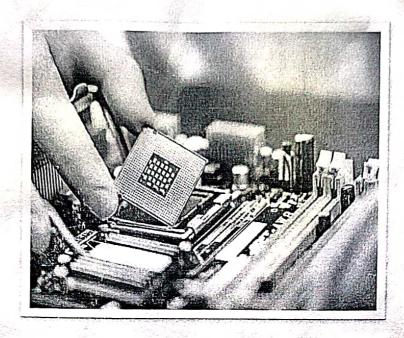
#### **PROSPECTUS**



#### GOVERNMENT DEGREE COLLEGE- RAVULAPALEM



CERTIFICATE COURSE

in

**COMPUTER HARDWARE** 

2022-23

**Department of Computer Science & Applications** 

#### Department of Computer Science & Applications, Department of IoT

Faculty Name	Designation			
Smt.U.Subhashini	HoD, Computer Applications			
Smt.V.Sailaja	HoD, Computer Science			
Sri.K.S.N Prasad	Lecturer			
Smt. K.Sridevi	Lecturer			



#### About the college

Government Degree College, Ravulapalem, Located on the serene right bank of holy river Godavari in Dr.B.R.Ambedkar Konaseema District of Andhra Pradesh, Government Degree College, Ravulapalem has embarked upon imparting quality higher education to the students of both Godavari Districts of Andhra Pradesh Since inception in 1981, the institution has been enjoying the confidence and laurel of parent community and other stake holders for its innovative practices in devising and deploying pedagogy and infrastructure in making students globally competitive.

The college has rendered yeomen service to the student community by offering undergraduate programs since its establishment. The institution at present offers eight undergraduate programs through 13 departments. The institution emerged as a platform for breeding quality human resources with social responsibility and ethical values also.

The modern and well-equipped student support facilities especially, Jawahar knowledge centre and e-enabled library, etc. are serving as launch pads for equipping the student with the necessary skills that enable them to scale new heights in their education and job careers. Being a NAAC-accredited institution at grade B, it boosts committed and academically in-genius faculty with research purists. The institution fortifies teaching-learning activity with state-of-the-art latest ICT infrastructure. Recognized both under 2(f) and 12(B) sections of UGC Act 1956, the college is forging ahead with innovative programs for turning out quality future citizens.

#### Our Vision:

To develop the college into a multi-faceted educational institution that provides equitable and empowering quality education to the students in general and to those from the underprivileged sections of the society for shaping them into intellectually competent and skilled, self-reliant, morally upright and socially committed citizens.

#### Our Mission:

To train all students through qualitative learning experiences for developing intellectual and practical capabilities, self-discipline, self-confidence, self-reliance, compassion through a well-designed curriculum that includes domain, general, global, extension and healthy practices.

#### Objectives:

- Serving the needs of rural students
- To enable the poor and downtrodden/under privileged sections of the society and access to gainful employment opportunities by imparting skill oriented education.
- > To achieve the academic excellence
- To inculcate human values and social responsibilities

#### About the Department:

The Department of Computer Science and Applications was found in 1998. A new course with Mathematics, Electronics, Internet of Things(M.E.IoT) has been introduced in the year 2020. The department is mainly concerned with development and applications of software (Desktop applications and web applications and IoT applications), with brief knowledge of hardware. Students learn fundamental concepts of computer hardware and software and become familiar with a variety of computer applications including word-processing, spreadsheets, databases, programming languages (C, JAVA etc.) and multimedia presentations.

The Department of Computer Science and Applications is a well-established and highly recognized department in terms of academics and student strength in its graduate and undergraduate programmes. The department regularly updates its curriculum in accordance with UGC guidelines as well as latest advancements in the relevant fields. Majority of the teachers are keenly and productively involved in research and pedagogical advancement. The department not only focuses on nurturing both curricular and extracurricular talent/ skills of students but also makes an endeavor to play a vital role in the applications of computers by promoting innovative work.

#### Vision:

- Impart quality and need based education for vertical mobility of the students for higher education and to produce graduates who possess the skills and problemsolving tools.
- To enable every student to cope up with the latest developments through effective transaction of the curricular and co-curricular aspects.

#### Mission:

- To impart subject knowledge through higher order learning
- To adopt innovative pedagogical strategies using ICT in teaching-learning process.

o To develop academic activity which is suitable for higher studies, employment and inculcate entrepreneurial skills.

#### Courses offered

Course	Specialization	Intake	Medium	
B.Sc	Computer Science	30	English	
B.Com	Computer Applications	40	English	
B.Sc	IoT	30	English	

#### **Faculty Profile:**

Name of the Faculty	Qualifications	Position
U.Subhashini	M.Sc(CS).,M.Tech(CSE).,APSET.,	Lecturer in Computer Applications
V.Sailaja	M.C.A.,M.Tech(CST).,APSET,N.E.T.,	Lecturer in Computer Science
K.S.N.Prasad	M.C.A	Lecturer in Computer Applications
K.Sridevi	M.Sc(Comp.Sc)	Lecturer in Computer Science

#### About the Certificate Course

During the duration of the Computer Hardware course, a candidate is trained in professional skills, professional knowledge &Employability skill. In addition to this, a candidate is entrusted to undertake project work and extracurricular activities to build up confidence. The broad components covered under this subject are as below: They learn about the basics of electrical and electronic components related to hardware. They will learn to assemble and repair desktop PC with all their internal components. Trainees will be able to install different types of operating systems and all other application software, customization of OS, update device drivers, setting firewall security, do junk file removal, data backup, and data recovery techniques.

This program opens various avenues for students. After the completion of the program, as a fresher you can begin your career as:

- Can become self employed by putting up a small scale business of PC repairs
- Can opt for advanced courses in networking with this basic understanding
- Can do certification courses like CCNA
- Hardware Engineer

Professionals in this career can also opt for teaching jobs in various hardware institutions. Graduate professionals can work as freelancers in this field. These graduates can work as a lab technician in educational institutions. There are lots of job opportunities available in India as well as in foreign countries for Hardware & Networking professionals.

#### **OBJECTIVES OF THE COURSE:**

Upon completing this course, the learner will be able to meet these overall objectives:

- Set up and configure a new computer.
- Given a scenario, select the appropriate components for a custom PC configuration to meet customer specifications or needs.
- Install or upgrade the operating system.
- Install, configure, and manage common peripheral devices and multifunction devices/printers.
- Troubleshoot common problems related to internal components such as motherboards, RAM, CPU, and power with appropriate tools.
- Troubleshoot common computer problems that can be resolved without replacing internal components.

#### **LEARNING OUTCOMES:**

- Identify the hardware components of a computer.
- Lists the hardware components such as processor, memory, disk, main board, etc.
- Explains the features (speed, capacity, etc.) of the hardware components of a computer.
- Explains the relationships between the components of a computer and how data are transferred among the components.
- Identify the peripheral devices outside computer.
- Uses computer using input devices, such as keyboard and mouse.
- Transfers data outside the computer using output devices, such as screen and printer.
- Saves files to removable devices and loads files from removable devices.
- Connects to the Internet using network cards.
- Identify the software's running on a computer.
- Identifies BIOS and changes settings in BIOS.
- Lists jobs of operating system.
- Uses the Windows operating systems.
- Tests the performance of hardware components on some specific programs.

#### **SYLLABUS**

**Unit-I: Fundamentals of Computers** 

Introduction to computers, characteristics and limitations of computer, Block diagram of Computer, Input and output devices: Keyboard and mouse, inputting data in other ways, Types of Software: system software, Application software, Memories: primary, secondary and cache memory.

#### Unit-II: Hardware Components of a computer

Components of a computer: Motherboard components, RAM slots, Processor Sockets, SATA Connectors, Specification and internal parts of Hard disk. Internal parts of DVD R/W. Switch Mode Power Supply (SMPS). Voltages and current ratings, types of display (CRT, LCD, OLED) and specifications. VGA, DV, HDMI ports.

**Unit-III Assembly & Testing** 

Assembly and Testing: Front panel connections, Audio drivers and chipsets. Assembling a PC, Installing Operating system.

Unit-IV: troubleshooting & Software Installation

Troubleshooting of various hardware problems like SMPS failure, Display not there, missing OS or re-installation of user software or system software. CDROM, DVD lens cleaning or replacement, CMOS setup.

Driver software Downloading and installation, Antivirus Software installation, scanning for viruses, removing .tmp files from WINDOWS machine

#### DETAILED PEDAGOGICAL PLAN

Day	Period	Time	Topic	Methodology	
1	1	9:00 -10:00	Characteristics and limitations of computer	Lecture	
	2 5:00 - 6:00		Block diagram of Computer	Lecture	
2	3	9:00 -10:00	Input devices: Keyboard and mouse, other devices	Lecture	
	4	5:00 - 6:00	Types of scanners	Lecture	
3	5	9:00 -10:00	Output Devices: Monitor and its types	Lecture	
	6	5:00 - 6:00	Types of printers	Lockers	
4	7	9:00 -10:00	Other Output devices	Lecture	
4	8	5:00 - 6:00	Types of Software: system software	Lecture-Demo	
5	9	9:00 -10:00	Types of OS  Types of OS	Lecture-Demo	
3	10	5:00 - 6:00	Functions of OS	Lecture-Demo	
EAR	11	9:00 -10:00	Application software	Lecture-Demo	
6	12	5:00 - 6:00	Memories: primary Memory	Lecture-Demo	
7	13	9:00 -10:00	secondary memory	Lecture-Demo	
7	14	5:00 - 6:00		Lecture-Demo	
	15	9:00 -10:00	cache memory	Lecture-Demo	
8	16	5:00 - 6:00	Motherboard components, RAM slots	Lecture-Demo	
	10	3.00 - 0.00	Processor Sockets, SATA Connectors	Lecture-Demo	
9		9:00 -10:00	Specification and internal parts of Hard disk	Lecture-Demo	
	18 5:00 - 6:00 Internal parts of DVD R/W		Internal parts of DVD R/W	Lecture-Demo	
10	19	9:00 -10:00	Switch Mode Power Supply (SMPS). Voltages and current ratings	Lecture-Demo	
	20	5:00 - 6:00	types of display (CRT, LCD, OLED) and specifications	Lecture-Demo	
11	21	9:00 -10:00	VGA, DV, HDMI ports.	Lecture-Demo	
5.	22	5:00 - 6:00	Front panel connections	Lecture-Demo	
12	23	9:00 -10:00	Audio drivers and chipsets	Lecture-Demo	
12  -	24	5:00 - 6:00	Assembling a PC		
10	25	9:00 -10:00	Installing Operating system	Lecture-Demo	
13	26	5:00 - 6:00	Installing Operating system	Lecture-Demo	
	27	9:00 -10:00	Troubleshooting of various hardware problems like SMPS failure	Lecture-Demo Lecture-Demo	
14 —	28	5:00 - 6:00	missing OS or re-installation of user software or system software	Lecture-Demo	
E	29	9:00 -10:00	CDROM	Lecture-Demo	
5		5:00 - 6:00	DVD lens cleaning or replacement		
		9:00 -10:00	CMOS setup	Lecture-Demo	
6		5:00 - 6:00	Driver software Downloading	Lecture-Demo	
7 —		9:00 -10:00	Driver software installation	Lecture-Demo	
	-,		Antivirus Software installation	Lecture-Demo	

18	35	9:00 -10:00	Types of Virus	Lecture-Demo	
10	36	5:00 - 6:00	scanning for viruses	Lecture-Demo	
19	37	9:00 -10:00	removing .tmp files from WINDOWS machine	Lecture-Demo	
38		5:00 – 6:00 Identify and handling of Internal components in the PC		Practical	
	39	9:00 -10:00	Assembly of PC using various parts	Practical	
20	40	5:00 - 6:00	Installation of Operating System like Windows7, Windows8, Windows 2008	Practical	
21	41	9:00 -10:00	Troubleshooting of various hardware problems like SMPS failure	Practical	
21 42 5:00 - 6:00		5:00 - 6:00	missing OS or re-installation of user software or system software	Practical	
22	43	9:00 -10:00	CMOS setup	Practical	
22	44	5:00 - 6:00	Driver software Downloading	Practical	
00	45	9:00 -10:00	Driver software installation	Practical	
23 46		5:00 - 6:00	Antivirus Software installation	Practical	
	47	9:00 -10:00	scanning for viruses	Practical	
24	48 5:00 - 6:00 removing .tmp files from WINDOWS		removing .tmp files from WINDOWS machine	Practical	
OF.	49	9:00 -10:00	Mock Practical test	Practical test	
25	50	5:00 - 6:00	Mock Practical test	Practical test	
06	51	9:00 -10:00	Model-Test	Class Test	
26	52	5:00 - 6:00	Model-Test	Class Test	
057	53	9:00 -10:00	Model-Test	Class Test	
27	54	5:00 - 6:00	Model-Test	Class Test	
00	55	9:00 -10:00	Model-Test	Class Test	
28	56	5:00 - 6:00	Model-Test	Class Test	
29	57	9:00 -10:00	Model-Test	Class Test	
29	58	5:00 - 6:00	Model-Test	Class Test	
30	59	9:00 -10:00	Evaluation	Final Exam	
30	60	5:00 - 6:00	Certificate Presentation	N V Perga	

#### **Evaluation:**

Written Examination for 30 Marks(MCQ Model)

Practical Examination for 30 Marks (Assembling & disassembling of a PC)

#### **Model Question Paper**

Each Question carries 2 marks.

Total Questions: 15 Time: 30mins Total marks: 30

#### SAMPLE QUESTIONS

- 1. Which of the following is designed to control the operations of the computer
  - 1) User
  - 2) System software
  - 3) Application software
  - 4) Utility software
- 2. Which of the following is responsible for converting data received from the user into a computer understandable format?
  - 1) Output unit
  - 2) Input unit
  - 3) Memory unit
  - 4) Arithmetic unit
- 3. Which of the monitor looks like television and are normally used with non portable computer system
  - 1) LED
  - 2) LCD
  - 3) CRT
  - 4) Front panel monitors
- 4. Which of the following device provides the communication between a computer and the outer world
  - 1) Compact
  - 2) Input/output
  - 3) Drivers
  - 4) Storage
- 5. What is the mean of the booting in the operating system
  - 1) Restarting the computer
  - 2) Install the program
  - 3) To start
  - 4) To turn off

#### MODEL CERTIFICATE



GOVERNMENT DEGREE COLLEGE, RAVULAPALEM

NAAC Accredited with 'B' Grade(2.81 CGPA)

( Affiliated to Adikavi Nannayai University )

Beside NH-16, Main Road, Ravulapalem-533235, Dr.B.R.Ambedkar Dist., A.P., INDIA

E-Mail : [kc/yec.ravulapalem@gmail.com, Phone : 08855-257061

ISO 50001i2011, ISO 14001i2015, ISO 9001:2015 Certified College



#### Certificate of Completion



This is to Certify that

#### KSN PRASAD

of I B. Com (C.A.), Government Degree College, Ravulapalem has successfully completed the two months certificate course on "Computer Hardware" conducted by Department of Computer Science & Applications, GDC Ravulapalem from 4-Jan-23 to 5-Mar-23.

Smt.V. Sailaja HOD, Dept of CS

Sml.U. Subhashini HOD, Dept of CA

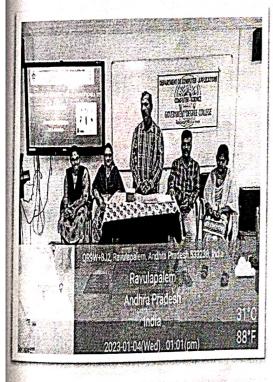
Dr.K. Jyothi

#### List of Students Enrolled:

S.No	Name of the Student	Class & Group		
1	N. V. K. SRINIVAS	I B. COM (General)		
2	V. LAKSHMANA SWAMY	IB. COM(C.A)		
3	K. D. V. PRAVEEN	I B. COM(C.A)		
4	A. CHANDEESH RAJU	I B. COM(C.A)		
5	D. D. SUBRAHMANYAM	I B. COM(C.A)		
6	V. SATYA ANJANEYULU	I B. COM(C.A)		
7	K. NAGA RAJU	IB. COM(C.A)		
8	D. ISSAC	I B. COM (General)		
9	M. SOWMYA	1 B. COM(C.A)		
10	K. ANUSHA	I B. COM(C.A)		
11	A. SRIVALLI	I B. COM(C.A)		
12	V. JYOTHI	I B. COM (General)		
13	T. SAI LAKSHMI	I B. COM(C.A)		
14	V. SWEETY	IB. COM(C.A)		
15	M. PHANI SATYA SRI	I. B. Sc(MPCs)		
16	K. TEJA SRI	I. B. Sc(MPCs)		
17	D. LAKSHMI	I. B. Sc(MPCs)		
18	P. LAKSHMI NARASIMHA	I B. COM (General)		
19	A. SATISH	I B. COM(C.A)		
20	SK.THANEESHA	I B. COM (General)		
21	T.GUNA SHAKER	I B. COM (General)		

CERTIFICATE COURSE INAUGARATION BY SRI.Bh.S.S.V.N.MURTHYgaru, VICE PRINCIPAL

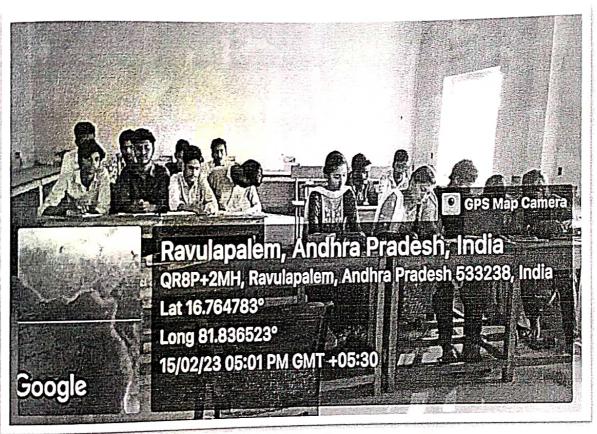


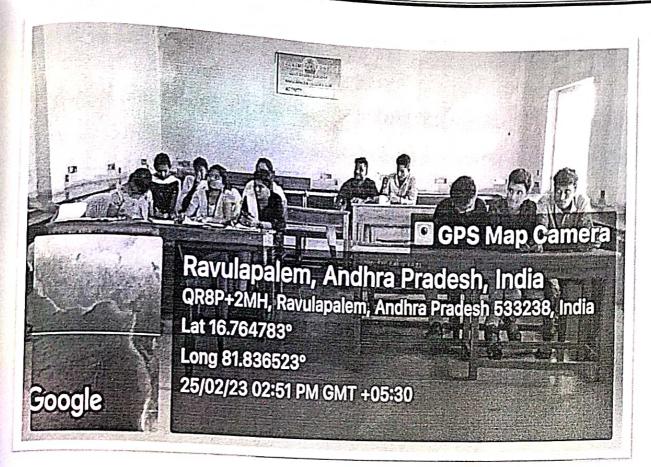


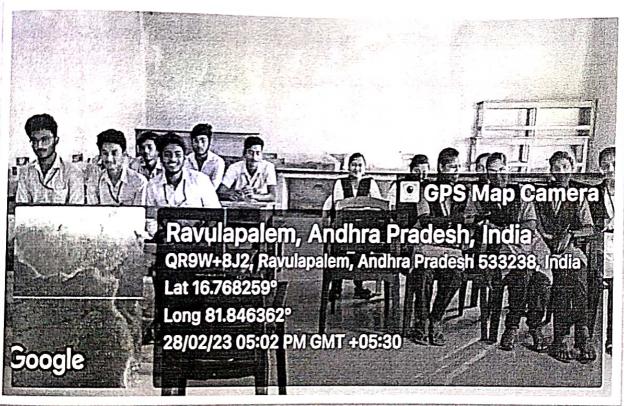


THEORY CLASSES

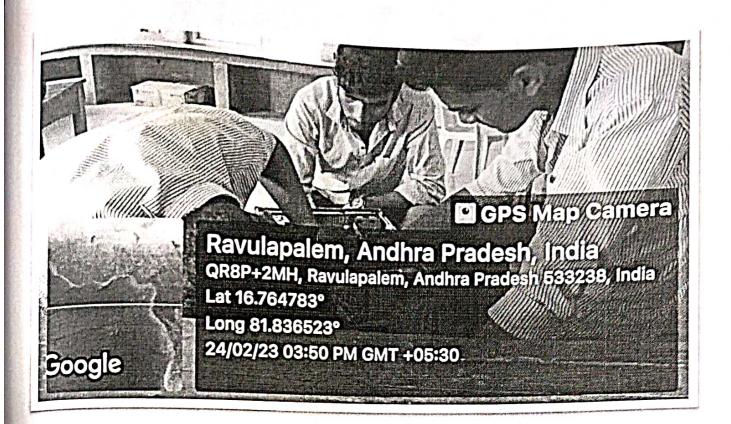


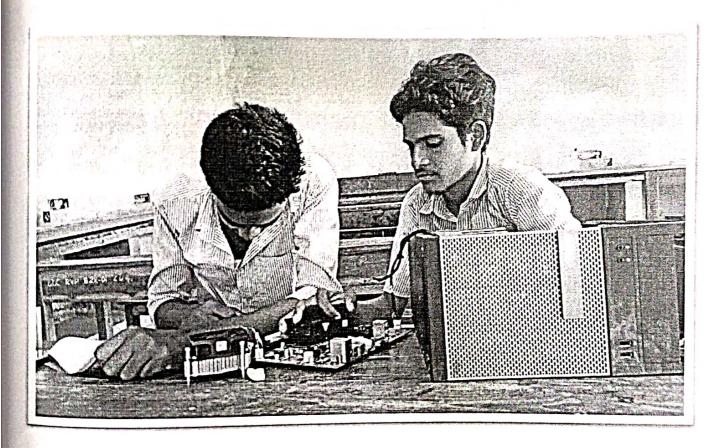




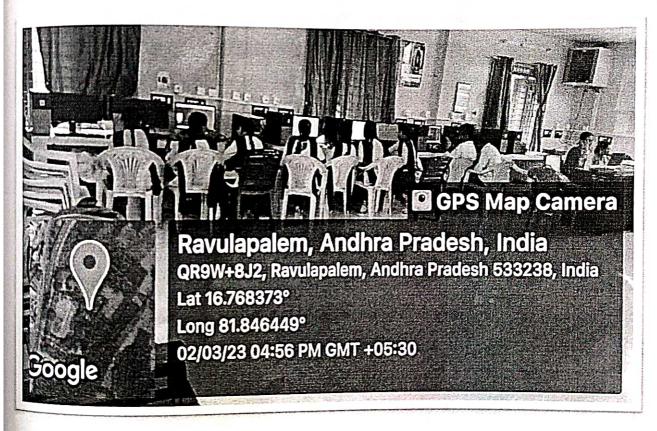


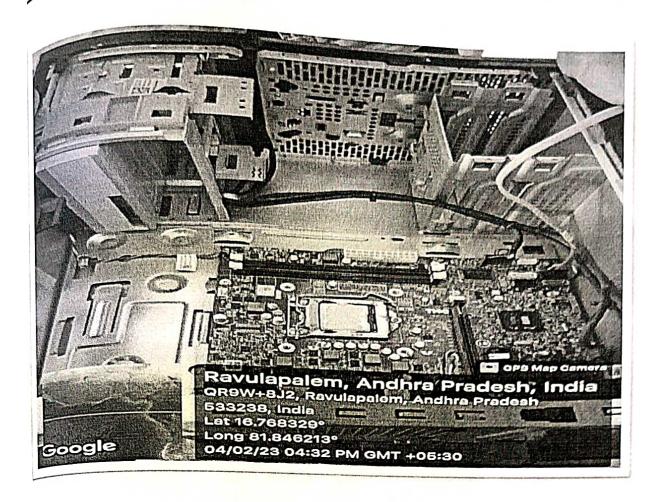
PRACTIACAL CLASSES







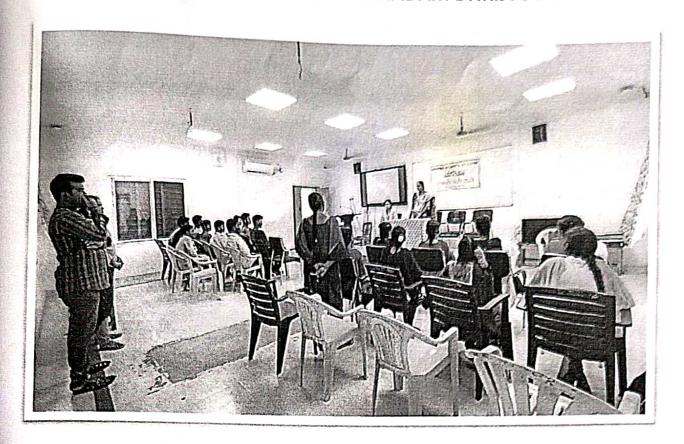


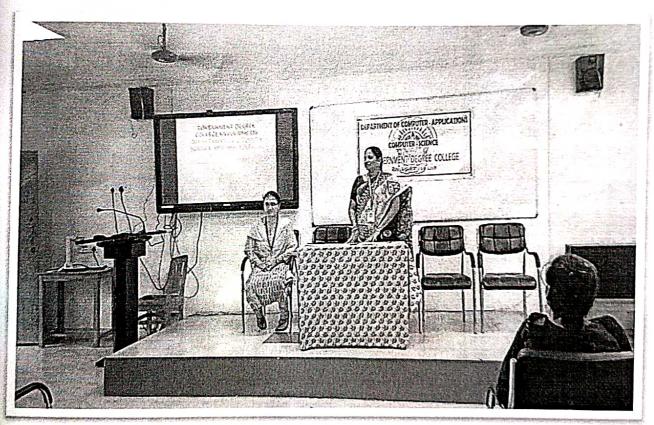


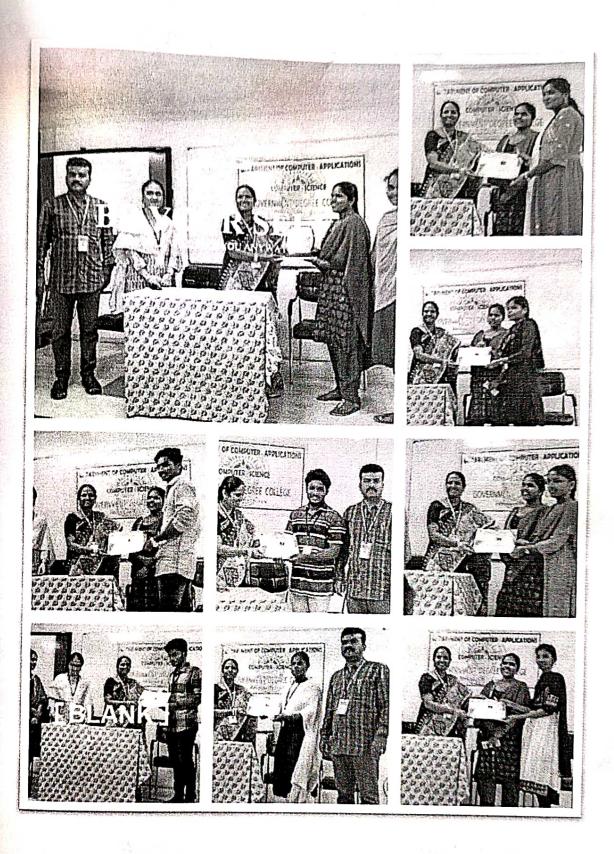




# CERTIFICATE ISSUE BY THE PRINCIPAL MADAM Dr.K.JYOTHI



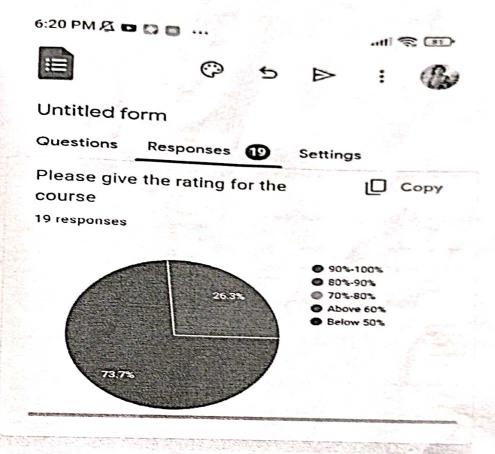




#### FEEDBACK FORM

#### Online Feedback form

https://forms.gle/qR79uCSQmCmcEYja7



Please comment the strength of the course and the way it was conducted

19 responses

Basic Computer Knowledge We learn

No

The practical experience made us to know very well about the course and Also the closeness of madam among the students, make us more comfortable to listen.

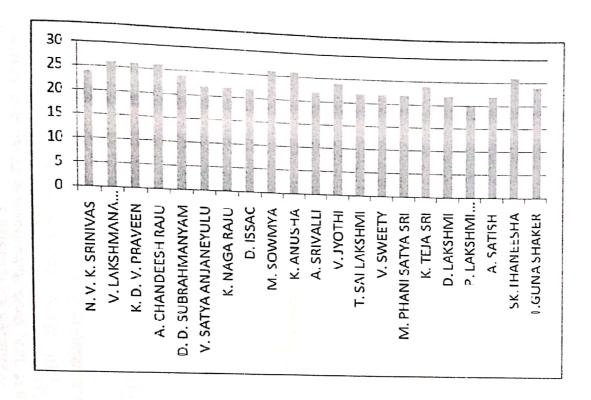
#### RESPONSES OF FEEDBACK.

Name the student	Class	Gro	expectation		Was Mustrated with	was clear and easy to understand	exposed yo to new	u knowledge after	this course	d the rating	Please comment the strength of the course and the way was conducted	Please comment the weaknesses of the it course and the war it was conducted	suggestions for
Varre Jyothi	B Com	Com	oute Strongly agre	· Fine Prof.	Too few examples	Agree	Strongly agre	e Excellent	Yes	90%-100%	Basic Computer Knowledge We learn	Good	Very Well
PAVANI	B. Tec		Strongly agre		Too few examples	Agree	Strongly agre	e Excellent	Yes	90%-100%	No	No	No
Lakshmana sw Vaddi	amy B.com	Com f appli ons (			Too few examples	Agree	Agree	Verygood	Yes	80%-90%	The practical experience made us to know very well about the course and Also the closeness of madam among the students, make us more comfortable to listen.	classes because of uncooperation of students with madam and The explanation	proper communication would need between student
N. V. K. Sriniva		C.A)	n ( Strongly agree	<i>\$</i>	Too few examples	Agree	Strongly disagree	Excellent	Yes	90%-100%	we learned new things and knowledge well with many examples		too continue the course for anothe students
Attili srivalli	(CA)	OM B.COM (CA)			Too lew examples	Agree	Agree	Verygood	Yes	90%-100%	Gaining knowledge about hardware	No weakness	More Lectures should be promoted in this
eki Sai Lakshm	1st B.co C.A	m B.com (C.A)	Strongly agree	15) P No. 10	Too few examples	Agree	Strongly agree	Verygood	Yes	80%-90%	Very good	No weakness	More Teachers should be promoted in this course
Issac	1 year	R. Com(C	V		Too few examples	Agree	Strongly agree	Excellent	Yes		It's help to improve our skill	Super	Developments the class strength
Sai nagaraju	ist year	B. Com			Too few examples	Agree	Agree	Excellent	Yes	90%-100%	No comment	No comment	Digital class is
D. Ibramanyam Kshmi	1 st year	B. Com (C.A.)	Strongly agree		Too few examples		Strongly disagree	Excellent	Yes		we learned new things and knowledge well with many examples	No	improve continue the course for anothe students
rasimha Guna prakash		Mpcs	Strongly agree		Advocate examples	Agree	Strongly agree	Excellent	(es	90%-100%	strength: we learned new things and mowledge well with		Suggutions: continue the course for another
		B. Com (C.A.)	Stronglyagree		Too few examples	Agree	Disagree	Very good	(es	90%-100% v	nany examples we learned new things and knowledge well with many	No	students continue the course for another students
adi satish	Cvr block	Mpcs B. Com	Strongly agree		Advocate examples	Agree	Strongly agree I	Excellent Y	es s	2	Ve learned new things and knowledge well		Continue the course for another
in marcesia		(CA)	Strongly agree		Too few examples		Strongly I disagree	Excellent Y	es s	XX-100% v	nany examples we learned new things and knowledge well with many	No	students Suggutions: continue the course for another
dragada kmya	1st Brom (CA)	B. COM (CA)	Strongly agree		Too few examples	Agree	Gree (	Good	es 8	0%-90% G	aining knowledge	No weakness	students More lectures should be apionted in this
	1st Year	B. Com (G)	Strongly agree	4 4 5	Too few examples		trongly E isagree	xcellent Y	es 9	1 To 1	e learned new things nd knowledge well ith many examples	No.	murse we learned new things and thowledge well with many examples
	Mpcs	1st BSC	Strongly agree		Advocate A examples	gree 5	trongly agree E	xcellent Ye	2:		ood course it will be seful to us	Not necessary	all good
ani Chandeesh		A)	Strongly agree		Advocate A	gree S	trongly agree G	iood Ye	s 9	0%-100% ht			es, technology
		(MPCs)	Strongly agree			gree A	gree V	ery good Ye	s 80	- 21	e learned new things I id knowledge well	io (	levelopment Continue the course for another
Anjaneyulu		B.com	trongly agree	377	Too few A examples		rongly D sagree	xcellent Ye	s &	0%-90% St	ith many examples rength; we learned to we things	to d	tudents continue the ourse for another

#### MARKS OF THE STUDENTS

S.No	Name of the Student	Class & Group	Marks	
1	N. V. K. SRINIVAS	I B. COM (General)	24	
2	V. LAKSHMANA SWAMY	I B. COM(C.A)	26	
3	K. D. V. PRAVEEN	I B. COM(C.A)	26	
4	A. CHANDEESH RAJU	I B. COM(C.A)	26	
5	D. D. SUBRAHMANYAM	I B. COM(C.A)	24	
6	V. SATYA ANJANEYULU	IB. COM(C.A)	22	
7	K. NAGA RAJU	IB. COM(C.A)	22	
8	D. ISSAC	I B. COM (General)	22	
9	M. SOWMYA	I B. COM(C.A)	26	
10	K. ANUSHA	I B. COM(C.A)	26	
11	A. SRIVALLI	IB. COM(C.A)	22	
12	V. JYOTHI	I B. COM (General)	24	
13	T. SAI LAKSHMI	I B. COM(C.A)	22	
14	V. SWEETY	I B. COM(C.A)	22	
15	M. PHANI SATYA SRI	I. B. Sc(MPCs)	22	
16	K. TEJA SRI	I. B. Sc(MPCs)	24	
17	D. LAKSHMI	I. B. Sc(MPCs)	22	
18	P. LAKSHMI NARASIMHA	I B. COM (General)	20	
19	A. SATISH	I B. COM(C.A)	22	
20	SK.THANEESHA	I B. COM (General)	26	
21	T.GUNA SHAKER	I B. COM (General)	24	

#### SCORE ANALYSIS



Members:

1. Smt.U.Subhashini

2. Smt.V.Sailaja

3. Ssri.K.S.N.Prasad

4. Smt K.Sridevi

SIGNATURE

Bilaje V

KEN pre

Principal



# GCYFNINITE NAAC Accredited with 'B' Grade(2.61 CGPA) CEGNER CULLEGE, TAVOLISTALENI

Beside NH-16, Main Road, Ravulapalem-533238, Dr.B.R.Ambedkar Dist., A.P, INDIA ISO 50001:2011, ISO 14001:2015, ISO 9001:2015 Certified College E-Mail: jkcjyec.ravulapalem@gmail.com, Phone: 08855-257061 Affiliated to Adikavi Nannaya University



# Certificate of Completion



This is to Certify that

# KSN PRASAD

Science & Applications, GDC Ravulapalem from 4-Jan-23 to 5-Mar-23 of I B. Com (C.A.), Government Degree College, Ravulapalem has successfully completed the two months certificate course on "Computer Hardware" conducted by Department of Computer

Smt.V. Sailaja HOD, Dept of CS

> Smt.U. Subhashini HOD, Dept of CA

Dr.K. Jyothi
Principal