

## **Supporting Documents-**

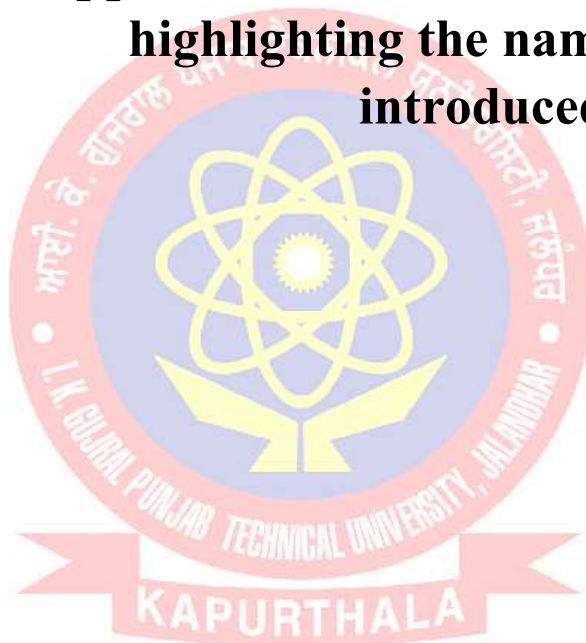
**1.1.3 & 1.2.1**

**Name of the Department: Food Science and Technology**

**MOMs highlighting employability  
courses\_1.1.3**

**And**

**Approved MOMs of BOS / Academic council  
highlighting the name of new courses  
introduced\_1.2.1**



Minutes 1<sup>st</sup> BOS Meeting Food Engineering; 02-05-2017IK Gujral Punjab Technical University  
Main CampusM. Tech Food Technology  
(Nutrigenomics)

Department of Food Engineering

Minutes of Meeting

The first meeting of the Board of Studies (Food Engineering) was held in the Department of Academics, Conference Hall 2<sup>nd</sup> floor, IK Gujral Punjab Technical University on 02/05/2017 at 10.00 AM.

The following members were present:

1. Dr. Rajneesh Kant Sachdev, HOD, Food Engineering, IKGPTU (Chairman)
2. Dr. Bhupender Singh Khatkar, Professor, GJUST, Hisar (Member)
3. Dr. Devinder Dhingra, Sr. Scientist, ICAR, Delhi (Member)
4. Dr. Kamlesh Prasad, Professor, SLIET, Longowal (Member)
5. Dr. Charanjiv Singh Saini, Associate Professor, SLIET, Longowal (Member)
6. Dr. Shabir Sidhu, Assistant Professor, Food Engineering, IKGPTU (Member)
7. Er. Barinderjit Singh, Assistant Professor, Food Engineering, IKGPTU (Member)

The following members could not attend the meeting due to busy schedule:

8. Dr. Navdeep Sodhi, Professor, GNDU, Amritsar (Member)
9. Dr. Maninder Arora, Professor, PAU Ludhiana (Member)
10. Dr. Ashutosh Upadhyay, Associate Professor, NIFTEM, Sonapat (Member)
11. Dr. Malkiat Singh, INTERTEK, Panchkula (Member)
12. Dr. Manbir Singh, Associate Professor, Khalsa College, Amritsar (Member)
13. S. Navdeepak Sandhu, Dy. Dir., Alumni & Corporate Affairs, IKGPTU (Member)
14. Er. Gazal Sharma, Assistant Professor, Food Engineering, IKGPTU (Member)
15. CII Nominee (Member)

The meeting commenced with the formal introduction of the newly constituted BOS. Chairman BOS took up the formal agenda items point wise.

**Item 1.1: To welcome the new Board of Study**

Chairman welcomed the new board of studies with the brief introduction about the university, its working and the department of food engineering. The members were informed about functions to be executed by the BOS and all members took keen interest towards contributing towards all functions.

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

2/10/2017

2/10/2017



**Item 1.2: To consider the updation of scheme and curriculum of M. Tech. Food Technology (Nutrigenomics)**

Deliberations were carried out for finalizing M. Tech. first semester syllabus. The syllabus proposed by Department of Food Engineering was put before the members and following decisions were made:

1. Broad structure of the M. Tech. course will be as follows (annexure-1):
  - Core Courses: 38%
  - Inter-disciplinary and elective courses: 20%
  - Dissertation: 42%
2. The syllabus was finalized with minor modification in three subjects out of seven (annexure-1).
3. The subject codes should be as per UGC guidelines. The subject codes were updated accordingly (annexure-1).
4. The interdisciplinary elective courses from the areas of Basic Sciences/ Management/ Languages/ Journalism and Mass Communication/ Other streams of Engineering/ Human Values and Professional Ethics can be selected by the students.
5. Minimum number of experiments to be conducted in the laboratory is ten out twelve specified in the syllabus (annexure 1).
6. It was decided that supervisor allotment will be done in the first semester itself.
7. The revised curriculum will be applicable from batch 2017 onwards.
8. It is apparent that programme outcomes and course outcomes of M. Tech. Food Technology is as per UGC guidelines and will be formulated and put up in next BOS.

**Item 1.3: To finalize the curriculum of B. Tech. Food Technology 7<sup>th</sup> and 8<sup>th</sup> semester**

1. The curriculum of 7<sup>th</sup> and 8<sup>th</sup> semester of B. Tech. Food Technology was finalized (annexure 2).
2. In addition, changes were done in the curriculum of B. Tech. semester third and fourth.
3. Minor modifications were also done in the scheme of 4<sup>th</sup> semester.
4. These minor changes in the 3<sup>rd</sup> and 4<sup>th</sup> semester were approved.
5. The modified syllabus will be applicable from batch 2017 onwards.

**Item No. 1.4: To review the proceeding of last meeting of BOS Food Technology in terms of its recommendations for nomenclature of M. Tech. Food Technology (Nutrigenomics)**

1. The recommendations of the last BOS w.r.t. nomenclature of M. Tech. Food Technology (Nutrigenomics) was reviewed and it was decided that the nomenclature of the course be changed to M. Tech. Food Technology keeping in view the future prospects of the students obtaining this degree. The change of nomenclature will be

22/10/09/21

22/10/09/21



Minutes 1<sup>st</sup> BOS Meeting Food Engineering; 02-05-2017

applicable from batch 2017 onwards. Accordingly the contents of the curriculum have been revised and finalized as per the item 1.2.

2. Multidisciplinary nature of the course and multidisciplinary faculty has been agreed upon in view of the changing academic scenario worldwide and in particular the areas of food technology/food engineering.

**Item No.1.5: To review the eligibility criteria for B. Tech. Food Technology and M. Tech. Food Technology (Nutrigenomics)**

1. The admission eligibility criteria of M. tech. Food Technology was modified to include following in addition to the existing eligibility criteria
  - a. All the disciplines specified by AICTE under "Engineering and Technology Level: Under Graduate (Sr. no. 119 -123; AICTE approval process Handbook 2017-2018)" in food technology/food engineering discipline.
  - b. To include the word equivalent in the eligibility criteria (annexure 3).
2. The admission eligibility criteria for B. Tech. will be at par with other B. Tech. programmes as notified by Government of Punjab (annexure 3).

The meeting ended with vote of thanks to the Chair and the Members by Dr. Shabir Sidhu.

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

21/10/17

22/10/17



**IK Gujral Punjab Technical University  
Main Campus**

**Department of Food Science and Technology**

**Minutes of Meeting**

The first meeting of the campus Board of Studies Clinical Research was held in the Department of Academics, Conference Hall 2<sup>nd</sup> floor, IK Gujral Punjab Technical University on 25/07/2019 at 10.30 AM.

The following members were present:

1. Dr. Rajneesh Kant Sachdev, HOD, Food Engineering, IKGPTU (*Chairperson*)
2. Dr. R.K. Goel, Professor, Department of Pharmaceutical Sciences and Drug Research, Punjabi University, Patiala
3. Dr. Shalini Salwan, Professor, Department of Pharmacology, Punjab Institute of Medical Sciences, Jalandhar
4. Dr. Deepak Prabhakar Bhagwat, Associate Professor, School of Pharmacy, Maharaja Agrasen University
5. Dr. Gaurav Bhargawa, Department of Chemical Sciences, IKGPTU, Main Campus
6. Dr. Megha Sood, Associate Professor, Department of Pharmacology, Punjab Institute of Medical Sciences, Jalandhar
7. Er. Gazal Sharma, Assistant Professor, Department Food Science & Technology, IKGPTU, Main Campus
8. Dr. Shabir Sidhu, Assistant Professor, Department Food Science & Technology, IKGPTU, Main Campus (*Coordinator*)
9. Dr. Anoop Kumar, Assistant Professor, Department of Pharmacology & Toxicology, NIPER, Raebareli.
10. Mr. Ravi Thakur, Student Representative, Department Food Science & Technology, IKGPTU, Main Campus

The following members could not attend the meeting due to busy schedule:

1. Dr. G. D. Gupta, Professor, ISF College of Pharmacy, Moga
2. Dr. Barinderjit Singh, Assistant Professor, Food Engineering, IKGPTU (Member)
3. Dr. Abhishek Kaler, Drug Safety Scientist, Parexel International India Pvt Ltd., Chandigarh
4. Dr. Deepti Rathee, Manager- Aggregate Reports, Worldwide Medical and Safety, Pfizer Healthcare India Pvt. Ltd., Chennai, Tamil Nadu
5. Dy. Director / Assistant Director CR&A, Deptt. of CR&A, IKGPTU

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

21/7/19

*[Signature]*  
Megha Sood

*[Signature]*

*[Signature]*  
Shabir

*[Signature]*

*[Signature]*  
R. Thakur



The meeting commenced with the formal introduction of the newly constituted Clinical Research BOS for campus programs. Chairman BOS took up the formal agenda items point wise.

**Item 1.1: To welcome the new Board of Study**

Chairperson welcomed the new board of studies with the brief introduction about the university, its working and the Department of Food Science and Technology. The members were informed about functions to be executed by the BOS and all members took keen interest in contributing towards all functions. The members were informed that Department of Academics, IKG PTU has issued guidelines regarding MSc. Skeleton for designing of the curriculum. The curriculum thus designed will in line with it.

**Item 1.2: To consider the updation of scheme and curriculum of M.Sc. Clinical Research (Batch 2019-21 onwards)**

The syllabus of MSc. Clinical Research for batch 2019-21 was finalized for first and second semester after the deliberations and suggestions of BOS. The board decided to adopt the syllabus prepared by previous BOS with necessary modifications and rectifications and the following recommendations have been made:

1. The basic skeleton of MSc. Clinical Research study scheme was finalized by taking into consideration guidelines issued by Department of Academics, IKG PTU, and guidelines issued by UGC including generic electives and discipline specific elective courses.
2. The course codes were assigned as per the guidelines issued by Director Office, Main Campus. The course outcomes of the course were prepared and the mapping of course outcomes and program outcomes was done.
3. The first semester course "Fundamentals of Clinical Research" was revised. The module on intellectual property rights was replaced by pre clinical toxicity studies.
4. The nomenclature of first semester course "Pharmacology" was changed to "General Pharmacology" and the module on animal models of disease and toxicology studies was replaced with basic pharmacokinetics module.
5. The course "Ethics in Clinical Research" in first semester was removed as a separate course. The content of the course "Clinical Research Regulations" was enriched with

*[Signature]*  
25/07/19  
Mugli had

*[Signature]*

*[Signature]*  
shabir

*[Signature]*

*[Signature]*

Head

Dept. of Food Science & Technology

IKG Gujrat Technica University

KAPUR

25/07/19



- modules on ethics in clinical research. Accordingly, the nomenclature of the course changed to "Clinical Research Regulations & Ethics".
6. In the first semester "Pharmacokinetics" course was removed and in its place, "Clinical Pharmacokinetics" was introduced.
  7. The nomenclature of the course "Human Biology" was changed to "Fundamentals of Physiology". The nomenclature of the courses "Etiopathology & Pharmacotherapy-I" and "Etiopathology and Pharmacotherapy-II" was changed to "Pharmacotherapeutics-I" and "Pharmacotherapeutics-II" respectively.
  8. The content of the course "Pharmacotherapeutics-I" was revised. The content on pharmacoeconomics of this course was added to course "Pharmacoeconomics and Health Technology Assessment".
  9. A new course "International Regulatory Affairs" was introduced in the second semester as discipline specific elective.
  10. In the previous scheme the course type of "Ethics in Clinical Research" was discipline specific elective. In the new scheme this course was replaced by "Intellectual Property Rights" course from the pool of second semester discipline specific elective course.
  11. After detailed deliberation, it was decided to retain journal club course in the first, second and third semester of new study scheme. In this course, the students will be presenting literature, which would give them exposure to the latest advancements in the field and skill enhancement for better scientific communication and critical analysis of data.
  12. Members deliberated that keeping in view the significance of documentation and scientific writing in the field of clinical research Medical Writing course is very important.
  13. The ability enhancement courses, professional communication in the first semester and professional communication lab in second semester were included in the scheme. These courses will foster the ability to communicate both orally and in writing as per the demands of the profession.
  14. The scheme and syllabus as finalized by the BOS is annexed (Annexure 1)

Head

Deptt. of Food Science & Techno  
I.K. Gujral Punjab Technical Unive

KAPURTHALA

10/09/21

*[Signature]*  
09/09/19  
Megha Sood

*[Signature]*

*[Signature]*  
Shabir

*[Signature]*

*[Signature]*  
Bhaskar



Minutes 1<sup>st</sup> BOS Meeting MSc Clinical Research: 25-07-2019**Item 1.3: To review and finalize Department Vision and Mission statement and Program Educational Outcomes and Program Outcomes of MSc. Clinical Research**

1. Members deliberated on the matter of Department Vision and Mission. The members appreciated that foundation of the Department is multi-disciplinary/ inter-disciplinary as per the global trends and demand of time. However, it was felt that minor modifications in the vision and mission of the department are required to reflect the multi-disciplinary/ inter-disciplinary nature of the department and to encompass all the courses running in the department.
2. It was decided that accordingly Department Vision and Mission would be revised. The revised Vision and Mission will be circulated through e-mail to all the members for their suggestions and finalization.
3. It was decided to write a preamble of the program MSc. Clinical Research.
4. The Program Educational Objectives and Program Outcomes prepared by previous BOS were adopted with minor modifications (Annexure 2).

**Item No. 1.4: To finalize the curriculum of MSc. Clinical Research semester third and fourth (Batch 2018).**

1. The new BOS adopted the study scheme and syllabus prepared by the previous BOS for the batch 2018.
2. The Study scheme and syllabus of first and second semester were adopted as such. However, the scheme and syllabus of third and fourth semester were adopted after few rectifications.
3. The nomenclature of the course "Concepts in Clinical Trials" was changed to "Clinical Study Design".
4. The syllabus of the course "Research Methodology" was revised to include content on meta-analysis.
5. A new course related to research work entitled "Synopsis" of two credits carrying 50 marks was introduced in the third semester study scheme. The evaluation of the course was decided to be internal only. The purpose of the course is to finalize the research problem to be undertaken by the student in the final semester.

Head

Dept. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

24/10/2019

*[Signature]*  
Megha

*[Signature]*

*[Signature]*  
Shabir

*[Signature]*

*[Signature]*



6. The dissertation scheme finalized by the previous BOS was modified as per the new notification issued by Registrar IKGPTU (IKGPTU/Reg/NF/157 dated 04-04-2019).
7. The scheme and syllabus finalized by the BOS is attached (Annexure 3).

**Item No.1.5: To review the scheme of internal assessment**

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

Internal (30 Marks)	Continuous Comprehensive Assessment( = 26
	Attendance = 04
External (20 Marks)	Synopsis = 05
	Performance = 10
	Viva = 05
<b>Total</b>	<b>50 Marks</b>

**Item No.1.6: To review the scheme of internal assessment**

1. As per the study scheme, the internal assessment has two components i.e. continuous mode and sessional exams. The criteria for the evaluation of continuous mode was finalized as follows:

- a) For theory courses having internal of 30 marks

- Sessional Exams: 20 Marks
- Continuous Mode: 10 Marks

**Continuous Mode Scheme**

Criteria	Maximum Marks
Attendance	4
Academic activities (Average of any 3 activities e.g. quiz, assignment, open book test, field work, group discussion and seminar)	6
<b>Total</b>	<b>10</b>

- b) For theory courses having internal of 15 Marks

Head  
 Deptt. of Food Science & Technology  
 I.K. Gujral Punjab Technical University  
 KAPURTHALA

24/10/2019

*[Signature]*  
 10/10/19  
 Megha Sood

*[Signature]*

*[Signature]*  
 Shabir

*[Signature]*

*[Signature]*  
 R. Thakur



Minutes 1<sup>st</sup> BOS Meeting MSc Clinical Research: 25-07-2019

- Sessional Exams: 10 Marks
- Continuous Mode: 05 Marks

**Continuous Mode Scheme**

Criteria	Maximum Marks
Attendance	2
Academic activities (Average of any 3 activities e.g. quiz, assignment, open book test, field work, group discussion and seminar)	3
Total	5

**Item No.1.7: To finalize the guidelines for allotment of marks for attendance**

1. One of the components of continuous mode of internal assessment is attendance. The following guidelines for the award of marks for attendance were finalized by the board:

**Guidelines for the Allotment of Marks for Attendance**

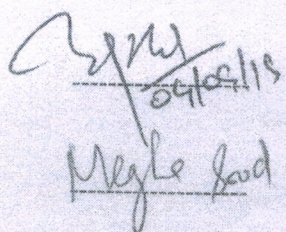
Percentage of Attendance	Theory (Attendance Maximum Marks 04)	Theory (Attendance Maximum Marks 02)	Practical (Attendance Maximum Marks 04)
More Than 93	4	2	4
87-92	3	1.5	3
81-86	2	1	2
75-80	1	0.5	1
Lessthan75	0	0	0

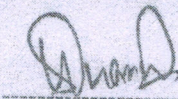
**Item No.1.8: To review the matter of minimum credits required for the award of MSc. Clinical Research Degree.**

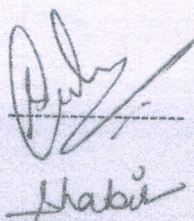
1. The board deliberated in detail on the matter of minimum credits that a student has to earn for the award of degree. The members were of the view that in addition to course work during the degree students should be encouraged to participate in conference, scientific presentations and other activities for the holistic development of the students. Further, it was decided that by participation in such activities students will be awarded credits. These credits will then add up in the final credits earned by the students at the end of degree.

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

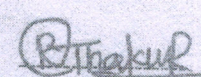
2  
10/08/21

  
Megha Sod

  
Dr. Anand

  
Shabir

  
Ar

  
B. Thakur



2. The study scheme of the program has in total 86 credits for the coursework undertaken during the degree and it was decided that for award of degree a student has to earn minimum 90 credits (i.e.  $86+04^* = 90$ ). The remaining credit can be earned by the student through any of the co-curricular activities of his/her choice from the list provided below. Further, it was decided that the maximum credits, which a student can earn, would be 95 (i.e.  $86+09^*=95$ ). The student will earn the credits for co-curricular activities anytime during the duration of MSc.
3. The board also decided that the Head of Department would award these credits in the fourth semester to students.
4. The members agreed the draft of fourth semester DMC displaying the credits of co-curricular activities presented to the board. Further, it was decided that before finalization of the same the matter should be taken up with COE, IKG PTU for resolving administrative issues if any.

### Semester Wise Credits Distribution

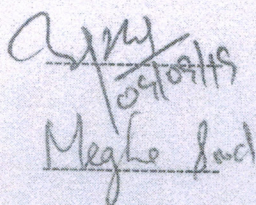
Semester	Credits
I	22
II	20
III	24
IV	20
Co-curricular Activities	04
<b>Total Credit Points</b>	<b><math>86 + 4^* = 90</math></b>

\*Credits for Co-curricular Activities

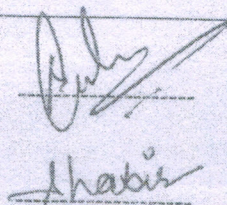
\*Credits not included towards calculation of CGPA

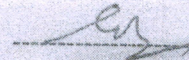
### Guidelines for Awarding Credits for Co-curricular Activities

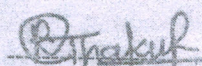
Name of the Activity	Credit Points
Successful completion of MOOCs Courses other than generic elective (4 weeks)	04
Successful completion of MOOCs Courses other than generic elective (2 weeks)	02
Hospital Training (minimum 4weeks)	02
Participation in Seminar/ Conference/ Workshop/ Symposium/ Training Programs (related to the specialization of the student)	01
Presentation in Seminar/ Conference/ Symposium/ (related to the specialization of the student)	02

  
Meghe Sach

  
Dharm

  
Shabir



  
Bhakur



Minutes 1<sup>st</sup> BOS Meeting MSc Clinical Research: 25-07-2019

Presentation in Seminar/ Conference/ Symposium/ (related to the specialization of the student) and with award	03
Research / Review Publication in indexed in Scopus / Web of Science	03
Research / Review Publication in peer reviewed journals	02
Minimum ten days residential camp organized by NSS/ Youth Affairs	02
Inter University participation in cultural or sports activity	02
Inter University award in cultural or sports activity	03
Inter College participation in cultural or sports activity	01
Inter College participation in cultural or sports activity	02

5. Subsequent to the BOS meeting, the matter of minimum credits required for award of degree was discussed with COE, IKG PTU. He conveyed that uniformity should be maintained in the credits earned by the student for award of degree. Hence, it was decided that credits for co-curricular activities should be fixed as 04. Thus, all the students will be awarded degree with 90 credits. The students who will obtain 04 credits will be given satisfactory grade.

Draft DMC

Grade Sheet  
Master of Science Clinical Research  
Semester IV

Name:

Father's Name:

Mother's Name:

Subject Code	Subject	Type	Credits	Grade Int/Ext
xxx	ABCD	Theory	4	B+
yyy	EFGH	Practical	2	A
-	Co-curricular Activities	-	4*	Satisfactory

Credits Registered in the Semester: 20

Semester Grade Point Average (SGPA):

Cumulative Grade Point Average (CGPA):

Total Credits Earned =  $86 + 4* = 90$ 

\*Credits not included towards calculation of CGPA

Head

Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

24/07/24

*[Signature]*  
Meghe Sad

*[Signature]*

*[Signature]*  
Shabir

*[Signature]*



Minutes 1<sup>st</sup> BOS Meeting MSc Clinical Research: 25-07-2019**Item No. 1.9: Addition of MOOCs courses in the pool of Generic Elective Courses.**

1. The board decided to include the SWAYAM/MOOCs courses in the pool of generic elective courses for all semester. It was also decided that these courses will updated in the list of generic elective courses from time to time in accordance to courses available at the platform.
2. The board as given below approved the list of SWAYAM/MOOCs courses for the coming semester.

List of Courses

S. No	Course Title	Start Date	End Date	Duration	Course Type	Exam Date	URL
1	Biochemistry & Molecular Biology	08 Aug. 2019	31 Oct 2019	12 weeks	Elective		<a href="https://swayam.gov.in/nd2-cec19_bt02/preview">https://swayam.gov.in/nd2-cec19_bt02/preview</a>
2	Neuroscience of Human Movements	29 Jul 2019	18 Oct 2019	12 weeks	Elective	16 Nov 2019	<a href="https://swayam.gov.in/nd1-noc19_ge28/preview">https://swayam.gov.in/nd1-noc19_ge28/preview</a>
3	Research Ethics	15 Jul 2019	30 Oct 2019	15 weeks	Core		<a href="https://swayam.gov.in/nd2-ugc19_ge04/preview">https://swayam.gov.in/nd2-ugc19_ge04/preview</a>
4	Health Research Fundamentals	29 Jul 2019	20 Sep 2019	8 weeks	Elective	29 Sep 2019	<a href="https://swayam.gov.in/nd1-noc19_ge24/preview">https://swayam.gov.in/nd1-noc19_ge24/preview</a>
5	Organic Chemistry in Biology and Drug Development	29 Jul 2019	18 Oct 2019	12 weeks	Elective	16 Nov 2019	<a href="https://swayam.gov.in/nd1-noc19_cy22/preview">https://swayam.gov.in/nd1-noc19_cy22/preview</a>
6	Ultrafast Optics and Spectroscopy	29 Jul 2019	18 Oct 2019	12 weeks	Elective	17 Nov 2019	<a href="https://swayam.gov.in/nd1-noc19_cy28/preview">https://swayam.gov.in/nd1-noc19_cy28/preview</a>
7	Soft Skills	29 Jul 2019	18 Oct 2019	12 weeks	Elective	16 Nov 2019	<a href="https://swayam.gov.in/nd1-noc19_hs33/preview">https://swayam.gov.in/nd1-noc19_hs33/preview</a>

3. The members agreed upon the mechanism presented before the board for transfer of credits earned through such courses. Further, it was decided that before finalization of the same the matter should be taken up with COE, IKG PTU for resolving

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

*[Signature]*  
Meghe

*[Signature]*  
Dhanraj

*[Signature]*  
Shabir

*[Signature]*

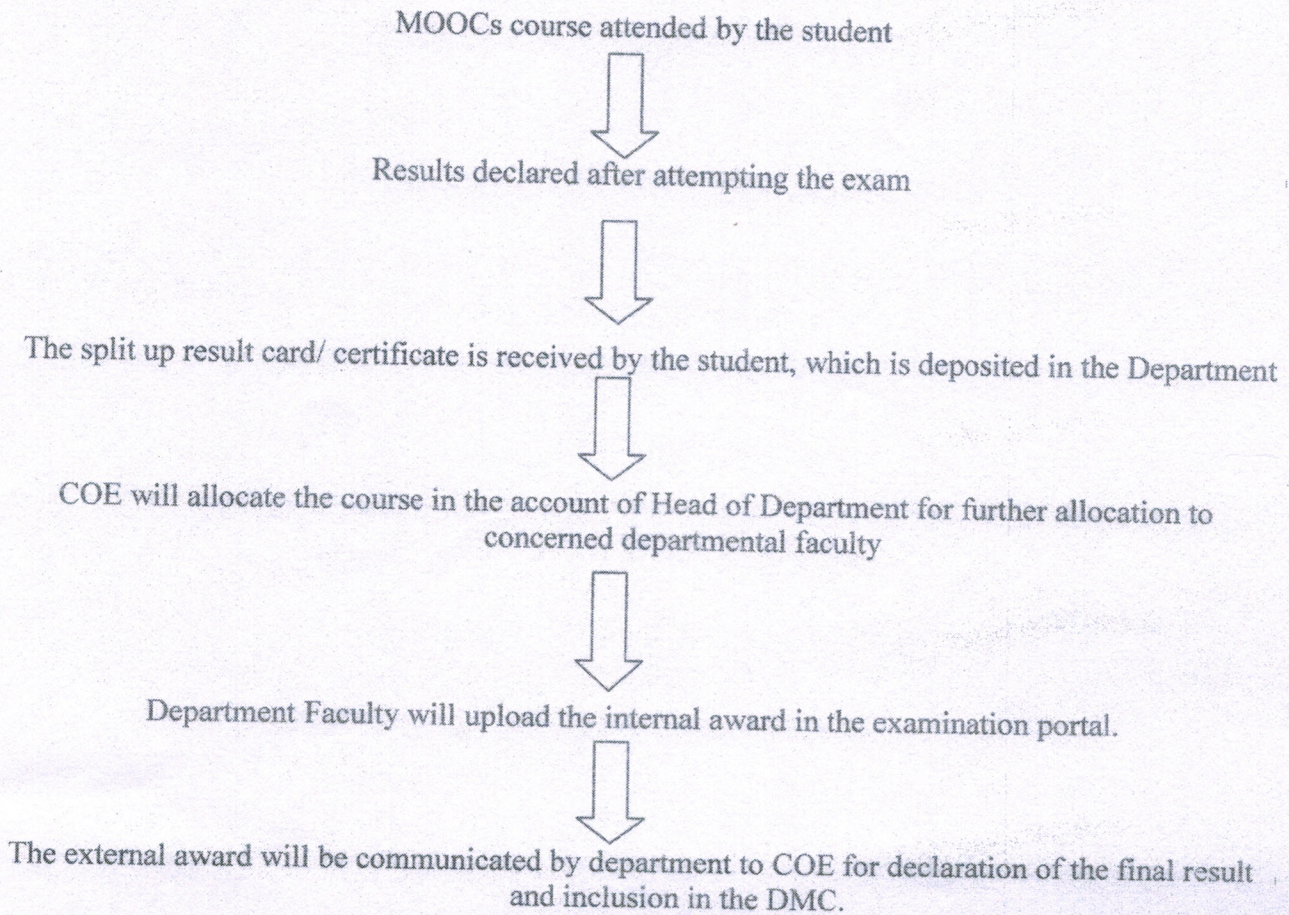
*[Signature]*  
R. Thakur

10/9/19



Minutes 1<sup>st</sup> BOS Meeting MSc Clinical Research: 25-07-2019

administrational issues if any. The proposed mechanism for transfer of credits is as under:



4. Subsequent to the BOS meeting, the matter of credit transfer for SWAYAM/MOOCs was discussed with COE, IKG PTU. He agreed with the proposed mechanism for credit transfer.

**Item No. 1.10: Any other item with the permission of chair.**

1. The matter of end semester exam of the course Biostatistics in Clinical Research was discussed. The question paper was entirely theoretical without any numerical. It was decided that in the next meeting board would draft guideline for the question paper setters for setting end semester exam question papers. Further, it was decided that the

*[Signature]*  
Megha Sood

*[Signature]*

*[Signature]*  
Shabir

*[Signature]*

*[Signature]*

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA  
10/8/21



Minutes 1<sup>st</sup> BOS Meeting MSc Clinical Research: 25-07-2019

board will prepare a list of question paper setters for the courses and it will be forwarded to examination department.

- The matter of journal club evaluation scheme was discussed and the scheme was finalized as below:

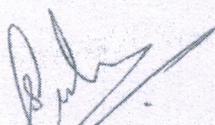
**Evaluation Scheme Journal Club**

Paper Selection and Content Delivery	10
Power Point Presentation	05
Post Presentation Discussion	10
Total	25


*Note: Student will present minimum two papers in each semester*

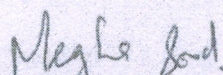
The meeting ended with vote of thanks to the Chair.

Dr. R.K. Goel

  
Dr. Shalini-Salwan

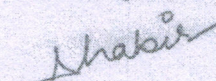
Dr. Deepak Prabhakar Bhagwat

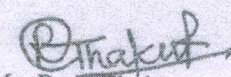
  
Dr. Gaurav Bhargawa

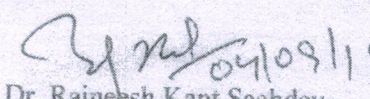
  
Dr. Megha Sood

Dr. Anoop Kumar

  
Er. Gazal Sharma

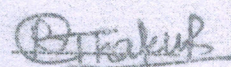
  
Dr. Shabir Sidhu

  
Mr. Ravi Thakur

  
Dr. Rajneesh Kant Sachdev  
(Chairperson)

Head

Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA



10/09/19



M. Tech Food  
Technology

The following members were present:

- The meeting commenced with the formal introduction of the newly constituted BOS. Chairman of BOS took up the formal agenda items point wise.

Chairman welcomed the new board of studies with a brief introduction about the university, its working and the department of Food Science & Technology. The members were informed about the function to be executed by the BOS and all the members took a keen interest in contributing all functions.

The syllabus and scheme with minor modification were put before the members and the deliberations were carried out on the proposal of minor modification for the adoption of scheme and syllabus of M.Sc Food technology (3rd & 4th semester) for the students till batch 2018. The following decisions were made:

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA  
10/09/21

Pace      B On      KAPURTHALA      Yr  
29/07/19      B Brn      April      Bo      A



4.2.2 The board of studies members gave their consent to ratify the distribution of marks for M.Sc dissertation (batch 2017 and 2018) which was already notified vide notification no IKGPTU/Reg/NF/157 dated on 04/04/2019.

**Item 4.3 To consider the adoption of the scheme and curriculum of M.Tech Food Technology for the students of batch 2018 with minor modifications.**

4.3.1 The syllabus and scheme with minor modification was put before the members and the deliberations were carried out on the proposal of minor modification for the adoption of scheme and syllabus of M.Tech Food technology (3<sup>rd</sup> & 4<sup>th</sup> semester) and Program Education Objectives/ Program Outcomes/ Course Objectives & Outcomes for the students (batch 2018). The consent was given to ratify the distribution of marks for M.Tech dissertation which was already notified vide notification no IKGPTU/Reg/NF/157 dated on 04/04/2019 (Annexure 4B).

4.3.2 The proposed list of relevant MOOC/SWAYAM courses which may replace open elective courses of M.Tech was finalized by all the BOS members (Annexure 4C)

**Item 4.4 To consider the updation of the scheme and curriculum of M.Sc Food Technology for batch 2019 onwards.**

The syllabus and scheme was put before the members and the deliberations were carried out on the proposal of updation of scheme and syllabus of M.Sc Food technology students with for batch 2019 onwards. The following decisions were made:

4.4.1 The proposed eligibility criteria for M.Sc food technology has been finalized by BOS members from batch 2019 onwards as below

"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"

4.4.2 The proposed scheme and syllabus has been finalized by BOS Members with proposed minor modification (agenda item 4.4.2 a, 4.4.2 b and 4.4.2.d) and Program Education Objectives/ Program Outcomes/ Course Objectives & Outcomes for the students of M.Sc food technology from batch 2019 onwards. The board of studies members gave their consent to ratify the distribution of marks for M.Sc dissertation which was already notified vide notification no IKGPTU/Reg/NF/157 dated on 04/04/2019 as per agenda item 4.4.2 c (Annexure 4D).

4.4.3 The proposed evaluation scheme of internal & external awards (agenda item 4.4.3) of laboratory courses was finalized by all the BOS members as below:

	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

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA



	40%	Viva	06
<b>Total</b>			<b>50</b>

4.4.4 The proposed evaluation scheme of theory course including sessional /Mst exams as well as continuous mode scheme (agenda item 4.4.4.1, 4.4.4.2) was finalized by all the BOS members as below:

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

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

#### 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). 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 as below

<b>Permission time period</b>	<b>Approving authority</b>
Within 10 days from date of conduct of MST	Head of Department
Within 30 days from date of conduct of MST	Director (Main Campus)
After 30 days	Vice-Chancellor

#### 4.4.4.2 Continuous Mode Scheme

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

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

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA



4.4.5 The proposed guidelines for the allotment of marks for attendance (agenda item no. 4.4.5) was finalized by all the BOS members.

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
< 75% attendance	nil	nil	nil

**Item 4.5 To consider the updation of the scheme and curriculum of M.Tech Food Technology for batch 2019 onwards.**

The syllabus and scheme was put before the members and the deliberations were carried out on the proposal of updation of scheme and syllabus of M.Tech. Food Technology students for batch 2019 onwards. The following decisions were made:

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

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. (Hons) in Food Technology, BSc (Hons) Agriculture (with elective/hons in Food Technology/Food Process Engineering) or any equivalent degree with at least 50% (45% in case of candidate belonging to reserved category) marks in aggregate

OR

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.

**4.5.2 Proposed scheme and syllabus used for M.Tech. Food Technology batch 2019 onward (Annexure J) with modification:**

- The proposed scheme and syllabus has been finalized by BOS Members with proposed minor modification (agenda item 4.5.2 a, 4.5.2 b) and Program Education Objectives/ Program Outcomes/ Course Objectives & Outcomes for the students of M.Tech. Food Technology from batch 2019 onwards (Annexure 4E).
- The board of studies members gave their consent to ratify the distribution of marks for M.Sc dissertation which was already notified vide notification no IKGPTU/Reg/NF/157 dated on 04/04/2019 as per agenda item 4.5.2 c (Annexure 4E).
- The BOS members gave their consent for inclusion of following courses in M.Tech Food Technology for Batch 2019 onwards (Annexure 4E):
  - Two audit courses i.e. Audit I and Audit II (Non-credit) As per agenda item 4.5.2d,

Head  
Deptt. of Food Technology  
I.K. Gujral Punjab Technical University

KAPURTHALA

*Dr. S.*

*B. On*

*U. J. S.*

*W*

*3rd 29/07/19*

*R-L*

*B. P.*

*M. P.*

*A. S.*

*B. S. S.*



- b. Open elective course - As per agenda item 4.5.2e
- c. **Research Methodology and IPR course - As per agenda item 4.5.2f**
- d. **Mini project with Seminar course - As per agenda item 4.5.2g**

**4.5.3** The proposed list of relevant MOOC/SWAYAM courses which may replace open elective courses of M.Tech was finalized by all the BOS members (**Annexure 4F**)

**4.5.4** The proposed evaluation scheme of internal & external awards (agenda item 4.5.4) of laboratory courses was finalized by all the BOS members as below

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

**4.5.5** The proposed evaluation scheme of theory course including sessional /Mst exams as well as continuous mode scheme (agenda item 4.5.5.1, 4.5.5.2) was finalized by all the BOS members.

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

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

#### **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). 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 as below

Permission time period	Approving authority
Within 10 days from date of conduct of MST	Head of Department
Within 30 days from date of conduct of MST	Director (Main Campus)
After 30 days	Head of Deptt. of Food Science & Technology I.K. Gujral Punjab Technical University KAPURTHALA

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*

*[Handwritten signature]*



#### 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

4.5.6 The proposed guidelines for the allotment of marks for attendance (agenda item no. 4.5.6) was finalized by all the BOS members.

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
< 75% attendance	nil	nil	nil

#### 4.6 Any other item with the Permission of Chair

The following agenda were put up as table agenda

##### 4.6.1 Vision and mission of Department of Food Science and Technology

The vision and mission of Department of Food Science and Technology was put before the members and the deliberations were carried out on vision and mission of Department of Food Science and Technology. The proposed vision and mission of Department of Food Science and Technology has been finalized by BOS Members

##### Vision:

To create competent professionals those, contribute towards the economic development of the nation by going in line with the policy of Government of India in the field of food processing food safety and security.

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

*[Handwritten signatures and dates]*  
25/02/19



**Mission:**

- Development of human resources in the field of food science and technology to serve the cause of nation
- Providing a strong theoretical and practical background across the food science discipline with an emphasis on developing sustainable resources to cater food and nutrition related challenges
- Development of human resources in the area of clinical nutrition and research to contribute effectively in making India healthy
- Create favorable environment for innovation to translate theoretical knowledge into practical applications
- Inculcating professional ethical values, innovative research capabilities and leadership abilities
- Holistic development of the youth through the process of self evaluation and continuous improvement

**4.6.2 Recommendation of the names of paper setters for external examiners for M.Sc. Food Technology and M.Tech. Food Technology.**

The deliberations were carried out on names of paper setters for external examiners for different courses of M.Sc. Food Technology and M.Tech. Food Technology. It is finalized that the names of paper setters for external examiners for M.Sc. Food Technology and M.Tech. Food Technology will be sent by BIS members to Dr. Barinderjit Singh latest by August 12, 2019 through email.

**4.6.3 To deliberate on the nature of courses being run in the Department of Food Science and Technology.**

The BOS members also suggested that keeping in mind the NAAC/NBA guidelines and requirements and receiving funding from central agencies, it will be appropriate to run different nature of courses (Food Technology/Clinical Research) under Department of Food Science and Technology and Department of Pharmaceutical Sciences, respectively for the holistic growth of faculty and students of the institution.

Meeting ended with vote of thanks by Ms Jyotsna.

Dr. Balmeet Singh Gill

Dr. Deep Narayan Yadav

Dr. Kamlesh Prasad

Dr. Vikas Nanda

Dr. Manbir Singh

Dr. Amritpal Kaur

Dr. Bindu

Dr. Ankur Ojha

Dr. Bhupinder Singh

Dr. B.S. Khatkar

Ms. Naval Preet Kaur

Ms. Disha

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA



Dr. Barinderjit Singh

Dr. Rajneesh Kant Sachdev

Please put up for approval

Convenor (P.S.)

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

2/10/21



IK GUJRAL PUNJAB TECHNICAL UNIVERSITY  
MAIN CAMPUS, KAPURTHALA  
DEPARTMENT OF FOOD SCIENCE & ENGINEERING  
**MINUTES OF MEETING**

The 5th meeting of board of studies (Food Science & Engineering) was held in the Department of Academics. Conference Hall 2<sup>nd</sup> floor at IK Gujral Punjab technical university on 5<sup>th</sup> Feb. 2019 at 10:00 am.

The following members were present:

1. Dr. Rajneesh Kant Sachdev, Chairperson, IKGPTU
2. Dr. Balmeet Singh Gill, GNDU, Amritsar, Member
3. Dr. Manbir Singh, KCL, Amritsar, Member
4. Dr. Amritpal Kaur, GNDU, Amritsar, Member
5. Dr. Bindu, KVK, Kapurthala, Member
6. Dr. Barinderjit Singh, IKGPTU, Member
7. Dr. Bhupinder Singh, CDLSIET Member
8. Dr. Sukhwinder Singh, CPRS, Jalandhar
9. Mr. M.S. Bedi, Dy. Director, Deptt. of CR&A, IKGPTU, Member

The meeting commenced with the action taken report of 4<sup>th</sup> BoS Meeting. Chairman of BOS took up the formal agenda items pointwise.

**Item 5.1 To confirm the action taken report of the fourth Board of Study Meeting**

Chairman briefed about the action taken report of 4<sup>th</sup> BOS Meeting. BOS members decided to deliberate on the action taken report of 4<sup>th</sup> BOS Meeting in next meeting due to the non-availability of a few senior BOS members.

**Item 5.2 To finalize the scheme and syllabus of Ph.D. Food Science and Technology**

1. The proposed scheme and syllabus were put before the members.
2. Unanimously following suggestion were made by BOS members regarding syllabus of PhD
  - a. As per the UGC letter no. D.O. No. F.1-1/2018(Journal/CARF) dated December, 2019, Course of Research and Publication Ethics (RPE) has been adopted as such into the compulsory subject (Two Credits) list of PhD course work scheme and syllabus (Annexure A-UGC Letter, Annexure B- Syllabus of Research and Publication Ethics (RPE)).
  - b. The all other proposed course contents were deliberately modified as per suggestion proposed by BOS members as Annexure C.

**Item 5.3 Any other item with the Permission of Chair**

NA

Meeting ended with vote of thanks by Dr. Barinderjit Singh.

Dr. Balmeet Singh Gill

Dr. Manbir Singh

Dr. Amritpal Kaur

Dr. Bindu

Dr. Bhupinder Singh

Dr. Sukhwinder Singh

Mr M. S. Bedi

Dr. Barinderjit Singh

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

Dr. Rajneesh Kant Sachdev



Annexure DFST-1.2.1.  
MOM. Total Pgs-05  
Program & outcome  
scheme  
Attendance  
sheet

IK GUJRAL PUNJAB TECHNICAL UNIVERSITY  
MAIN CAMPUS, KAPURTHALA  
DEPARTMENT OF FOOD SCIENCE & ENGINEERING  
MINUTES OF MEETING

The 5th meeting of board of studies (Food Science & Engineering) was held in the Department of Academics, Conference Hall 2<sup>nd</sup> floor at IK Gujral Punjab technical university on 24/02/2020 at 10:00 AM.

The following members were present:

1. Dr. Rajneesh Kant Sachdev, Chairperson, IKGPTU
2. Dr. Balmeet Singh Gill, GNDU, Amritsar, Member
3. Dr. Manbir Singh, KCL, Amritsar, Member
4. Dr. Amritpal Kaur, GNDU, Amritsar, Member
5. Dr. Bindu, KVK, Kapurthala, Member
6. Dr. Barinderjit Singh, IKGPTU, Member
7. Dr. Bhupinder Singh, CDLSJET, Member
8. Dr. Sukhwinder Singh, CPRS, Jalandhar
9. Mr. M.S. Bedi, Dy. Director, Deptt. of CR&A, IKGPTU, Member

The meeting commenced with the action taken report of 4<sup>th</sup> BoS Meeting. Chairman of BOS took up the formal agenda items pointwise.

**Item 5.1 To confirm the action taken report of the fourth Board of Study Meeting**

Chairman briefed about the action taken report of 4<sup>th</sup> BOS Meeting. BOS members decided to deliberate on the action taken report of 4<sup>th</sup> BOS Meeting in next meeting due to the non-availability of a few senior BOS members.

**Item 5.2 To finalize the scheme and syllabus of Ph.D. Food Science and Technology**

1. The proposed scheme and syllabus were put before the members.
2. Unanimously following suggestion were made by BOS members regarding syllabus of PhD
  - a. As per the UGC letter no. D.O. No. F-1-1/2018(Journal CARE) dated December, 2019, Course of Research and Publication Ethics (RPE) has been adopted as such into the compulsory subject (Two Credits) list of PhD course work scheme and syllabus (Annexure A-UGC Letter, Annexure B- Syllabus of Research and Publication Ethics (RPE)).
  - b. The all other proposed course contents were deliberately modified as per suggestion proposed by BOS members as Annexure C.

**Item 5.3 Any other item with the Permission of Chair**

NA

Meeting ended with vote of thanks by Dr. Barinderjit Singh.

Dr. Balmeet Singh Gill *B.S. Gill* 24/2/20

Dr. Manbir Singh *Manbir Singh* 24.2.2020

Dr. Amritpal Kaur *Amritpal Kaur* 24/2/2020

Dr. Bindu *Bindu*

Dr. Bhupinder Singh *Bhupinder Singh*

Dr. Sukhwinder Singh *Sukhwinder Singh*

Mr. M. S. Bedi *M.S. Bedi* 24/2/2020

Dr. Barinderjit Singh *Barinderjit Singh* 24/2/2020

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

Dr. Rajneesh Kant Sachdev



# **Scheme & Syllabus of**

## **Ph.D. - Food Science & Technology**

**Batch 2020 onwards**



**By**

**Board of Study (Food Science & Engineering)**  
**Department of Food Science & Technology (Main Campus)**  
**IK Gujral Punjab Technical University**

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

23/10/21

✓ 24.2.22 *[Signature]* *[Signature]*  
p-2



Program Outcomes

- PO1 Learning to conduct innovative and high quality research to solve emerging problems in Food Science and Technology through applying the fundamental scientific knowledge and designing and conducting research experiments and analysing the findings.
- PO2 Conceptualizing and solving scientific and technological problems through lateral and original thinking and evaluating a wide range of potential solutions for those problems to arrive at feasible and optimal solutions after considering public health, food safety, food preservation, novel value-added product development, nutritional enhancement and food security as core areas of expertise.
- PO3 Doctoral students will attain professional and leadership skills for professional positions in food and allied industries, government, or research institutes.
- PO4 Communication skills and professional approach to convey technical information and defend scientific findings within the scientific community by presenting research to local, regional, and national audiences through publications, report writings and presentations will be enhanced.
- PO5 Developing skills and competencies in budding researchers and inculcating the requisite aptitude in them to conduct advanced research in the emerging areas of food science and technology with a rigorous and scientific approach.

21  
24/12/2020

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

21  
23/11/21



**IK Gujral Punjab Technical University**  
**Ph.D. : Food Science & Technology (Batch 2020 onward)**

Course Code	Course Type	Course Title	Load Allocation			Marks Distribution		Total	Credits
			L	T	P	Internal	External		
PHDFT-101-20	Compulsory Course	Research Methodology	3	1	0	40	60	100	4
PHDFT-101-20		Research and Publication Ethics	2	0	0	20	30	50	2
PHDFT-201-20	Core Theory Course (Any one)	Advances in Food Processing Technology	3	1	0	40	60	100	4
PHDFT-202-20		Advances in Food Analysis	3	1	0	40	60	100	
PHDFT-203-20		Advances in Food Packaging	3	1	0	40	60	100	
PHDFT-204-20		Processing Technology for Bioactive Compounds	3	1	0	40	60	100	
PHDFT-301-20	Interdisciplinary Course (Any One)	Intellectual Property Rights	3	1	0	40	60	100	4
PHDFT-302-20		Product Design & Development	3	1	0	40	60	100	
PHDFT-303-20		Project Planning & Implementation	3	1	0	40	60	100	
PHDFT-304-20		Food Supply Chain Management	3	1	0	40	60	100	
PHDFT-401-20	Core Presentation	*Presentation	0	0	6	75	-	75	3
		<b>Total</b>	<b>11</b>	<b>3</b>	<b>6</b>	<b>215</b>	<b>200</b>	<b>425</b>	<b>17</b>

\*Minimum two presentation related to proposed research area of the candidate

\*Non-University Exam

Head  
 Deptt. of Food Science & Technology  
 I.K. Gujral Punjab Technical University  
 KAPURTHALA



**IK Gujral Punjab Technical University  
Department of Academics**

Minutes of meeting of Board of Studies Pharmacy held on March 5, 2021 at 3:00 PM through online mode (Skype).

The following member were present:

1. Prof. (Dr.) G. D. Gupta, Director-Cum-Principal, ISF College of Pharmacy, Moga (Chairman)
2. Dr. Chander Mohan, RBIP, Hosiarpur (Vice-Chairman)
3. Dr. D. N. Prasad, Principal Shivalik College of Pharmacy, Nangal (Member)
4. Dr. M. Arockia Babu, Principal, Chandigarh College of Pharmacy, Landran, Mohali (Member)
5. Dr. Puneet Utereja, PCTE, Baddowal (Member)
6. Dr. Shamsher Singh, ISF College of Pharmacy, Moga (Member)
7. Dr. Anjoo Kamboj, Chandigarh College of Pharmacy, Landran (Member)
8. Dr. Jagdeep Singh Dua, SCPN, Nangal (Member)
9. Dr. Vandana Kharb, Sachdeva College of Pharmacy, Kharar (Member)
10. Dr. Subheet Jain, Deptt. of Pharmaceutical Sciences, GNDU Amritsar, (Member)
11. Dr. Pawan Krishan, Professor, Deptt of Pharmaceutical Sciences, Punjab University, Patiala (Member)
12. Dr. Shabir Sidhu, Assistant Professor, Main Campus IKGPTU (Member-Coordinator)

The following members could not attend the meeting:

1. Dr. Anupam Sharma, Professor, UIPS, Panjab University, Chandigarh (Member)
2. Dr. Gurpreet Kaur, Akal College of Pharmacy, Mastuana (Member)
3. Dr. Pradeep Saha, Assistant Professor, SCPN, Nangal (Member)
4. Dy. Director / Assistant Director CR&A, Department of CR&A, IKGPTU (Member)

Dr. G.D. Gupta, Chairperson of BOS Pharmacy welcomed the members. The agenda for discussion were taken up and following were resolved.

### 1. Agenda for Ratification

1.1. Matter pertaining to the award of credits for co-curricular activities in M. Pharmacy

The Board of Studies approved the scheme for the award of credits for co-curricular activities. As per the modified scheme it is was recommended that 02 credit points should be made mandatory so that all the students are awarded degree with uniform total credits of 95. It was approved that the modified scheme will be applicable from Batch 2017 onward. The modified scheme is as follows:

\_\_\_\_\_

\_\_\_\_\_

Head

Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

21/03/21



**Fourth Semester Study Scheme of M. Pharmacy from Batch 2017 onward****Fourth Semester**

Course Code	Course Name	L	P	Marks			Credits
				Internal	External	Total	
-	Journal Club	1	-	25	-	25	1
-	Research Work	-	31	-	400	400	16
-	Discussion/Final Presentation	3	-	75	-	75	3
-	Co-curricular Activities	-	-	Satisfactory/Unsatisfactory			2*
<b>Total</b>		<b>4</b>	<b>31</b>	<b>100</b>	<b>400</b>	<b>500</b>	<b>22</b>

\*Note: Required credit points 02 for satisfactory; Less than 02 creditpoints unsatisfactory

\*Credits not included towards calculation of CGPA

**Semester Wise Credits Distribution**

Semester	Credit Points
I	26
II	26
III	21
IV	20
Co-curricular Activities (Attending Conference, Scientific Presentations & Other Scholarly Activities)	02*
<b>Total Credit Points</b>	<b>93 + 2* = 95</b>

- \*Credit Points for Co-curricular Activities
- \*Credits not included towards calculation of CGPA
- \*The credit points assigned for extracurricular and or co-curricular activities shall be given by the Principals of the colleges and the same shall be submitted to the University

**2. Finalization of scheme and syllabus of M. Pharm Pharmacy Practice**

The Board discussed and finalized the study Scheme and Syllabus of M. Pharm Pharmacy Practice for the session 2020 onwards. Copy of finalized syllabus is attached as Annexure-A

\_\_\_\_\_

\_\_\_\_\_

Head

Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

21/09/21



**M. Pharm Pharmacy Practice Scheme****First Semester**

Course Code	Course Name	L	P	Marks			Credits
				Internal	External	Total	
MPP 101T	Clinical Pharmacy Practice	4	-	25	75	100	4
MPP 102T	Pharmacotherapeutics-I	4	-	25	75	100	4
MPP 103T	Hospital & Community Pharmacy	4	-	25	75	100	4
MPP 104T	Clinical Research	4	-	25	75	100	4
MPP 105P	Pharmacy Practice Practical I	-	12	50	100	150	6
	Seminar/Assignment		7	100		100	4
<b>Total</b>		<b>16</b>	<b>19</b>	<b>250</b>	<b>400</b>	<b>650</b>	<b>26</b>

- # Minimum five seminar/assignment each of 20 marks per semester

**Second Semester**

Course Code	Course Name	L	P	Marks			Credits
				Internal	External	Total	
MPP201T	Principles of Quality Use of Medicines	4	-	25	75	100	4
MPP202T	Pharmacotherapeutics II	4	-	25	75	100	4
MPP203T	Clinical Pharmacokinetics and Therapeutic Drug Monitoring	4	-	25	75	100	4
MPP204T	Pharmacoepidemiology & Pharmacoeconomics	4	-	25	75	100	4
MPP205P	Pharmacy Practice Practical II	-	12	50	100	150	6
	Seminar/Assignment		7	100		100	4
<b>Total</b>		<b>16</b>	<b>19</b>	<b>250</b>	<b>400</b>	<b>650</b>	<b>26</b>

- # Minimum five seminar/assignment each of 20 marks per semester

**Third Semester**

Course Code	Course Name	L	P	Marks			Credits
				Internal	External	Total	
MRM301T	Research Methodology & Biostatistics*	4	-	25	75	100	4
	Journal Club	1	-	25	-	25	1
	Discussion / Presentation (Proposal Presentation)	2	-	50	-	50	2
	Research Work*		28		350	350	14
<b>Total</b>		<b>7</b>	<b>28</b>	<b>100</b>	<b>425</b>	<b>525</b>	<b>21</b>

- \*Non-University Exam

Head

 Deptt. of Food Science & Technology  
 I.K. Gujral Punjab Technical University  
 KAPURTHALA

21/05/21



**Fourth Semester**

Course Code	Course Name	L	P	Marks			Credits
				Internal	External	Total	
-	Journal Club	1	-	25	-	25	1
-	Research Work	-	31	-	400	400	16
-	Discussion/Final Presentation	3	-	75	-	75	3
-	Co-curricular Activities	-	-	Satisfactory/Unsatisfactory			2*
<b>Total</b>		<b>4</b>	<b>31</b>	<b>100</b>	<b>400</b>	<b>500</b>	<b>22</b>

\*Note: Required credit points 02 for satisfactory; Less than 02 credit points unsatisfactory

\*Credits not included towards calculation of CGPA

### 3. Inclusion of mandatory course on Research and Publication Ethics in PhD course work

The Board deliberated and finalized subject code, scheme and syllabus of Research and Publication Ethics for inclusion in the PhD course work from batch 2021 onward as compulsory course. The copy of syllabus is attached as Annexure-B

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

21/10/21



## Study Scheme

Course Code	Course Type	Course Name	Load			Marks			Credits
			L	T	P	Internal	External	Total	
PHP-101	Compulsory Course	Research Methodology	3	1	-	30	70	100	4
PHP-102	Compulsory Course	Research & Publication Ethics	2	-	-	20	30	50	2
PHP-201	Core Theory (Any One)	Pharmaceutics	3	1	-	30	70	100	4
PHP-202		Pharmaceutical Chemistry	3	1	-	30	70	100	
PHP-203		Pharmacology	3	1	-	30	70	100	
PHP-204		Pharmacognosy	3	1	-	30	70	100	
PHP-301	Interdisciplinary Course (Any One)	Modern Pharmaceutical Analytical Techniques	3	1	-	30	70	100	4
PHP-302		Intellectual Property Rights	3	1	-	30	70	100	
PHP-303		Pharmacology & Toxicological Screening Methods	3	1	-	30	70	100	
PHP-304		Biochemical & Separation Techniques	3	1	-	30	70	100	
PHP-305		Bioprocess Technology	3	1	-	30	70	100	
PHP-306		Recombinant Biotechnology	3	1	-	30	70	100	
PHP-307		Plant Tissue Culture	3	1	-	30	70	100	
PHP-401	Presentation	*Presentation	-	-	-	-	-	75	-
Total			11	03	06	185	270	455	17

\*Minimum three presentations related to proposed research area of the candidate

\*Non-University Exam

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

21/05/21



**4. Examination pattern of M. Pharm end semester exam**

The examination pattern of theory end semester exam of 75 marks was finalized as follows:

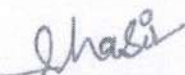
Section A compulsory	10x2=20
Section B (Answer 7 out of 9)	7x5 = 35
Section C (Answer 2 out of 3)	2x10=20
	75 Marks

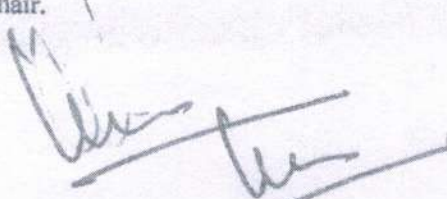
The examination pattern of practical end semester exam of 100 marks was finalized as follows:

Synopsis	20
Minor Experiment	20
Major Experiment	40
Viva-Voce	20
	100 Marks

The modified exam pattern was recommended to be implemented from batch 2021 onward.

The meeting ended with the vote of thanks to the chair.

  
Dr. Shabir Sidhu (Coordinator)

  
Prof. (Dr.) G. D. Gupta  
(Chairperson BOS)

Head  
Deptt. of Food Science & Technology  
I.K. Gujral Punjab Technical University  
KAPURTHALA

u  
90/5/2