

DEPARTMENT REPORT

NAME OF DEPARTMENT: Biotechnology and Food Processing

VISION OF THE DEPARTMENT: The vision of the department is to produce competent Biotechnologist who can employ premium processes and applications which will profoundly influence existing paradigm of agriculture, healthcare, industry and restoration of environment providing sustainable competitive edge to present society.

MISSION OF THE DEPARTMENT:

- To be centre of excellence in the field of biotechnology equipped to create graduates and postgraduates who endeavour for the welfare of the mankind.
- To impart quality education for lifelong professional growth and opportunity in a wide range of careers.
- To create awareness about potentials of Biotechnology with socio-ethical implications.
- To nurture confident individuals who are effective contributors towards growth of the nation.

DEPARTMENTAL PROFILE (Year of establishment, courses, no. of seats, scope etc.: (250 words) :-

The Biotechnology and Food Processing department was established in 2008. This department conducts both undergraduate and postgraduate programs (B. Sc (Hons) Biotechnology, B. Voc Food Processing and M. Sc Biotechnology). The seats allowed for the particular courses are- B. Sc (Hons) Biotechnology: 40, B. Voc Food Processing: 50 and M. Sc Biotechnology: 30.

Biotechnology is a broad discipline that utilizes biological systems, living organisms, cells or cellular parts of this to develop or create different technologies and products. It has offered modern medical devices for various diagnostic and preventive purposes that include diagnostic test kits, vaccines and radio-labelled biological therapeutics which are used for imaging and analysis. Biotechnology has played a great dynamic role in improving the challenges regarding to human health as it has the flexibility to reduce global health differences by the provision of promising technologies. Health, life quality and expectancy of life have been increased worldwide through the services provided by biotechnology.

FACULTY OF THE DEPARTMENT:

S. No.	Name of Faculty	Educational Qualification	Experience	mail ID	Pictures of Faculty
1	Dr. Mamta Arora	Ph.D., CSIR UGC- NET	15 yr. 7 months	mamtaarora.2007@rediffmail.com	

2	Dr Parvinder Kaur	Ph.D., CSIR UGC- NET	4 yr 3 months	harrysaini88@gmail.com	
3	Dr Avni Viz	Ph.D.	1yr 4months	Avnivij15@gmail.com	
4	Navreet Bhardwaj	M.Sc., UGC NET	1yr 4month	bhardwajnavreet@mail.com	
5	Manpreet Kaur	M.Sc.	7 yr 3 months	sainimanpreet89@gmail.com	
6	Love Singla	M.Sc. (Hons.), CSIR UGC- NET, GATE	1yr 6month	Lsingla04@gmail.com	
7	Ramandeep Kaur	M.Sc.	5yr 6month	Ramandeep0024@gmail.com	

8	Parminder Kaur	M.Sc.	09 month	95parminder@gmail.com	
9	Jaspreet Kaur	M.Sc.	3 yr 7 month	jassipabla1990@yahoo.com	
10	Manpreet Kaur	M.Sc.	04 month	manpreetkaur230894@gmail.com	
11	Navjot Kaur	M.Sc.	03 month	bhartinavjot1991@gmail.com	

ACHIEVEMENT/PUBLICATIONS OF FACULTY:

Year of award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
Aug-15	Mamta Arora	Associate Professor	State Award from Nehru Youth club Ropar
Aug-16	Mamta Arora	Associate Professor	Bharat Jyoti Award from India International Friendship Society
Apr-16	Mamta Arora	Associate Professor	Medal of Merit for her commendable services to scouting movements from Bharat Scouts & Guides, Punjab

Jun-16	Mamta Arora	Associate Professor	Best Citizens of India Award from Best Citizen Publishing House, New Delhi
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Name of the author/s	Title of paper/book/conference	Name of journal/conference	Year of publication	ISBN/ISSN number	Link of the publication listed in international Journal
Dr. Mamta Arora	In-Vitro Antioxidant and antimicrobial activity study on Selected seeds of cicer arietinum Linn.	Asian Pacific Journal of Health Science, APJHS	19-11-2014	ISSN: 2231-2560	https://saepub.com/acc.php?journal_name=AJBPR&volume=4&issue=4
	Essential oils analysis of pseudobulbs of Crepidium acuminatum (D.DON) SZLACH by GC-MS	Asian Pacific Journal of Health Science, APJHS	20-8-2017	ISSN: 2349-0659	https://www.researchgate.net/publication/323687210_Essential_oils_analysis_of_pseudobulbs_of_Crepidium_acuminatum_DON_SZLACH_by_GC-MS
	A REVIEW ON PHYTOCHEMICAL AND PHARMACOLOGICAL POTENTIAL OF FAMILY ORCHIDACEAE	International research journal of pharmacy	21-10-2017	ISSN:2330-8407	https://www.researchgate.net/publication/321192997_A_REVIEW_ON_PHYTOCHEMICAL_AND_PHARMACOLOGICAL_POTENTIAL_OF_FAMILY_ORCHIDACEAE
	Propagation and Phytochemical Analysis of Crepidium acuminatum (D.DON) Szlach	IOSR journal of Pharmacy and Biological Sciences	Nov-17	e-ISSN: 2278-3008 p-ISSN: 2319-7676	https://www.researchgate.net/publication/321192997_A_REVIEW_ON_PHYTOCHEMICAL_AND_PHARMACOLOGICAL_POTENTIAL_OF_FAMILY_ORCHIDACEAE
	TPC, TFC & Antioxidant activities of Crepidium acuminatum (D. Don) Szlach	Journal of Pharmacognosy and Phytochemistry	7/6/2017	e-ISSN: 2278-4136 p-ISSN:	https://www.researchgate.net/publication/319183326_TPC_TFC

				2349-8234	Antioxidant activities of Crepidium acuminatum D Don Szlach
	Pharmacognostic Evaluation & Antimicrobial Activity of Endangered Ethnomedicinal Plant <i>Crepidium acuminatum</i> (D.DON) Szlach	Pharmacognosy Journal	2/11/2017	ISSN : 0975-3575	https://phcogj.com/article/446
	Exploit Cloud Computing for Next Generation sequencing analysis	IJRITCC	May-17	ISSN: 2321-8169	https://ijritcc.org/index.php/ijritcc/article/view/689 .
	Finger print profile of an important therapeutic plant of <i>Astavarga crepidium</i>	Current trends in biotechnology and pharmacy	September , 2018	ISSN:2230-7303	https://abap.co.in/finger-print-profile-important-therapeutic-plant-astavarga-crepidium-acuminatum-d-don-szlach-hptlc
Dr. Parvinder Kaur	Aza-Michael Addition of γ -Aminopropylsilatranes to Substituted N-Phenylmaleimides: Design and Synthesis of a Heterocyclic Amine Receptor and Their Preliminary Antimicrobial Studies	Silicon	16-12-2014	ISSN 1876-9918	https://link.springer.com/article/10.1007/s12633-014-9245-8
	Distribution of Class 1 Integrins, sul1 and sul2 Genes Among Clinical Isolates of <i>Stenotrophomonas maltophilia</i> from a Tertiary Care Hospital in North India	Microbial Drug Resistance	17-03-2015	ISSN: 1931-8448	https://www.liebertpub.com/doi/abs/10.1089/mdr.2014.0176
	Antimicrobial susceptibility pattern of <i>Burkholderia cepacia</i> complex & <i>Stenotrophomonas maltophilia</i> over six years (2007-2012)	IJMR	10/1/2015	ISSN 0971-5916	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4683836/
	MALDI-TOF mass spectrometry: An emerging tool for unequivocal identification of non-fermenting Gram-negative bacilli	IJMR	May-17	ISSN: 0971-5916	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5644302/
	<i>Stenotrophomonas maltophilia</i> : from trivial to grievous	Indian journal of medical microbiology	23-Jan-19	ISSN:1998-3646	http://www.ijm.org/article.asp?issn=0255-

					0857;year=2017;volume=35;issue=4;spage=469;epage=479;aulast=Singhal
Dr. Avni Vij	Investigating regulatory signatures of human autophagy related gene 5 (ATG5) through functional <i>in silico</i> analysis	Meta Gene	26-07-2016	ISSN: 22 14-5400	https://www.sciencedirect.com/science/article/pii/S2214540016300354
	Non-synonymous single nucleotide polymorphisms of ATGS destabilize ATG12-ATG5/ATG16L1 complex: An enzyme with E3 like activity of ubiquitin conjugation system	Meta Gene	27-4-2017	ISSN: 22 14-5400	https://www.sciencedirect.com/science/article/pii/S2214540017300324
	Rotavirus-like particles (RV-VLPs) Vaccines: An update	Wiley online Library	19-10-2017	ISSN:10 97-0037	https://onlinelibrary.wiley.com/doi/abs/10.1002/rmv.1954
Miss Navreet	To assess food adulteration related awareness of literate female homemakers in Chandigarh and detection of adulteration in food items purchased by them	Indian journal of social research	May-19	ISSN:00 19-5626	http://www.homesciencejournal.com/archives/?year=2018&vol=4&issue=2&part=B&ArticleId=571
Mr. Love Singla	Effective Topical Delivery of H-AgNPs for Eradication of Klebsiella pneumoniae-Induced Burn Wound Infection	AAPS PharmSciTech	19-April-19	ISSN: 1530-9932	https://link.springer.com/article/10.1208/s12249-019-1350-y

DEPARTMENT CALENDAR

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
July 2019 No of Working Days-	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31				
Aug-2019 No of Working Days-				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30	31	
Sep-2019							1
	2	3	4	5	6	7	8

No of Working Days-	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30						
Oct -2019 No of Working Days-		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31			
Nov -2019 No of Working Days-					1	2	3
	4	5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29	30	
Dec -2019 No of Working Days-							1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30	31					

	Holidays
	Student Food association
	Biotechnology association
	Final Examination

SHINING STARS OF THE DEAPRTMENT

S. No.	Year	Name of the students	Class of students	Achievements	Pictures
1	2014-15	Raminder Kaur	M.Sc.BT(2nd)	Percentage in Merit (83)	 Raminder Kaur M.Sc. (B.T.) 83%
2		Manpreet Kaur	M.Sc.BT(1st)	Percentage in Merit (83)	 Manpreet Kaur M.Sc.-I (BT) 83%

3		Amandeep Kaur	M.Sc.BT(1st)	Percentage in Merit (81.6)	 Amandeep Kaur M.Sc.-I (BT) 81.68%
4		Gurjinder Kaur	M.Sc.BT(1st)	Percentage in Merit (78)	 Gurjinder Kaur M.Sc. (B.T.) 78%
5		Beant Kaur	M.Sc.BT(1st)	Percentage in Merit (76)	 Beant Kaur M.Sc.-I (BT) 76%
6		Manveer Kaur	M.Sc.BT(1st)	Percentage in Merit (74)	 Manveer Kaur M.Sc.-II (BT) 74%
7		Harpreet Kaur	B.Sc.BT	Percentage in Merit (71)	 Harpreet Kaur B.Sc. (BT) 71%
8		Mohini Verma	B.Sc.BT	Percentage in Merit (70)	 Mohini Verma B.Sc. Biotechnology 70%
9		Ruhi Grover	B.Sc.BT	Percentage in Merit (68)	 Ruhi Grover B.Sc. Biotechnology 68%

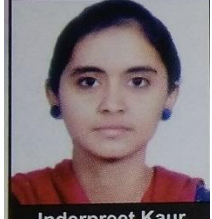
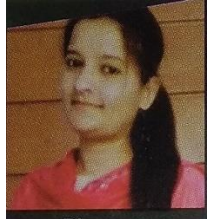
10		Amanpreet Kaur	B.Sc.BT	Percentage in Merit (70)	 Amanpreet Kaur B.Sc. (BT) 70%
11		Nidhi Dhiman	B.Sc.BT	Percentage in Merit (68)	 Nidhi Dhiman B.Sc. (BT) 68%
12		Amit Singh	B.Sc.BT	Percentage in Merit (67)	 Amit Singh B.Sc. Biotech 67%
13	2015-16	Manpreet Kaur	M.Sc.BT(3rd)	Percentage in Merit (80)	 Manpreet Kaur MSc. BT-III, 80%
14		Amandeep Kaur	M.Sc.BT(3rd)	Percentage in Merit (77)	 Amandeep Kaur MSc. BT-III, 77%
15		Mohini Verma	M.Sc.BT(2nd)	Percentage in Merit (80)	 Mohini Verma MSc. BT-II, 80%

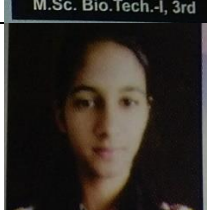
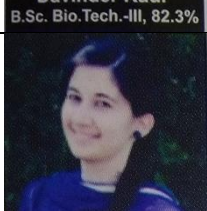
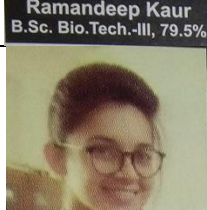
16		Mandeep Kaur	M.Sc.BT(2nd)	Percentage in Merit (77)	 Mandeep Kaur MSc. BT-II, 77%
17		Amandeep Kaur	M.Sc.BT(2nd)	Percentage in Merit (76)	 Amandeep Kaur MSc BT-II, 76%
18		Dimple joshi	B.Sc.BT 1	Percentage in Merit (80)	 Dimple Joshi BSc. BT-I, 80%
19		Harwinder Kaur	B.Sc.BT 1	Percentage in Merit (78), Mime &skit	 Harwinder Kaur BSc. BT-I, 78%
20		Nidhi Dhiman	B.Sc.BT 2	Percentage in Merit (76)	 Nidhi Dhiman BSc. BT-III 76%
21		Manjeet Kaur	B.Sc.BT 2	Percentage in Merit (75)	 Manjeet Kaur BSc. BT-III, 75%

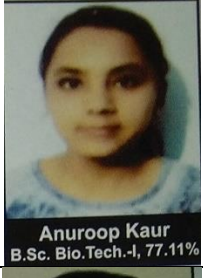
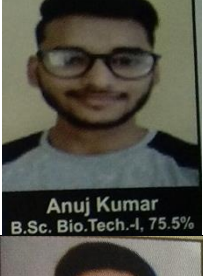
22		Amandeep Kaur	B.Sc.BT 2	Percentage in Merit (66)	 Amandeep Kaur BSc. BT-III, 66.10%
23		Rajat Kumar	B.Sc.BT 3	Percentage in Merit (76)	 Rajat Kumar BSC BT-III, 76%
24		Amit Singh	B.Sc.BT 3	Percentage in Merit (76)	 Amit Singh BSC BT-III, 76%
25		Diksha Kalia	B.Sc.BT 3	Percentage in Merit (73)	 Diksha Kalia BSC BT-III, 73%
26		Veera Rani	B.Voc.FP 1	Percentage in Merit (83)	 Veera Rani B.Voc. FP-I, 83%

27		Manpreet Kaur	B.Voc.FP 1	Percentage in Merit (82)	 Manpreet Kaur B.Voc. FP-I, 82.33%
28		Deepak Kumar	B.Voc.FP 1	Percentage in Merit (81)	 Deepak Kumar B.Voc. FP-I, 81.33%
29	2016-17	Karamjit Kaur	M.Sc.BT(3rd)	Percentage in Merit (75)	 Karamjit Kaur M.Sc. (B.T.)-III, 75%
30		Ramanpreet Kaur	M.Sc.BT(3rd)	Percentage in Merit (74)	 Ramanpreet Kaur M.Sc. (B.T.)-III, 74%
31		Hamanpreet Kaur	M.Sc.BT(1)	Percentage in Merit (77)	 Hamanpreet Kaur M.Sc. (B.T.)-I, 77%
32		Davinder Kaur	B.Sc.BT 2	Percentage in Merit (75)	 Davinder Kaur B.Sc. (B.T.)-II, 75%

33		Rupinder Kaur	B.Sc.BT 2	Percentage in Merit (72)	 Rupinder Kaur B.Sc. (B.T.)-II, 72%
34		Harwinder Kaur	B.Sc.BT 5	Percentage in Merit (75)	 Harwinder Kaur B.Sc. (B.T.)-V, 75%
35		Gagandeep Kaur	B.Voc.FP 1	8.60 (CGPA)	 Gagandeep Kaur B.Voc. (F.P) CGPA 8.60%
36		Manpreet Kaur	B.Voc.FP 1	8.60 (CGPA)	 Manpreet Kaur B.Voc. (F.P) CGPA 8.60%
37		Veera Rani	B.Voc.FP 2	Percentage in Merit (83)	 Veera Rani B.Voc. (F.P) 83%
38		Manpreet Kaur	B.Voc.FP 2	Percentage in Merit (82)	 Manpreet Kaur B.Voc. (F.P) 82%

39	2017-18	Amanpreet Kaur	M.Sc.BT(2nd)	Percentage in Merit (77)	 Amanpreet Kaur M.Sc. Bio.Tech.-II, 77.1%
40		Hamanpreet Kaur	M.Sc.BT(2nd)	Percentage in Merit (76.5)	 Hamanpreet Kaur M.Sc. Bio.Tech.-II, 76.5%
41		Inderpreet Kaur	M.Sc.BT(2nd)	Percentage in Merit (71.9)	 Inderpreet Kaur M.Sc. Bio.Tech.-II, 71.9%
42		Navneet Kaur	M.Sc.BT(2nd)	Percentage in Merit (71.5)	 Navneet Kaur M.Sc. Bio.Tech.-II, 71.5%
43		Bhawana	M.Sc.BT(1)	Merit Rank 1 st	 Bhawana M.Sc. Bio.Tech.-I, 1st
44		Kirandeep Kaur	M.Sc.BT(1)	Merit Rank 2 nd	 Kirandeep Kaur M.Sc. Bio.Tech.-I, 2nd
45		Sumandeep Kaur	M.Sc.BT(1)	Merit Rank 2 nd	 Sumandeep Kaur M.Sc. Bio.Tech.-I, 2nd

46		Parminder Kaur	M.Sc.BT(1)	Merit Rank 3rd	 Parminder Kaur M.Sc. Bio.Tech.-I, 3rd
47		Manimder Kaur	M.Sc.BT(1)	Merit Rank 3rd	 Manimder Kaur M.Sc. Bio.Tech.-I, 3rd
48		Davinder Kaur	B.Sc.BT 3	Percentage in Merit (82.3)	 Davinder Kaur B.Sc. Bio.Tech.-III, 82.3%
49		Ramandeep Kaur	B.Sc.BT 3	Percentage in Merit (79.5)	 Ramandeep Kaur B.Sc. Bio.Tech.-III, 79.5%
50		Sharanpreet Kaur	B.Sc.BT 3	Percentage in Merit (73)	 Sharanpreet Kaur B.Sc. Bio.Tech.-III, 73%
51		Neha Banwal	B.Sc.BT 2	Percentage in Merit (81.2)	 Neha Banwal B.Sc. Bio.Tech.-II, 81.2%

52		Gurpreet Kaur	B.Sc.BT 2	Percentage in Merit (80)	 Gurpreet Kaur B.Sc. Bio.Tech.-II, 80%
53		Anuroop Kaur	B.Sc.BT 1	Percentage in Merit (77.11)	 Anuroop Kaur B.Sc. Bio.Tech.-I, 77.11%
54		Anuj Kumar	B.Sc.BT 1	Percentage in Merit (75.5)	 Anuj Kumar B.Sc. Bio.Tech.-I, 75.5%
55		Gurjeet Kaur	B.Voc.FP 3	8.27 (CGPA)	 Gurjeet Kaur B.Voc. FP-III, CGPA 8.27
56		Ramandeep Kaur	B.Voc.FP 3	8.50 (CGPA)	 Ramandeep Kaur B.Voc. FP-III, CGPA 8.50
57		Manpreet Kaur	B.Voc.FP 2	7.60 (CGPA)	 Manpreet Kaur B.Voc. FP-II, CGPA 7.60

58		Jobanpreet Kaur	B.Voc.FP 2	7.60 (CGPA)	 Jobanpreet Kaur B.Voc. FP-II, CGPA 7.60
59		Bikramjit Singh	B.Voc.FP 2	7.43 (CGPA)	 Bikramjit Singh B.Voc. FP-II, CGPA 7.43
60		Jasvir Kaur	B.Voc.FP 1	7.40 (CGPA)	 Jasvir Kaur B.Voc. FP-II, CGPA 7.40
61		Amandeep Kaur	B.Voc.FP 1	7.80 (CGPA)	 Amandeep Kaur B.Voc. FP-II, CGPA 7.8
69	2018-19	Ruchi Samwal	M.Sc.BT(2nd)	Percentage in Merit (76.5)	 Ruchi Samwal M.Sc. Bio.Tech.-II, 76.8%
70		Shivi Jain	M.Sc.BT(2nd)	Percentage in Merit (76)	 Shivi Jain M.Sc. Bio.Tech.-II, 76%

71		Maninder Kaur	M.Sc.BT(2nd)	Percentage in Merit (75.5)	 Maninder Kaur M.Sc. Bio.Tech.-II, 75.5%
72		Gurvinder Kaur	M.Sc.BT(2nd)	Percentage in Merit (75)	 Gurvinder Kaur M.Sc. Bio.Tech.-II, 75%
73		Bhawna	M.Sc.BT(2nd)	Percentage in Merit (74.8)	 Bhawna M.Sc. Bio.Tech.-II, 74.8%
74		Parminder Kaur	M.Sc.BT(2nd)	Percentage in Merit (72.6)	 Parminder Kaur M.Sc. Bio.Tech.-II, 72.6%
75		Kirandeep Kaur	M.Sc.BT(2nd)	Percentage in Merit (72)	 Kirandeep Kaur M.Sc. Bio.Tech.-II, 72%
76		Kiranjit Kaur	M.Sc.BT(2nd)	Percentage in Merit (71.5)	 Kiranjit Kaur M.Sc. Bio.Tech.-II, 71.5%

77		Dilpreet Singh	M.Sc.BT(2nd)	Percentage in Merit (70)	 Dilpreet Singh M.Sc. Bio.Tech.-II, 70%
78		Gurpreet Kaur	B.Sc.BT 2	Percentage in Merit (81.7)	 Gurpreet Kaur B.Sc. Bio.Tech.-II, 81.7%
79		Neha Banwal	B.Sc.BT 2	Percentage in Merit (80.7)	 Neha Banwal B.Sc. Bio.Tech.-II, 80.7%
80		Anuroop Kaur	B.Sc.BT 1	Percentage in Merit (76)	 Anuroop Kaur B.Sc. Bio.Tech.-I, 78.6%
81		Anuj Kumar	B.Sc.BT 1	Percentage in Merit (74)	 Ajay Kumar B.Sc. Bio.Tech.-I, 74%
82		Manpreet Kaur	B.Voc.FP 3	8.1 (CGPA)	 Manpreet Kaur B.Voc. FP-II, 80.1%

83		Damanpreet Kaur	B.Voc.FP 3	7.8 (CGPA)	 Damanpreet Kaur B.Voc. FP-II, 78.1%
84		Simranjeet Kaur	B.Voc.FP 2	7.2 (CGPA)	 Simranjeet Kaur B.Voc. FP-II, 72%
85		Amandeep Kaur	B.Voc.FP 2	7.0(CGPA)	 Amandeep Kaur B.Voc. FP-II, 70%

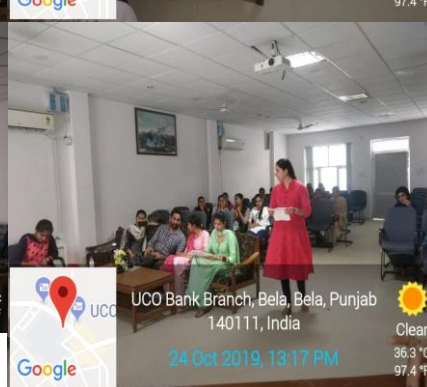
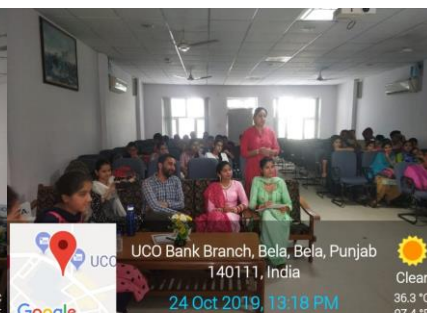
ACTIVITIES (any five activity along with caption)



WORKSHOP



INDUSTRIAL VISIT



Quiz Competition



Exhibition Competition



PLACEMENT DRIVE





INDUCTION PROGRAMME

SWOC:

Strengths:

1. Well experienced and dedicated teaching faculty with good student teacher ratio.
2. Laboratories with modern State of the Art equipments and modern software tools.
3. Effective use of modern technology like projectors, multimedia in teaching learning process.
4. Student centric functionality of department with mentoring, counseling done by teachers and effective monitoring for their academic growth.
5. Safe and Secured Environment for girl students.

Weaknesses:

1. Less Industry – Department interaction.
2. Less Placement ratio.
3. Involvement of Alumni at department level requires more attention.
4. Lacking in revenue generation.

Opportunities:

1. To arrange more number of FDPs / National Level /International Level conferences.

2. To organize various specialized Training programs/ Workshops for the students as well as for faculty also.
3. To find out the research scope for interdisciplinary and sponsored projects.
4. Scope for improvement of digital literacy amongst the student faculty.

Challenges:

1. To strengthen Industry-Department Interaction.
2. TO find the methods to have more placements in core companies.
3. Encouraging the students for the competitive examinations.
4. To have more focus on Industrial training for both faculty and students.
5. Frequent movement of faculty.