Department of Chemical Engineering Sant Longowal Institute of Engineering & Technology, Longowal <u>Exercise in lieu of In-house Training</u> <u>BE First Year Students</u>

Preamble: The present situation has forced most of us to work from home. In such a scenario it will not be possible for students to undergo Summer Training in normal fashion as per past practice. So, in view of giving our student to complete course requirement, it is proposed to give suitable exercise to cover the said aspect of course. In this exercise, each student is expected to write a report in given format for the given exercise. The report should be submitted in PDF format to designated email id in case submission does not fall in the period of institute working, otherwise a bound report is to be submitted to respective faculty coordinator through the faculty mentor/supervisor assigned to the student.

Duration: 2 Weeks (80 hrs.) – (18th May, 2020 to 31st May, 2020)

Objectives: The student must be able to

- 1. To observe the structure and functioning of a chemical industry
- 2. To understand the role of a chemical engineer in modern world
- 3. To understand scope and opportunities in chemical engineering
- 4. To analyze the NBA attributes for an engineering graduate
- 5. To understand skills required by a chemical engineer Hard skills and soft skills
- 6. To understand the curriculum of graduation in chemical engineering
- 7. To evaluate the hard skills required by a chemical engineer
- 8. To practice the soft skills required by an engineering graduate
- 9. To introduce various chemical engineering laboratories and practice general laboratory ethics
- 10. 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.

Distribution of activities to be taken up by students:

Objective	Activity	References	Report Submission	No. of Hrs.	Marks	Activity	Report Sub-
				considered	allocated	Days	mission day
1	Explore the website of the reputed chemical industries and study their administrative structure and functions	Internet/ websites of specific chemical industries	02 pages Summary report	4 hrs.	5	Day 1 -2	Day 3
2	Explore Websites for Career, Jobs, Employability assessments for Chem. Engineers	Websites of TCSiON; AICTE; any other	1 page summary report	5 hrs.	10	Day 1-2	Day 3
3	#1. Identify the suitable opportunities for Chemical Engineering Graduates i. Employment (Industry/service sector) ii. Self-Employment (Start-up/business opportunity/setting up of small plant) iii. Higher studies #2. Job advertisements for Freshers Chemical Engineering Graduates posted in the past 5 years (at least 20 nos.)	Google; youtube etc.	04 page summary report for #1 And 20 pages of job advertisements	5 hrs.	10	Day 3-4	Day 5
4	Study of NBA attributes for Engineers	-do-	02 page report	4 hrs.	5	Day 4	Day 5
5	Preparation of powerpoint presentation on hard skills and soft skills required by chemical engineers based on NBA attributes for engineering graduates	-do-	Powerpoint presentation of 10 no. of slides	5 hrs.	5	Day 4-5	Day 6
6	Go through and Observe the study scheme and syllabi of chemical engineering degree program	 Study scheme/ syllabi available at website <u>www.sliet.ac.in</u> Google/ youtube 	2 page summary	5 hrs.	5	Day 4-5	Day 6
7	Online designated Talks by Experts	Will be suggested/arranged online by department	2 pages summary of each talk	7 hrs.	10	-	On the day next to talk
8	Online course on Soft/Life Skills for engineers titled 'Career Edge – Knockdown the Lockdown' by TCSiON – Digital Learning Hub	https://learning.tcsionhub.in/courses/career-edge/	One page Summary of each module of the program	25 hrs.	20	Day 1-14	Day 15
9	Study of all chemical engg. laboratories through the laboratory manuals	Lab manuals to be provided by Lab-in-charge/ Technicians	One page summary report of each lab	8 hrs.	10	Day 5-10	Day 11
	Common Activities for Chemical Engineering Laboratories: 1) Safety in Laboratories; 2) Preparation before the Lab.; 3) After Lab; 4) Duringlab; 5) Lab. ethics; 6) Sample Lab Report writing	Internet sources like Google/ youtube/any other	One page pointwise summary of all components from 1 - 6	4 hrs.	5	Day 10-13	Day 14
10	Study the guidelines/protocolissued by WHO/ICMR/any other agency Yourideas on 'Campus Living after Lockdown Period of COVID-19'	https://www.cdc.gov/coronavirus/ 2019-ncov/prevent-getting- sick/social-distancing.html WHO/ICMR website	Analyze campus living after COVID-1 lockdown like in academics, hostel etc 05 pages report	8 hrs.	15	Day 6-9	Day 10

Other 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 (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 will evaluate the work/ reports and the final award sheet in prescribed Performa would be submitted to Faculty Coordinator (Summer Training for degree program) 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 (continuous assessment)

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

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

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

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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)