Describe two best practices successfully implemented by the institution as per NAAC format provided in the manual

The following are the two best practices of the institution that have contributed to the achievement of Institutional Objectives of the college.

Two Best Practices of the institution are:

1. Implementation of innovative methods in teaching & learning process

2. e-Governance

BEST PRACTICE -1

Title of the Practice: <u>Implementation of innovative methods in teaching – learning process</u>

Goal of the Practice:

- ❖ Driving the concepts home through project based learning approach
- ❖ Learning by doing
- ❖ Inculcating cognitive & computational thinking and programming capabilities
- ❖ Design and development of efficient and economical ways of solving real life problems

Context:

The current practice of paper based evaluation system in the middle and end of the semesters is not giving much scope to students to apply their concepts to develop a product or a service that solve a real life problem. There is a growing need for tools both hardware & software which will prompt the students to think innovately and come up with the solutions that are time and cost effective.

Practice:

Students who build circuits in their very first year of engineering using electronics workbenches can design circuits to address practical problems by the time they reach final year.

Programming has become an enigma for many engineering students. Using innovative software tools like programming workbench will motivate them to learn and apply code to solve practical problems.

Also, e-learning through Virtual labs, YouTube videos, lectures and other related sources make learning easy and pleasurable
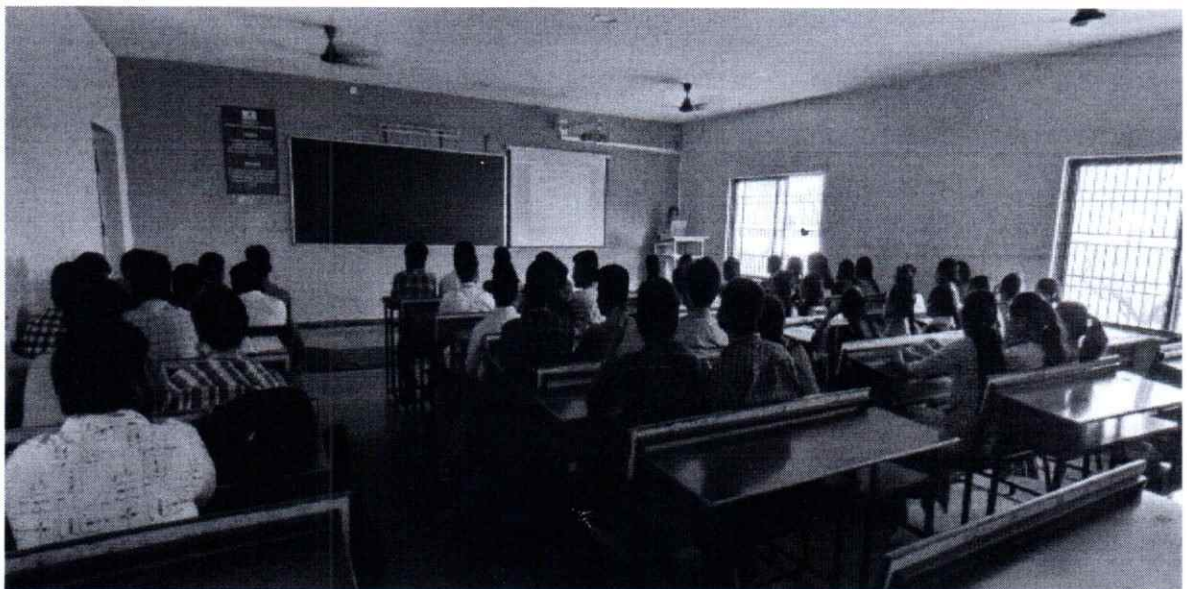
Evidence of success:

More and more students are participating in Coding and IOT design competitions. Students are developing IT & Engineering products for solving existing problems or for new applications.

Problems encountered and Resources required

It takes a lot of time and effort to get acceptance of teachers & students to embrace new technologies.

1. Flipped Class Room:

2. ICT Support Learning

a) Microsoft Teams

b) NPTEL/ Swayam Videos

c) **Virtual labs**

Logism software
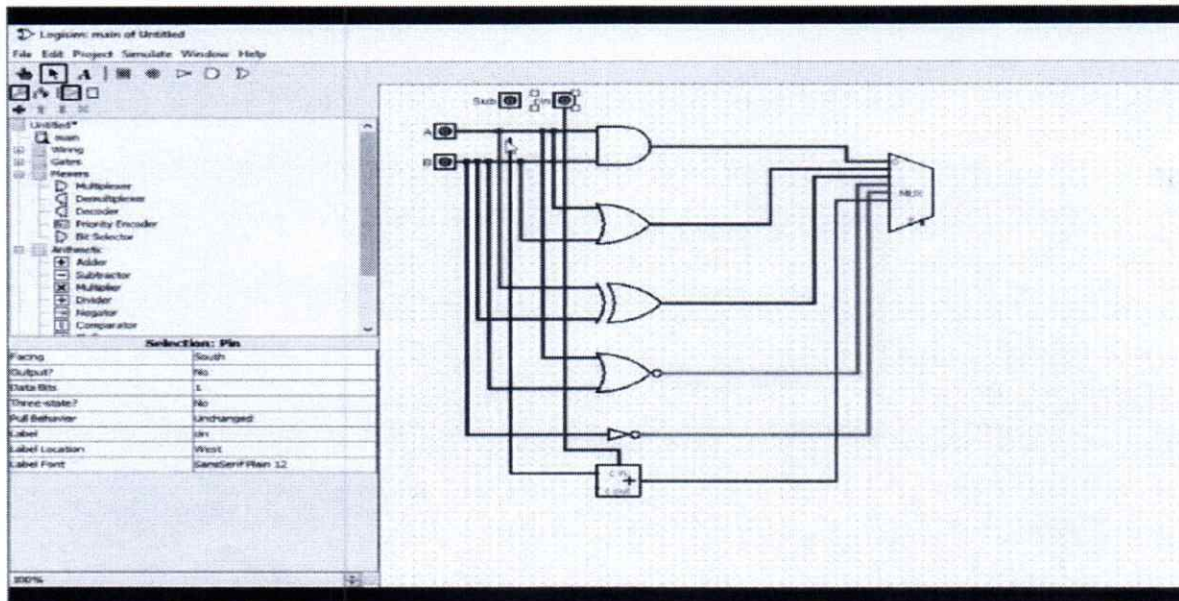
GPCET

Pioneering Innovative Education

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Academic Year: 2020-21

Faculty Using ICT tools

S.No	Class	Topic Delivered using ICT	Subject	Name of the Faculty	ICT tools used
1	III	Basic Maxwell''s equations	Antennas and Wave Propagation	Dr.KCTSwamy	https://www.youtube.com/watch?v=XUR-dnDa7eI
2	III	Antenna Arrays	Antennas and Wave Propagation	Dr.KCTSwamy	https://www.youtube.com/watch?v=mudiXpU_DVQ
3	III	Pulse code modulation	Digital Communication Systems	Mrs.Fowziasulthana	https://www.youtube.com/watch?v=l_SqkcP6hZ4
4	III	Introduction Convolution Codes	Digital Communication Systems	Mrs.Fowziasulthana	https://www.youtube.com/watch?v=AnyVu5eDhAQ
5	III	FET	Digital Signal Processing	T. Suman	https://www.youtube.com/watch?v=r4Pc-rGBRJA
6	III	Discrete Time Signal & system	Digital Signal Processing	T. Suman	https://www.youtube.com/watch?v=8zbBJkw5KsM&list=PL4FA894BD6A9586E1
7	III	Logic Gates	CMOS VLSI Design	Dr. Sandipswarnakar	https://www.youtube.com/watch?v=fT3TC2AU_H8
8	III	Design of Adders	CMOS VLSI Design	Dr. Sandipswarnakar	https://www.youtube.com/watch?v=85XxQZqBNlg https://www.youtube.com/watch?v=YBY0k5mIQy0
9	IV	Photo Detector	Optical Fiber Communication	K.Anil Kumar	https://www.youtube.com/watch?v=1X2Xt7wIcbA
10	IV	Attenuation & Power loss in fibers	Optical Fiber Communication	K.Anil Kumar	https://www.youtube.com/watch?v=FVHzrGRN6i8

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11	IV	Gunn diode, Varactor diode	Microwave Engineering Digital Image Processing	K.Anil Kumar& T.Suman	https://www.youtube.com/results?search_query=Gunn+diode-principles+classes+by+iit+professors
12	IV	Directional Couplers	Microwave Engineering Digital Image Processing	K.Anil Kumar& T.Suman	https://www.youtube.com/watch?v=44mBn7nyMlM
13	IV	Edge Detection	Digital Image Processing	T.Suman	https://www.youtube.com/watch?v=9r8ph2pb9aw
14	IV	Discrete Cosine Transforms	Digital Image Processing	T.Suman	https://www.youtube.com/watch?v=S8FkaEWfCOg
15	IV	Transmission media reflection	RF Integrated Circuits	Mrs.S.Fowziasulthana	https://www.youtube.com/watch?v=q9k9FPh0iJI&list=PLbMVogVj5nJQdGDSx243YPnNeLMBrhNE8&index=2
16	IV	RF system basic architectures	RF Integrated Circuits	Mrs.S.Fowziasulthana	https://www.youtube.com/watch?v=KUDGGsyh1Hs
17	II	Sample space & Events	Probability Theory and Stochastic Processes	Dr. N.Ramamurthy	https://www.youtube.com/watch?v=leVm6xuKdlU
18	II	Random Variables	Probability Theory and Stochastic Processes	Dr. N.Ramamurthy	https://www.youtube.com/watch?v=zujeSyREcQ4
19	II	Zener Diode and applications	Electronic Devices and Circuits	Dr.T.Tirupal	https://www.youtube.com/watch?v=I2nrBITEVls
20	II	BJT biasing-methods	Electronic Devices and Circuits	Dr.T.Tirupal	https://www.youtube.com/watch?v=l6M6FvjUdTI
21	II	Vestigial sideband (VSB) modulator	Analog Communication Systems	Dr.T.Tirupal	https://www.youtube.com/watch?v=KC8kh5FaIc0
22	II	Amplitude modulation	Analog Communication Systems	Dr.T.Tirupal	https://www.youtube.com/watch?v=UznnkHMisIk

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HOD-ECE

(Autonomous)
Approved by AICTE, New Delhi | NAAC Accreditation with 'A' Grade | Accredited by NBA (CSE, EEE & ECE) | Permanently Affiliated to JNTUA
Campus: Nandikotkur Road, Venkayapalli (V), Kurnool-518 452, Andhra Pradesh
Nandikotkur Road, VENKAYAPALLI
KURNOOL-518452 (A.P)
Landline : 08518 285011/88 Fax:08518 285033, Mobile: 9246922858
Email: principal@gpcet.ac.in, Website: www.gpcet.ac.in

BEST PRACTICE -2

Title of the Practice: **e- Governance**

Goal of the Practice:

The goal of the practice is to provide effective and easy way to automate the functionalities of the Institute and to provide information about the students and staff to the stake holders by way of Digital Campus and college website. Digital campus software which is being used by our institute provides various types of educational related services like maintaining attendance and internal marks, work load of staff members, leave history, mentoring data etc, thereby reducing human error and paper work. The college website **www.gpcet.ac.in** provides information about the various departments of the institution, vision, mission, placement details, facilities provided etc.

Context:

Our institute has a total annual intake of 816 UG students in 7 UG and 4 PG programs. To maintain the records of all these students manually is a huge task and there are chances of committing errors. Hence Digital Campus software is being used by our Institute to store information about various types of educational related services like maintaining attendance and internal marks, work load of staff members, leave history, mentoring data etc, thereby reducing human error and paper work.

Practice:

Digital campus software is loaded with main features like Admissions and Academics, correspondence, library, administration etc., by which the details of attendance and internal marks, work load of staff members, leave history, backlogs of students, mentoring data etc., which can be accessed when necessary by both the staff as well as student using their Login Id and passwords. To access to the software can be done through the following link: https://digitalcampus.msmfclasses.com:90

Evidence of Success

- ❖ The information regarding any student or staff can be accessed in minimum amount of time.
- ❖ The analysis of marks and attendance can also be done easily.
- ❖ As the log-in access is also given to the parents, the parents are being able to access the information about attendance, marks etc., of their wards in minimum amount of time.
- ❖ Effective management of resources.
- ❖ Interaction between the faculty and students has also increased
- ❖ The information is stored centrally and no redundant data is stored

Problems encountered and Resources required

- ❖ There will be problem in accessing the data when the network is down.
- ❖ There is a chance of files getting corrupted.

A separate high configuration server is to be allotted for this software.

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E-Governance Screen Shots Login Sheets:

G.Pullaiah College of Engineering and Technology has ERP software which covers following areas of operation.

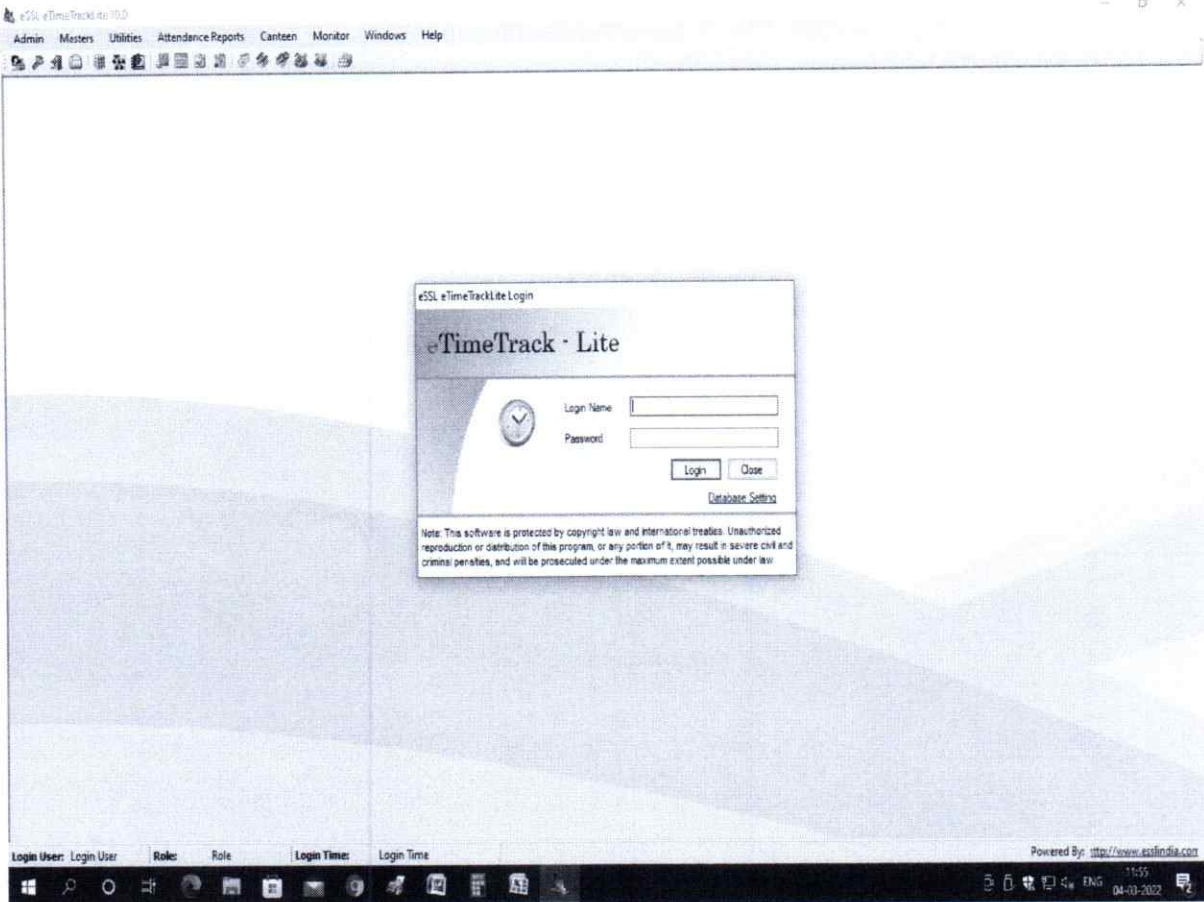The screenshots of e-governance software are as follows:

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

INDEX

S.no	E-Governance areas	Screenshot Description
1	Administration	ERP home page
		ERP login page
		ERP modules
2	Finance and Accounts	ERP home page(Tally)
		ERP login page(Tally)
3	Student Admission and support	ERP login page(Digital campus)
		ERP modules(Digital campus)
		ERP home page(gpcet.ac.in)
		ERP Modules(gpcet.ac.in)
4	Examination	ERP Login Page
		ERP GPCET Portal

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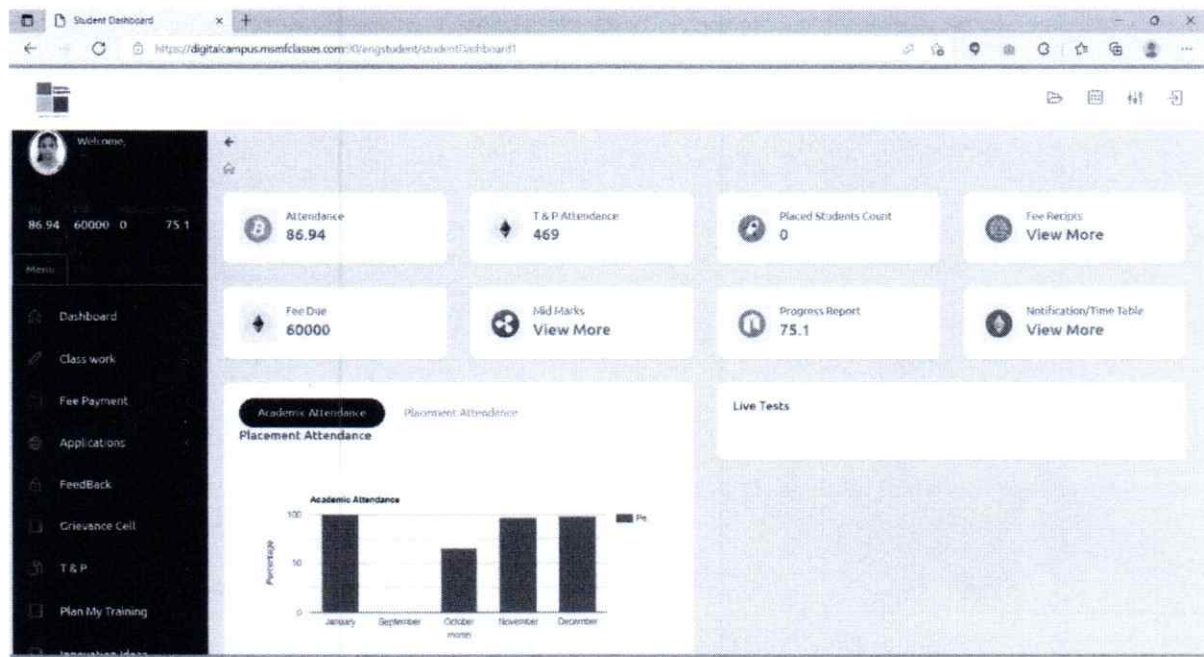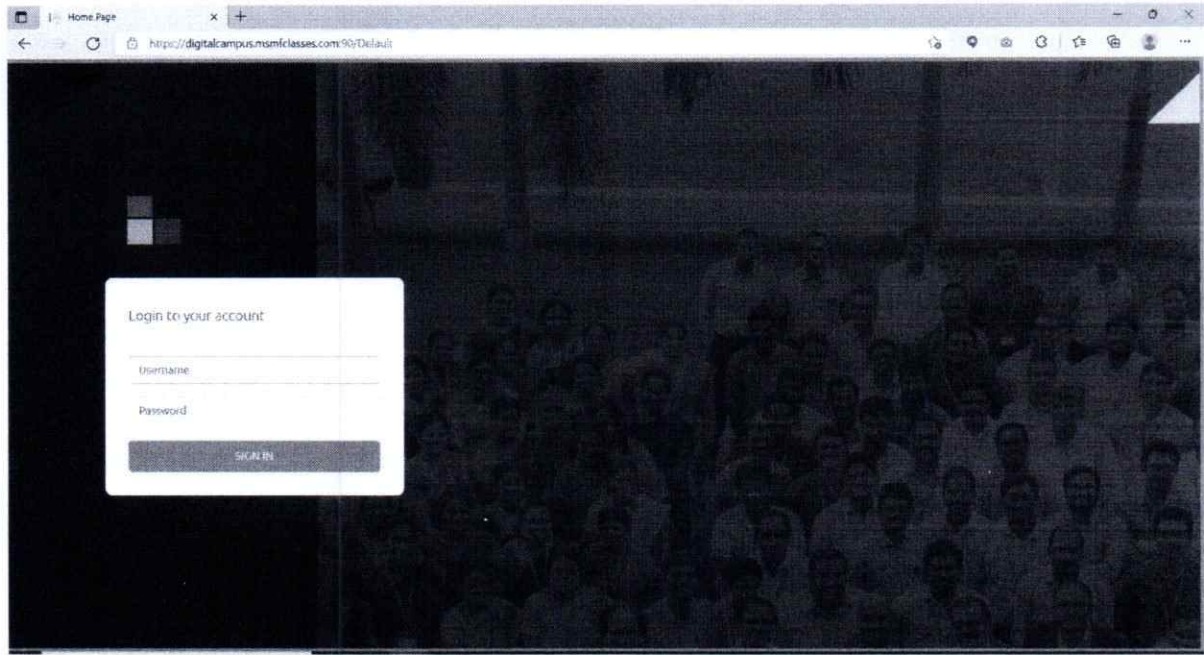
Concept (Bio Metric)

Concept-Home page & Login page
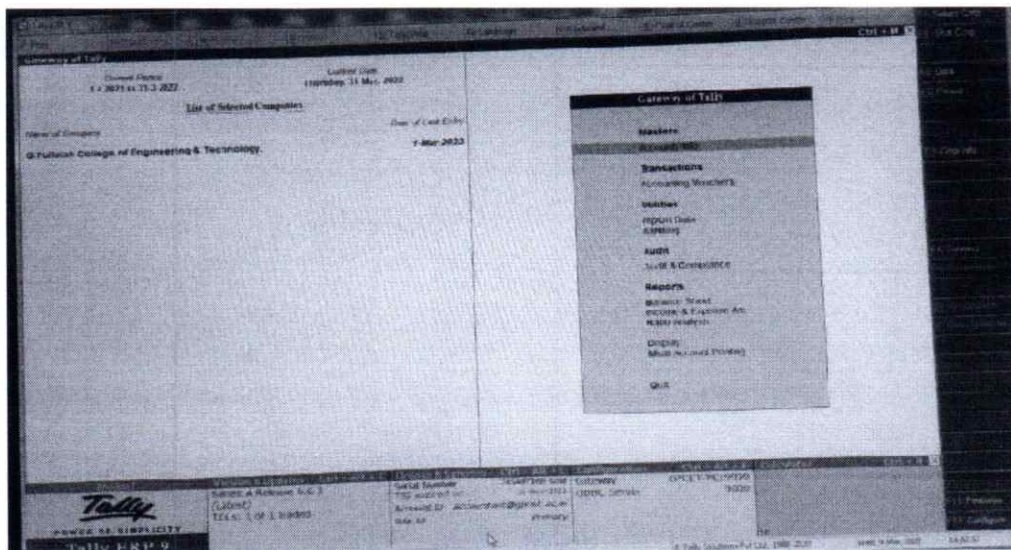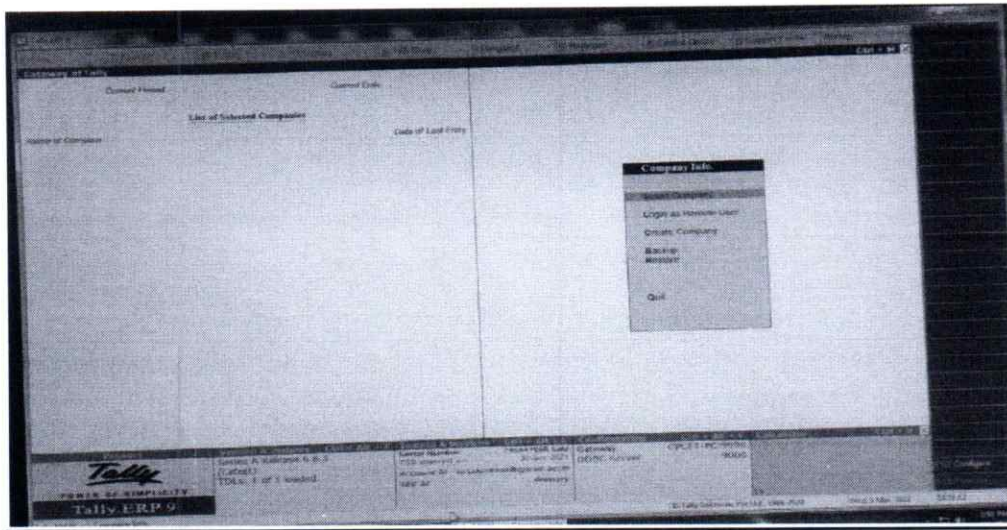
Tally software

Tally-Homepage

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GPCET software

Digital campus-HOME PAGE

Digital campus-MODULES

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SMART CAMPUS

GPCET- Home Page

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GPCET-Modules

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EXAMINATION

- Processing and announcement of results.
- Issuing certificates such as Grade Sheet, Consolidated Statements of Grade, Provisional Certificate and Transcripts.

Controller of Examinations

Dr. S. Venkateswarulu
Professor of Humanities and Sciences
Phone No: 9848070532
E-Mail id: coe@gpcet.ac.in

Additional Controller of Examinations – I

Dr. B. Venkata Rami Reddy
Professor in Electrical and Electronics Engineering
Phone No: 9441150088
E-Mail id: bvramireddyeee@gpcet.ac.in

Additional Controller of Examinations – II

Mr. P. Suman Prakash
Assoc Professor in Computer Science and Engineering
Phone No: 9493869760
E-Mail id: sumancse@gpcet.ac.in

Additional Controller of Examinations – III

Mr. T. Suman
Asst Professor in Electronics and Communication Engineering
Phone No: 9703204904
E-Mail id: ac1@gpcet.ac.in

Academic calendar

B.Tech Program

- Academic Calendar for IV B.Tech I Sem – 2021-22
- Academic Calendar for III B.Tech I Sem – 2021-22
- Academic Calendar for II B.Tech I Sem – 2021-22
- Academic Calendar for I B.Tech I Sem – 2021-22

M.Tech Program

- Academic Calendar for I M.Tech II Sem – 2020-21
- Academic Calendar for I M.Tech I Sem – 2021-22

MBA Program

- Academic Calendar for I MBA II Sem – 2020-21
- Academic Calendar for I MBA I Sem – 2021-22

Home page

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Faculty information portal
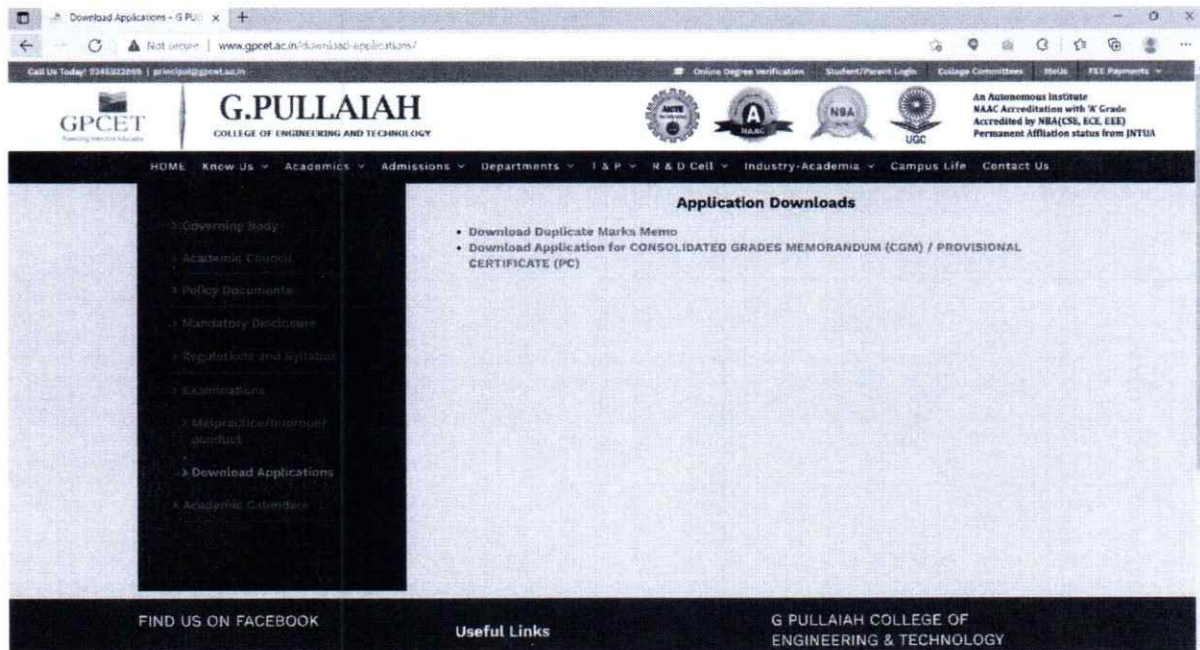
Students portal

No.: **Receipt No./63036/2020-21**

Dated **19-Jan-2021**

DELNET - Developing Library Network
Jawaharlal Nehru University Campus
Nelson Mandela Road, Vasant Kunj
New Delhi-110070
State Name : Delhi, Code : 07

Receipt

Received with thanks from :   **G. PULLAIAH COLLEGE OF ENGG. & TECH.**
NANDIKOTKUR ROAD
KURNOOL-518452
[DELNET MEM NO. IM-6533]

The sum of :   **Indian Rupees Thirteen Thousand Five Hundred Seventy Only**

By :   G. PULLAIAH COLLEGE OF ENGG. & TECH.; Union Bank of India (India)
Inter Bank Transfer   00019959604   19-Jan-2021   **13,570.00**

Remarks :   **AMOUNT RECEIVED TOWARDS ANNUAL INSTITUTIONAL MEMBERSHIP FEES**
FOR THE PERIOD 20.01.2021 TO 19.01.2022

PRINCIPAL
G.Pullaiah College of Engg & Tech.
Nandikotkur Road, VENKAYAPALLI
KURNOOL-518 452 (A.P)

Auth: ory

**₹ 13,570.00/-

Dr. Sangeeta Kaul
Network Manager

Director

DELNET/IM-6533/apGPCET/MEM/2021   January 19, 2021

Sub: DELNET Membership Renewal

Dear Mr. Saravana,

We acknowledge with thanks the receipt of ₹ 13,570 (₹ Thirteen Thousand Five Hundred Seventy only) received through NEFT dated 19.1.2021 made towards the DELNET Annual Institutional Membership Fee for the period 20.1.2021 to 19.1.2022. The receipt no. 63036 dated 19.1.2021 is enclosed for the office records.

You are requested to access DELNET databases through the World Wide Web using the following procedure:

Web Address: **http://www.delnet.in**

Click onto "New Discovery Portal". Since the IP address provided by you is registered with us, you should be able to open the landing page without login prompt. Please let us know if you encounter any difficulty.

We are also glad to provide the following login & password for accessing DELNET remote:

         Login   **: apgpcet**
         Password   **: gpc6533**

Kindly note your Inter Library Loan (ILL for Books) Password is **"apgpcetlib"** to be used while registering a request. You are also welcome to send us the bibliographical references at sangs@delnet.ren.nic.in, sangskaul2003@yahoo.co.in for the resources needed by you. We will try our best to locate these resources. *Also, a complete user manual on how to access DELNET online databases is available at the Discovery Portal.*

I would like to mention that DELNET provides access to more than three crore catalogue records of books, journals, articles, etc. through Discovery Portal and also more than one crore and fifty lakh full-text e-books, e-journals & e-articles through *Knowledge Gainer Portal*. DELNET also provides Delplus software free of charge for library automation purpose. DELNET Guest House facility at New Delhi can also be availed by member-libraries on payment basis.

I would also like to inform you that DELNET shall be glad to organise a one hour webinar on DELNET Networked Resources and Services at a mutually convenient date and time for the students, faculty, researchers and scholars of "G. Pullaiah College of Engineering & Technology, Kurnool Distt, Andhra Pradesh". It will help in the effective utilisation of DELNET resources and services.

I am enclosing a poster on DELNET and a Certificate of Membership. Please kindly let us know if you wish to get any books on ILL or the journal articles.

With kind regards,

Yours sincerely,

Sangeeta Kaul

Mr. R. Saravana
Librarian
G. Pullaiah College of Engineering & Technology
Nandikotkur Road
Kurnool Distt.-518452
Andhra Pradesh

Encl: (1) Receipt no. 63036 dated 19.1.2021 of ₹ 13,570
       (2) Tax Invoice
       (3) DELNET Poster
       (4) Certificate of Membership

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR

ANANTHAPURAMU -515002, ANDHRA PRADESH, INDIA

ACKNOWLEDGEMENT

RECEIPT OF PAYMENT TOWARDS JNTUA CONSORTIA FOR E-RESOURCES

This is to acknowledge the receipt of payment **Rs. 14,750/-** (Rupees Fourteen Thousand Seven Hundred and Fifty Only) from **G.Pullaiah College of Engineering & Technology (Autonomous), Pasupala (V), Nandikotkur Road, Kurnool Dist-518 452.** on date **11-01-2021** towards JNTUA Consortia for e-Resources for subscribing to the J-GATE Engineering & Technology with resource sharing facility for the year 2021.

Signature of the Registrar with Seal

REGISTRAR
J.N.T.U. Anantapur
ANANTAPURAMU-515002

2 7 FEB 2021

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GPCET
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Access to J-Gate for G.Pullaiah College of Engineering and Technology(Autonomous)

1 message

support@jgateplus.com <support@jgateplus.com>
To: library@gpcet.ac.in, nsm@informaticsglobal.com, dirap@jntua.ac.in, shylaja@informaticsglobal.com

Tue, Feb 2, 2021 at 5:00 PM

Hello B Durga prasad .,

Your access to **J-Gate** Discovery Platform is renewed.

Access Period : 1/2/2021 to 31/1/2022

Access Type : Subscription

Package Subscribed : Engineering & Technology

Access Credentials	Users	Library Admin
URL:	https://jgateplus.com/	https://jgateplus.com/admin
Username:	gpceuser	gpceadmin
Password:	gpceuser848814915	gpceadmin264033930

Please do not circulate LIBRARY ADMIN Access Credentials among end users.

IP Based Access :

103.206.112.48

Important Note:

We understand that reasonably a lot of investment goes in to subscription of your library resources, therefore visibility and usage is a prime concern for the library. J-Gate helps to increase the **usage and visibility of your library subscribed journal resources** among your students, faculties and researchers.

1. Register All Your Static IPs in J-Gate for easy and authenticated access by users of your institution.

2. Integrate "Journal Discovery Search Box" in Your Library Website for visibility and easy accessibility of library subscribed resources. Refer the document "Search Box Guide" with Steps to integrate in your website.

3. Send all your Library Subscribed Journals/Book Series/Conference Proceeding Holding details to configure single platform discovery through J-Gate. Fill the attached Excel File "Library Holdings" and email to jcoordinator@informaticsglobal.com

Please find attached a draft email for communicating J-Gate access to users on behalf of your library.

Email Address for Any Queries related to J-Gate: jcoordinator@informaticsglobal.com

We look forward to your earnest help and efforts towards **increasing the usage and visibility of your library subscribed resources.**

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY ANANTAPUR

ANANTHAPURAMU -515002, ANDHRA PRADESH, INDIA

ACKNOWLEDGEMENT

RECEIPT OF PAYMENT TOWARDS JNTUA CONSORTIA OF E-RESOURCES

This is to acknowledge the receipt of payment Rs. 98,002/- (Rupees Ninety Eight Thousand and Two Only) from G. Pullaiah College of Engineering and Technology(AT) (Autonomous), Nandikotkur Road, Kurnool Dist. – 518 452 on date 03-02-2020 towards JNTUA Consortia of e-Resources for subscribing to the following resources for the year 2020.

1. Taylor & Francis (555 e-journals)
2. J-GATE Engineering & Technology with resource sharing facility

Signature of the Registrar with Seal

REGISTRAR

Dated: J N T U. Anantapur

APURAMU-515002

0 7 MAR 2020

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KURNOOL-518 452 (A.P)