



**P. C. JABIN SCIENCE COLLEGE,
AUTONOMOUS, HUBBALLI.**

College With Potential for Excellence Phase – III

Re-Accredited by NAAC with Grade - ' A ' CGPA - 3.37

MHRD-NIRF Ranking 89th at National level & 8th at State level

SUPPLEMENTARY FOR SELF STUDY REPORT

Submitted

to

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

Institutional Accreditation for 4th Cycle

by

**Dr. B. S. Agadi
Coordinator**

**Dr. S. V. Hiremath
Principal**



KLE's
P. C. JABIN SCIENCE COLLEGE,
Vidyanagar, Hubballi-580031

Autonomous College

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CPE PHASE-III

89th Rank by NIRF-2017, MHRD, Govt. of India



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FOREWORD

P. C. Jabin Science College, Hubballi-580031 submitted its 'Self Study Report- Cycle-4, to the Director, National Assessment and Accreditation Council, Bangalore on 15th April 2017 for assessment and accreditation. Since then substantial quantum of time has passed and a number of activities, both academic and co-curricular, have been continued as per the academic calendar of events in the college, in the new academic session 2017-18. We would, therefore, like to present all these activities for the information of the visiting NAAC Peer Team in the form of 'Supplementary Self-Study Report'. These activities are submitted in details with a humble request to the NAAC Peer Team to go through it as part of our sincere and genuine efforts to appraise you on our strengths and weaknesses for overall assessment of the college.

Dr. B. S. Agadi
Coordinator
Self Study Report

Dr. S. V. Hiremath
Principal

CRITERIA-WISE INPUTS

PROFILE OF THE COLLEGE

24. In present academic year the management has recruited new teaching and non-teaching faculty with respect to enhanced work load and retired posts for the year 2017-18

Positions	Professor		Associate professor		Assistant Professor		Non-Teaching Staff		Technical Staff	
	M	M	F	M	F	M	F	M	F	
Sanctioned by the UGC/University/State government	-	14	03	04	03	10	-	-	-	
Recruited	-	-2 (Rtd)	-1 (Rtd)	-	-	-	-	-	-	
Sanctioned by the Management/Society/other bodies	-	-	-	27	43	32	26	03	03	
Recruited	-	-	-	03	06	-	-	-	-	
Total		12	02	34	52	42	26	03	03	

CRITERION I: CURRICULAR ASPECTS

1.3. Curriculum Enrichment

As per the Calendar of Academic events the Departments have conducted the BOS meetings with the following agenda.

- Review and update of syllabus
- Analysis of question papers
- Results analysis
- Outcome of Microanalysis of even semester results.
- Penal of examination

The honourable member of respective subjects appreciated the results of the departments and also the activities conducted by the departments. The Committees also discussed on the advanced subjects to be included.

1.4 Feedback System

1.4.1 The College is continuously putting efforts in making the effective feedback practicing a structured feedback mechanism on curriculum, infrastructure and other student facilities for the academic year 2016-17 is successfully completed. The feedback analysis is discussed in IQAC meeting and the corrective measures have been suggested to the respective departments for the improvement.

CRITERION II: TEACHING LEARNING AND EVALUATION

Table 2.1.3a: Subject wise Strength – B.Sc.

Year	Subjects	Physics (P)	Chemistry (C)	Mathematics (M)	Statistics (S)	Electronics (E)	Computer Science (CS)	Botany (B)	Zoology (Z)	Microbiology (MB)	Biotechnology (BT)
2017-18		280	366	307	30	74	79	163	178	36	53

Table 2.1.3 b: Subject combination

Year	PC M	PM E	PM S	CM S	CB Z	CBB T	CZB T	MSC S	MEC S	PMC S	CBM B	CZM B
2017-18	148	63	14	03	126	25	28	13	11	55	12	24

Table: 2.1.3c: Strength -BCA and M.Sc.

Course	2017-18
BCA	338
M.Sc.	97

Table 2.1.5: Profile of the Students Admitted for the academic year 2017-18:

Sl. No	Year	SC	ST	OBC	GM	Total		Grand Total
						M	F	
1.	B. Sc	89	42	733	336	381	819	1200
2.	BCA	21	02	192	171	156	230	386
3.	M. Sc	03	00	52	28	30	53	83
4.	Ph. D	-	01	-	05	04	02	06
5.	Grand Total	113	45	977	540	571	1104	1675

2.2. Catering to Student Diversity

2.2.1 As the Quality parameter, the College has organized orientation programme for fresher of B. Sc I semester and BCA first semester students.

One day Orientation programme for all the B. Sc I semester students has been organized on 10th July 2017. 357 students and 30 resource persons (faculty) are participated in 10 groups.

The department of BCA has conducted one week orientation programme to I semester students from 19th to 22nd June 2017 in college campus. A unique method of orientation by taking the 150 BCA I semester students to a selected off campus location to enhance the social networking and understanding in the form of ‘Out-bond Programme’ at 24th June 2017 at Dharwad Adventure Base. The students are educated about the facilities, teaching, learning and evaluation process, personality development and finally motivated the students to set a goal for their career.

2.3.1 The IQAC of the college has developed the Calendar of Academic events of the College for the academic year 2017-18 and notified by college website. Departments have designed the teaching & lesson plan and notified to the students.

2.3.3 To make teaching, learning more effective many of the departments, apart from classroom interactions, the other methods of learning experiences such as field visit and industrial tours are conducted after SSR submission are as follows.

List of Study tours/visits conducted

Sl. No	Date	Departments	Students	Place visited
1.	04/05/2017	Statistics	B. Sc IV & VI semester	<ul style="list-style-type: none">University of Agricultural Science, Dharwad,District Science Centre, Karnataka University, Dharwad
2.	10-12/04/2017	Botany	B. Sc VI Semester	<ul style="list-style-type: none">Shringeri, Horanady, Kuduremukh, Udupi
3.	07/08/2017	Biotechnology	B.Sc III sem	<ul style="list-style-type: none">Akshaya Patra foundation, Rayapur, Dharwad

2.3.5 To acquire the advances in respective fields, after the submission of SSR the college has organized the following guest lecturers in the following departments by inviting eminent resource persons from renowned institutions to enrich students and faculty knowledge.

Sl. No.	Department	Title/topic of the Guest lecture	Resource person/s	Date
1.	Statistics	'Opportunities in Statistics'	Mr. A. A. Kambalimath	29/06/2017
2.	BCA	'Opportunities & challenges in IT' fields for III semester students	TCS Team, Bengaluru	10/07/2017
3.		'Recent Technology in computer Science' for I semester students	TCS Team, Bengaluru	10/07/2017
4.		'Opportunities in IT fields' for III semester	Mr. Shaan Shaikh	02/08/2017
5.		'Start Up Entrepreneurship' for V semester students	Mr. Shaan Shaikh	02/08/2017
6.		'Networking concept' for III semester students	Mr. Kiran Jamkhandi	01/09/2017
7.	Comp. Science	'An introductory guest lecture on Soft skills' to all Comp. science students	Mr. Tejaswi, Brush Polish, Bengaluru	10/09/2017
8.	Library	'Kannadadalli vijnana Sahitya'	Sri. M. A. Subramanyam	19/07/2017
9.		'Student Social Responsibility'	Dr. Lingaraj Ramapur	12/08/2107

In view of students preparation with respect to the global competition, The college has conducted the following activities in continuation of the activities mentioned in the RAR to sensitize its staff and students on teaching and learning process such as leadership qualities & personality development, Team building, Pre placement quality assessment, the departments have organized the following workshops.

Sl. No.	Department	Title/topic of the Workshop	Resource person/s	Date
1.	BCA	Team Building for V semester students	'Deshpande Foundation Team'	02/08/2017
2.		Pre-placement Quality Assessment' for the V semester Students	Mr. Ramain Venkat from Vernaz	28 & 29/07/2017
3.		Goal Setting for II semester students	Mr. Ramanne Venkat from Vernaz	08/07/2017
4.		Personality Development for BCA I semester students	Mr. Praveen Gudi, CEO, My Life, Hubballi	16/06/2017

2.3.7 To monitor the students needs and performance and to solve the students problem the fresher student have been allotted to the mentors of the college and weekly meetings of mentor-mentee are regularly conducting to understand the interests, goal setting etc.

2.3.9 The college has conducted one day workshop for faculty and PG students to create culture of instilling and nurturing creativity and scientific temper.

The PG department of Biotechnology and Chemistry have organised one day workshop on Research methodology and Review Article writing for all the PG students of the college on 20th August 2017. The senior research faculty of the college addressed the students and interacted.

2.3.12 The IQAC designed structural feedback proforma for the curricular aspects, have been analysed. The short falls and strength have been informed to each department.

2.4.9 Recognitions for excellence at the international level after the submission of SSR

Our faculty received prizes and awards at various National and International conferences/ seminars and workshops.

Faculty awards

International Conference : 01			
Faculty	Research award details	Awarding body	Date and Year
Dr. S. V. Hiremath	Best Speaker award at World Diabetes and Endocrinology Summit-2017	Raytheon health Care, Dubai, UAE.	20-22/June 2017

2.4.12 The College has organized international Conference on academic development programmes for its faculty, leading to enrichment of teaching-learning process. To enrich the faculty and students the college has organised two day international conference with the following details.

Sl. No	Theme of the conference	Date	Resource persons	Beneficiaries
1.	Recent Innovation in Computer Application	20 th & 21 st July 2017	<ul style="list-style-type: none"> • Dr. D. H. Rao, Former Dean, VTU, Belagavi • Dr. Vijaya M. Y, Vice President Global Technical Operation, MERCK, USA • Dr. Basavaraj Anami, KLE Institute of Technology, Hubballi • Dr. Rajendra Hegadi, IIIT, Dharwad • Sanganna Y. • Shailashree N. 	100legates

The department of BCA has arranged interactive demonstrative workshop on effective learning by computer based teaching and learning process for more than 800 high school students.

2.6.4 Give Programme-wise details of the pass percentage and completion rate of students.

Table: Pass percentage and completion rate of B.Sc for the academic year 2017-18.

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
B. Sc	255	75.13	23.28	1.59	--	74.12
BCA	90	75.00	22.37	2.63	--	84.44
M. Sc-Physics	09	75.00	25.00	--	--	88.89
M. Sc -Chemistry	22	17.65	82.35	--	--	77.28
M. Sc -Biotechnology	07	85.71	14.29	--	--	100.0
M. Sc-Computer Science	06	100.00	--	--	--	100.0
M. Sc (all subjects together)	44	55.26	44.74	--	--	91.54

Criterion III: RESEARCH, CONSULTANCY AND EXTENSION

3.1.5 Different departments of the College and Collaboration with national/international institutes/industries. In continuation of collaborations recently for academic exchange the college has made the following collaborations.

MoUs/Collaborations of the College

Sl. No.	External Institution/Collaborator and the departments involved	Purpose /outcome of collaboration
Department of Biotechnology & Microbiology		
1.	CytXon Biosolutions, Lingaraj Nagar, Hubballi	Research
2.	Shantala Power Ltd. Hubballi-580031	Industrial Research
Department of Electronics		
3.	APLAB, Hubballi-580031	
Department of Botany		
4.	CytXon Biosolutions, lingaraj Nagar, Hubballi	Research
Department of Chemistry		
5.	Centre for Material Science, KLETechnological University, BVB-CET Campus	Research

3.2.3. To promote and ensure research activities among students and faculty the institution has provided seed money to faculty for research.

Alumni association of the college has sponsored seed money of Rs. 42,000/- for the faculty research project. The following departments have completed the projects and submitted the reports. Further the new findings will be either presented or published at national or international level.

Sl. No	Title of the Project	Name of the investigators
1.	Comparative study on Plasma Free Amino acids profiling in Type2Diabetes, Cardiovascular Disease and breast Cancer on North Karnatak Population	Dr. Joy H. Hosakeri Miss. Sushmita M. Ashwini S. Keerti P.
2.	Biodiversity of ants in Hubli-Dharwad Region	Smt. Sumangala patil, Smt. Rekha Shettar, Sri. Yashwantkumar S.
3.	Some Recent topics in general topological spaces	Smt. Bhadramma Pattanshetti
4.	Flowcytometry based Apoptosis related Assay for Validation of Anticancer property of Phytochemicals from <i>Solanaum macranthum</i>	Dr. Joy H. Hosakeri Vishal U. Kalebar Geetanjali R. Kamble
5.	Coumarin-Benzofuran conjugates-synthesis, characterization and preliminary Biological Evaluation	Dr. Mahantesha Basanagouda
6.	RGB Image Segmentation using Threshold Method and Gamma Correction of an image	R. P. Mudenoormath

Alumni association of the college has sponsored seed money for the student Research Project. The following departments have completed the projects and submitted the reports.

Sl. No	Title of the Project	Name of the investigators
1.	A statistical Analysis on “Socio Economic conditions of Senior Citizens of Hubballi”	Madhu S. Kulkarni and Vishalakshi
2.	A Statistical Analysis on “kidney failure and Dietary Guidelines for persons undergoing Kidney failure”	VI semester Statistic students
3.	“Vertex Coloring of Graphs and its Color energy”	Smt. G. M. Mokashi , sushma C. Purad, Aishwarya Yadagiri, Iranna Morabad and Poornima H.
4.	“Preparation and Characterization of Nano Particles”	Smt. L. V. Hublikar , Miss. Apoorva U, Miss. Supriya hangal, Miss. Sammita D. Hebbar and Vijayalakshmi Abbigere
5.	“Solar simulation using LED’s	Sri. N. H. Tiligal, Ruban L and Abhishek
6.	A study on Seasonal, variation of zooplankton abundance in some water bodies of Hubballi	Sri. Ramanagouda patil and Pavankumar Navalgund

7.	Synthesis of Gold Nano particles and its applications in detection of Pesticides	Geetanjali R. Kamble, Miss. Snehanjali B. Bushra B and Humsa A.
8.	Broad Spectrum of Antioxidant properties of Indian medicinal plants	Dr. gurusiddesh Hiremath, Amit A. K., Sanakausar Y. S., Sakshi b. S. and Shruti p. A.
9.	Flora of P. C. Jabin Science college Campus	Sri. L. C. kulkarni, Kiran R. Ganiger, Nachiket S., Naragund and Anandkumar Nayak P.

3.2.4. Research Publications and Awards

3.4.1a: The results of research projects are continually presented or published. Recently many faculty and students were able to participate and presented at national and international level. Major papers presented in regional, national and international conferences/Seminars:

Participants/Presented	International	National	Total
Faculty	11	05	16
Students	26	08	34

3.4.1b: Publication in proceedings/abstract book

Publication in proceedings/abstract book

Participants	International	National	Total
Faculty	11	05	16
Students	26	-	26

3.4.3 The intellectual property of the faculty has been brought in the form of books. In addition to the earlier publications of books and useful manuals have been successfully published in Books with ISBN numbers with details of publishers :

Details on books published with ISBN

Particular	Title	ISBN	Publishers
A Book of Lab Manual	Laboratory Manual for Microbiology	978-81-931871-6-6	Kalyan Literary Publishers, Kalaburagi
A Book Lab Manual	Laboratory Manual for Biotechnology	978-81-931871-5-9	Kalyan Literary Publishers, Kalaburagi

3.4.3. Details of publications by the faculty:

A. Number of papers published in peer reviewed journals (national / international)

Table: Publication details

International	National	Total
13	-	13

3.6.1 The best awareness programme are continued during the academic year 2017-18.

Awareness programmes

- Van Mahotsav on 5th June 2017 organized by Botany department
- World Environment Day On Monday, 5th June 2017 Environment conservation and propagation of plants among public organized by Botany department
- Awareness on water borne diseases through skit at Govt. High School Tarlagatta, Kundagol on 07/09/2017 organized by Zoology department
- Awareness on Dengue fever through skit at MPS School Tarlagatta, Kundagol on 07/09/2017 organized by Zoology department
- An awareness programme was organized by Zoology on “World ozone day’ on 16th September 2017 in Lamington School

3.6.7 Outreach Programme – The faculty of the Chemistry, Botany, Zoology and Physics departments were demonstrated interactive experiments to the Sixty Girl students of Lamington High School on one day Hands on Experiment Programme on 22/08/2017.

Department of BCA organised one day out reach programme **HAPTICS-17** – “Computer Hardware Expo” on 18th August 2017 for 800 high schools students

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1.15 Cell for Anti-sexual Harassment of the college has organised an awareness programme on “**Law Relating Domestic Violence**” for all the lady faculty and students of the college. Dr. Sharada G. Patil, Principal of KLE’s G. K. Law College, Hubballi-580031 was a Chief Guest, addressed and interacted with the students. **Smt. Kalpna Kawalekar**, Assistant Manager, Corporation Bank Yaliwal and **Smt. Jayashree Kalal**, ASI, Vidyanagar- Police stations were the resource persons explained the preventive measurements for women’s consequences.

5.1.16 Anti- ragging Committee; According to the Calendar of academic events the college has organised an awareness programme for the students on 11th August 2017 by inviting Mr. Nayak Police Inspector of Vidyanagar- police station, Hubballi. He addressed the students and explained the rules regulations and punishments for ragging in the college campus. Further he visited the both the girls and boys hostel to develop the awareness in hostilities of the college.

5.3. Student Participation and activities: As per the calendar of academic events the college has organised the following activities for students and also promote the students to participate in activities conducted in different institutions.

5.3.2 Student Participation and presentation

Participants	Participation	Presentation	Publication	Awards
Students	26	8	26	2

1. Intercollegiate literary fest ‘Jigyasa’ on 22nd July 2017.

Shri Gopalkrishna Hegde, Director, KLE Dhvani, Hubballi who encouraged the students to buy and read books and also to present books to others on special occasions. Dr. Gurudevi Huleppanavarmath, HoD English KLE’s Lingaraj College, Belagavi was the chief guest of Valedictory function.

2. Department of Biotechnology has organized one Week Food and Nutrients Fest

Sl. No	Date	Event
1.	1 st September, 2017	‘Cooking Without Fire’ Competition
2.	4 th September, 2017	‘Fruit/Vegetable Carving’ Competition
3.	5 th September, 2017	‘Millet Day’ Recipes competition
4.	6 th September, 2017	‘Rice Donation To Orphanage’
5.	7 th September, 2017	Guest Lecture & Prize Distribution

3. Essay competition on 11th July 2017 under Zoological association on the eve of “World population Day”.

Topic: “Population explosion and its effects on Developing Nations”

4. “Art competition “on 29th July 2017 under Zoological association. Theme: “Save our Tigers” Zoology

5. Painting and Greetings Competition. Botany

a. Painting is Environmental issues

b. Greeting competition using dry and wet plant material conducted for individual and group.

6. PGCET for B. Sc VI Semester students. from 24th July 2017.

7. Blood Donation Camp, 15th August on the eve of historic occasion of Independence Day, a blood donation camp was organised by KLE’s BCA, Hubballi in association with RED CROSS Indian Society.

8. Quiz Competition

Topic	Date	Number of Participants
Fundamentals of Physics	11.08.2017	13 Groups (26 students)

9. College has organised one day International Fest on “Indian Cultural Heritage” on 31st July 2017. To orient and to develop national cultural heritage among the student community the Indian traditional folklore people of India and from Canada were invited for the presentation, Ancient folkore of Karnataka, Maharastra such as Yakshagana, Lawani songs, Sobane songs, Puravnatike, Kuchchipudi, Jogipada etc were performed.
10. College librarian has published thirteen general articles in popular news papers regarding the social reformers.
11. IQAC has organised one day workshop on “**Drug Abuse**’. Mr. Cicil George, Blossom Foundation, Bengaluru with his team conducted one day interactive workshop for B.Sc I semester students. On the eve the drug abuse day celebration the pencil art, paintings and collage completions were conducted for the students and prizes and mementos are distributed.
12. NSS & NCC celebrated the ‘**Sadhbhavan Day**’ by organizing the rally.

CRITERION VII: INNOVATIONS AND BEST PRACTICES

7.3.1 As per the schedule of the calendar of the events the college has organised best practice of our college that is **Popularization of basic Science in rural high school. Parappa Mushappa Roogi Secondary School** of a village “Byahatti” on 13th July 2017. All the science departments have carried the hand on training experiments to the high schools and demonstrated all the experiments according the 9th and 10th Standard syllabus of the school. Faculty has interacted with the students in order to solve the queries of the students.

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