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EDITOR

MS. PAYAL V. PATEL

STUDENTS TEAM

RAJ MUNGRA

HET JASANI



Government Polytechnic, Jamnagar

Computer Department

PRAGYAAN

MAJOR HIGHLIGHTS OF THE ISSUE

**HAR GHAR
TIRANGA**

**VISION, MISSION
PEOs, PSOs**

**GURUPURNIMA
DAY 2022**

WEBSITE: <https://www.gpjm.cteguj.in/programs/detail/205>

PRINCIPAL'S MESSAGE



Shree. H. J. Baldaniya

It has always been our belief that every student has an unending pool of talent that needs to be fostered. A proper care and guidance will help the students to develop right attitude, values and practices that enable each individual to excel in future.

The main focus of our Institution is to empower students with sound knowledge, wisdom, passion for innovation and latest know-how in cutting-edge technologies to experience and face the challenges of Industry 4.0 in a highly networked global perspective.

Computers have become an inherent part of our routine life. No department or business can be thought of being fully functional and automated without the use of computers. Our department provides a platform for the students to enhance their employability skill which helps us in achieving our objective of preparing students for a successful career.

MESSAGE FROM HOD

It is a pleasure to head the Department of Computer Engineering in Government Polytechnic Jamnagar. We are a team of experienced and motivated faculty members who are in process of tuning the young engineers through innovative teaching-learning process. Highly motivated students and researchers are our strong team members too, who are always eager to grab the opportunity to upgrade their skills.



Shree. C. G. Ajudiya

MISSION OF THE DEPARTMENT

M1: To inculcate into students practical skills.

M2: To facilitate students with suitable environment to develop their logical and analytical skills

M3: To make available modern technology and related tools for hands-on experience.

M4: To inculcate interpersonal skills and ethical values into the students so that they can become successful professionals.

VISION OF DEPARTMENT

TO BECOME A CENTRE OF EXCELLENCE AND GENERATE COMPETENT PROFESSIONALS IN THE FIELD OF COMPUTER ENGINEERING FOR THE BETTERMENT OF THE NATION AND SOCIETY AT LARGE.

PSOs

PSO I : ABLE TO DEVELOP COMPUTER SOFTWARE SUCH AS WEB APPLICATIONS AND DESKTOP APPLICATIONS USING APPROPRIATE TOOLS.

PEOs

PEO1 : Pursue higher education in engineering to enhance knowledge and skills gained in diploma.

PEO2 : Develop career as professional in software industry, networking, database administration etc.

PEO3 : Develop innovative and entrepreneurial attitude in order to start an enterprise.

GURU PURNIMA CELEBRATION

GURU OR TEACHER HAS ALWAYS BEEN CONSIDERED AKIN TO A GOD IN THE HINDU CULTURE. GURU PURNIMA OR VYASA PURNIMA IS THE DAY TO CELEBRATE AND PAY OUR GRATITUDE TO OUR GURUS.

GURU PURNIMA DAY WAS CELEBRATED IN OUR COLLEGE GOVERNMENT POLYTECHNIC, JAMNAGAR.





Title : Guru Purnima

Date : 13/07/2022

Time : 1:00 PM

Patron : Shri. A. K. Zala, Principal

**Organized By : Computer Department,
Government Polytechnic, Jamnagar**



INTERNSHIP MEETING

AFTER THE FIRM DISCISON OF GTU WAS PASSED TO INCULCATE STUDENTS INTO INTERNSHIP, A MASSIVE RESPONSIBILITY WAS GIVEN ONTO THE RESPECTED FACULTY OF THE GOVERNMENT POLYTECHNIC JAMNAGAR. ON THIS TOPIC, A MEETING WAS HELD TO DISCUSS WHAT SHALL BE DONE NEXT IN WHICH EVERY FACULTY MEMBERS WERE INVITED.



Title : Internship Meeting

Date : 20/07/2022

Patron : Shri. A. K. Zala, Principal

Organized By: Government Polytechnic Jamnagar

NDRF TRAINING

AFTER A SERIES OF NATURAL CALAMITIES INCLUDING, THE ORISSA SUPER CYCLONE (1999), GUJARAT EARTHQUAKE (2001) AND INDIAN OCEAN TSUNAMI (2004), AMONG MANY OTHERS, THE CONCERNED AUTHORITIES TOOK NECESSARY STEPS TOWARDS DESIGNING A SYSTEMATIC DISASTER MANAGEMENT PLAN. THIS LED TO THE ENACTMENT OF THE DISASTER MANAGEMENT ACT ON DECEMBER 26, 2005

THE DISASTER MANAGEMENT ACT HAS STATUTORY PROVISIONS FOR CONSTITUTION OF NATIONAL DISASTER RESPONSE FORCE (NDRF) FOR THE PURPOSE OF SPECIALIZED RESPONSE TO NATURAL AND MAN-MADE DISASTERS. ON DATE: 21/7/2022 NDRF TRAINING WAS CONDUCTED IN GOVERNMENT POLYTECHNIC JAMNAGAR. ALL THE STUDENTS AND FACULTIES BENEFITED FROM THE ACTIVITY AND GAVE AN OVERWHELMING RESPONSE. WE ARE THANKFUL TO THE WHOLE NDRF TEAM AND ALL SUBJECT'S EXPERTS, WHO HAD PRESENTED VALUABLE CONTENT ON THAT DAY.

Title : NDRF Training

Date : 21/07/2022

Time : 11:00 AM

Patron : Shri. A. K. Zala, Principal

Organized By : Government Polytechnic Jamnagar



AWARENESS PROGRAM FOR GIRLS

AWARENESS PROGRAMS MEANS COMMUNITY-WIDE OR AUDIENCE-SPECIFIC PROGRAMS, CAMPAIGNS OR INITIATIVES THAT INCREASE AUDIENCE KNOWLEDGE AND SHARE INFORMATION AND RESOURCES TO PREVENT VIOLENCE, PROMOTE SAFETY AND REDUCE PERPETRATION. IN OUR COLLEGE, ON DATE:27/7/2022 AWARENESS PROGRAM WAS ORGANIZED BY WOMEN DEVELOPMENT CELL. ALL THE GIRL STUDENTS BENEFITED FROM THE PROGRAM AND GAVE AN OVERWHELMING RESPONSE. WE ARE THANKFUL TO THE WOMEN DEVELOPMENT CELL WHO HAD PRESENTED VALUABLE CONTENT ON THAT DAY.



E-FIR Awareness

E-FIR AWARENESS PROGRAM WAS ORGANISED ON DATE:27/7/2022, IN GOVERNMENT POLYTECHNIC JAMNAGAR COLLEGE. ON THIS DAY ALL THE STUDENTS WERE INVITED TO THE AUDITORIUM HALL TO ATTEND THE EVENT BASED ON THE E-FIR INITIATIVE FROM THE INDIAN GOVERNMENT.

AT THE EVENT DEPUTY OFFICER FROM THE BEDI POLICE STATION WAS INVITED AS THE CHIEF GUEST. THE CHIEF GUEST EXPLAINED ABOUT AN APPLICATION THAT IS PREPARED TO REGISTER AN ONLINE FIR, WHICH HELP CITIZENS TO SAVE THEIR TIME AND HAS WAY MORE ADVANTAGES. THE STUDENTS WERE TAUGHT HOW TO REGISTER FOR AN ONLINE FIR. THE STEPS AND MANY MORE THINGS WERE TAUGHT.

A LITTLE BIT INFORMATION ON THE TYPES OF FIR'S WAS GIVEN TO THE STUDENTS AND THEN THE EVENT WAS HAPPILY ENDED.

WE ARE THANKFUL TO THE SUBJECT EXPERT FOR CONDUCTING THE SEMINAR AND SHARE THEIR EXPERTISE WITH ALL THE FACULTY MEMBERS AND THE STUDENTS.





Title : E-FIR Awareness Programme

Date : 27/07/2022

Patron : Shri. A. K. Zala, Principal

**Organized By : Government Polytechnic
Jamnagar**

INDEPENDENCE DAY CELEBRATION

INDEPENDENCE DAY IS ANNUALLY OBSERVED ON 15 AUGUST AS A NATIONAL HOLIDAY IN INDIA COMMEMORATING THE NATION'S INDEPENDENCE FROM THE BRITISH EMPIRE ON 15 AUGUST 1947. INDIA ATTAINED INDEPENDENCE FOLLOWING AN INDEPENDENCE MOVEMENT NOTED FOR LARGELY NONVIOLENT RESISTANCE AND CIVIL DISOBEDIENCE LED BY THE INDIAN NATIONAL CONGRESS. INDEPENDENCE DAY IS OBSERVED THROUGHOUT INDIA WITH FLAG-HOISTING CEREMONIES, PARADES AND CULTURAL EVENTS.

'HAR GHAR TIRANGA' IS A CAMPAIGN UNDER THE AEGIS OF AZADI KA AMRIT MAHOTSAV TO ENCOURAGE PEOPLE TO BRING THE TIRANGA HOME AND TO HOIST IT TO MARK THE 75TH YEAR OF INDIA'S INDEPENDENCE. OUR RELATIONSHIP WITH THE FLAG HAS ALWAYS BEEN MORE FORMAL AND INSTITUTIONAL THAN PERSONAL. BRINGING THE FLAG HOME COLLECTIVELY AS A NATION IN THE 75TH YEAR OF INDEPENDENCE THUS BECOMES SYMBOLIC OF NOT ONLY AN ACT OF PERSONAL CONNECTION TO THE TIRANGA BUT ALSO AN EMBODIMENT OF OUR COMMITMENT TO NATION-BUILDING. THE IDEA BEHIND THE INITIATIVE IS TO INVOKE THE FEELING OF PATRIOTISM IN THE HEARTS OF THE PEOPLE AND TO PROMOTE AWARENESS ABOUT THE INDIAN NATIONAL FLAG. UNDER THE HAR GHAR TIRANGA CAMPAIGN, THE CENTRAL GOVERNMENT HAS URGED PEOPLE TO HOIST THE TRICOLOR IN THEIR HOMES FROM AUGUST 13 TO 15.

INDEPENDENCE DAY WAS CELEBRATED AT GOVERNMENT POLYTECHNIC JAMNAGAR ON 15TH AUGUST 2022.





OUR RESPECTED PRINCIPAL SHRI. A. K. ZALA HOSTING THE INDIAN FLAG ON THE INDEPENDENCE DAY.

SHRI. A. K. ZALA GIVING AN ENLIGHTENING SPEECH ON THE PROGRESS MADE BY OUR GREAT NATION.



TITLE: INDEPENDENCE DAY CELEBRATION

DATE: 15/08/2022 TIME: 09:00 AM

PATRON: SHRI. A. K. ZALA, PRINCIPAL

ORGANIZED BY: GOVERNMENT POLYTECHNIC, JAMNAGAR

ON THAT DAY DIFFERENT ACTIVITIES WERE PERFORMED AND SOME OF THE STUDENTS FROM COMPUTER DEPARTMENT HAD RECEIVED COMPETITION CERTIFICATE TOO.

Some glimpses of the event:



HAR GHAR TIRANGA

'HAR GHAR TIRANGA' IS A CAMPAIGN UNDER THE AEGIS OF AZADI KA AMRIT MAHOTSAV TO ENCOURAGE PEOPLE TO BRING THE TIRANGA HOME AND TO HOIST IT TO MARK THE 75TH YEAR OF INDIA'S INDEPENDENCE.

GOVERNMENT POLYTECHNIC COLLEGE CELEBRATED 'HAR GHAR TIRANGA' UNDER 'AZADI KA AMRUT MAHOTSAV' WITH VARIOUS COMPETITIONS.

Government Polytechnic Jamnagar is going to celebrate "Har Ghar Tiranga" under "Azadi Ka Amrit Mahotsav" with various competitions as below.			
Date:	Coordinator	Department	Event / Competitions
29-07-22	Convener: Shri H. V. Mandala, HOD Mechanical Department	ALL	Reading of the "SANKALP PATRA"
30-07-22	Shri. N. D. Khanpara	Civil	Essay Writing
02-08-22	Shri. M. D. Vaishnav	Civil	National flag making competition.
02-08-22	Shri. K. M. Shaikh	AMD	Singing Competition on National Flag.
03-08-22	Shri. J. L. Chauda	Elec.	A competition depicting how the journey of the national flag has developed.
03-08-22	Shri. P. V. Patel	Comp.	Acting Competition on the national flag.
04-08-22	Shri. U. M. Joshi	General	Rangoli Competition
04-08-22	Shri. H. P. Joshi	Mech.	Elocution Competition



Government Polytechnic Jamnagar
Patron
Shri A. K. Zala, Principal



Some glimpses of the event:







INDUCTION PROGRAM

FROM 23RD SEP FIRST SEMESTER WAS STARTED SUCCESSFULLY. BEFORE THE TERM STARTED ONE WEEK INDUCTION PROGRAM WAS ORGANIZED IN GOVERNMENT POLYTECHNIC JAMNAGAR COLLEGE. FROM 12/9/2022 TO 22/9/2022 INDUCTION PROGRAM WAS ORGANIZED IN COMPUTER DEPARTMENT.

IN ONE WEEK INDUCTION PROGRAM SEMINAR ON "COMPUTER LITERACY" AND "SCOPE OF THE BRANCH" WAS ORGANISED IN COMPUTER DEPARTMENT, GOVERNMENT POLYTECHNIC, JAMNAGAR ON 21ST SEP 2022. 83 STUDENTS HAD PARTICIPATED IN THIS EVENT FROM FIRST YEAR COMPUTER DEPARTMENT.

TO CREATE AWARENESS AMONG NEWLY ADMITTED STUDENTS ABOUT THE SCOPE OF THEIR SUBJECT IN THE PROFESSIONAL WORLD WE HAD INVITED OUR ALUMNI MEMBER MR. NIKHIL TANK TO SHARE HIS EXPERTISE WITH THE STUDENTS. HE WAS ONE OF OUR FORMER STUDENT FROM BATCH 2014. HE HAS COMPLETED HIS B. E. IN COMPUTER ENGINEERING FROM BIRLA VISHVAKARMA MAHAVIDYALAYA COLLEGE, ANAND. AFTER COMPLETED HIS B.E. HE WAS SELECTED WITH 4.5 LAC ANNUAL PACKAGE IN THE COMPANY. CURRENTLY HE HAS STARTED HIS OWN COMPANY.

WELCOME SPEECH IS GIVEN BY SHRI. J. V. SHAPARIA. AFTER THAT, SEMINAR WAS PRESENTED BY OUR ALUMNI MEMBER MR. NIKHIL TANK. HE GAVE INFORMATION ABOUT ACADEMIC KNOWLEDGE, PROGRAMMING LANGUAGES, FRONT END DEVELOPER, BACK END DEVELOPER, DATABASE, DATA ANALYTICS, BIG DATA ETC.

MR. NIKHIL TANK GUIDED THE STUDENTS VERY WELL AND SOLVED ALL THE STUDENTS DOUBTS. THE EVENT WAS SUCCESSFULLY COMPLETED WITH DOUBT SOLVING SESSION. ALUMNI ASSOCIATION FACULTY MEMBER OF COMPUTER DEPARTMENT, MS. P. V. PATEL MOTIVATED ALL THE STUDENTS BY HER SPEECH AND PRESENTED VOTE OF THANKS TO THE PARTICIPANTS.

ALL THE STUDENTS BENEFITED FROM THE ACTIVITY AND GAVE AN OVERWHELMING RESPONSE. WE ARE THANKFUL TO THE SUBJECT EXPERT MR. NIKHIL TANK FOR SHARING THEIR EXPERTISE WITH THE STUDENTS.

SOME GLIMPSES OF THE EVENT:



SOME GLIMPSES OF THE EVENTS

I. Tiranga Yatra

Date: 10/08/2022



2. Vaccination drive at college

Date: 25/08/2022



ALUMNI ASSOCIATION
GOVERNMENT POLYTECHNIC JAMNAGAR

GPAA
MEET • MEET • PROSPER

Sangam 2022
A MEGA REUNION

"IT'S TIME TO REJOICE AND CHERISH THE GOOD OLD MEMORIES OF OUR COLLEGE LIFE - LET'S JOIN TO MEET OUR REAL FRIENDS"

DATE: 09th OCT. 22
SUNDAY

Venue: GOVERNMENT POLYTECHNIC JAMNAGAR

TIME: 04.00 PM ONWARDS

Convenor
Dipesh A. Bharad
94262 06747
Neelam Gadhavi
99093 22612

Scan & Register

Invited By
R. D. Gohil (Principal)
A. K. Zala (Secretary)
M. K. Sonaiya (Secretary)
Executive Committee Members & All Staff Members
Government Polytechnic-Jamnagar

LET'S ALL MEET UP AT ALUMNI MEET

3. Road Safety Awareness

Date: 30/08/2022



4. Sangam - A Mega Reunion

Date: 09/10/2022





જામનગર 18-10-2022

જામનગર • મંગળવાર, 18 ઓક્ટોબર, 2022 | 2

સરકારી પોલિટેકનિક કોલેજના ભૂતપૂર્વ વિદ્યાર્થીઓનું રી યુનિયન યોજાયું

750 થી વધુ ઈજનેર અને 40 થી વધુ ભૂતપૂર્વ શિક્ષકોએ ભાગ લીધો



ભાસ્કર સ્વપ્ન / જામનગર

જામનગર શહેરની સરકારી પોલિટેકનિકના છાત્રોના રી યુનિયન માટે સંગમ કાર્યક્રમનું આયોજન કરવામાં આવ્યું હતું. જેમાં 750 થી વધુ ઈજનેરો તથા 40 થી વધારે ભૂતપૂર્વ શિક્ષકો જોડાયા હતા. જામનગરમાં સરકારી પોલિટેકનિક કોલેજ વર્ષ-1983

માં શરૂ થઈ હતી. જેમાંથી પાસ થયેલા વિદ્યાર્થીઓ એન્જિનિયરિંગ અને અન્ય વ્યવસાય ક્ષેત્રમાં આગળ વધીને વિદેશ સ્થાયી થયા છે. વિદ્યાર્થીઓ માટે રી-યુનિયન કાર્યક્રમ ટાઉનહોલમાં યોજાયો હતો. 750 થી વધુ ઈજનેરો અને 40 થી વધુ શિક્ષકો જોડાયા હતા. કાર્યક્રમમાં ભૂતપૂર્વ વિદ્યાર્થીઓ સરકાર સાથે એમઓયુ કરી નોકરીની તક ઉભી કરશે તે

અંગેની ચર્ચા કરી હતી. કાર્યક્રમમાં જીતુલાલ, સંસદ પુનર્મથન માધમ, પારાસભ્ય હકુમા, મેયર બીનાબેન કોઠારી તેમજ પ્રોફેસરો અને સ્ટાફ હાજર રહ્યા હતા. કાર્યક્રમને સફળ બનાવવા આર.ડી ગોહિલ, એમ કે સોનેયા, નીલમબેન ગઢવી, એસ ઝેડ પટ્ટણ, દીપેશભાઈ ભટ્ટરાલ, એ.કે. ઝાલા તેમજ આચાર્ય બદલાણીએ જેહમત ઉઠાવી હતી.

6. QUIZ-Competition



5. Mathematics Day Celebration

Date: 22/12/2022



Bitcoin's Monetary Policy

Let's agree that we have heard of bitcoin mining a lot of time but the problem is that most of us are not aware of the process. Not to mention some of us are not familiar with the term "bitcoin mining". So let's not feel ashamed and understand the whole process behind it.



Bitcoin transaction are not just like normal centralized currency transactions. First let's understand the meaning of centralized and decentralized applications and finance. So, if something is centralized then it is meant to be controlled by a individual or a body of individuals and on the other hand if something is decentralized then it is meant to be controlled by a certain rules sometimes referred to as "Smart Contracts".

Let's understand this with an example. Jeffery sends Adornis 4 tokens for a cup of coffee and then Jonathan sends Adornis 5 tokens for a cup of latte. Now in centralized finance systems both the incoming transactions are stored to add up to total of 9 tokens. But in the decentralized system the transaction are stored in a memory pool and are called Unspent Transactions also called as UTXOs. And whenever Adornis demands to send 5 tokens to Justin, then one of the UTXO is used to make the transaction. Now the process does not end there. Someone needs to validate the transaction in other words someone has to say "**Adornis is a good guy and can send his desired amount to Justin**".

The validation is done by encoding all the transaction details into a hash code by an algorithm called SHA256. This algorithm creates 256 digits long hexadecimal string called a hash code. The game lies here, yes creating a hash code is the only game. If the hash code is valid the transaction is uploaded to the blockchain and the creator of the hash code earns a reward called **transaction fees**. So these good guys are called the "Bitcoin Miners" and their profession is called "Bitcoin Mining". Is it that easy? Yes sort of.....

LET'S PLAY A GAME

Imagine three teams, team A with 2 players, team B with 4 players, and team C with 8 players. Now I tell the quest to the teams: I have a number in my mind from 0 to 50 and the first team to guess the number wins the game.

Imagine three teams, team A with 2 players, team B with 4 players, and team C with 8 players. Now I tell the quest to the teams: I have a number in my mind from 0 to 50 and the first team to guess the number wins the game.

Now the basic point of this game is that the team with the most number of guesses wins. Basically the team with more amount of work done wins.

This principle is used while bitcoin mining the more hashes one generates the more chances one has to win the transaction fees. So this is how Bitcoin miners earn.

How does this process exactly works ?

I know this might get bit of complicated but let's understand this in simple steps :

- A sends x BTCs to B, now the details of this transaction is stored into a memory area called mempool.
- A Bitcoin miner selects a transaction from the mempool and generates a hash code for that particular transaction.
- Now, this is not that easy and now many competitive miners start generating hashes, and one of the valid hash gets accepted. This game of generating hashes is coined as proof of work.
- After a valid hash is generated then the transaction block is added to the blockchain and the transaction fees are given to the miner.
- This is getting more complicated because a miner has very powerfull computation devices which can generate upto 4-million-billion hashes per second.

So this is bitcoin mining in easy steps.

Edited and Compiled by:

1) HET JASANI

Sem - 3 , Computer Dept.



CONTACT INFORMATION

**COMPUTER ENGINEERING DEPARTMENT
GOVERNMENT POLYTECHNIC, JAMNAGAR
VALSURA ROAD, PO. BEDI, JAMNAGAR
DIST: JAMNAGAR - 361009**

STATE: GUJARAT, INDIA

WEBSITE:

- 1. <http://www.gpjm.cteguj.in/programs/detail/205>**
- 2. <https://gpjcomp.wordpress.com/>**

EDITOR

It is my privilege and honor as the Editor-in-chief for the newsletter of Computer Department at Government Polytechnic, Jamnagar.

The main agenda of the newsletter is to provide insights of department like academics and other activities happening at department. Some knowledge regarding current technology etc.

- Ms. PAYAL V. PATEL