Name of Faculty: **MOHIT JINDAL**		
Discipline: **FOOD TECHNOLOGY**		
Semester: **3rd**		
Subject: **Handling, transportation and storage of foods**		
Lesson Plan Duration: **15 Weeks (July 2018-Nov. 2018)**		
Work load (Theory/Practical) per week (in hours): Theory: 03, Practical: 02		
Week	**Lecture day**	**Theory**
1st	1	Introduction to Syllabus and Evaluation Scheme.
	2	Scope of handling, transportation and storage of food and food products.
	3	Importance of handling, transportation and storage of food and food products.
	4	**Introduction to Laboratory and its equipments. (Practical)**
2nd	5	Post harvest losses.
	6	Revision of unit 1.
	7	Introduction to Post Harvest Changes in Foods.
	8	**Determination of moisture content of given stored food grain sample. (Practical)**
3rd	9	Physiological changes.
	10	Chemical Changes.
	11	Microbiological Changes.
	12	**Sampling Techniques of stored foods from different storage structures and conditions (Practical)**
4th	13	Biochemical changes.
	14	Revision of unit 2nd.
	15	Class test for unit 1st and 2nd.
	16	**To calculate bulk density. (Practical)**
5th	17	Introduction to handling, transportation and storage.
	18	Various unit operations of post-harvest handling, transportation.
	19	Introduction to various conveying systems.
	20	**Analysis of food grain sample for foreign matter. Practical)**
6th	21	Belt conveyors, chain conveyors- their selection, operation and maintenance.Screw conveyors, hydraulic conveyors, pneumatic conveyors- their selection,
	22	operation and maintenance.
	23	Vibrating and oscillating conveyors, bucket elevators – their selection, operation and maintenance.
	24	**Demonstration of changes during storage of fresh fruits and vegetables (Practical)**
7th	25	Revision for unit 3rd.
	26	Preparation of grains for storage, Storage requirements.
	27	Infestation control, mycotoxin.

	28	**Determination of changes in pH and acid values in storage of milk (Practical)**
8th	29	Handling practices.
	30	Causes of spoilage and their prevention.
	31	Factors affecting quality of grain during storage.
	32	**To determine candling and grading of eggs. (Practical)**
9th	33	Types of storage structures and facilities.
	34	Types of storage structures and facilities.
	35	Revision for unit 4th.
	36	**To study procedure of ante-mortem examination of animals. (Practical)**
10th	37	Handling, transportation and storage of fruits and vegetables.
	38	Spoilage and prevention of fruits and vegetables.
	39	Revision of unit 5th.
	40	**Determination of pH and titrable acidity of stored juice sample. (Practical)**
11th	41	Pre-slaughter handling and transportation system – their effects on quality of meat products
	42	Transportation and storage requirements.
	43	Ante-mortem examination of animals.
	44	**To check quality of stored milk. (Practical).**
12th	45	Revision of unit 6th.
	46	Introduction to milk: Collection, pre-cooling of milk.
	47	Handling and transportation systems of milk.
	48	**To determine candling and grading of eggs. (Practical)**
13th	49	Effects of handling and transportation on quality of milk.
	50	Revision of unit 7th.
	51	Introduction to eggs processing: Candling and grading of eggs.
	52	**To calculate true density. (Practical)**
14th	53	Packaging, handling, pre-treatment of eggs.
	54	Transportation and storage of eggs.
	55	Revision of unit 8th.
	56	**Determination of Titrable acidity of stored juice sample. (Practical)**
15th	57	Introduction to cold storage facilities.
	58	Requirements for storage of different fruits and vegetables.
	59	CA and MA Storage. Revision of unit 9th.
	60	**Internal examination of students. (Practical)**