



## Yearly Status Report - 2017-2018

### Part A

#### Data of the Institution

<b>1. Name of the Institution</b>		UNIVERSITY COLLEGE OF SCIENCE
Name of the head of the Institution		Prof. Eshwar H Y
Designation		Principal (in-charge)
Does the Institution function from own campus		Yes
Phone no/Alternate Phone no.		08162260220
Mobile no.		9886465964
Registered Email		principalucst@gmail.com
Alternate Email		iqacucs@gmail.com
Address		University College of Science B. H. Road
City/Town		Tumakuru
State/UT		Karnataka
Pincode		572103

2. Institutional Status					
Affiliated / Constituent		Constituent			
Type of Institution		Co-education			
Location		Urban			
Financial Status		state			
Name of the IQAC co-ordinator/Director		Mukundappa B L			
Phone no/Alternate Phone no.		08162260220			
Mobile no.		9844321868			
Registered Email		principalucst@gmail.com			
Alternate Email		iqacucs@gmail.com			
3. Website Address					
Web-link of the AQAR: (Previous Academic Year)		<a href="https://ucst.ac.in/wp/wp-content/uploads/2020/01/UCST-AQAR-2016-17.pdf">https://ucst.ac.in/wp/wp-content/uploads/2020/01/UCST-AQAR-2016-17.pdf</a>			
4. Whether Academic Calendar prepared during the year		No			
5. Accreditation Details					
Cycle	Grade	CGPA	Year of Accreditation	Validity	
				Period From	Period To
3	B+	2.66	2019	08-Feb-2019	07-Feb-2024
6. Date of Establishment of IQAC			07-Jun-2004		
7. Internal Quality Assurance System					
Quality initiatives by IQAC during the year for promoting quality culture					
Item /Title of the quality initiative by IQAC		Date & Duration		Number of participants/ beneficiaries	
<b>No Data Entered/Not Applicable!!!</b>					
<pre>L::asset('/', 'public').'/public/index.php/admin/get_file?file_path='.encrypt('Postacc/Special_Status/'.\$instdata-&gt;upload_special_status)}} </pre>					
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**8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.**

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
University College of Science	CPE	UGC	2016 1800	10000000
Department of Environmental Science-PG, UCS, Tumkur	research grant	CEFIPRA	2017 730	6340000
University College of science	Research grant	Tumkur University	2017 180	120000
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**9. Whether composition of IQAC as per latest NAAC guidelines:**

Yes

Upload latest notification of formation of IQAC

[View Link](#)

**10. Number of IQAC meetings held during the year :**

4

The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website

No

Upload the minutes of meeting and action taken report

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**11. Whether IQAC received funding from any of the funding agency to support its activities during the year?**

No

**12. Significant contributions made by IQAC during the current year(maximum five bullets)**

1. Conducted the Bridge Course for the freshers 2. Enhancement in the research activity by undertaking projects funded by various funding agencies 3. Enhance ICT facilities 4. Canteen facility to staff and students 5. Strengthening of career guidance and placement cell 6. Under the UGCCPE grant the institution has strengthen the laboratories and conducted various skill development workshops. 7. Several faculty members have obtained the Ph.D guideship

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**13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year**

Plan of Action	Achievements/Outcomes
promoting research activities among teachers and students	Able to publish seventy papers in journals of national and International repute
No Files Uploaded !!!	
14. Whether AQAR was placed before statutory body ?	No
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	No
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2018
Date of Submission	18-Jul-2018
17. Does the Institution have Management Information System ?	No

## Part B

### **CRITERION I – CURRICULAR ASPECTS**

#### **1.1 – Curriculum Planning and Implementation**

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

The curriculum prescribed by the Tumkur University for the Science Undergraduate Programs is adopted in the institution. The institution has well-structured plan to ensure effective implementation of the curriculum and is accomplished through various customs Before the commencement of each semester meeting of all teaching staff members with principal is held to receive active inputs and to arrive at consensus for the effective implementation curriculum. The institution adopts method to conduct Head of the department meetings in every subject twice in a month. In the first meeting of the each semester the action plan is prepared in an optimal and effective way to ensure curriculum delivery. The institution follows the scheduled academic calendar notified by the Tumkur University for each semester. The necessary requirements are made at the department level to impart curriculum as per the action plans formed. The institution organizes bridge course at the beginning of academic year for all newly admitted students to brief and to give outline about the structures curriculum of the program. Bridge Course also inducts fresher into the collegiate atmosphere, familiarises them with the vision, mission, goals, objectives, rules of the college and averts their fear of English. At the beginning of the each semester all faculty will prepare action plan of their respective subjects which includes course outcomes and objectives it gives an insight to the contents of curriculum during the course of program. Action plan developed in the year includes a way to impart program educational objectives and its possible outcomes for each program and course objectives and course

outcomes which are defined for each course in the curriculum by the University.

Teachers convey key and abstract concepts using PPTs and learning aids like molecular models along with the regular lecture methods. Labs are equipped with adequate equipments, computers and other consumables. A monitoring system involving the Principal and the HODs ensure full completion of the syllabi of all the courses. Students' progress is monitored by administering periodical diagnostic tests as well as assignments as a part of internal assessment. Library provides satisfactory access to the books prescribed in the syllabi. Students are encouraged to use e-learning resources. Student participation in the sports and physical fitness activities is given considerable weightage.

With a vast outdoor facility, fully furnished indoor facility and a modern gymnasium, talented students are trained in sports and games and are made to represent the college at various levels of competitions. The annual sports day provides opportunity for the students to exhibit their sporting talent. Frequent seminars/lectures/demonstrations are organized on Yoga, physical and mental health aspects. The Cultural cell takes care of identifying and nurturing talents in literary activities and performing arts. Annual cultural fest beckons students to stage their performances. Documentation of curriculum delivery: Teachers document their everyday activity in the Academic Diaries which is reviewed by the respective HODs and further by Principal. The dairies also record the co-curricular and extra-curricular activities the teachers participate.

#### 1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entreprene urship	Skill Development
NIL	-	Nil	00	-	-

### 1.2 – Academic Flexibility

#### 1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
Nil	NIL	Nil
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#### 1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BSc	PCM, PME, PMCs, CBZ, CBbt, CZMb, CZBt	01/07/2016
BVoc	Hardware Technology and Networking	01/07/2016

#### 1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	0	0

### 1.3 – Curriculum Enrichment

#### 1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
00	Nil	0

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### 1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BSc	nil	0
No file uploaded.		

### 1.4 – Feedback System

#### 1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	No
Alumni	Yes
Parents	No

#### 1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained
The feedback mechanism prevailing at the institution depends upon a well-functioning feedback system which is launched and implemented with integrated loop mechanism. The College has been practicing a 360o feedback system accommodating all the stake holders including staff, students, alumni to help the individuals and organization as a whole to improve the performance and effectiveness in curriculum. The structured feedback forms (print versions) were circulated to student, teachers and alumni. The forms contain questions (of quick response type and a single descriptive question) regarding the effectiveness of curriculum. The responses are analyzed and appropriate conclusions are drawn.

## CRITERION II – TEACHING- LEARNING AND EVALUATION

### 2.1 – Student Enrolment and Profile

#### 2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BSc	PCM PME PMCs CBZ CBBt CZBt	660	2328	657
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### 2.2 – Catering to Student Diversity

#### 2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2017	1276	237	94	20	14

### 2.3 – Teaching - Learning Process

#### 2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-

learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
128	128	16	16	0	100
<a href="#">View File of ICT Tools and resources</a>					
<a href="#">View File of E-resources and techniques used</a>					

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

Mentorship is one of the best practices of our college. The faculties of the college monitor the overall development and learning of the student through this practice. As per the practice a batch of 12 students is allotted to every faculty in the beginning of the year. The monitoring committee undertakes the job of formation of batches of mentees, distribution of these batches and giving orientation to all the faculty members in the beginning of the academic year. The mentors meet the students regularly and discuss with them several aspects of their learning. The mentors listen to their problems and provide guidance individually or in group. For the needy students a personal counselling is also done on the regular basis. The advanced learners are provided with additional competitive tools for learning. The slow learners, problematic and disadvantaged learners are identified and given not only counselling but also suggestions to cope up with their academic problems and to improve their performance. If any of the students have any sort of serious personal problem they are referred to the student counselling centre where a team of trained faculty provide them the needed personal support. In case if the mentor finds out any kind of health issue the students are referred to suitable healthcare facility. The mentors also monitor the development and competencies of the students and maintain an academic progress document. During parent teacher interactions, the mentors discuss the same with the parents. Further this document includes the sports and extracurricular activities of the students thereby an overall development of the students is documented. The mentors meet the parents at least once in each semester in this regard. Every semester meetings are conducted to review the progress of the mentoring system. The overall progress of the mentoring program is documented and reviewed in the meeting.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
1513	128	1:12

## 2.4 – Teacher Profile and Quality

2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
77	77	0	0	33

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

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
2017	Dr. P. K. Raghavendra Kumar	Assistant Professor	Certificate of outstanding contribution from INORGANICA CHIMICA ACTA(Elsevier)
2017	Dr. Narahari	Assistant Professor	Summer research fellowship from Indian Academy of Sciences

2017	Dr. Geetha Vasanth	Assistant Professor	Dr. Jayamma Kariyanna endowment award from Karnataka Women writers association
2017	Dr. Rashmi Hosamani	Assistant Professor	Third prize for poster presentation in the UGC sponsored two days national conference on recent advances and developments in microbial technology
2017	Dr. Rashmi Hosamani	Assistant Professor	Fellowship award of the Indian association of applied microbiologists for the devotion in theory and practice to the promotion of knowledge and research in applied microbiology
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## 2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BSc	1	II/IV/VI	25/05/2018	16/06/2018
MSc	2,3,4	II/IV	12/07/2018	07/08/2018
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2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

The IQAC of our college gives high importance to continuous formative assessment. At the beginning of every semester along with the preparation of academic calendar and the action plan of the semester, internal examinations are planned. This planning well in advance helps the faculty members to cover the syllabus required for the internal test. Separate internal examinations are conducted for both theory as well as practical components. Multiple internal tests provide the students to improve their internal assessment marks. Further, continuous assignments are given and evaluated keeps the students to follow up the teaching being delivered in the classes. In addition to these, quizzes, surprise test and several innovative evaluation methods are used for the continuous formative assessment of the students.

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

As our college is a constituent college of Tumkur University, the college



follows the academic calendar of Tumkur University. Dates of beginning as well as the end of the semester, conduction of semester end examinations are fixed by the Tumkur University. However, the calendar for the continuous formative assessment is prepared at the institution level and adhered to it in conducting internal assessment examinations. At the beginning of the academic year, an action plan is drawn based on the academic calendar issued by the Tumkur University, the dates of internal examinations are fixed. The conduction of internal examinations is carried out at the departmental level for both theory and practical components.

## 2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

[www.ucst.ac.in](http://www.ucst.ac.in)

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
1	BSc	All Combinations	734	571	77.79
2	MSc	Physics	95	62	65.26
3	MSc	Chemistry	102	52	50.98
4	MSc	EVS	25	23	92

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## 2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

[www.ucst.ac.in](http://www.ucst.ac.in)

## CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 – Resource Mobilization for Research

3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
International Projects	1095	CEFIPRA	300	63.4
Projects sponsored by the University	90	Tumkur University	1.2	1.2

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### 3.2 – Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Nil	Nil	

### 3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Nil	Nil	Nil	Nil	Nil
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### 3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start-up	Date of Commencement
Nil	Nil	Nil	Nil	Nil	Nil
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### 3.3 – Research Publications and Awards

#### 3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
0	00	00

#### 3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
Physical education	2

#### 3.3.3 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
National	Kannada	7	Nil
International	computer science	3	Nil
International	biotechnology	3	Nil
International	chemistry	34	Nil
International	physics	1	Nil
International	Microbiology	3	Nil
International	Zoology	4	Nil
International	Electronics	2	Nil
International	Physical education	1	Nil
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#### 3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Library and information sciences	1
Physics (UG and PG)	11
Chemistry (UG and PG )	15
Biotechnology	5
Microbiology	13
Languages (Kannada and English)	11
Computer Science	7

## 3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
Green synthesis of gold nanoparticle s: Its effect on cocoon and silk traits of mulberry silkworm (Bombyx mori L.)	RR Patil, H Raja Naika, SG Rayar, N B alashanmug am, Vivek Uppar, Atanu Bhat tacharyya	Particulate Science and Technology pp.	2017	4	University College of science, Tumkur University, Tumkur	9
Facile-one pot-green synthesis, antibacterial, antifungal, antioxidant and antiplatelet activities of lignin capped silver nanoparticles : A promising therapeutic agent.	. Marula siddeshwar a MB, Dakshayani SS, Sharath Kumar MN, Chethana R, Raghavendra Kumar P, Devaraja S.	2017, 81 :182-190.	2017	12.6	University College of science, Tumkur University, Tumkur	100
Regioselective Synthesis, Antibacterial, Molecular docking and Finger print applications of 1- benzhydryl piperazine derivatized 1,4-disubstituted 1,2,3-Triazol	Shivaraja G, S Sreenivasava, Ramesha A R, Madhu Chakrapani Rao, H Nag abhushana	chemistrySelect (Wiley-vch.de)	2018	1	University College of science, Tumkur University, Tumkur	4

es						
Supramolecular architecture of 5-bromo-7-methoxy-1-methyl-1H-benzimidazole.3H2O: Synthesis, spectroscopic investigations, DFT computation, MD simulations and Docking studies,	P. Krishna Murthy, Smitha.M, Sheena Mary Y, Stevan Armakovi?, Sanja J. Armakovi?, R. Sreenivasa Rao, P.A. Suchetan, L. Giri, Rani Pavithran, C.Van Alsenoy	Journal of Molecular Structure (Elsevier)	2017	5.1	University College of science, Tumkur University, Tumkur	10
Synthesis, characterization and computational study of the newly synthesized sulfonamide molecule,	P. Krishna Murthy, V. Suneetha, Stevan Armakovi?, Sanja J. Armakovi?, P.A. Suchetan, L.Giri, R. Sreenivasa Rao	Journal of Molecular Structure	2018	5.1	University College of science, Tumkur University, Tumkur	34
Synthesis, Crystal structure, Hirshfeld surface studies and frontier orbitals analysis of 4-(1-benzofuran-2-yl)-2-methyl-6-phenylpyrimidine.	Krishnaswamy G., Krishna murthy potla, Suchetan P. A., Nivedita R Desai, Aruna Kumar Doyijode, R. Sreenivasa Rao.	Chemical Data Collections,	2017	2.5	University College of science, Tumkur University, Tumkur	2
Structural and spectroscopic characterization,	P. Krishna Murthy, G. Krishnaswamy, Stevan Armakovid,	Journal of Molecular Structure,	Nil	5.1	University College of science, Tumkur University,	14

reactivity study and charge transfer analysis of the newly synthesized 2-(6-hydroxy-1-benzofuran-3-yl) acetic acid.	Sanja J. Armakovid, P.A. Suchetan, Nivedita R. Desai, V. Suneetha, R. reeniva saRao, G. Bhargavi, D.B. Aruna kumar.				Tumkur	
High performance affinity chromatography and related separation methods for the analysis of biological and pharmaceutical agents.	Zhang C, Rodriguez E, Bi C, Zheng X, Suresh D, KyungahSuh, Li Z, Elsebaeia F and Hage DS.	Analyst,	Nil	6	University College of science, Tumkur University, Tumkur	28

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### 3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Green synthesis of gold nanoparticle s: Its effect on cocoon and silk traits of mulberry silkworm (Bombyx mori L.)	RR Patil, H Raja Naika, SG Rayar, N B alashanmug am, Vivek Uppar, Atanu Bhat tacharyya	Particulate Science and Technology	2017	44	9	University College of science, Tumkur University, Tumkur
Facile-one pot-green synthesis, antibacterial, antifungal, antioxidant	. Marula siddeshwar a MB, Dakshayani SS, Sharath Kumar MN, Chethana	Mater Sci Eng C Mater Biol Appl.	2017	163	100	University College of science, Tumkur University, Tumkur

and antiplatelet activities of lignin capped silver nanoparticles : A promising therapeutic agent.	R, Raghavendra Kumar P, Devaraja S.					
Synthesis, Crystal Structure and Molecular Docking Studies of Novel 2-(4-(4-substituted phenylsulfonyl) piperazin-1-yl) quinolone-3-carbaldehyde Derivatives	R Nivedita Desai, G. Krishnaswamy, S Naveen, NK Lokanath, PA Suchetan, DB Aruna Kumar, Sreenivasas.	Research on Chemical Intermediates,	2017	54	1	University College of science, Tumkur University, Tumkur
Development, Formulation, and Evaluation of Sodium Alginate-G-Poly (Acrylamide-Co Acrylic Acid/Cloister-30b)/Ag nanoparticles Hydrogel Composites and their applications In Paclitaxel Drug Delivery and Anticancer Activity	B. H. Nanjunda Reddy, Pradipta Ranjan Rauta, V. Venkata Lakshmi, Swamy Sreenivasas,	International Journal of Applied Pharmaceutics,	2018	20	7	University College of science, Tumkur University, Tumkur
Synthesis, photoluminescence and	M. Srinivas, G.R. Vijayakumar, K.M.	Journal of Science: Advanced Materials	2017	40	26	University College of science, Tumkur Uni

forensic application of blue light emitting azomethine zinc (II) complexes of bis(salicylidene)cyclohexyl-1,2-d	Mahadevan, H. Nagabhusana, H.S. Bhojya Naik	and Devices				University, Tumkur
Different supramolecular architectures mediated by different weak interactions in the crystals of three N-(aryl)-2,5-dimethoxybenzenesulfonamides	s, K. Shakuntala, S. Naveen, N. K. Lokanath, Suchetan P. A and M. Abdoh	Acta Cryst. E	2017	15	4	University College of science, Tumkur University, Tumkur
Supramolecular architecture of 5-bromo-7-methoxy-1-methyl-1H-benzimidazole.3H <sub>2</sub> O: Synthesis, spectroscopic investigations, DFT computation, MD simulation studies and Docking studies,	P. Krishna Murthy, Smitha.M, Sheena Mary Y, Stevan Armarkovi?, Sanja J. Armarkovi?, R. Sreenivasa Rao, P.A. Suchetan, L. Giri, Rani Pavithran, C.Van Alsenoy	Journal of Molecular Structure (Elsevier)	2017	110	10	University College of science, Tumkur University, Tumkur
Synthesis, characterization and computational study of the newly synt	P. Krishna Murthy, V. Suneetha, Stevan Armarkovi?, Sanja J. Armarkovi?,	Journal of Molecular Structure	2018	110	34	University College of science, Tumkur University, Tumkur

hetized sulfonamide molecule,	P.A. Suchetan, L.Giri, R. Sreenivasa Rao					
Synthesis, Crystal structure, Hirshfeld surface studies and frontier orbitals analysis of 4-(1-benzofuran-2-yl)-2-methyl-6-phenylpyrimidine.	Krishnaswamy G., Krishna murthy potla, Suchetan P. A., Nivedita R Desai, Aruna Kumar Doyijode, R. Sreenivasa Rao.	Chemical Data Collections,	2017	17	2	University College of science, Tumkur University, Tumkur
Structural and spectroscopic characterization, reactivity study and charge transfer analysis of the newly synthesized 2-(6-hydroxy-1-benzofuran-3-yl) acetic acid	P. Krishna Murthy, G. Krishnaswamy, Stevan Armakovi?, Sanja J. Armakovi?, P. A. Suchetan, Nivedita R Desai, V. Suneetha, R. Sreenivasa Rao, G. Bhargavi, D.B. Arunakumar	Journal of Molecular Structure	2018	110	12	University College of science, Tumkur University, Tumkur

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### 3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Resource persons	0	20	0	0
Presented papers	3	27	4	0
Attended/Seminars/Workshops	0	7	2	0

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### 3.4 – Extension Activities



3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Library orientation program	university college of science	5	200
special lecture by Prof. C. R. Pradeep, CIT, Gubbi on 'Joy of Learning Mathematics' for Undergraduate students on 6th October 2017 at	Department of Mathematics, University College of Science, Tumkur University, Tumakuru.	10	299
Exhibition on the Application of Mathematics as a part of Science Day during the academic year 2017-18.	Department of Mathematics, University College of Science, Tumkur University, Tumakuru.	10	201
Organized Workshop on 'Bharavanige Koushala' On 4th Oct 2017	Department of kannada University College of Science, Tumkur University, Tumakuru.	5	250
Organized Workshop on 'Kavya Shravana' Ancient Poetry Recital' On 9th Aug 2017	Department of kannada University College of Science, Tumkur University, Tumakuru.	5	300
Organized Workshop on 'Kavya Shravana' Ancient Poetry Recital' On 9th Aug 2017	Department of kannada University College of Science, Tumkur University, Tumakuru.	5	450
Conducted science popularization program at Govt High School, Swandenahalli, Tumakuru, Karnataka on 10/11/2017	DOSR University College of Science, Tumkur University, Tumakuru.	10	600
Conducted science popularization program at Govt High School, Gularave, Tumakuru, Karnataka on 14/11/2017	DOSR in chemistry, University College of Science, Tumkur University, Tumakuru.	13	540
Popularization of Science programme has successfully	DOSR in physics University College of Science, Tumkur	7	300

organized in Sri Pirangiswamy Higher Primary School in Gavimata, Kunigal (Taluk) as academic activity and to enhance science temperament in High School Level Students.	University, Tumakuru.		
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### 3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
nil	nil	nil	Nill

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### 3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activities	Number of students participated in such activities
Conducted social awareness programmes i.e., clean India, green India and swachch bharath at Swandenahalli -village, Tumakuru, Karnataka on 11/11/2017	DOSR in chemistry, University College of Science, Tumkur University, Tumakuru.	swachch bharath	30	300
Conducted social awareness programs i.e., clean India, green India and swachch bharath at Gularave-village, Tumakuru, Karnataka on 12/11/2017	DOSR in chemistry, University College of Science, Tumkur University, Tumakuru.	swachch bharath	50	500

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## 3.5 – Collaborations

### 3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
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research	Dr. P. Raghavendra Kumar	na	1200
research	dr s sreenivasa	na	365
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3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
nil	nil	nil	Nil	Nil	nil
<a href="#">View File</a>					

3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
nil	Nil	nil	Nil
<a href="#">View File</a>			

## CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
2	1.3

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Class rooms	Existing
Laboratories	Existing
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added
<a href="#">View File</a> <a href="#">View File</a>	

### 4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
e-Lib i-Next (web version)	Fully	22.04.30	2017

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
	Text Books	41592	2521902	3301	1270456	44893
Reference Books	5362	1172851	0	0	5362	1172851
Journals	36	102706	0	53200	36	155906
e-Books	97000	27225	199500	16090	296500	43315
Library Automation	0	0	1	194877	1	194877
<a href="#">View File</a> <a href="#">View File</a>						

4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Nil	Nil	Nil	Nil
No file uploaded.			

#### 4.3 – IT Infrastructure

##### 4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/GBPS)	Others
Existing	89	32	0	0	4	4	15	0	0
Added	2	0	0	0	0	0	0	0	0
Total	91	32	0	0	4	4	15	0	0

##### 4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

1 MBPS/ GBPS
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##### 4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
NIL	Nil

#### 4.4 – Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
26	12.86	6.5	2.42

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

The Institution has well-defined policies for maintaining and utilizing academic and support facilities. The general maintenance and upkeep of these facilities is the responsibility of the institution. Supporting staffs are appointed to assist in general maintenance in addition, housekeeping tasks are outsourced by the Tumkur University. The Office Superintendent is over-all in charge of monitoring infrastructure maintenance. Regular maintenance of computer laboratories and systems are carried out by the concerned Department. The services of the Engineer of the Tumkur University are also available for consultation and guidance. Computer systems available in the laboratories and the Resource Centre in the library are fully utilised. The library is fully utilised and is open from 9.00am to 6.00 pm to facilitate the maximum number of users. Requirement for new textbooks, reference books, magazines, journals and e-books re procured as per the suggestions given by Library Committee, HODs and are placed before the management for approval by the Librarian and procured as per approval. Periodic weeding out of outdated textbooks is also undertaken after approval in order to make space for new titles. Stock verification is done annually with the help of faculty. There is an allocation for substantial annual budget for adding books to the library collection and improving library facilities. General infrastructural facilities are maintained by college supporting staff. The services from Tumkur University like guidance from Civil Engineer, Electrical engineer, electricians, plumbers and gardeners are always available. Any maintenance or repair work is reported to the concerned official for required action. All major requirements have to be submitted in writing for approval. Requirements for new classroom furniture or fittings are submitted in writing by the Principal to the Tumkur University for approval by Purchase Committee. All sports facilities, including multi gym, are maintained by the Physical Education Director along with college supporting staff. Requirement for new equipment or repair of old equipment is placed before the concerned Committee.

## CRITERION V – STUDENT SUPPORT AND PROGRESSION

### 5.1 – Student Support

#### 5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	NIL	Nil	Nil
Financial Support from Other Sources			
a) National	1. SC/ST social welfare Day/Hostel scholar 2. BC fee concession - District Nonplan, 3. BC fee concession - State sector plan	952	2817550
b) International	NIL	Nil	Nil

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5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
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Soft skill development	19/08/2017	80	Mr. Pavan Kumar, STS Worldwide, Regional office: Novus STS (subsidiary of STS Worldwide), 22/1, Dr.Rajkumar Road, Malleshwaram west, 2nd floor, World trade Centre, Bangalore, India.2nd floor, World trade Centre, Contact No: 7204476128
Remedial coaching	06/03/2018	500	Faculties from all departments
Bridge courses	15/06/2017	540	College faculties
Yoga and Meditation	22/07/2017	500	Dr. Manjunath A.M. Dept. of Physical Education, University College of Science. Contact no.9448180513
<a href="#">View File</a>			

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2018	Resume Writing Skills	Nil	100	Nil	10
2017	career guidance cell	Nil	6	Nil	Nil
<a href="#">View File</a>					

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
7	6	35

**5.2 – Student Progression**

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations	Number of students	Number of students placed	Name of organizations	Number of students	Number of students placed

visited	participated		visited	participated	
STS Worldwide India, Bangalore	84	13	ITC, Bangalore IISc NMR Centre Jain College, Bangalore DOSR Chemistry Tumkur University Himalaya IAS and KAS Coaching centre Deeksha PU College,, Bangalore HHV Pvt Ltd, Dabaspete, Bangalore (Rural) STS Worldwide India, Bangalore	7	7
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#### 5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
2018	161	B.Sc	Physics, Mathematics, chemistry , Botany and Zoology	Tumkur, Bangalore, Mysore , kuvempu universities and B.Ed colleges	M.Sc and B.Ed
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#### 5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
SLET	2
Any Other	3
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#### 5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Blissful Yoga	National conference	350
Work shop on pranayama Mudra kriyas. Bhandas	Regional workshop	500

Research Renaissance in physical Education	National Conference	480
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### 5.3 – Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2017	Quiz	National	Nil	1	1	Tejaswini N
2018	Quiz	National	Nil	1	1	Harshitha H L and Akshara prasad
2018	Drama competition	National	Nil	1	1	Basavaraju T M and group
<a href="#">View File</a>						

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

The institution does have Student Council that functions in integrating and executing the various activities of the institution. Presently the Council consists of representative from all classes elected by the respective classmates. The major activities conducted by the Student Council during the last academic year are as follows: List of events organized by Students Council Name of the programme Fresher 's Day Science day Teachers Day Valedictory Annual Day Sports Day Ethnic day Students' representation in the Student Council is unique in that they are managed by the students for the students and by the students all organizing committees of the various fests have student representation along with the faculty-coordinators. Activities involve in planning, organizing and executing various activities of the institution under the guidance of the faculty coordinators.

### 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

After helping students successfully to receive their degree/certification, our campus begins to look for new opportunities to continue adding value to the personal and professional life of alumni. Alumni associations are of vital importance for both alumni and the college. For alumni, our alma maters often provide networking opportunities, job connections, and community. Even graduates who move far away from their college have opportunities to participate in alumni chapter events, and meetups. This dynamic organization is recognized as a valuable resource of university college of science community with respect to student support and progression. The activities of associations are: Alumni Committee: This committee acts as a bridge between college and alumni associations. Conduct meetings for effective implementation of alumni engagement in the campus and conducted meetings on the same. Alumni



Interaction: Every department organise alumni interaction, so that alumni can share their expertise with the students in terms of academic, higher education and career perspectives.

5.4.2 – No. of enrolled Alumni:

2800

5.4.3 – Alumni contribution during the year (in Rupees) :

280000

5.4.4 – Meetings/activities organized by Alumni Association :

meeting was conducted to discuss on alumni building.

## CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Vision: • To Achieve Academic Excellence in Higher Education and Research  
 Mission: • To inculcate and nurture young talents and evolve an effective mechanism for greater participation of all the stakeholders of the university college of science. • To develop and operationalize a strategy to foster financial self-sufficiency and self-reliance. • To promote cordial working conditions, work ethics, work culture among the faculty and staff members there by promoting welfare of the students and society. • To Introduce innovative curricular frame work aimed at knowledge, skill and aptitude-based, application oriented higher education and research. Decentralization: This is a Government autonomous college under Tumkur University. The Principal is the head of the college. Tumkur University is the administrative body consists of Honourable Vice chancellor, Registrar, Registrar (Evaluation) to the policies, road map, development and functioning of institute. The action plan is formulated by the planning body which includes Principal, heads of the department and coordinators of various departments. The Principal provides suggestions, monitors the procurement, and welfare activities. The head of the institution is responsible for academic, co-curricular and administrative activities of the institution. Further, for the sake of smooth running of the college, Various cells like student grievance and redressal cell, women empowerment cell, placement cell, Women's Development Cell etc, and different committees like Admission committee, Academic and Examination, Cultural, Discipline, NCC, NSS, Anti-ragging squad, etc. are formed. Participative Management: The college promotes a culture of participative management. The responsibility of the institution for its progress rests on the faculty, Heads of the department, Administrative officials and non-teaching staff. Various committee members work as a team for the betterment of the institute. At each level, there is an active participation in planning and implementation.

6.1.2 – Does the institution have a Management Information System (MIS)?

Partial

### 6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Curriculum Development	The College follows curriculum determined by the Tumkur University and Many faculties are members of BOS and

BOE of Tumkur University and other Universities of the state. Faculties actively contribute to provide class notes to the students and wrote many text books. They make curriculum easy for students through different teaching methodologies, ICT and other Techniques.

Teaching and Learning

The college has the strategy of planning academic activities before the commencement of the semester. The academic calendar is given by the Tumkur University. The faculty prepares curriculum delivery plan. The institute promotes innovative teaching learning methods. A faculty uses different techniques for improving the students understanding and grasping power. Besides maintaining notes and using only blackboard for teaching as in earlier days, ICT and other teaching methods as group teaching, seminars by students, class quiz, assignments, etc. are used in the classrooms by faculties to enhance their teaching by making learning more interesting. Faculty are encouraged to attend FDP, workshop and upgrade their knowledge and skill.

Examination and Evaluation

The faculty members of the college are working as members internal and external examiners as paper setters and evaluators for theory and practical examination. Internal examinations (theory practicals are conducted for each semester and evaluation is carried out by the faculty. Semester examinations are conducted by the University. The results displayed on the Tumkur University website. The results are analyzed and students' feedback is obtained, and if necessary, changes are made in the delivery of subject. Assignments are also given in each course.

Research and Development

Faculties are encouraged to pursue research. Many faculties have undertaken major and minor research projects. Their research work has been published in many reputed National and international journals. Faculty also present research papers in international and national journals and conferences.

Library, ICT and Physical Infrastructure / Instrumentation

•Serials subscription system is maintained by entering the data in the E-Lib Integrated Library Management

Software. •To support Library Automation RFID technology is implemented and tagging RFID tags to books is in process. •Library has access to more than 6000 e-journals (including current issues with 5-10 years back files) and 1,35,000 e-books through program entitled "National Library and Information Services infrastructure for ScholarlyContent (N-LIST)" by INFLIBNET. •Library has access to IEEE Communication Society Digital Library which includes 17 periodicals and conference and workshops proceedings. . Requirements of the equipments/instruments from departments are meet from time to time budget allocated by the university.

**Human Resource Management**

As a affiliated college, academic and non-academic staff is recruited by the Tumkur University. Faculties were appraised and motivated for further enrichment with research aptitude. Administrative staff is encouraged to provide their best support for the smooth functioning of the institution. The college also invites visiting faculties to fullfill the needs of institutions. Teaching staff is motivated to carryout co-curricular activities along with their basic duty of teaching. Teaching staff is inspired to bring out the best from the students through effective teaching. Platform is provided to the students to take part in various co-curricular activities as per their interest. Potential talents of the students are explored through extra-curricular activities. These talents will be nurtured and a platform is provided for exhibiting their expertise through intercollegiate competitions and youth festival.

**Industry Interaction / Collaboration**

Industry interaction like Special lectures are organized in the college from eminent speakers. Industrial visits are conducted to the students. Many faculties have collaborations with RD institutes, industries and other universities.

**Admission of Students**

Admission notification has been posted on the college and university websites and news papers. The students were given counseling and guidelines to choose proper course or subjects. Reservations followed as per rules and regulations guidelines of Karnataka

## 6.2.2 – Implementation of e-governance in areas of operations:

E-governance area	Details
Examination	All the exam related data and management activities are managed through computers. Results of internal exams are uploaded online. Students' registration form for examinations and marks of internal exams are uploaded online. The hall tickets are received online. End exam results are available on the university website. All correspondence to University like communicating the internal examination results, University examination forms, etc. are partially communicated as soft copies and in the form of emails.
Planning and Development	To enable the office staff to work on computer, computer training was given to them. They were taught how to use net and send the email to keep in touch with other colleges, Office of higher education, education department, University, UGC, NAAC, etc.
Administration	Presently office related correspondences with Pay bill and other bills, admissions, exam, scholarship, accounts, etc. are being operated online. The administration of office dealing with students, faculty, and admissions are partially computerized.
Finance and Accounts	Accounts, salary, and exam forms, Scholarship, etc. is being operated with computers/online. All the salaries of teaching and non teaching staff are computerized and online.
Student Admission and Support	College constitutes an admission committee for UG/PG level admission. Merit list announced online. Equal opportunity is given to all the eligible candidates/students irrespective of their caste, creed, gender, number of attempts and merit at HSC level purely on merit basis. College also gives admission to those students, who have passed in supplementary Exams after main HSC Exams. As a government college, the college gives admission to the deprived students. All the seats are filled every year in UG and PG departments of the college. All the scholarships and fees will be according to admissible to Karnataka state government.

### 6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2017	Dr Shet Prakash M	International conference on Advances in Science and Engineering (ICASC-2017) on 20-01-2017 to 22-01-2017, Thailand	Thailand	40000
<a href="#">View File</a>				

6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2017	Nil	Nil	Nil	Nil	Nil	Nil
<a href="#">View File</a>						

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
Orientation programme	1	03/06/2017	26/06/2017	28
Refresher programme	8	29/05/2017	23/12/2017	21
<a href="#">View File</a>				

6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
0	Nil	0	Nil

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
The staff association established which is an instruments that brings	The staff association established which is an instruments that brings	The mentor-mentee system started to address the problems of the

the members of different interests under one roof. Availability of OOD, SPCL, EL, Maternity, Paternity, medical, study are some of the leave facilities available for the staff. Institution also encourages the faculty to persue higher studies like Ph.D, post doctoral studies under FIP.

the members of different interests under one roof. Availability of OOD, SPCL, EL, Maternity, Paternity, medical, study are some of the leave facilities available for the staff.

students and under each mentot 15students were allotted. Remedial classes conducted for the students weaker in the subject.

#### 6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

The accounts of the institute are regularly audited. The local inspection committee of Tumkur has audited the accounts of the institution. Apart from this , the auditing of the accounts of the institution is regularly monitored by the Finance department of Tumkur University.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Nil	0	--
<a href="#">View File</a>		

6.4.3 – Total corpus fund generated

00

#### 6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Tumkur University	Yes	University college of science
Administrative	Yes	Tumkur University	Yes	University college of science

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

A meeting of teachers and Parents conducted during the orientation program of the fresher students was concluded with the following points: To promote NSS and NCC among the students to develop community feeling. To encourage students to take part in extracurricular activities for their holistic development. To teach the opportunities and importance of the course. The information of the children progress are informed and interaction are allowed to know their problems if any from the college and suggestions are voluntarily accepted for the development of institutions.

6.5.3 – Development programmes for support staff (at least three)

- Faculties are encouraged to organize conferences, workshops, seminars etc.
- Faculties are encouraged to undertake minor major research projects.
- Also teachers are encouraged to attend professional development trainings like orientation course, refresher course and FDPs.

#### 6.5.4 – Post Accreditation initiative(s) (mention at least three)

- Career Counselling Centre to prepare the students for various competitive examinations.
- To enhance student for capacity building, soft skills and employability skills.
- Placements.

#### 6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	No
c) ISO certification	No
d) NBA or any other quality audit	No

#### 6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
No Data Entered/Not Applicable !!!					
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### CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 – Institutional Values and Social Responsibilities

##### 7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
International Women's day	08/03/2018	08/03/2018	149	101

##### 7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources
TOTAL POWER REQUIRED 102.0 KW TOTAL LIGHTING EQUIPMENT 26.93 KW

##### 7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Ramp/Rails	Yes	0
Rest Rooms	Yes	0
Braille Software/facilities	No	0
Scribes for examination	Yes	1
Special skill development for differently abled students	No	0
Any other similar facility	No	0

Provision for lift	No	0
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#### 7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2017	1	1	05/06/2017	1	World environmental day	Environmental	100
2017	1	1	21/06/2017	1	International yoga day	Importance of yoga	250
2017	1	1	23/08/2017	1	Blood donation camp	Collection and preservation of blood	50
2017	1	1	02/10/2017	1	Swachha Bharath abhiyaan	Cleanliness and maintenance of hygiene	100

[View File](#)

#### 7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
KCSR handbook	Nil	<a href="http://www.ucst.ac.in/KCSR">http://www.ucst.ac.in/KCSR</a>
UNIVERSITY STATUES	Nil	<a href="http://ucst.ac.in/uploads/2023/may/UCST20College20Code20of20Conduct2003_06_2023.pdf">http://ucst.ac.in/uploads/2023/may/UCST20College20Code20of20Conduct2003_06_2023.pdf</a>
UGC RULES AND REGULATIONS	Nil	<a href="http://www.ucst.ac.in/ugcrules">http://www.ucst.ac.in/ugcrules</a>

#### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Ambedkar Jayanthi	14/04/2017	14/04/2017	200
International Yoga day	21/06/2017	21/06/2017	150
Gandhi Jayanthi	02/10/2017	02/10/2017	200
Swachha Bharath abhiyan	02/10/2017	02/10/2017	100
Independence Day	15/08/2017	15/08/2017	150
Mathru bhasha divas	21/02/2018	21/02/2018	300



International women's day	13/03/2018	13/03/2018	250
Republic day	26/01/2018	26/01/2018	250
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#### 7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

- **Solid waste management:** All degradable solid waste generated in the college is collected every day and dumped in to dumping pit for decompose. Decomposed organic manure is utilized for gardening as organic manure.
- **Liquid waste management:** It is necessary to treat effluent/waste water, hence our college is having good facility to channel waste water to be discharged from all laboratories to underground channels for disposal in a properly manner. Sewage waste is directed to separate closed pits for decompose.
- **E-waste management** As per the government policies we adopt 3R (Reduce, Reuse and Recycle) methodology. Printer Cartridges are generally refilled, wherever refilling is not possible, the cartridge is returned to the manufacturer. All damaged or non-functional electronic/electrical materials (e-waste) were returned to the manufacturer. UPS batteries are exchanged for a nominal cost with the vendor for the new batteries/purchases

### 7.2 – Best Practices

#### 7.2.1 – Describe at least two institutional best practices

1 . Academic Excellence Context To achieve the objectives of these best practices we in our institution periodically revise the syllabus as per the guidelines of the university. There is a need to motivate the student community by the teacher ,which is possible by active involvement of teachers in different academic related activities such as OC,RC,FDP, winter school etc. from which the teachers will be transformed to motivated teachers. In 2016-17, CBCS was introduced students are able to choose subjects of their choice by following the CBCS guideline. College offers new skill based and job oriented B.Voc., course this prepares students for future success in academic growth and job opportunity. In order to establish a common platform for evaluating the intellectual ability of students and selecting the right candidate in to right course open counselling was introduced. Library automation is being done which caters need of students and faculties effectively. Skill enhancement: Students were promoted to develop experimental and soft skills though the application of the Internet and ICT based methods. Students were allowed to visit different industries as a part of their curriculum to know the new innovations and development in the industries, which is helping for the placement. The practices All the initiatives required for the above best practice were listed and the action plan was prepared. The plan comprises the following activities.

- Preparation of the teachers for the class room teaching and laboratories as per the curriculum. The teachers also recommends the text books/e-sources for in-depth learning
- Teachers also make use of the ICT/visual aids/charts facilities in class rooms for better imagination and understanding of the subject.
- Monitoring of students attendance for theory and practical by periodic checking by the individual departments, which enable the student to be punctual to class which assist the student gain the knowledge.
- Those with shortage of attendance will be listed and their parents were informed to improve the regularity in attending the classes
- Pre announced periodic internal test for theory and practical are conducted and assignments are given to assess the students learning capabilities. This process monitors the continuous evaluation of the individual student.
- Poor and slow learners were identified by the above process and were given remedial teaching for improvement
- Sample question papers and model of answers were prepared and

circulated to students. • Lab manuals were prepared and circulated experiments were demonstrated to the students. • The library was strengthened in terms of latest books, journals, e-journals. INFLIBNET and Internet laboratory facilities were created in the library • CBCS was introduced in the college during academic year 2016-17 students are able to choose subjects of their choice by following the CBCS guideline. CBCS facilitates learners to earn more or less credits in a semester based on their intellectual capacity. • College offers new B.Voc., course this course prepares students for future success in terms of further academic growth and job opportunity. • Skill enhancement: Students were promoted to develop experimental and soft skills through the application of the Internet and ICT based methods. Students were allowed to visit different industries as a part of their curriculum to know the new innovations and development in the industries, which is helping for the placement. • All the faculty members were promoted to attend and complete the career advancement programmes from time to time as per the UGC norms by which the teachers keep abreast of updating the knowledge in their respective fields. • Students will be informed to apply for different scholarships from time to time which help them for their studies. Evidence of Success The objectives set for the best practice have been reflected in the following ways • All the teachers have transformed into motivating teachers • Periodic monitoring of attendance has helped the students to be regular • Internal assessment tests helped the students to prepare well for the final examinations • Every successive year the results have improved and many ranks have been bagged by the institution. • Academically excelled students were able to go for their further studies at various reputed higher educational institutes. • The employability rate has enhanced compared to the previous years • The demand for taking admission into the college increasing every year which can be seen with the number of applications received for admission. • From 2012 the intake of the students has considerably increased due to demand

2. Research excellence  
Context: The main focus of the higher education in India is to promote research. This is a harmonious and healthy practice followed since the affiliation of the college to Tumkur University. The college conducts meeting every semester at the end to bring the faculty involved in research and extension activities. The meeting holds discussion about the following issues,  
1. Major and minor projects undertaken  
2. Number of papers published in peer reviewed journals  
3. To strengthen the library and ICT facilities in all aspects of promotion of research.  
4. Students projects undertaken  
5. Encouraging the faculty and the students to organize and present research papers in the national / international seminars / conferences / workshops  
6. Encouraging faculty to use innovative methods so that students appreciate science  
7. Teachers and students are motivated to collaborate with external organizations both inside and outside the country to take up advanced research.

The Practice University College of science a constituent college of Tumkur University has obtained the NAAC 'A' grade accreditation in 2012, continuing the same the institute has taken the initiative of Promotion of research and extension activities as a best practice. As per the objectives we have setup a committee for promotion of research and extension activities in the institute. Based on the committee recommendations 21 the faculty members have registered for Ph.D., degrees and 6 members have completed their Ph.D., during the last five years. All eligible faculty members were advised to take-up the major/minor research projects from various funding agencies. From 2012 total 30 projects were sanctioned to the college and all 30 projected were successfully completed till 2107 of total Rs 1, 69, 70,000/- Under this best practice 340 papers were published in national international journals. More than 350 many papers were presented in the national and international conferences. Because of active participation of the faculty members they have updated their knowledge in the field of research. Under the research projects some of the faculty members were able to establish collaboration with companies and other higher

educational institutions through MoUs. As per the curriculum of the university the staff members have guided the student projects in under graduated and post graduate departments. Students projects were sanctioned from various funding agencies, through these projects students have published research articles in the conferences and seminars. 18 faculty members have got the guide-ship in their research field from Tumkur University. Since 2012 forty seven Ph.D., were guided and one awarded the Ph.D., degree, 46 research scholars are pursuing Ph.D. We have conducted workshops for students where the students have gained hands on experience in various field of science and technology. As per the objective we have encouraged the students to visit and participate in the open day programmes at IIS Bangalore. Every year the college has organized study tours and industrial visits to encourage and enhance their knowledge in the field of science. Many of our students have obtained the scholarships from KSTA. Students and the faculty members make use of the ICT facilities for academic and research work. Swachh Bharth Abhiyaan programmes have been conducted in the college to create awareness about cleanliness among students and faculties. NCC and NSS units of the college have actively taken up the work of Swachh Bharath Abhiyaan at various nearby villages. Every working day of the college starts with the state and National anthem by which the students and faculties develop patriotism in them. Evidence of success As per the set objectives the faculty members have completed their Ph.D., after joining the institute. The faculties have participated in the various International and National Conferences/Symposiums/Seminars and workshops and updated their knowledge in their respective fields. With set objective the faculty members have applied for minor /Major projects funded by various funding agencies and were able to get various projects. The sanctioned projects were implemented and were completed in time. The outcome of the projects was published in various national and international Journals. Individual department had organized conferences and workshop at national level compliance of dates and schedules by one and all in the college itself is an evidence for success of this practice. All are abreast and updated with information.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

### 7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

University College of Science, an institution with Potential for excellence, constituent College of Tumkur University (erstwhile Government Science College) was established in 1940 to cater to the educational needs of Tumakuru district where the majority of students hail from the rural background. Tumkur is Just 70 Kilometers away from Bangalore the State capital of Karnataka. The college is situated in the heart place of Tumkur City. Tumkur the city is well popular as Kalpataru Naadu (land of coconuts) and is also well known for education. The college has an area of 90 acres and the campus is about 98,800 sq. ft. In 2009, the erstwhile Government Science College was handed over to Tumkur University, when it was renamed as University College of Science. Presently, it is one among the two constituent colleges of Tumkur University. Having the vision "To achieve academic excellence in Higher Education Research", The institution is constantly upgrading its infrastructural facilities and human resources in it and heading forward in achieving its mission "To inculcate and nurture young minds to evolve an effective mechanism for greater participation of all the stake holders of University College of Science. To develop and operationalize a strategy to foster financial self-sufficiency. To promote cordial working conditions work ethics, work culture among the Faculty staff members thereby

promoting the welfare of the students and the Society. To introduce innovative curricular framework of Knowledge, skill aptitude Base application oriented higher education research. The major stake holders of the institute are students of Tumkur rural areas, who come from remote areas and are economically deprived from the professional education due to their economic condition. Having them as the major stake holders the college is offering courses in B.Sc., of different combinations of science such as PCM, CBZ, PMCs, PME, CZMb, CBBt and CZBt. The college is also offering the B.Voc course in hardware technology and networking. PG Courses in Chemistry, Physics and Environmental Science are also offered in the college. The college has got a well-established library comprising good number of books, journals and e-resources and is supporting the staff and the students of the college. Presently the college has about 1600 plus students. All the above courses are well supported by fifty-five permanent faculty members and 94 full time guest faculties. Faculty members are dedicated, competent and well qualified who also engage them self in various funded projects from the funding agencies like UGC, DST, CSIR, DBT, VGST etc.,. Some of the faculty members also guiding the Ph.D., programs of Tumkur University. The institute also supports all the other co-curricular and extension activities such as NCC, NSS, sports and cultural programmes. In all, the institute is supporting the overall growth of the students by which the students are fulfilling the existence of the institute. Mentioning all the above relevance University College of Science has grabbed the recognition of being the institution of college with potential of excellence and make it as distinctive from other institutions.

Provide the weblink of the institution

<https://ucst.ac.in/>

### **8.Future Plans of Actions for Next Academic Year**

Promote the faculty members to be involved in curriculum designing such as per the state and university provisions and based on feedback from various stake holders (open elective courses and adding more self learning modules, skill components, topics concerning local, regional, national and international issues, gender issues, environment related topics, social issues. Timely revival of the syllabus and take feed-back on the syllabus. Promoting the teachers to improve teaching skills for betterment of the institution. Creating good learning atmosphere to students such as use of smart class rooms enabled with ICT tools, creating competitive atmosphere in the institution for learning Promote the faculty to participate in the work-shops, conferences related to teaching, learning and evaluation Support and encourage the staff to obtain Ph.D degrees, to take up research projects and guide-ship in respective areas of research. Promoting to publish research papers in journals and conferences of repute. Sensitize faculty about IPR and promote industry institute interaction by developing MOUs with industry and academia. Promoting all the extension activity programmes of NCC, NSS, Sports and science popularization programmes. Creation of all round facilities in the campus for both faculty and students like library, sports, canteen etc. Upgrading the existing and classrooms and laboratories by writing proposals to various funding agencies. Promoting the faculty and students to develop the holistic leadership qualities, involve teachers and students in the various committees for the smooth functioning of the institution. Creating awareness among students about different scholarships available through state and central government schemes and facilitate to receive them from the various agencies. Creation of student activity cell, promotion for conducting the programmes related to personality development and career guidance. Conducting placement drives thorough placement cell. Promotion of alumni activities in the campus. Promote students to take-up the research projects and attend the conferences and seminars. Promote to conduct activities related to building values among faculty and students, sensitizing the students about the environment

related issues, creation of green and plastic free campus.