



**AMRUTVAHINI COLLEGE OF
ENGINEERING, SANGAMNER**



DEPARTMENT OF COMPUTER ENGINEERING

&

ASSOCIATION OF COMPUTER ENGINEERING STUDENTS

ISSUE 1: 2019-20

KAVYADSA

..... Ray of Hope



Voice Computing

Editor:- Mr. Vikram Abhang

HOD MESSAGE



Prof. R. L. Paikrao
Head of Department

Dear Students,

It gives us great pleasure to bring you the first issue of department magazine **Kavadsa** for academic year 2019-20.

"We cannot always build the future for our youth, but we can build our youth for the future."- Franklin D. Roosevelt

It gives me great satisfaction to welcome you all on behalf of the entire Computer engineering department of the Amrutvahini College of Engineering, Sangamner.

Apart from academic activities, the co-curricular activities, sports, adventure, cultural and social- service activities, form important aspects of the life of the human being. This importance is well indicated in the spread of facilities and activities conducted at the department of computer engineering. In this regard **Medha 2020** and Alumni Meet were two highlights of this semester.

The Alumni of the Institute have done exceedingly well in all walks of life at both national and international levels and brought name and fame for themselves as well as to their parent institute i.e. AVCOE. The Institute takes pride in their success.

I cordially welcome the newly admitted students in the department of this great educational institution and wish them a memorable, meaningful and rewarding tenure to emerge as world-class engineers. I would urge upon them to prove as good human beings and worthy citizens. The senior students are welcome back to the new academic session with renewed vigorous and dedication.

Regards!!!

"You don't have to be great to start, but you have to start to be great."- Zig Ziglar.



WHAT'S NEW IN DEPARTMENT

1. Media Club - Installed New LED TV

"Capitalism does a number of things very well: it helps create an entrepreneurial spirit; it gets people motivated to come up with new ideas, and that's a good thing."

1. DEPARTMENT ACTIVITIES :-

Three Days Workshop on "Machine Learning & Its Applications";-

Department of computer engineering organized Three days' workshop on "Machine Learning and it's Applications" 27th-29th, September 2019 for SE, TE, BE students . There are 60 (Sixty) students participated in this workshop. The resource person for this workshop is Mr. Murumkar Yogesh, Director, Bharat Software Solutions, Kothrud, Pune. Program started with introductory speech by Prof. V. K. Abhang. This Workshop organized by Prof. P. Patro & Prof. V.K.Abhang. Workshop concluded with certificate distribution by Prof. P. Patro. This was fruitful workshop for students for final year project.



Editor: Mr. V.K.Abhang

Orientation Program on Redhat :-



Department of Computer Engineering organized orientation program on **“Awareness of Redhat Certification”** dated on 11th July, 2019. This orientation program organized for T.E. Computer students. Total 150 students attended same. Resource person was Mr. Rohan Sonawane & Team (IRT, Nasik). Prof. R.L.Paikrao & Mr. V.K.Abhang, Prof. G.D.Puri organized same. Mr. V.K.Abhang concluded session with vote of thanks. This was fruitful session to students get idea about importance of Redhat certification.

Workshop on “Cloud Storage: SAN Vs NAS”

One Day Workshop organized on **“Cloud Storage: SAN Vs NAS”** dated on 5th Oct, 2019. Prof. S.K.Sonkar & Prof. M.A.Wakchaure organized same. Resource person was Mr. Santosh Ugale (ESDS, nasik). Total 82 PG & B.E. students attended same. This was fruitful session to students about cloud storage. Program concluded vote of thanks by Prof. M.A.Wakchaure.



Editor: Mr. V.K.Abhang

2. INDUSTRIAL VISITS:-

2.1 Industrial Visit of S.E. B:-

S.E. Computer B students visited to **C-DAC,Pune** dated on 9th Aug, 2019. Total 50 students with three staff members Prof. M.B.Gunjral & Prof. J.N.Ganthade accomplished this visit. Mr. Atharv Murumkar & Ms. Ayesha Shaikh worked as student coordinator. Outcome of this visit is students get idea about working environment & recent technologies.



3. ISTE STUDENTS CHAPTER :-

3.1 Meditation for Stress Management :-

As a part of ISTE student chapter, department organized a seminar on **“Meditation for stress management”** for all second year students. Total 140 students attended this session. Program started with introductory speech by Ms. S. B. Bhonde followed by felicitations of guests. Speakers for this session were Bk. Dr. Yogini, Bk. Padmaji, Bk. Bharatiji. At the end, students also had live experience of **“Rajyog meditation”**. This seminar organized by Ms. K.U.Rahane & Ms. S.B.Bhonde.



Editor: Mr. V.K.Abhang

3.2 Value Added Course on Python for Data Science:-

Department of Computer Engineering ISTE students chapter organized 5 days Value added course on “Python for Data Science” dated on 7th to 10th September, 2019 & 21st to 22nd September, 2019. This 40-hours value added course was summed up with hands-on exercises & mini projects developed by students. Resource persons were Mr. Sachin Janani, Mr. Ganesh Joshi, Mr. Aniket (Prygma Information Systems, Pune). Total 80 students attended same. At the end, introduction to python flask was concluded with python libraries used in Machine Learning.



Snaps of Value added course

Enthusiasm is the mother of effort, and without it nothing great was ever achieved. --Ralph Waldo Emerson



Editor: Mr. V.K.Abhang



4. ALUMNI INTERACTION:-

4.1 Expert lecture on Importance of Cloud Computing:-

Department of computer engineering organized Expert Lecture on “**Importance of Cloud Computing in Today’s World**” on 27th September ,2019. Total 60 students of B.E. attended same. Resource person was our alumni Mr. Sagar Mohalkar (Trainee Technical Dept., -ESDS S/W solution Pvt.Ltd. Nashik.) . This lecture coordinated by Prof. S.K.Sonkar.



5. CSI Chapter Activity:-

Department of Computer Engineering CSI student’s chapter organized workshop on “**Awareness of Cyber Security & Forensics**” dated on 12th July, 2019. This workshop organized for T.E. & B.E. Computer students. Total 150 students attended same. Resource person was Mr. Onkar Gandhe (Cyber Expert, Nasik). Prof. S.A.Thanekar & Mr. V.K.Abhang organized same.

Resource person highlighted about cyber security & forensics. Students get idea about How to avoid online fraud & how to detect?. Prof. R.L.Paikrao (Head, Computer Engineering) addressed to gather about cyber security. Prof. S.A. Thanekar introduced the guest of workshop. Mr. V.K.Abhang concluded session with vote of thanks.

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Audience



Felicitation

6. ACES ACTIVITIES:-

6.1 FunTech:-

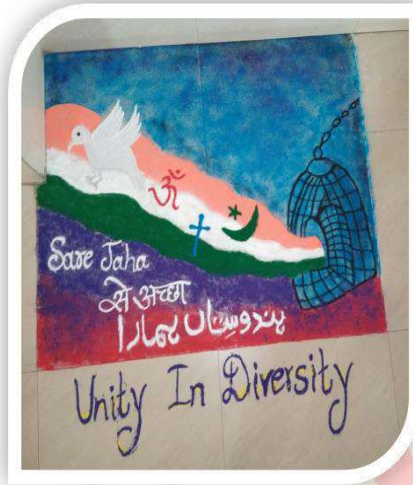
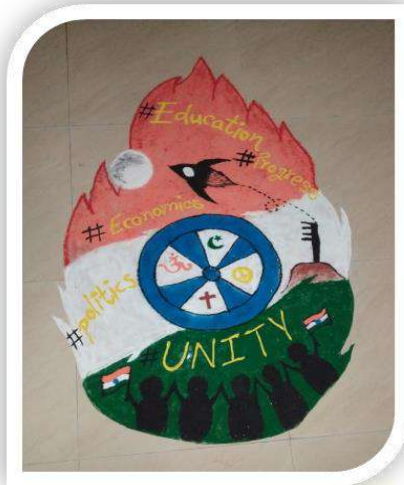
FunTech was organized under ACES for students of S.E. & T.E. students. The competition was organized on 3rd August 2019. The Activity was conducted for making the student interact with each other. The competition was like Damsaraz, student where divided in group of four and one of them was ask to act or draw to convey his message to his group member. Total 72 students appeared for this activity. Winners are :

Winners: 1) Shejul Akash 2) Shaikh Ayesha
3) Shinde Sambhodi 4) Wakchaure Swarangi
Runner Up: 1) Vadnere Tripura 2) Varpe Rutuja
3) Varpe Pratiksha 4) Walve Nikita



6.2 Rangoli Competition:-

Rangoli Competition was organized under ACES for students of T.E. It was conducted on 7th August 2019. Students were asked to participate and explore their creativity on the topics like **Independence Day and Technology**.



1st Winners:-

Kunal Thite
Mardikar Gauri
Patil Nital
Tajane Sejal

2nd Winners:-

Rajdeo Dnyanda
Vetal Prajakta
Thorat Kaveri
Shaikh Saba

3rd Winners :-

Chaudhari Prajwal
Bhand Rutuja
Avad Aarti
Jadhav Vaishali

6.3 Photography Competition:-

Photography Competition was organized under ACES for students of SE-TE-BE. It was conducted on 27th and 28th of July 2019 in college campus.



1st Blue Phoenix- Om Khandave



2nd Lavender Lashes- Aditya Kadlag

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3rd Lavender Lashes- Aditya Kadlag



3rd White Lions- Ravikumar Ghadge

7. STUDENTS LAURAL:-

Sr. No	Name of Students	Event Name	Name of Organizers	State/ National/ International Level	Achievement / Prize
1.	Mr. Tejas Satpute	Ideazzz 2k19- Project Idea Competition	STES SITS, Narhe,Pune	State	-
2.	Mr. Shreyas Satpute	Ideazzz 2k19- Project Idea Competition	STES SITS, Narhe,Pune	State	-
3.	Mr. Abhijeet Varpe	Ideazzz 2k19- Project Idea Competition	STES SITS, Narhe,Pune	State	-
4.	Mr. Tejas Satpute	Ethical Hacking- Capture the flag	Udemy	International	-

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		Walkthroughs-v1			
5.	Mr. Tejas Satpute	Android Ethical Hacking Course, C,C++, Python	Udemy	International	3 rd
6.	Mr. Vinay Gupta	Technical Championship MINDSPARK 2019	COEP, PUNE	National	3 rd
7.	Ms. Ishwari Kadav	Technical Championship MINDSPARK 2019	COEP, PUNE	National	3 rd
8.	Ms. Anushka Chaudhari	Technical Championship MINDSPARK 2019	COEP, PUNE	National	3 rd
9.	Mr. Vijay Chaudhari	Technical Championship MINDSPARK 2019	COEP, PUNE	National	4 th
10.	Mr. Tejas Bidwei	Technical Championship MINDSPARK 2019	COEP, PUNE	National	4 th
11.	Mr. Rohan Kulkarni	Technical Championship MINDSPARK 2019	COEP, PUNE	National	4 th
12.	Ms. Rutuja Dengale	JAPANESE LANG. NAT-TEST		International	Q3
13.	Mr. Tushar Gopale	JLPT -N5	JLPT	International	N5
14.	Ms. Rakhi Kawade	JLPT -N5	JLPT	International	N5
15.	Ms. Falguni Aher	JLPT -N5	JLPT	International	N5

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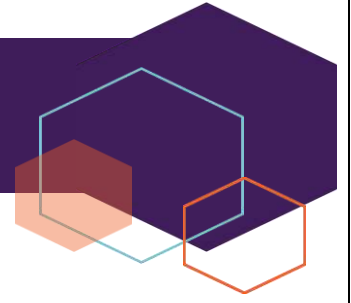
16.	Mr. Sagar Hande	JLPT -N4	JLPT	International	N4
17.	Ms. Snehal Kolhe	JLPT -N5	JLPT	International	N5
18.	Mr. Vinay Gupta	NPTEL Data Structure & Algorithm using Python	NPTEL IIT	National	-
19.	Ms. Ishwari Kadav	NPTEL Data Structure & Algorithm using Python	NPTEL IIT	National	-
20.	Mr. Vijay Chaudhari	NPTEL Data Structure & Algorithm using Python	NPTEL IIT	National	-
21.	Mr. Tejas Bidwei	NPTEL Data Structure & Algorithm using Python	NPTEL IIT	National	-
22.	Ms. Purva Chandge	NPTEL Data Structure & Algorithm using Python	NPTEL IIT	National	Silver Medal
23.	Mr. Vaibhav Takle	Speech Competition	SJVN Ltd	-	--

*******HEARTY CONGRATUALATIONS*******

Without continual growth and progress, such words as improvement, achievement, and success have no meaning. --Benjamin Franklin.

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8. PLACEMENT CELL:-



Following are placements details from B.E. A & B class.

Sr No	Name of Student	Name of Company with Location	Selection for the post	Pay Scale / CTC in LPA
1	Maheshwari Thorat	Tata Consultancy Services	Assistant System Engineer	3.53
2	Vrushali Nehe	Tata Consultancy Services	Assistant System Engineer	3.53
3	Om Khandve	Tata Consultancy Services	Assistant System Engineer	3.53
4	Abhishek Nagare	Tata Consultancy Services	Assistant System Engineer	3.53
5	Aniruddha Kote	Tata Consultancy Services	Assistant System Engineer	3.53
6	Priyanka Dhadage	Tata Consultancy Services	Assistant System Engineer	3.53
7	Sagar Hande	Tata Consultancy Services	Assistant System Engineer	3.53
8	Rushikesh Amale	Tata Consultancy Services	Assistant System Engineer	3.53
9	Manali Bhalgat	Tata Consultancy Services	Assistant System Engineer	3.53
10	Shrutika Madake	Tata Consultancy	Assistant System	3.53

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		Services	Engineer	
11	Tanesh Sharma	Tata Consultancy Services	Assistant System Engineer	3.53
12	Prasad Deshmukh	Tata Consultancy Services	Assistant System Engineer	3.53
13	Tushar Gopale	Tata Consultancy Services	Assistant System Engineer	3.53
14	Yash Agrawal	Selfmade Pvt. Ltd.	Software Engineer	4.0
15	Vaibhav Takale	Selfmade Pvt. Ltd.	Software Engineer	4.0
16	Supriya Pawar	Netwin Solutions	Jr. Software Engineer	3.0
17	Ajay Shewale	L-cube	Business Development Executive- Trainee	3.0
18	Junaid Shaikh	Xoriant	Software Engineer	4.5
19	Rishikesh Kadhane	Cognizant Technology Solutions	Software Engineer	4.0
20	Ajay Kanawade	Cognizant Technology Solutions	Software Engineer	4.0
21	Vrushali Kadam	Cognizant Technology Solutions	Software Engineer	4.0
22	Swati Daware	Cognizant Technology Solutions	Software Engineer	4.0
23	Manasi Mahamuni	Cognizant Technology Solutions	Software Engineer	4.0
24	Hrishikesh Shankhpal	Cognizant Technology Solutions	Software Engineer	4.0

25	Abhiruchi Nawale	Cognizant Technology Solutions	Software Engineer	4.0
26	Bhagyashree Walve	Cognizant Technology Solutions	Software Engineer	4.0
27	Prathmesh Joshi	Cognizant Technology Solutions	Software Engineer	4.0
28	Riddhi Jaju	Cognizant Technology Solutions	Software Engineer	4.0
29	Snehal Tambe	Cognizant Technology Solutions	Software Engineer	4.0
30	Shrushti Wabale	Cognizant Technology Solutions	Software Engineer	4.0
31	Kshitija Pawar	Cognizant Technology Solutions	Software Engineer	4.0
32	Pooja Mandule	Cognizant Technology Solutions	Software Engineer	4.0
33	Mayur Badhe	Cognizant Technology Solutions	Software Engineer	4.0
34	Saurabh Gore	Cognizant Technology Solutions	Software Engineer	4.0
35	Prasad Gagrani	Cognizant Technology Solutions	Software Engineer	4.0
36	Abhishek Patade	Cognizant Technology Solutions	Software Engineer	4.0
37	Ajay Shewale	Cognizant Technology Solutions	Software Engineer	4.0

38	Rushikesh Kote	Cognizant Technology Solutions	Software Engineer	4.0
39	Bhushan Vinchurkar	Tata Consultancy Services	Assistant System Engineer	3.53
40	Shruti Pachore	DreamTech Developers	Software Engineer	1.55
41	Govinda Patil	DreamTech Developers	Software Engineer	1.55
42	Avinash Shinde	DreamTech Developers	Software Engineer	1.55
43	Vrushabh Chaudhari	DreamTech Developers	Software Engineer	1.55
44	Pooja Ugale	DreamTech Developers	Software Engineer	1.55
45	Anjali Shinde	DreamTech Developers	Software Engineer	1.55

****HEARTY CONGRATUALATIONS****

"The secret of my success is that we have gone to exceptional lengths to hire the best people in the world." - Steve Jobs

9. CONFERENCE / PAPER PUBLICATION:-

1. Mr. V.K.Abhang & Mr. A.S.Thorat published paper entitled "Performance Improvement of Parallel Programming Model Based on Parameterized Pipelined Map Reduce Approach" in IEEE on 17th Oct,2019, Electronic ISBN: 978-1-5386-8158-9 & Print on Demand(PoD) ISBN: 978-1-5386-8159-6

url- <https://ieeexplore.ieee.org/document/8869321>

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10. NPTEL COURSE CERTIFICATION:-



1. Prof. K.U.Rahane completed NPTEL course on **“Data Structure & Algorithm Using Python”** With score-74%.
2. Mr. V.K.Abhang completed NPTEL course on **“Introduction to Programming in C”** With score-70%.
3. Ms. J.R. Tambe completed NPTEL course on **“Data Structure & Algorithm Using Python”** With score-82%.
4. Prof. G.D.Puri completed NPTEL course on **“Python for Data Science”** With score- 65%.
5. Prof. M.S.Tamboli completed NPTEL course on **“Python for Data Science”** With score- 75%.
6. Prof. K.U.Rahane completed NPTEL course on **“Python for Data Science”** With score- 69%.
7. Prof. S.R.Pandit completed NPTEL course on **“Python for Data Science”** With score- 62%.
8. Prof. A.N.Nawathe completed NPTEL course on **“Python for Data Science”** With score-59%.
9. Prof. S.B.Bhonde completed NPTEL course on **“Python for Data Science”** With score-65%.
10. Prof. M.A.Wakchaure completed NPTEL course on **“Python for Data Science”** With score-64%.
11. Prof. S.K.Sonkar completed NPTEL course on **“Cloud Computing”** With score-72%.
12. Prof. Pramoda Patro completed NPTEL course on **“Calculus of Several Real Variables”** With score-64%.

“Unless you try to do something beyond what you have already mastered, you will never grow.”— Ronald E. Osborn

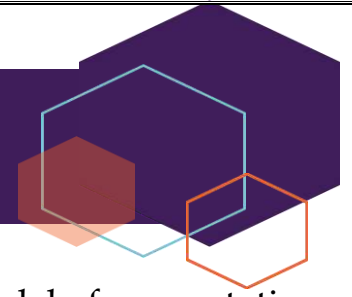
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11. FDP/STTP/WORKSHOP/SEMINARS:-



1. Ms. K.U.Rahane completed One Week FDP on **“Data Structure & Algorithm Using Python”**.
2. Mr. V.K.Abhang completed Two week FDP on **“Introduction to Programming in C”**.
3. Ms. J.R.Tambe completed One Week FDP on **“Data Structure & Algorithm Using Python”**.
4. Ms. K.U.Rahane , Ms. S.B.Bhonde, Mr. P.Patro, Mr. V.K.Abhang attended one day workshop on **“Augmented Reality & Virtual Reality”** on 7th September,2019 at AVCOE, Sangamner.
5. Prof. R.L.Paikrao, Mr. P.Patro, Mr. V.K.Abhang attended Three day workshop on **“Machine Learning & Its Application”** from 27th to 29th September,2019 at AVCOE, Sangamner.
6. Prof. S.K.Sonkar attended AWS Training Program on **“Introduction to Container”** on 9th September 2019.
7. Prof. S.K.Sonkar attended Google Training Program on **“ Google Cloud OnBoard: Big Data & Machine Learning”** on 5th September 2019.
8. Prof. S.K.Sonkar delivered Expert Lecture to B.E. students on **“Parallel Programming through CUDA Technique”** at KVN Naik College of Engineering Nashik on 25th September 2019.
9. All faculty members attended **“Engineers Day”** program by Dr. Om Prakash Kulkarni on 17th Sept, 2019.
10. All faculty members attended **“Teachers Day”** program by Dr. Avinash Pant on 5th Sept, 2019.
11. All faculty members attended **“NBA Orientation Program”** program by Dr. Ashok Ghatol on 18th November, 2019.

12. TECHNO-ZONE:-



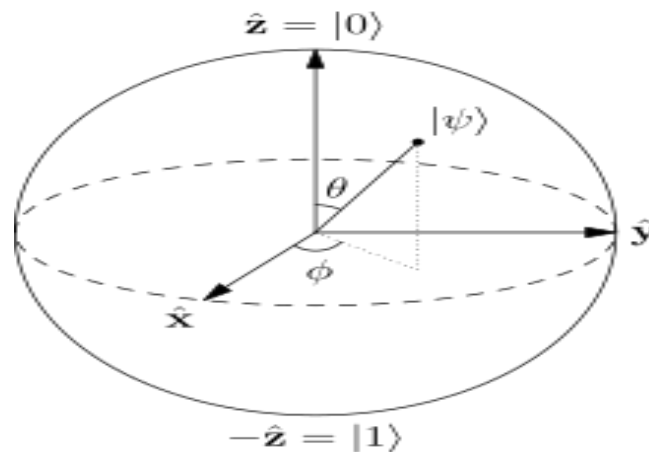
Quantum Computing is the study of a non-classical model of computation. Whereas traditional models of computing such as the Turing machine or Lambda calculus rely on "classical" representations of computational memory, a quantum computation could transform the memory into a quantum superposition of possible classical states. A **quantum computer** is a device that could perform such computation.

Quantum computing began in the early 1980s when physicist Paul Benioff proposed a quantum mechanical model of the Turing machine. Richard Feynman and Yuri Manin later suggested that a quantum computer could perform simulations that are out of reach for regular computers. In 1994, Peter Shor developed a polynomial-time quantum algorithm for factoring integers. This was a major breakthrough in the subject: an important method of asymmetric key exchange known as RSA is based on the belief that factoring integers is computationally difficult. The existence of a polynomial-time quantum algorithm proves that one of the most widely used cryptographic protocols is vulnerable to an adversary who possesses a quantum computer.

Experimental efforts towards building a quantum computer began after a slew of results known as fault-tolerance threshold theorems. These theorems proved that a quantum computation could be efficiently corrected against the effects of large classes of physically realistic noise models. One early result demonstrated parts of Shor's algorithm in a liquid-state nuclear magnetic resonance experiment. Other notable experiments have been performed in superconducting systems, ion-traps, and photonic systems.

Despite rapid and impressive experimental progress, most researchers believe that "fault-tolerant quantum computing [is] still a rather distant dream". On 23 October 2019, Google AI, in partnership with the U.S. National Aeronautics and Space Administration (NASA), officially claimed that its Sycamore quantum processor completed in 200 seconds a task the equivalent of which would take a state-of-the-art supercomputer approximately 10,000 years to complete. In response, one prominent researcher declared that a quantum computing revolution equivalent to the modern digital computer will require "immense engineering, and probably further insights as well." There is an increasing amount of investment in quantum computing by governments, established companies, and start-ups. Current research focuses on building and using near-term intermediate-scale devices and demonstrating quantum

supremacy alongside the long-term goal of building and using a powerful and error-free quantum computer.



The Bloch sphere is a representation of a qubit, the fundamental building block of quantum computers.

Types of quantum computers

Building a functional quantum computer requires holding an object in a superposition state long enough to carry out various processes on them.

Unfortunately, once a superposition meets with materials that are part of a measured system, it loses its in-between state in what's known as DE coherence and becomes a boring old classical bit.

Devices need to be able to shield quantum states from DE coherence, while still making them easy to read. Different processes are tackling this challenge from different angles, whether it's to use more robust quantum processes or to find better ways to check for errors.

13. FORTHCOMING ACTIVITIES:-

ACES Activity: - GD, Debate, Quiz, Extempore, House Cup, Fresher's Party, and Farewell Party.

CSI Activity: - Guest lecture, Workshops

ISTE Student Chapter Activity: - Workshop, Guest Lecture.

cPGCON-2020: - SPPU 9th PG Computer students conference

Happy New Year 2020!!!

Editor: Mr. V.K.Abhang