

**I.K. Gujral Punjab Technical University, Kapurthala
(Main Campus)**

Department of Food Science & Technology

Agenda Board of Studies

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Item No. 4.1: To welcome the new Board of Study

- The Department of Food Engineering was established in the year 2012 with the name Department of Life Sciences and Technology. M. Tech. Course, Pharma Food Nutraceutical Biotechnology was started in the same year after due approval of Academic council of IKG PTU and subsequently by BOG IKG-PTU.
- The curriculum of the course work was prepared and finalized by an expert committee approved by the then Vice-Chancellor of the University.
- In the year 2014, the nomenclature of the course was changed from M. Tech. Pharma Food Nutraceutical Biotechnology to M. Tech. Food Technology (Nutrigenomics) on the recommendations of the expert committee and subsequent approval of Vice-Chancellor of the University.
- In the year 2017 department introduced M.Sc. Food Technology.
- In the year 2018 department reintroduced M.Tech. Food Technology with the restructure of scheme and syllabus.
- BOS is one of the authorities of the University as per the act. Thus with a brief on the stream of Food Technology/Food Engineering, IKG-PTU welcomes the members of the new BOS (vide notification no . IKGPTU/Reg/Notification/202 dated 13/05/2019) with the expectations of contribution at the macro and micro level in pursuit of academic excellence in this emerging field. (**Annexure A**)

Item No.4.2: To consider the adoption of the scheme and curriculum of M.Sc. Food Technology for students till Batch 2018 with minor modification

4.2.1 Adoption of scheme and syllabus used for M.Sc. Food Technology (batch 2018) in 3rd and 4th semester with minor modification. (**Annexure B**). The following minor modification has been proposed:

4.2.1a. Syllabi of MSFT612-18 Food Safety, Standards and Quality Control (Theory)

Attached as Annexure C

4.2.1b Correction in evaluation marks of theory subject MSFT-613-18 Agribusiness management and MSFT-630-18 Seminar as below (**Annexure B**)

Subject Code	Subject Name	Incorrect Distribution Marks		Correct Distribution Mark	
		Internal	External	Internal	External
MSFT-613-18	Agri-Business Management	30	20	15	35
MSFT-630-18	Seminar	30	20	35	15

4.2.1c To ratify the distribution of marks for evaluation for M.Sc. dissertation as per notification regarding the distribution of marks for evaluation for M.Sc. and M.Tech. Dissertation (vide notification no IKGPTU/Reg/NF/157 dated 04/04/2019). The evaluation of Dissertation has been changed from satisfactory/unsatisfactory (non - credit) to 300 marks (credit). The same decision will also be implemented on M.Sc. batch 2017 (**Annexure D**).

Item No.4.3: To consider the adoption of the scheme and curriculum of M.Tech. Food Technology for students of Batch 2018 with minor modification

4.3.1 Adoption of scheme and syllabus used for M.Tech. Food Technology (batch 2018) in 3rd and 4th semester with minor modification. (**Annexure E**). The following minor modification has been proposed.

a To ratify the distribution of marks for evaluation for M.Tech. Dissertation as per notification regarding the distribution of marks for evaluation for M.Sc. and M.Tech. dissertation (vide notification no IKGPTU/Reg/NF/157 dated 04/04/2019) (**Annexure D**)

4.3.2 Proposed list of relevant MOOC/SWAYAM courses which may replace open elective courses of M.Tech (Annexure N).

Item No. 4.4: To consider the updation of the scheme and curriculum of M.Sc. Food Technology for Batch 2019 onward

4.4.1 Modification in the eligibility criteria of M.Sc. Food Technology

1. Current eligibility

M. Sc. Food Technology	Bachelor of Science / Applied Science in any subject/ B. Tech Food Technology / Biotechnology/ Sugar Technology/ Sugar and Alcohol Technology/ Fermentation Technology / Dairy Technology or any other examination recognized equivalent thereto with at least 50% marks in aggregate
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2. Proposed eligibility

M. Sc. Food Technology	Bachelor of Science / Applied Science in any subject/ B. Tech Food Technology / Biotechnology/ Sugar Technology/ Sugar and Alcohol Technology/ Fermentation Technology / Dairy Technology/ B.Voc. (Food Science & Technology/Agri-Food Technology/Food Processing) /Bachelor in Hotel Management and Catering Technology or any other examination recognized equivalent thereto with at least 50% marks in aggregate
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4.4.2 Proposed scheme and syllabus used for M.Sc. Food Technology batch 2019 onward (**Annexure F**) with following minor modification in older scheme and syllabus (Batch till 2018)

4.4.2a. Syllabi of Food Safety, Standards and Quality Control (Theory)

Attached as Annexure C

4.4.2b The addition of UC in all subject code, e.g. UC-MTFT-101-19 (As per minutes of the meeting issued by Director Office – Main Campus; Ref # DIR/IKGPTU/MC/2953 dated 31/05/2019- **Annexure G**)

4.4.2c To adopt the distribution of marks for evaluation for M.Sc. Dissertation as per notification regarding the distribution of marks for evaluation for M.Sc. and M.Tech.

Dissertation. (vide notification no IKGPTU/Reg/NF/157 dated 04/04/2019; **Annexure D**)

4.4.2d Correction in evaluation marks of theory subject MSFT-613-19 Agribusiness management and MSFT-630-19 Seminar as below (**Annexure F**)

Subject Code	Subject Name	Incorrect Distribution Marks		Correct Distribution Mark	
		Internal	External	Internal	External
MSFT-613-19	Agri-Business Management	30	20	15	35
MSFT-630-19	Seminar	30	20	35	15

4.4.3 To review the external and internal evaluation scheme of laboratory courses.

As per the study scheme, the laboratory courses are of 02 credit points carrying 50 marks. Further, the division of 50 marks is 35 internal and 15 external (**Annexure H**). The evaluation scheme for awarding internal and external marks is proposed as follows:

	Marks Distribution*	Particulars	Marks
Internal (Total- 35 Marks)	60%	Internal written exam	21
	~25%	Practical Record	09
	~15%	Attendance	05
External (Total- 15 Marks)	60%	Written exam &/or Performance	09
	40%	Viva	06
Total			50

* In reference to letter # IKG.PTU/DA/2224 dated 19.7.2017 (**Annexure I**)

The matter of evaluation scheme of the course is put forth for deliberation by BOS.

4.4.4 To review the internal evaluation scheme of theory courses

For theory courses having internal of 30 or 15 marks. The internal assessment has two components

	Criteria	Marks Distribution %age*	Marks
For Internal of 30 Marks	Sessional/MST Exams	60%	18
	Continuous Mode	40%	12
	Total Marks		30

* In reference to letter # IKG.PTU/DA/2224 dated 19.7.2017 (**Annexure I**)

	Criteria	Marks Distribution %age*	Marks
For Internal of 15 Marks	Sessional/MST Exams	60%	9
	Continuous Mode	40%	6
	Total Marks		15

* In reference to letter # IKG.PTU/DA/2224 dated 19.7.2017 (**Annexure I**)

4.4.4.1. Sessional/MST Exams:

(i) The university regulations regarding awarding of sessional/internal marks will be implemented for M. Sc. Food Technology (IKG.PTU/DA/2224 dated 19.7.2017 **Annexure I**). According to regulation, there should be two MST exams MST(I) + MST(II). Both the MSTs should be made compulsory for all the students.

(ii) In addition to above, It is recommended that if any student could not be able to appear in one or another MST, it should be the responsibility of the student to request to HOD for conducting another MST immediate after joining back to the department for makeup the MST (immediate after an absence in respective MST).

4.4.4.2 Continuous Mode Scheme

	Criteria	Marks Distribution %age*	Maximum Marks
For Internal of 30 Marks	Attendance	~15%	4
	Home assignment /Presentation	~25%	8
	Total		12

* In reference to letter # IKG.PTU/DA/2224 dated 19.7.2017 (**Annexure I**)

For Internal of 15 Marks	Criteria	Marks Distribution %age*	Maximum Marks
	Attendance	~15%	2
	Home assignment /Presentation	~25%	4
	Total		6

* In reference to letter # IKG.PTU/DA/2224 dated 19.7.2017 (**Annexure I**)

The scheme of internal evaluation is put forth for review and finalization by the BOS.

4.4.5 To finalize the guidelines for allotment of marks for attendance for M.Sc. Food Technology

One of the components of the continuous mode of internal assessment is attendance. The draft guidelines for the award of marks for attendance is proposed as follows:

Guidelines for the Allotment of Marks for Attendance for M.Sc.

Percentage of Attendance*	Theory (Attendance Maximum Marks 02)	Theory (Attendance Maximum Marks 04)	Practical (Attendance Maximum Marks 05)
More Than 95%	2	04	05
91–95%	1.5	03	04
86–90%	1	02	03
81–85%	1	01	02
75–80%	0.5	0.5	01
Less than 75% attendance	nil	nil	nil

* In reference to letter # IKG.PTU/DA/2224 dated 19.7.2017 (**Annexure I**)

The guidelines for the allotment of marks for attendance are put forth for review and finalization by the BOS.

Item No.4.5: To consider the updation of scheme and curriculum of M.Tech. Food Technology for Batch 2019 onward

4.5.1 Modification in the eligibility criteria of M.Tech. Food Technology

1. Current eligibility

M. Tech. Food Technology	<p>B. Tech./ B.E. (Food Engineering/ Food Technology/ Food Engineering & Technology/ Food Process Engineering/ Food Process Technology/ Dairy Technology/ Dairy Engineering/ Food Biotechnology/ Agri. Process Engineering/ Agri. Engineering/Biotechnology) or any equivalent degree with at least 55% marks.</p> <p style="text-align: center;">OR</p> <p>M.Sc. (Food Science/ Food Technology/ Food Science and Technology/ Food Processing and Technology/ Biotechnology) or any equivalent degree with at least 55% marks.</p>
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2. Proposed eligibility

M. Tech. Food Technology	<p>B. Tech./ B.E. (Food Engineering/ Food Technology/ Food Engineering & Technology/ Food Process Engineering/ Food Process Technology/ Dairy Technology/ Dairy Engineering/ Food Biotechnology/ Agri. Process Engineering/ Agri. Engineering/Biotechnology) or B.Sc. in Food Technology /Agriculture (Four Year) or any equivalent degree with at least 50% (45% in case of candidate belonging to reserved category) marks in aggregate</p> <p style="text-align: center;">OR</p> <p>M.Sc. (Food Science/ Food Technology/ Food Science and Technology/ Food Processing and Technology/ Biotechnology/Agriculture) or any equivalent degree with at least 50% (45% in case of candidate belonging to reserved category) marks in aggregate.</p>
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4.5.2 Proposed scheme and syllabus used for M.Tech. Food Technology batch 2019 onward (Annexure J) with modification:

4.5.2a Syllabus of Food Safety and Quality Assurance (Theory) - UC-MTFT-512-19

Attached as Annexure K

4.5.2b The addition of UC in all subject code, e.g. UC-MTFT-101-19 (As per minutes of the meeting issued by Director Office – Main Campus; Ref # DIR/IKGPTU/MC/2953 dated 31/05/2019- **Annexure G**)

4.5.2c To adopt the distribution of marks for evaluation for M.Tech. Dissertation as per notification regarding the distribution of marks for evaluation for M.Sc. and M.Tech. Dissertation. (vide notification no IKGPTU/Reg/NF/157 dated 04/04/2019; **Annexure D**)

4.5.2d Addition of two audit courses, i.e. Audit I and Audit II (Non-credit) into M.Tech Food Technology in line with university academic letter no. IKG-PTU/DA/ 2324 Dated 28/11/2018 (**Annexure L**) and AICTE PG model curriculum of Engineering and Technology (**Annexure M**).

4.5.2e Addition of Open elective course into M.Tech. Food Technology in line with AICTE PG model curriculum of Engineering and Technology (**Annexure M**).

4.5.2f Addition of Research Methodology and IPR course into M.Tech Food Technology in line with AICTE PG model curriculum of Engineering and Technology (**Annexure M**).

4.5.2g Addition of Mini project with Seminar course into M.Tech Food Technology in line with AICTE PG model curriculum of Engineering and Technology (**Annexure M**).

4.5.3 Proposed list of relevant MOOC/SWAYAM courses which may replace open elective courses of M.Tech (**Annexure N**).

4.5.4 To review the external and internal evaluation scheme of laboratory courses.

As per the study scheme, the laboratory courses are of 02 credit points carrying 50 marks. Further, the division of 50 marks is 30 internal and 20 external. The evaluation scheme for awarding internal and external marks is proposed as follows:

	Marks Distribution	Particulars	Marks
Internal (Total- 30Marks)	60%	Internal written exam	18
	25%	Practical Record	8
	15%	Attendance	4
External (Total- 20 Marks)	60%	Written exam &/or Performance	12
	40%	Viva	08
Total			50

The matter of evaluation scheme of the course is put forth for deliberation by BOS.

4.5.5 To review the internal evaluation scheme of theory courses

For theory courses having internal of 40 or 20 marks. The internal assessment has two components

For Internal of 40 Marks		Marks Distribution %age	Marks
	Sessional/MST Exams	60%	24
	Continuous Mode	40%	16
Total Marks			40

For Internal of 20 Marks		Marks Distribution %age	Marks
	Sessional/MST Exams	60%	12
	Continuous Mode	40%	8
Total Marks			20

4.5.5.1 Sessional/MST Exams:

(i) The university regulations regarding awarding of sessional/internal marks will be implemented for M. Tech. Food Technology (IKG.PTU/DA/2224 dated 19.7.2017 **Annexure I**). According to regulation, there should be two MST exams MST(I) + MST(II). Both the MSTs should be made compulsory for all the students.

(ii) In addition to above, It is recommended that if any student could not be able to appear in one or another MST, it should be the responsibility of the student to request to HOD for conducting another MST immediate after joining back to the department for makeup the MST (immediate after an absence in respective MST).

4.5.5.2 Continuous Mode Scheme

For Internal of 16 Marks	Criteria	Maximum Marks
	Attendance	6
	Home assignment /Presentation	10
	Total	16

For Internal of 8 Marks	Criteria	Maximum Marks
	Attendance	3
	Home assignment /Presentation	5
	Total	8

The scheme of internal evaluation is put forth for review and finalization by the BOS.

4.5.6 To finalize the guidelines for allotment of marks for attendance for M.Tech. Food Technology

One of the components of the continuous mode of internal assessment is attendance. The draft guidelines for the award of marks for attendance is proposed as follows:

Guidelines for the Allotment of Marks for Attendance for M.Tech.

Percentage of Attendance	Theory (Attendance Maximum Marks 06)	Theory (Attendance Maximum Marks 03)	Practical (Attendance Maximum Marks 04)
More Than 95%	06	03	04
91–95%	05	2.5	03
86–90%	04	02	02
81–85%	03	1.5	01
75–80%	02	1	0.5
Less than 75% attendance	nil	nil	nil

The guidelines for the allotment of marks for attendance are put forth for review and finalization by the BOS.

Item No.4.6: Any other item with the Permission of Chair