

**SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY LONGOWAL**  
**(Deemed University under MHRD, Govt. of India)**

**Subject: Remedial Classes of FTT-524 (FLUID FLOW OPERATIONS AND RHEOLOGY)**

This is to inform to the undermentioned students of B.E. Food Technology (B.E, Food Technology (Degree 2016 Four Years & Leet 2017) that the results of FTT-524 (FLUID FLOW OPERATIONS AND RHEOLOGY) examination, was declared on 20<sup>th</sup> June 2018 and the following students could not clear the examination:

S.No	Name of the student	Roll No
1	ABHIJIT SARKAR	1731074
2	SNAHENDU KAR	1731079
3	SUJAY SAGUN GAWA	1731082
4	HARE KRISHNA KUMAR	1731084
5	DEEPAK KASHYAP	1731913
6	KAJAL	1731911
7	ABHISHEK KUMAR CHOUDHARY	1731925
8	HARPREET SINGH	1731926
9	UDITA SINGH	1731928
10	BHAVINDER SHARMA	1731930
11	MUKUL KUMAR CHAUHAN	1731933
12	PRASHANT RANJAN	1731934
13	SHASHI PRAKASH	17317937
14	ANAI. PUSHPA	1731940
15	MD. SAIF RIAZ ANSARI	1731941
16	KUNDAN RAJ	1731942
17	SAURABH SRIVASTAVA	1731945

To provide an opportunity for these students to improve their understanding and performance in the subject, the Department of Food Technology has decided to conduct remedial classes for FTT-524 in the upcoming semester.

Course Code: FTT-524

Course Name: FLUID FLOW OPERATIONS AND RHEOLOGY

Faculty: Dr. NAVDEEP JINDAL

Class Schedule: from 4: 30 onwards and on Saturdays

The venue of the classes will be communicated to you soon.

All the concerned students mentioned above are requested to get in touch with the undersigned to confirm their attendance for the remedial classes.

We strongly encourage the identified students to avail themselves of this opportunity to enhance their understanding of the subject and improve their academic performance.

  
NAVDEEP JINDAL

Associate Prof. (FET)

CC: HOD (FET) -For kind information  
Notice Board

**SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY**  
**LONGOWAL**  
**(Deemed University under MHRD, Govt. of India)**  
**REPORT ON THE REMEDIAL CLASSES OF**  
**B.E. Food Technology**  
**(Degree 2016 Four Years & Leet 2017)**  
**OF SUBJECT**  
**FTT-524 (FLUID FLOW OPERATIONS AND RHEOLOGY)**

This report aims to analyze the reasons for the failure of students in the course FTT-524: Fluid Flow Operations and Rheology, during the 4<sup>th</sup> semester. The course is a part of the curriculum for the Food Engineering program and covers essential topics related to fluid mechanics and rheology. The report will discuss the challenges faced by students in this course and recommend potential improvements to enhance learning outcomes.

## 2. Course Overview:

The FTT-524 course is designed to provide students with a comprehensive understanding of fluid flow operations and rheology in the context of the food industry. The course primarily focuses on: a) Fluid Flow Operations: This aspect deals with the principles of fluid mechanics, including fluid properties, flow behavior, pressure drop, and flow through pipes and equipment used in food processing. b) Rheology: Rheology is the study of the flow and deformation of materials, particularly non-Newtonian fluids like food products. It is essential in understanding the behaviour of complex fluids during processing and manufacturing.

## 3. Challenges Faced by Students:

Several factors contributed to the students' difficulty in successfully completing FTT-524:

### a) Overloaded Semester:

The 4<sup>th</sup> semester included three engineering courses, namely FTT-522 Food Engineering, FTT-523 Dairy Engineering, and FTT-524 Fluid Flow Operations and Rheology. The concurrent study of these three rigorous courses likely overwhelmed the students, causing their focus to be divided, and hindering their ability to grasp the complexities of Fluid Flow Operations and Rheology.

### b) Introduction of Rheology:

The inclusion of rheology as a part of the course added an extra layer of complexity. Rheology is a specialized subject that requires a solid understanding of fluid mechanics and mathematical concepts. The introduction of rheology might have stretched the students' capabilities beyond their preparedness, leading to confusion and difficulty in grasping the concepts.

#### 4. Recommendations:

To improve the learning outcomes and address the challenges faced by students, the following recommendations are suggested:

##### a) Restructure Course Curriculum:

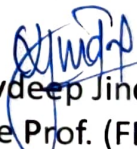
Consider restructuring the curriculum for the 4th semester to distribute the course load more evenly. Perhaps, FTT-524: Fluid Flow Operations and Rheology could be moved to another semester with fewer demanding courses. This will provide students with a better opportunity to focus on and excel in the subject.

##### b) Separate Rheology from Fluid Flow Operations:

Based on feedback from students and faculty, it is recommended to remove the rheology part from the course and create a separate module or elective focusing solely on rheology. This will allow students to develop a more profound understanding of fluid flow operations before diving into the complexities of rheology.

#### 5. Conclusion:

The failure rate in the FTT-524 course, Fluid Flow Operations and Rheology, during the 4th semester, can be attributed to the heavy course load and the incorporation of rheology. To improve student performance and understanding, it is recommended to restructure the curriculum, remove the rheology part, provide additional support through tutoring and remedial classes, and emphasize practical applications. Implementing these changes will likely result in a more enriched learning experience and improved success rates for students pursuing the Food Engineering program.

  
Navdeep Jindal  
Associate Prof. (FET)



**SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY LONGOWAL**  
**(Deemed University under MHRD, Govt. of India)**

Subject: Remedial Classes of FTT-524 (FLUID FLOW OPERATIONS AND RHEOLOGY)

This is to inform to the undermentioned students of B.E. Food Technology (Degree 2016 Four Years & Leet 2017) that the results of: FTT-524 (FLUID FLOW OPERATIONS AND RHEOLOGY) examination, was declared on 12<sup>th</sup> February 2019, and the following students could not clear the examination:

S.No	Name of the student	Roll No
1	ABHIJIT SARKAR	1731074
2	HARE KRISHNA KUMAR	1731084
3	ABHISHEK KUMAR CHOUDHARY	1731925
4	PRASHANT RANJAN	1731934
5	MD. SAIF RIAZ ANSARI	1731941
6	KUNDAN RAJ	1731942
7	SAURABH SRIVASTAVA	1731945

To provide an opportunity for these students to improve their understanding and performance in the subject, the Department of Food Technology has decided to conduct remedial classes for FTT-524 in the upcoming semester.

Course Code: FTT-524


Course Name: FLUID FLOW OPERATIONS AND RHEOLOGY

Faculty: Dr Navdeep Jindal

Class Schedule: from 4: 30 onwards and on Saturdays

The venue of the classes will be communicated soon.

All the concerned students mentioned above are requested to get in touch with the undersigned to confirm their attendance for the remedial classes. We strongly encourage the identified students to avail themselves of this opportunity to enhance their understanding of the subject and improve their academic performance.

  
(Navdeep Jindal)  
Associate Prof. (FET)

CC: HOD (FET) -For kind information

Notice Board

**SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY LONGOWAL**  
(Deemed to be University under section 3 of UGC Act, 1956)  
Tabulation sheet of B.E. Food Technology (Degree 2016) Four Years & Leet 2017

Semester: 4th Regular

Examination : May, 2018

S. No.	Trade	Regn. No.	Subject Codes Credits	Earned Grade and Grade Points																SGPA 22	List of subject(s) in which student gets fail Grade i.e., "F", "F", or "I"				
				FTT-521		FTP-521		FTT-522		FTP-522		FTT-523		FTP-523		FTT-524		FTP-524				FTT-525		FTP-525	
				Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points			Grade	Points	Grade	Points
1	GFT	1640059	Ms. PALLAVI MERTIYA	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	10.00	
2	GFT	1640071	SAURABH KUMAR	B+	8	B+	8	B+	8	A	9	C	5	B+	8	B+	8	A	9	C+	6	B+	8	7.27	
3	GFT	1640106	SACHIN SAROJ	A+	10	A	9	B	7	A	9	B+	8	A+	10	A+	10	A+	10	A	9	B+	8	8.77	
4	GFT	1640116	CHINMAYA KUMAR PANDA	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	10.00	
5	GFT	1731072	POONAM NAIK	A	9	A	9	B+	8	B+	8	C+	6	B+	8	C	5	A	9	A	9	A	9	7.64	
6	GFT	1731073	MANAV PREET	B+	8	B	7	B+	8	B+	8	C	5	A	9	C	5	B+	8	B+	8	B+	8	7.05	
7	GFT	1731074	ABHUIT SARKAR	B	7	C+	6	C	5	B+	8	E	2	B+	8	E	2	A+	10	A	9	A+	10	5.64	FTT-523 FTT-524
8	GFT	1731075	SANKET KUMAR	B+	8	B+	8	B+	8	A	9	C+	6	A	9	B+	8	A+	10	B	7	B+	8	7.68	
9	GFT	1731076	ARUNAVA BHOWMIK	C	5	B	7	C	5	B+	8	D*	4	B+	8	C	5	A	9	B	7	B+	8	5.77	
10	GFT	1731079	SNANENDU KAR	B+	8	B+	8	B	7	A	9	C+	6	A	9	E	2	A	9	B	7	B+	8	6.64	FTT-524
11	GFT	1731081	NEERAJ LAL	C+	6	B+	8	C	5	B	7	C	5	A	9	D	4	A	9	C+	6	B+	8	5.86	
12	GFT	1731082	SUJAY SAGUN GAWAS	B+	8	B+	8	C+	6	A	9	D	4	B	7	E	2	A	9	B+	8	A	9	6.18	FTT-524

\*The grade revised as per decision of Result Moderation Board (RMB) was held on 19.06.2018.

Prepared by  
20/6/18

Checked by  
20/6/18

A.R. (Exams.)  
20/6

Dy. Registrar (Academics)  
20/6/18

**SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY LONGOWAL**  
(Deemed to be University under section 3 of UGC Act, 1956)  
Tabulation sheet of B.E. Food Technology (Degree 2016) Four Years & Leet 2017

Semester: 4th Regular

Examination : May, 2018

S. No.	Trade	Regn. No.	Subject Codes Credits	Earned Grade and Grade Points																SGPA 22	List of subject(s) in which student gets fail Grade i.e. "F", "F", or "F"				
				FTT-521		FTP-521		FTT-522		FTP-522		FTT-523		FTP-523		FTT-524		FTP-524				FTT-525		FTP-525	
				Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points			Grade	Points	Grade	Points
13	GFT	1731084	HARE KRISHNA KUMAR	D	4	D	4	D	4	B+	8	E	2	D	4	E	2	C	5	C+	6	B+	8	4.05	FTT-523 FTT-524
14	GFT	1731911	ONAM KUMAR	B+	8	A	9	C	5	B+	8	D	4	C+	6	D	4	A	9	B+	8	A	9	6.23	
15	GFT	1731912	SONI KUMARI	B+	8	B	7	D	4	B	7	D	4	C+	6	D	4	A	9	B+	8	A	9	5.91	
16	GFT	1731913	DEEPAK KASHYAP	B	7	B+	8	C	5	B	7	E	2	C	5	E	2	A	9	B+	8	B+	8	5.27	FTT-523 FTT-524
17	GFT	1731914	KM ASMA PARVEEN	A	9	A+	10	C	5	B+	8	C+	6	B	7	B	7	A	9	A	9	A	9	7.36	
18	GFT	1731915	SHIV SHANKAR MUKHIYA	A	9	A	9	C+	6	A	9	B	7	A	9	B+	8	B+	8	A	9	A	9	7.91	
19	GFT	1731916	GARGI TYAGI	A+	10	A+	10	A	9	A	9	A	9	A+	10	A	9	A	9	A+	10	A	9	9.36	
20	GFT	1731917	KAJAL	A	9	A	9	C	5	B+	8	C	5	C+	6	E	2	A	9	B+	8	A	9	6.27	FTT-524
21	GFT	1731919	NANDANI RAY	A+	10	A+	10	A	9	A+	10	A+	10	A+	10	A+	10	A	9	A+	10	A+	10	9.77	
22	GFT	1731920	SATYAM KUMAR SINGH	C+	6	B+	8	B+	8	A	9	C	5	C+	6	C	5	C	5	A	9	A	9	6.77	
23	GFT	1731921	PRACHI KUMARI	A	9	A	9	B	7	C+	6	C	5	B	7	B+	8	A	9	A	9	A	9	7.55	
24	GFT	1731923	APARNA KUMARI	A	9	A+	10	B+	8	B+	8	C+	6	A	9	B+	8	A	9	A+	10	A+	10	8.32	
25	GFT	1731924	KUMARI KOMAL	B+	8	A	9	C	5	B+	8	D	4	C+	6	D	4	A	9	A	9	A	9	6.36	

20/6/18  
Prepared by

20/6/18  
Checked by

20/6  
A.R. (Exams.)

20/6/18  
Dy. Registrar (Academics)



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Semester: 4th Regular

Examination : May, 2018

S. No.	Trade	Regn. No.	Subject Codes Credits Name of Student	Earned Grade and Grade Points																				SGPA 22	List of subject(s) in which student gets fail Grade i.e., "E", "F", or "T"
				FTT-521		FTP-521		FTT-522		FTP-522		FTT-523		FTP-523		FTT-524		FTP-524		FTT-525		FTP-525			
				Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points		
26	GFT	1731925	ABHISHEK KUMAR CHOUDHARY	B	7	B	7	D	4	C+	6	E	2	C	5	E	2	A	9	B+	8	B+	8	5.00	FTT-523 FTT-524
27	GFT	1731926	HARPREET SINGH	F	0	F	0	F	0	F	0	E	2	E	2	F	0	F	0	F	0	F	0	0.45	FTT-521 FTP-521 FTT-522 FTP-522 FTT-523 FTP-523 FTT-524 FTP-524 FTT-525 FTP-525
28	GFT	1731927	DINKEY PRIYA	A+	10	A+	10	C	5	B	7	C	5	B	7	C	5	A	9	A+	10	A+	10	7.18	
29	GFT	1731928	UDITA SINGH	C+	6	B+	8	D <sup>*</sup>	4	C+	6	E	2	C	5	E	2	C	5	C+	6	B+	8	4.45	FTT-523 FTT-524
30	GFT	1731929	SHREYA JAITLEY	A+	10	A+	10	B+	8	A	9	B+	8	A	9	A	9	A	9	A+	10	A	9	8.95	
31	GFT	1731930	BHAVINDER SHARMA	C	5	A	9	C	5	B+	8	C	5	B+	8	E	2	B+	8	B+	8	B+	8	5.73	FTT-524
32	GFT	1731931	SHIVAM KUMAR	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	A+	10	10.00	
33	GFT	1731932	LUCKY KUMAR	A+	10	A+	10	C+	6	A	9	A	9	A+	10	D	4	A+	10	A+	10	A+	10	8.23	
34	GFT	1731933	MUKUL KUMAR CHAUHAN	B+	8	B+	8	C+	6	A	9	C+	6	B+	8	E	2	B+	8	A	9	A	9	6.68	FTT-524
35	GFT	1731934	PRASHANT RANJAN	A	9	A	9	C+	6	B	7	B	7	B	7	E	2	A	9	B+	8	A	9	6.82	FTT-524
36	GFT	1731935	PRIYANKA ARUN	A+	10	A+	10	B+	8	B+	8	B+	8	B+	8	B+	8	A+	10	A+	10	A+	10	8.82	

\*The grade revised as per decision of Result Moderation Board (RMB) <sup>meeting</sup> was held on 19.06.2018.

Prepared by  
20/6/18

Checked by  
20/6/18

A.R. (Exams.)  
20/6

Dy. Registrar (Academics)  
20/6/18

**SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY LONGOWAL**  
(Deemed to be University under section 3 of UGC Act, 1956)  
Tabulation sheet of B.E. Food Technology (Degree 2016) Four Years & Leet 2017

Semester: 4th Regular

Examination : May, 2018

S. No.	Trade	Regn. No.	Subject Codes Credits Name of Student	Earned Grade and Grade Points																				SGPA 22	List of subject(s) in which student gets fail Grade i.e., "E", "F", or "I"
				FTT-521		FTP-521		FTT-522		FTP-522		FTT-523		FTP-523		FTT-524		FTP-524		FTT-525		FTP-525			
				Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points		
37	GFT	1731936	VIKAS GUPTA	A	9	A	9	C+	6	B+	8	B	7	B+	8	B+	8	A	9	A	9	A	9	7.86	
38	GFT	1731937	SHASHI PRAKASH	C	5	C+	6	C+	6	B+	8	E	2	C+	6	E	2	A+	10	C	5	B+	8	4.82	FTT-523 FTT-524
39	GFT	1731938	MANIKANT KUMAR	B+	8	B+	8	C	5	B+	8	C+	6	C	5	C	5	A	9	A	9	A	9	6.77	
40	GFT	1731939	KIRTI SINGH	A	9	B+	8	C	5	B	7	C+	6	B+	8	C	5	A	9	A	9	A	9	7.00	
41	GFT	1731940	ANAL PUSHUP	B	7	B+	8	C	5	B+	8	D	4	C	5	E	2	A	9	B+	8	B+	8	5.68	FTT-524
42	GFT	1731941	MD. SAIF RIAZ ANSARI	B	7	B	7	D	4	C+	6	E	2	C+	6	E	2	B+	8	B+	8	B+	8	5.00	FTT-523 FTT-524
43	GFT	1731942	KUNDAN RAJ	B+	8	B+	8	C+	6	B+	8	D	4	C	5	E	2	B+	8	A	9	A	9	6.14	FTT-524
44	GFT	1731943	PRITY SHANDILYA	A	9	A	9	B	7	B+	8	C	5	C	5	C	5	A	9	B+	8	A	9	7.00	
45	GFT	1731944	PRABHAT KUMAR	B	7	A	9	C+	6	B+	8	C+	6	B+	8	C+	6	A	9	A	9	A	9	7.14	
46	GFT	1731945	SAURABH SRIVASTAVA	C+	6	C+	6	D	4	C+	6	E	2	C	5	E	2	B+	8	C	5	B+	8	4.36	FTT-523 FTT-524
47	GFT	1731946	ANIKAIT TANDON	A	9	A	9	B	7	A	9	C+	6	B+	8	B	7	A	9	A	9	A	9	7.77	

\*The grade revised as per decision of Result Moderation Board (RMB) was held on 19.06.2018.

Dispatch-SLIET/AS/115  
Date: 21/6/18

21/6/18  
Prepared by

21/6/18  
Checked by

21/6/18  
A.R. (Exams.)

21/6/18  
Dy. Registrar (Academics)



**SANT LONGOWAL INSTITUTE OF ENGINEERING & TECHNOLOGY LONGOWAL**  
(Deemed to be University under section 3 of UGC Act, 1956)

Tabulation sheet of B.E. Food Technology (Degree 2016) Four Years & Leet 2017

Semester: 4th Retest

Examination : January, 2019

S. No.	Trade	Regn. No.	Subject Codes Credits	Earned Grade and Grade Points																				SGPA 22	List of subject(s) in which student gets fail Grade i.e., "F", "S" or "T"
				FTT-521		FTP-521		FTT-522		FTP-522		FTT-523		FTP-523		FTT-524		FTP-524		FTT-525		FTP-525			
				Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points		
1	GFT	1731034	ABDUL SARKAR	B	7	C+	6	C	5	B+	8	E	2	B+	8	E	2	A+	10	A	9	A+	10	5.64	FTT-523 FTT-524
2	GFT	1731075	SHAHENDU KAR	B+	8	B+	8	B	7	A	9	C+	6	A	9	C	5	A	9	B	7	B+	8	7.05	
3	GFT	1731092	SUJAY SAGUN GAWAS	B+	8	B+	8	C+	6	A	9	D	4	B	7	D	4	A	9	B+	8	A	9	6.45	
4	GFT	1731094	HARE ERISHNA KUMAR	D	4	D	4	D	4	B+	8	E	2	D	4	E	2	C	5	C+	6	B+	8	4.05	FTT-523 FTT-524
5	GFT	1731017	KAJLI	A	9	A	9	C	5	B+	8	C	5	C+	6	C	5	A	9	B+	8	A	9	6.68	
6	GFT	1731025	ADHISHER KUMAR CHOUDHARY	B	7	B	7	D	4	C+	6	C	5	C	5	E	2	A	9	B+	8	B+	8	5.55	FTT-524
7	GFT	1731930	BHAVINDER SHARMA	C	5	A	9	C	5	B+	8	C	5	B+	8	D	4	B+	8	B+	8	B+	8	6.00	
8	GFT	1731933	MUKUL KUMAR CHAUHAN	B+	8	B+	8	C+	6	A	9	C+	6	B+	8	C+	6	B+	8	A	9	A	9	7.23	
9	GFT	1731904	PRASHANT RANIAN	A	9	A	9	C-	6	B	7	B	7	B	7	E	2	A	9	B+	8	A	9	6.82	FTT-524
10	GFT	1731827	SHASHI PRKASH	C	5	C+	6	C+	6	B+	8	E	2	C+	6	C	5	A+	10	C	5	B+	8	5.23	FTT-523
11	GFT	1731941	MD. SAIF BIAZ ANSARI	B	7	B	7	D	4	C+	6	E	2	C+	6	E	2	B+	8	B+	8	B+	8	5.00	FTT-523 FTT-524
12	GFT	1731942	KUNDAN RAJ	B+	8	B+	8	C+	6	B+	8	D	4	C	5	E	2	B+	8	A	9	A	9	6.14	FTT-524
13	GFT	1731945	SAURABH SRIVASTAVA	C+	6	C+	6	D	4	C+	6	C	5	C	5	E	2	B+	8	C	5	B+	8	4.91	FTT-524

Dispatch-SHEET/AS/2257  
Date: 27/2/19

Prepared by  
27/2/19

Checked by  
27/2/19

A.R. (Exams.)

Dy. Registrar (Academics)