

ADMINISTRATIVE STAFF COLLEGE OF INDIA

Bella Vista,Rajbhavan Road, Hyderabad – 500 082

DBT STAR COLLEGE EVALUATION – QUESTIONNAIRE

1. Name of the College: **Bhaskaracharya College of Applied Sciences
(University of Delhi)**

2. Present Coordinator of the scheme:

Name and Designation	e-mail ID	Phone No.	Mobile No.
Dr. Shalini Sehgal (2010 to Nov.2013)	shalinisehgal72@gmail.com		9810586489
Dr. Purnima Anand (Dec.2013 to till date)	purnimamicro@yahoo.in		9818563729

3. Area of specialization of the Coordinator: (please tick one only)

Dr. Shalini Sehgal: Dairy Microbiology

Dr. Purnima Anand: Microbiology

4. Department/s benefited in the Scheme: (please tick one or more)

i. **Bio-chemistry**

ii. **Biomedical science**

iii. **Food Technology**

iv. **Microbiology**

5. Number of faculty benefited by the Scheme: (**22**)

6. Whether the Advisory Committee was formed for the Scheme? **Yes**

7. If Yes, number of meetings of the Advisory Committee held: **02**

8. Amount sanctioned under the Scheme: **Rs. 4400000.00**

9. Amount received as on the date: **Rs.3556000.00**

10. Is any unspent balance still remaining with the College? : **Yes**

11. If yes, please indicate the amount. **Rs. 3679.00**

12. Is a separate audited account maintained for the grants under the Scheme?

Yes (Audited by internal Audit & External Alfa Auditing)

13. Total amount spent on each of the following separately:
- i) Strengthening of academic and physical infrastructure (Upgrading / adding to Cass room and Laboratory facilities, Audio visual aids, IT related facilities Glass ware, Chemicals etc.): **Rs. 11,82,038**
 - ii) Enhancing quality of learning and teaching (hands on exposure to experimental work, Participation in summer schools etc.): **Rs. 1,04,954**
 - iii) Promoting networking and strengthening ties with neighbouring institutions and other laboratories (conducting and participating in Science / Biotech clubs / Group meetings, Conferences, Workshops, Seminars/Symposia etc.): **Rs. 99,856**
 - iv) Organizing specialized training programmes for faculty improvement: **Rs. 23,000**
 - v) Increasing core instrumentation resources (procurement of new equipment, upgrade of existing facilities etc.): **Rs. 19,93,705**
 - vi) Students' visits to noted research laboratories and industries related to the Scheme in the country: **Rs. 51,272**
 - vii) Devising standard curricula and Standard Operating Procedures (SOPs) (lecture notes, laboratory manuals, practical kits etc.) **Rs. 2,550**
 - viii) Upgrade of library facilities (Books, Journals, e-learning resources etc.) **Rs. 1, 40,168**

14. List of class room facilities upgraded (with reference to 13(i) above).

No grant was spent on infrastructural development as it is not a part of Star College Scheme

15. List of laboratory facilities upgraded (with reference to 13(i) above).

- | | |
|---|----------------------------------|
| i) Glassware | vi) PC linked Software |
| ii) Chemicals | vii) Biological Specimens |
| iii) Plastic ware | viii) Kitchen ware |
| iv) Biological Kits | ix) Miscellaneous |
| v) Educational Kits & Charts | |

16. Details of 'Hands-on' training programs conducted (with reference to 13(ii) above.)

Name of the programme	No of Training	Total No of Trainees
First "Better Process Control School for Manufacturers of Low Acid Canned and Acidified Foods" in collaboration with US Food and Drug Administration, India Office	01	52
Advances in Microbiological Analysis	01	30
Winter School -Training On Comprehensive Understanding About Food Quality & Safety Testing	01	17
Medical Laboratory Techniques	01	36
Basic Techniques of Molecular Biology & Use of microscopic techniques in Biomedical Science	01	40
Techniques of animal handling such as Tubectomy, Hysterectomy and Orchidectomy on laboratory animals	01	30
Gene Expression Analysis	01	30
Summer School in Molecular Biology	01	06
Basic Microbiological Techniques A and B	01	15
Sampling and enumeration of micro-organisms	01	15
Hands on Training on "Polymerase Chain Reaction	01	25
Use of Biostatistical Tools in Biological Research	01	84

17. Number of subjects / courses for which lecture notes were circulated (with reference to 13(ii & vii above).

- | | |
|--|------------------------------|
| i) Molecular Biology | iii) Human Physiology |
| ii) Medical laboratory Techniques | iv) Human Genetics |

18. Details of equipment procured and their utilization (with reference to 13(v) above).

Sl. No	Equipment.	Date of Purchase	Date of Installation	Purpose of Use (Teaching/ Practicals/ PG Research)	No. of Beneficiaries		Whether Fixed Asset Number Denotes DBT#
					Student	Faculty	
1.	Double Beam UV Spectrophotometer	17-12-11	16-01-12	All Equipment are being used for teaching, practicals And research purposes	369	22	
2.	Automatic Titrator	13-12-11	19-01-12				
3.	Gravimetric Dilutor	3-01-12	23-01-12				
4.	Digital Refractometer	14-10-11	14-10-11				
5.	Gel Documentation System	8-09-10	25-10-11				
6.	-20°C Refrigerator	12-09-11	12-10-11				
7.	Western Blotting Apparatus	2-01-12	11-01-12				
8.	Trinocular Microscope with Camera	1-11-11	8-11-11				
9.	Water Purification System	10-01-12	10-01-12				
10.	Cooling Cabinet	3-11-11	8-11-11				
11.	Orbital Shaker Incubator	16-12-11	20-12-11				

#Clarification needed

19. Practical manuals circulated among the students (with reference to 13(vii) above).

- | | |
|------------------------------|--------------------------------|
| i) Molecular Biology* | iii) Food Microbiology* |
| ii) Human Genetics* | iv) Bacteriology |

(*These manuals are uploaded on the Star College Scheme page on our college official website)

20. Standard operating procedures devised and distributed (with reference to 13(vii) above).

- | | |
|------------------------|----------------------------------|
| i) Pharmacology | iii) Medical Biochemistry |
| ii) Immunology | |

21. Details of library facilities / e- learning resources generated in the scheme:**
- i) **Books**
 - ii) **Virtual Labs** (uploaded on *Star College Scheme page on our College official website*)
- ** Grant on library facilities was spent only once.
22. Whether the grant was utilized to construct any permanent structures. **N A**
23. If yes, indicate the amount. **NA**
24. Did your College facilitate the visit of the Scientist / Specialist designated by DBT to review the progress of the scheme? **Yes**
25. If yes, state the number of visits.**02**
26. If no, give reason/s: **N A**
27. Number of students from other colleges utilizing the facilities created under the scheme:
- i) Local Colleges: **100**
 - ii) Colleges in nearby places: **02**
28. Whether any project was undertaken by the students: **Yes**
29. If Yes, list out the projects
- i) New Food Products Development
 - ii) Survey to study the status of Functional Foods, Knowledge about Food Laws and Probiotics among the college going youth
 - iii) Nutritional aspects of adults
 - iv) Microarray analysis
 - v) Analysis of beta-lactamase producing plasmids of *Neisseria gonorrhoea*
 - vi) DNA Microbial analysis
 - vii) Incidence of coliforms and pathogenic bacteria on the currency notes in NCT
 - viii) Role of *Trichoderma* as bio control agent
 - ix) Enumeration of Microbial Load on Fresh Fruits and Vegetables using Conventional Microbiological Methods
 - x) Survey of Current Food Safety Practices in a popular Retail Chain
 - xi) To study the hygienic conditions in Retail Outlets**
 - xii) Microbiological Sampling Technique on Fresh Produce**

30. Whether any Special / invited lecture was organized under the Scheme? **Yes**

31. If yes, furnish details.

Title	Date
Career in Food Safety – An international perspective	17.08.2011
A Hitchhiker's Guide to Cheminformatics and Drug Discovery	14.12.2011
Applications of Fluorescence Spectroscopy in Biomedical Science"	15.12.2011
Human Papillomavirus in the causation of Human Cancer	19.02.2013
Vitamin B12 deficiency: A silent epidemic	19.02.2013
Bacteriophages of Lactic Acid Bacteria, Foe and Friend in Food Production	21.03.2011
Emerging water-borne pathogens – The Indian Experience with <i>Yersinia enterocolitica</i> .	17.02.2012
Functional foods for improved human health.	17.02.2012
Biocatalysis: A promising tool for environmentally benign industrial growth.	05.09.2012
Microbiology- an exciting career ahead"	02.02.2013
From plant pathogen Interaction to GE crops: How science is converted to technologies.	25.03.2013
Seminar on "Changing Paradigm of Food Safety". Following lectures were held- i) Food Safety – An Indian Perspective ii) Cold Chain Management iii) Need of Food Safety in Fruits and Vegetable Industry	05.07.2013

32. Whether any HR activity was conducted by your College under this scheme? **Yes**

33. If yes, furnish the details below:

HR Activity	No. of events	Students		Teachers	
		Your College	Other colleges	Your College	Other colleges
i. Summer Training	02	06	02	--	--
ii. Demonstration (Workshops)	12	343	--	37	food industry Professionals
iii. Seminar/Symposium	14	555	50	--	--
iv. Projects	11	20	--	07	--
v. New Product Development (Yearly)	04	144	--	01	--

34. Details of the visits of your students to related laboratories/ industries / enterprises:

i) No. of visits: **(08)**

ii) No. of students participated: **(380)**

35. Has any formal feedback been obtained from the students on the usefulness of the Scheme for them? ... **No**

36. If Yes, state the feedback: **NA**

Extremely useful / Very useful/ Useful/ somewhat useful/ Not useful

37. Number of research papers published by the faculty involved in the scheme. **(10)**

38. Whether DBT is acknowledged in such papers? . . **No**

39. Is any process / technique, developed using the facilities created under the Scheme, patented / registered for patenting? **In Process**

40. If yes, is it communicated to DBT? **In Process**

41. In overall analysis, please indicate the level of usefulness of the scheme to your College in terms of;

- i) Increase in the proportion of 'Hands on experimental work by students **Extremely useful**
- ii) Access of students to laboratory and bioinformatics infrastructure **Extremely useful**
- iii) Access to life science related Literature **useful**
- iv) Summer Schools **useful**
- v) Faculty improvement **useful**
- vi) Increasing the Percentage of students of your college pursuing Life Science as a career **useful**
- vii) Increasing the employability of your students **useful**

42. Has any feedback been obtained from the faculty on the usefulness of the scheme for them? **Yes**

43. If yes, indicate their feedback on its effectiveness:

Extremely useful

44. Did you experience any problem in implementing the Scheme in your college?
Yes

45. If yes, state them:

- i) **There has been some delay in the release of grant that makes proper execution of the planned activities very difficult.**
- ii) **In the Co-ordinators' meeting, the time slot of 10 minutes is not enough for presenting the entire year's activities of all the four individual departments.**
- iii) **We find it difficult to organize training program at National level, since we do not have hostel facilities.**

46. Your suggestions, if any, to make the scheme more effective.

- i) **DBT can initiate interaction between colleges which will help in exchange of ideas and activities and strengthening the scheme.**
- ii) **More departments can be included to have interdisciplinary approach.**

- iii) **DBT can provide the SOPs generated by various colleges available to all, for the benefit of students throughout India.**
- iv) **Initiatives may be taken to record certain lectures of good speakers and those may be put on a common website for use of students also placed in remote Universities.**
- v) **A common platform could be created for regular discussions for teachers and students at par.**
- vi) **A decent amount may be allocated towards scholarship for students who undertake summer training in their respective colleges.**
- vii) **DBT is requested to have alliances with various reputed publishing groups to enable teachers publish their work.**