taken to prevent the spread of infection. Recommend the means to sanitize these touch points on daily basis. Suggest some innovative product or process to handle the problem of COVID-19?	05	4-6 pages report	Day 7-8	Day 9

Students are advised to refer various websites from the internet for the exercises. Online links and study materials would be shared time to time through Google Classroom. All students would be required to register on the Google Classroom for In-house Summer Training and will submit objective-wise report into it after getting approved from concerned Faculty mentor/ supervisor (Summer Training) [Communication with concerned faculty mentor/ supervisor may be made through phone/whatsapp/e-mail]. Late submission will not be accepted for evaluation and zero marks will be awarded for that. Faculty mentors/ supervisors (Summer Training) will evaluate the work/ reports in the Google Classroom regularly and return to the students after giving marks and appropriate comments, and the final award sheet in prescribed Performa would be submitted to Faculty Coordinator (Summer Training) at the end of training program. Following will be distribution of the marks to be awarded:

60% of total marks – To be awarded by concerned Faculty mentor/ supervisor (Summer Training) (continuous assessment)

20% of total marks – To be awarded by Faculty Coordinator (Summer Training) (Continuous assessment)

20% of total marks – To be awarded on the basis of final report submission and Viva-voce exam. (To be conducted by Convener)

### **GUIDELINES FOR SECTIONWISE REPORTS (Soft copy only)**

**Front page** : Task Name, Student Name, Course, Registration No, Institute Logo, Department Name, Institute Name and address, Dates etc.

Body of text of report

References used

### **GUIDELINES FOR FINAL REPORT (Soft/ Hard copy)**

**Front page** : Task Name, Student Name, Course, Registration No, Institute Logo, Department Name, Institute Name and address, Dates etc.

**Second Page**: Certificate

**Third Page onwards**:

Dedication/Acknowledgement

Contents

Body of Report (sectionwise), each section to start with New page

References and Appendix (if Required).

**(Format** : Font-12 Pt. Arial, 1.5 line spacing, Both Sides printing, Main Heading 14 Bold, Sub Heading 12 Bold)