

KANDRA (V), CHAS - 827613, BOKARO (JHARKHANA))

Ref. No.- Notice/184/2018

Date -08/8/2018

### NOTICE

Some of the students have showed intrest in GATE classes and dropped the application in application box for guidance and conducting GATE classes in the Institute.

Therefore, a meeting in this regard will be held at 04:00 PM on 09/08/2018 at Seminar Hall. So, all the interested students and all HOD are required to be present in the meeting to decide the guide path and conduction of GATE classes.

Sd/Director
GGSESTC, Bokaro

Copy to:

- i) All HODs
- ii) All 4th year student throng! Niha Brard (Main, Brys, 50/2)
- iii) Registrar

Director

GGSESTC, Bokaro

Carlo Carlo



## GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS BOKARO, JHARKHAND

Ref. No.- Notice/084-A/2019

Date- 07/08/2019

#### NOTICE

#### Regarding GATE, Civil services & other competitive exam Guidance

All students are hereby informed that the institute is conducting guidance classes for GATE, civil services and other competitive examination.

Therefore, students may contact for Civil services (Mrs. Sweta Kumari, BSH) and for GATE and other competitive examination (Mr. Alok Kumar, dept. of EEE) till 14th August 2019.

- 1. Mr. Alok Kumar, Coordinator, GATE
- 2. Mrs. Sweta Kumari, Coordinator, Civil services

@ho shal

Director, GGSESTC, Bokaro

#### Copy to:

- i) Dean, Academic & Administration
- ii) Administrative Officer
- iii) All HODs for information to their students
- iv) All 4th year student through Notice Board
- v) IT (System Administrator) for Website

For kind information: Hon'ble Secretary, GGES





## GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS BOKARO, JHARKHAND

Ref. No.- Notice/089-A/2020

Date- 07/09/2020

#### NOTICE

### Regarding GATE, Civil services & other competitive exam Guidance

All students are hereby informed that the institute is conducting guidance classes for GATE, civil services and other competitive examination.

Therefore, students may contact for Civil services (Mrs. Sweta Kumari, BSH) and for GATE and other competitive examination (Mr. Alok Kumar, dept. of EEE) till 14th September 2020.

- 1. Mr. Alok Kumar, Coordinator, GATE
- 2. Mrs. Sweta Kumari, Coordinator, Civil services

@for shall

Director, GGSESTC, Bokaro

#### Copy to:

- i) Dean, Academic & Administration
- ii) Administrative Officer
- iii) All HODs for information to their students
- iv) All 4th year student through Notice Board
- v) IT (System Administrator) for Website

For kind information: Hon'ble Secretary, GGES







## GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS BOKARO, JHARKHAND

Ref. No.- Notice/ 087-A/2021

Date-02/08/2021

### NOTICE

## Regarding GATE, Civil services & other competitive exam Guidance

All students are hereby informed that the institute is conducting guidance classes for GATE, civil services and other competitive examination.

Therefore, students may contact for Civil services (Mrs. Sweta Kumari, BSH) and for GATE and other competitive examination (Mr. Alok Kumar, dept. of EEE) till 14th August 2021.

- 1. Mr. Alok Kumar, Coordinator, GATE
- 2. Mrs. Sweta Kumari, Coordinator, Civil services

Director, GGSESTC, Bokaro

#### Copy to:

- i) Dean, Academic & Administration
- ii) Administrative Officer
- iii) All HODs for information to their students
- iv) All 4th year student through Notice Board
- v) IT (System Administrator) for Website

For kind information: Hon'ble Secretary, GGES TO THE CONTRACT OF THE CONTRAC



KANDRA (V), CHAS - 827013, BOKARO (JHARKHAND)

Ref. No.- Notice/116-A/2022

Date -2/8/2022

#### NOTICE

## Regarding GATE, Civil services & other competitive exam Guidance

All students are hereby informed that the institute is conducting guidance classes for GATE, civil services and other competitive examination.

Therefore, students may contact for Civil services (Mrs. Sweta Kumari, BSH) and for GATE and other competitive examination (Mr. Alok Kumar, Dept. of EEE) till 14th August 2022.

- 1. Mr. Alok Kumar, Coordinator, GATE
- 2. Mrs. Sweta Kumari, Coordinator, Civil services

Director, GGSESTC, Bokaro

Copy to:

i) Dean, Academic & Administration

ii) Administrative Officer

iii) All HODs for information to their students/

iv) All 4th year student through Notice Board

v) IT (System Administrator) for Website

For kind information:

Hon'ble Secretary, GGES

## GURU GOBIND SINGII EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS KANDRA (V), CHAS - 827013, BOKARO (JHARKHAND)

Ref. No.- Notice/096/2023

Date -24/7/2023

#### NOTICE

All students of GGSESTC are informed that the institute is conducting guidance classes for GATE, civil services and other competitive examination.

Students may contact for Civil services (Mrs. Sweta Kumari, BSH) and for GATE and other competitive examination (Mr. Alok Kumar, Dept. of EEE) till 14<sup>th</sup> August 2023.

Director

GGSESTC, Bokaro

#### Copy to:

- Dean, Academic & Administration
- ii) Administration & Law Officer
- iii) Concerned Faculty Members
- iv) All HoDs for information to their students
- v) College Notice Boards
- vi) IT (System Administrator) for website

TOWN CONTROL OF THE PROPERTY O

For kind information:

Hon'ble Secretary, GGES



KANDRA (V), CHAS-827013, BOKARO (JHARKHAND)

Ref. No.- Notice/070/2024

Date -6/5/2024

#### NOTICE

#### **GATE & IAS ACADEMY**

This is to notify that GATE & IAS ACADEMY has been revised for GGSESTC, Kandra, Chas, Bokaro. The following members have been nominated by the competent authority and it will effect from 6<sup>th</sup> May, 2024 to onwards: -

Sr. No.	Name of the Committee Members	Designation/ Department	Role
1	Dr. Priyadarshi Jaruhar	Director, GGSESTC	Chair Person
2	Prof. Alok Kumar	Asstt. Prof., EEE	Co-ordinator (GATE)
3	Prof. Simran Bhimjyani	Asstt. Prof., BSH	Co-ordinator (IAS ACA.)
4	Prof. Joydeep Sen	Asstt. Prof., CE	Member
5	Prof. Sushma Kumari	Asstt. Prof., ECE	Member
6	Prof. Nishant Kumar	Asstt. Prof., CSE	Member
7	Prof. Sumit Kumar Pandey	Asstt. Prof., ME	Member
8	Prof. Mukesh Kumar Sinha	Asstt. Prof., BSH	Member

Director GGSESTC, Bokaro

Copy to:

- i) Dean, Academic & Administration
- ii) Administrative Officer
- iii) All HODs by notification
- iv) All Concerned Persons
- v) IT (System Administrator) for website

TO CHARLES OF THE PROPERTY OF

DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

For kind information:-

Hon'ble Secretary, GGES



## GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS <u>BOKARO, JHARKHAND</u>

#### Annual Report of GATE Classes for the Academic Year 2019-20

The GATE classes were started in the academic year 2019-20. The GATE class organized with a group of highly qualified and dynamic teachers who encourage and motivate the students towards competitive examination (GATE, PSU etc.). GATE classes are carefully planned for the students to remain updated with the recent challenge for job in govt. sector. Seminars by renowned professors and short term courses are organized to update the students with the latest development in the education and industry trend on every week of Wednesday.

Following activities has conducted for GATE 2020:

- Offline GATE classes arranged on every week of Wednesday by GATE classes committee.
- There are 20 lecture conducted for GATE classes inside the institute.
- Provided online GATE course materials of respective subject to students.
- Provided online test series model for GATE examination 2020 to students.
- Following number of students are enrolled for GATE examination 2020.

Sl. No.	Branch	Number of students enrolled
1	EEE	12
2	ECE.	03
3	CSE	. 08
4	ME	05
5	CE	04

Institute has constituted GATE academic committee 2020-21 with following faculty member.

Sl. No.	Branch	Name of faculty	
1	EEE	Prof. Alok kumar	Co-ordinator
2	ECE	Prof. Sushma kumari	Member
3	CSE	Prof. Nishant kumar	Member
4	ME	Prof. Rohi Prasad	Member
5	CE	Prof. Gaurav kumar	Member

1. Alok kumar, Coordinator, GATE

2. Mrs. Sweta kumari, Coordinator, Civil services

DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

Director, GGSESTC, Bokaro



## GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS <u>BOKARO, JHARKHAND</u>

### Annual Report of GATE Classes for the Academic Year 2020-21

The GATE classes were started in the academic year 2020-21. The GATE class organized with a group of highly qualified and dynamic teachers who encourage and motivate the students towards competitive examination (GATE, PSU etc.). GATE classes are carefully planned for the students to remain updated with the recent challenge for job in govt. sector. Seminars by renowned professors and short term courses are organized to update the students with the latest development in the education and industry trend on every week of Wednesday.

#### Following activities has conducted for GATE 2021:

- Offline GATE classes arranged on every week of Wednesday by GATE classes committee.
- There are 20 online lecture conducted for GATE classes.
- Provided online GATE course materials of respective subject to students.
- Provided online test series model for GATE examination 2021 to students.
- Following number of students are enrolled for GATE examination 2021.

Sl. No.	Branch	Number of students enrolled
1	EEE	10
2	ECE	05
3	CSE	06
4	ME	06
5	CE	05

Institute has constituted GATE academic committee 2020-21 with following faculty member.

Sl. No.	Branch	Name of faculty	
1	EEE	Prof. Alok kumar	Co-ordinator
2	ECE	Prof. Sushma kumari	Member
3	CSE	Prof. Nishant kumar	Member
4	ME	Prof. Rohi Prasad	Member
5	CE	Prof. Gaurav kumar	Member

1. Alok kumar, Coordinator, GATE

2. Mrs. Sweta kumari, Coordinator, Civil services

DIRECTOR GGSESTC, Kandra, Ch Bokaro, Jharkhand-8270

Director,

GGSESTC, Bokaro



### GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS BOKARO, JHARKHAND

## Annual Report of GATE Classes for the Academic Year 2021-22

The GATE classes were started in the academic year 2021-22. The GATE class organized with a group of highly qualified and dynamic teachers who encourage and motivate the students towards competitive examination (GATE, PSU etc.). GATE classes are carefully planned for the students to remain updated with the recent challenge for job in govt. sector. Seminars by renowned professors and short term courses are organized to update the students with the latest development in the education and industry trend on every week of Wednesday.

### Following activities has conducted for GATE 2022:

- Offline GATE classes arranged on every week of Wednesday by GATE classes committee.
- There are 20 lecture conducted for GATE classes.
- Provided online GATE course materials of respective subject to students.
- Provided online test series model for GATE examination 2022 to students.
- Following number of students are enrolled for GATE examination 2022.

Sl. No.	Branch	Number of students enrolled
1	EEE	09
2	ECE	, 03
3	CSE	99
4	ME	06
5	CE	05

Institute has constituted GATE academic committee 2021-22 with following faculty member.

Sl. No.	Branch	Name of faculty	
1	EEE	Prof. Alok kumar	Co-ordinator
2	ECE	Prof. Sushma kumari	Member
3	CSE	Prof. Nishant kumar	Member
4	ME	Prof. Rohi Prasad	Member
5	CE	Prof. Gaurav kumar	Member

1. Alok kumar, Coordinator, GATE

2. Mrs. Sweta kumari, Coordinator, Civil services

Director,

GGSESTC, Bokaro CTOR

GGSESTC, Kandra, Chas Bollaro, Jharkhand-827013



## GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS BOKARO, JHARKHAND

### Annual Report of GATE Classes for the Academic Year 2022-23

The GATE classes were started in the academic year 2022-23. The GATE class organized with a group of highly qualified and dynamic teachers who encourage and motivate the students towards competitive examination (GATE, PSU etc.). GATE classes are carefully planned for the students to remain updated with the recent challenge for job in govt. sector. Seminars by renowned professors and short term courses are organized to update the students with the latest development in the education and industry trend on every week of Wednesday.

Following activities has conducted for GATE 2023:

- Offline GATE classes arranged on every week of Wednesday by GATE classes committee.
- Provided online GATE course materials of respective subject to students.
- Provided online test series model for GATE examination 2023 to students.
- Following number of students are enrolled for GATE examination 2023.

Sl. No.	Branch	Number of students enrolled
1	EEE	12
2	ECE	05
3	CSE	15
4	ME	08
5	CE	09

Institute has constituted GATE academic committee 2022-23 with following faculty member.

	Name of faculty	Branch	Sl. No.
Co-ordinato	Prof. Alok kumar	EEE	1
Member	Prof. Sushma kumari	ECE	2
Member	Prof. Nishant kumar	CSE	3
Member	Prof. Rohi Prasad	ME	4
Member	Prof. Gaurav kumar	CE	5

- 1. Alok kumar, Coordinator, GATE
- 2. Mrs. Sweta kumari, Coordinator, Civil services

Director, GGSESTC, Bokaro



## GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS BOKARO, JHARKHAND

## Annual Report of GATE Classes for the Academic Year 2023-24

The GATE classes were started in the academic year 2023-24. The GATE class organized with a group of highly qualified and dynamic teachers who encourage and motivate the students towards competitive examination (GATE, PSU etc.). GATE classes are carefully planned for the students to remain updated with the recent challenge for job in govt. sector. Seminars by renowned professors and short term courses are organized to update the students with the latest development in the education and industry trend on every week of Wednesday.

Following activities has conducted for GATE 2024:

- Offline GATE classes arranged on every week of Wednesday by GATE classes committee.
- There are 20 lecture conducted for GATE classes.
- Provided online GATE course materials of respective subject to students.
- Provided online test series model for GATE examination 2024 to students.
- Following number of students are enrolled for GATE examination 2024.

Sl. No.	Branch	Number of students enrolled
1	EEE	09
2	ECE	01
3	CSE	05
4	ME	- 05
5	CE	05

Institute has constituted GATE academic committee 2023-24 with following faculty member.

Sl. No.	Branch	Name of faculty	
1	EEE	Prof. Alok kumar	Co-ordinator
2	ECE	Prof. Sushma kumari	Member
3	CSE	Prof. Nishant kumar	Member
4	ME	Prof. Rohi Prasad	Member
5	CE	Prof. Jaydeep sen	Member

Alok kumar, Coordinator, GATE

2. Mrs. Sweta kumari, Coordinator, Civil services



Director, GGSESTC, Bokaro



### **GATE ACADEMY**

AN IQAC INITIATIVE

HOW TO GET SUCCESS IN GATE EXAM

Date: 09.08.2018 Time: 3:30PM

Resource Person: Prof. Alok Kumar (Asst. Prof. Dept of EEE. GGSESTC, BOKARO





EXPERIENCED & RESULT-ORIENTED FACULTIES



ONLINE/OFFLINE TEST SERIES

#### VENUE:

GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS

Kandra, Chas, Bokaro, Jharkhand - 827013

Phone no. 06534-265293, 06542-265398

E-mail Id: info a ggsestc.ac.in





### GATE ACADEMY

AN IQAC INITIATIVE

HOW TO GET SUCCESS IN GATE EXAM

Date: 14.09.2020 Time: 3:30PM

Resource Person: Prof. Alok Kumar (Asst. Prof. Dept of EEE. GGSESTC, BOKARO

#### JOIN FOR ASSURED CAREER



EXPERIENCED & RESULT-ORIENTED FACULTIES



ONLINE/OFFLINE TEST SERIES

#### VENUE:

GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS

Kandra, Chas, Bokaro, Jharkhand - 827013

Phone no. 06534-265293, 06542-265398

E-mail Id: info@ggsestc.ac.in





### GATE ACADEMY

AN IQAC INITIATIVE

HOW TO GET SUCCESS IN GATE EXAM

Date: 14.08.2022 Time: 3:30PM

Resource Person: Prof. Alok Kumar (Asst. Prof. Dept of EEE. GGSESTC, BOKARO

JOIN FOR ASSURED CAREER



EXPERIENCED & RESULT-ORIENTED FACULTIES



ONLINE/OFFLINE TEST SERIES VENUE:

GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS

Kandra, Chas, Bokaro, Jharkhand - 827013

Phone no. 06534-265293, 06542-265398

E-mail Id: info@ggsestc.ac.in

DIRECTOR
GSESTC, Kandra, Chas



### **IAS ACADEMY**

AN IQAC INITIATIVE

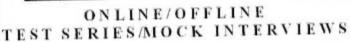
HOW TO GET SUCCESS IN CIVIL SERVICES EXAM

### JOIN FOR ASSURED CAREER

Date: 15.08.2018 Time: 3:30PM

Resource Person: Kumar Harsh(JPSC Qualified 2022)





#### VENUE:

GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS

Kandra, Chas, Bokaro, Jharkhand - 827013

Phone no. 06534-265293, 06542-265398

E-mail Id: info@ggsestc.ac.in



EXPERIENCED & RESULT-ORIENTED FAGULTIES

DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ISO 9001:2015 CERTIFIED



### **IAS ACADEMY**

AN IQAC INITIATIVE

HOW TO GET SUCCESS IN CIVIL SERVICES EXAM



Date: 20.08.2020

Time: 3:30PM

Resource Person: Kumar Harsh(JPSC Qualified 2022)





#### VENUE:

GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS

Kandra, Chas, Bokaro, Jharkhand - 827013

Phone no. 06534-265293, 06542-265398

E-mail Id: info@ggsestc.ac.in



EXPERIENCED & RESULT-ORIENTED FACULTIES

DIRECTOR GGSESTC, Kandra, Chas

Bokaro, Jharkhand-827013 SO 9001:2015 CERTIFIED



### IAS ACADEMY

AN IQAC INITIATIVE

HOW TO GET SUCCESS IN CIVIL SERVICES EXAM

### JOIN FOR ASSURED CAREER

Date: 25.08.2022 Time: 3:30PM

Resource Person: Kumar Harsh(JPSC Qualified 2022)







GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS

Kandra, Chas, Bokaro, Jharkhand - 827013

Phone no. 06534-265293, 06542-265398

E-mail Id: info@ggsestc.ac.in



EXPERIENCED & RESULT-ORIENTED FAGULTIES

DIRECTOR
STC, Kandra, Chas
Jharkhand-827013

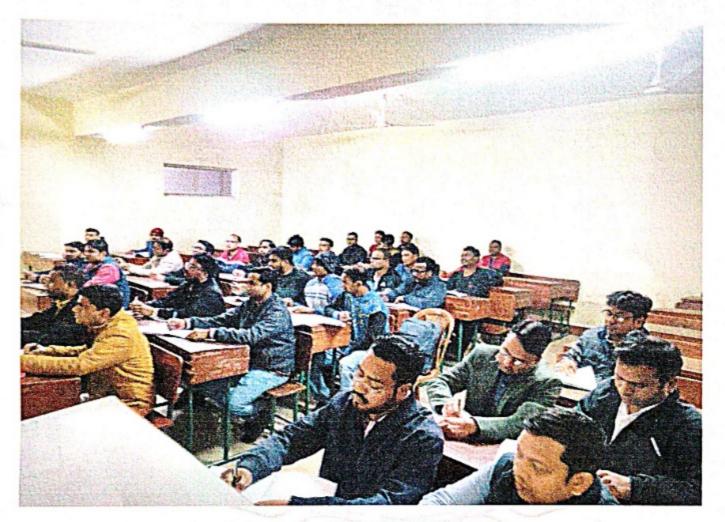
18O 9001:2015 CERTIFIED





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

Year: - 2018-19



Gate classes (Maths) on 17/10/2018



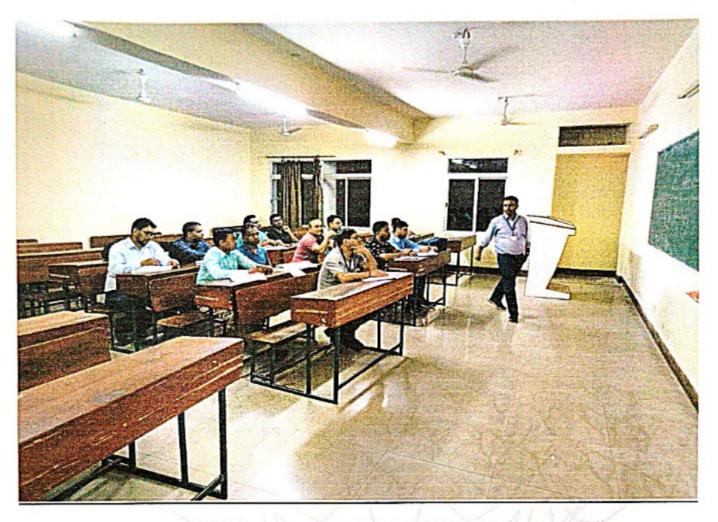
DIRECTOR GGSESTC, Kendra, Chas Bokaro, Jharkhand-627013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi



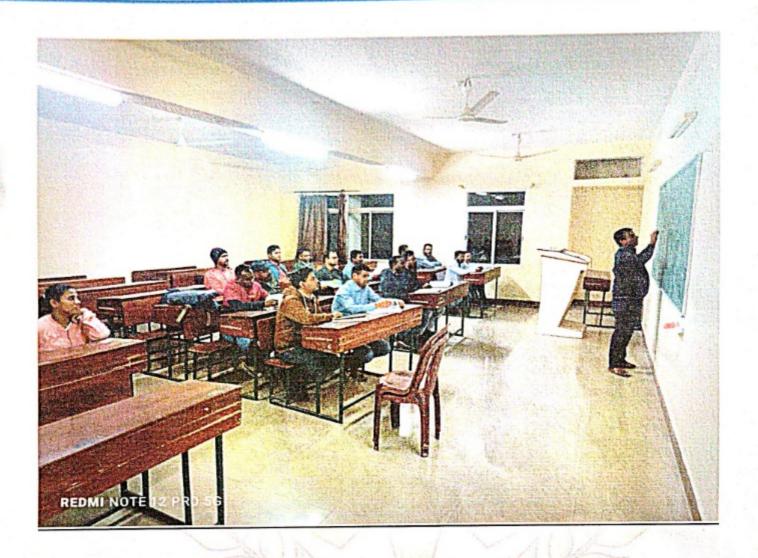
Gate classes (Maths) on 14/08/2018



DIRECTOR GGSE67G Kendra Chas Bekare, Jhan mand-327613



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi



Gate classes (GS) on 02/09/2020



ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi



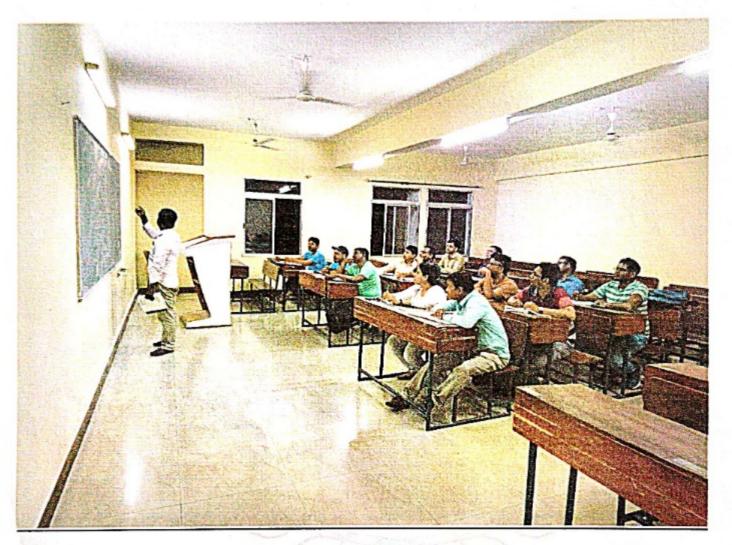
Gate classes (Maths) on 21/09/2020





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

Year: - 2020-21



Gate classes (Maths) on 21/08/2020



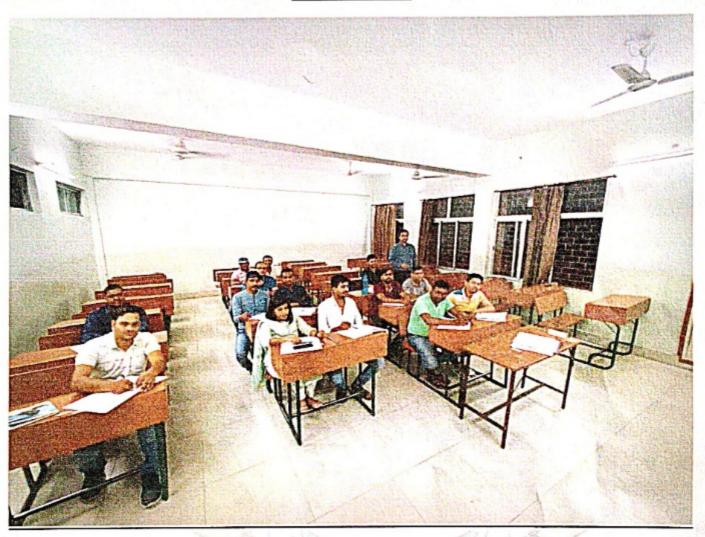
ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

Year: - 2021-22



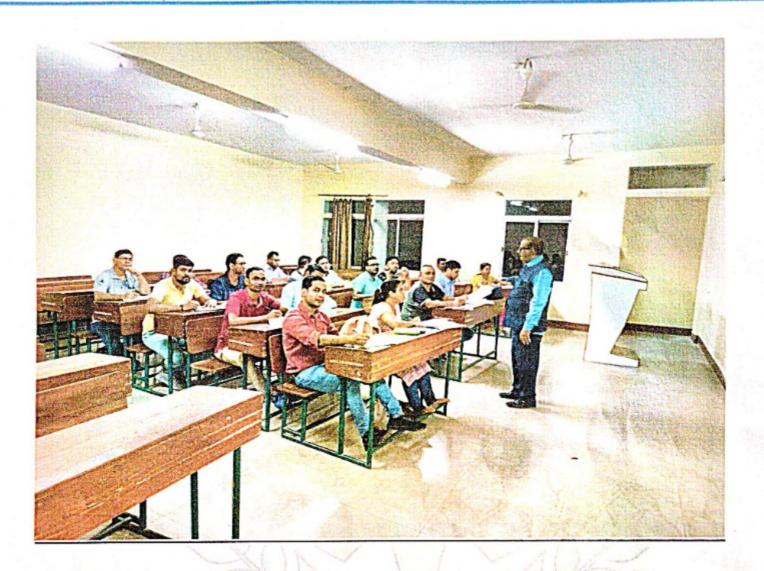
Gate classes (GS) on 28/08/2022



DIRECTOR COSESTO MAIN Chas EGSESTO MAIN TONGS Bokaro, Jhan and-827813



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi



Gate classes (GS) on 28/09/2022



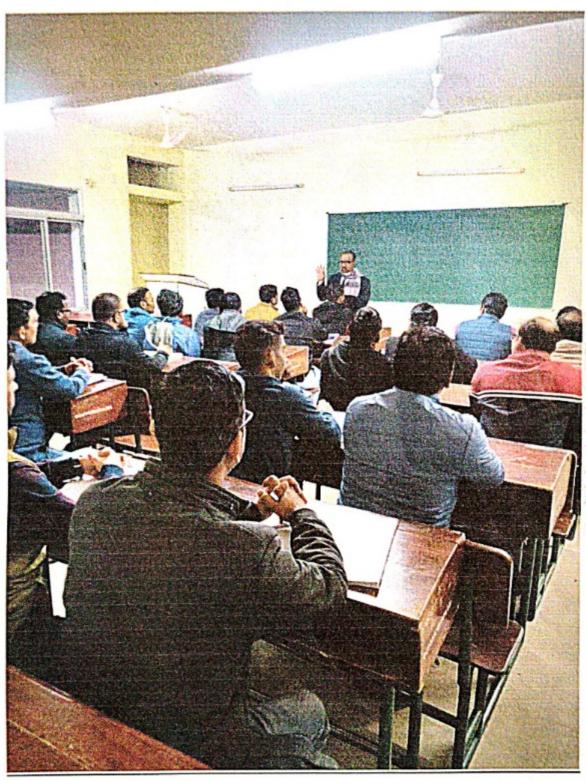
DIRECTOR GGSESTC, Kandra, Chas Bokaro, Sharld and 327013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi



Gate classes (GS) on 18/12/2022

DIRECTOR COSESTS, Karelro, Chas Bekero, January 10027013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, HARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.acon. Website: www.ggsestc.ac.in

Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## GATE Syllabus (Year 2022-23) Mechanical

#### General Aptitude (GA)

This section is common for all GATE papers.

#### 1. Verbal Ability

- English grammar
- Sentence completion
- Verbal analogies
- Word groups
- Critical reasoning
- Verbal deduction

#### 2. Numerical Ability

- Numerical computation
- Numerical estimation
- Numerical reasoning
- Data interpretation

#### **Engineering Mathematics**

#### 1. Linear Algebra

- Matrix algebra
- Eigenvalues and eigenvectors
- Systems of linear equations

#### 2. Calculus

- Functions of single and multiple variables
- Limit, continuity, and differentiability
- Partial derivatives
- Maxima and minima
- Taylor series
- Definite and indefinite integrals
- Double and triple integrals
- Vector calculus: Gradient, Divergence, Curl, and line integrals

#### 3. Differential Equations

- First-order equations (linear and nonlinear)
- Higher-order linear differential equations with constant coefficients
- Laplace transforms

#### 4. Complex Variables

- Analytic functions
- Cauchy-Riemann equations
- Cauchy's integral theorem



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

1.6

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

#### 5. Probability and Statistics

- Definitions of probability
- Conditional probability
- o Distributions (Normal, Binomial, Poisson)
- Mean, median, mode, and standard deviation

#### 6. Numerical Methods

- Solutions of linear and nonlinear algebraic equations
- Integration using trapezoidal and Simpson's rules
- Numerical solutions of first-order differential equations

#### Mechanical Engineering Core Topics

### 1, Applied Mechanics and Design

- Engineering Mechanics
  - Free-body diagrams and equilibrium
  - Trusses and frames
  - Kinematics and dynamics of particles and rigid bodies
  - Impulse and momentum
  - Work and energy

#### Mechanics of Materials

- Stress and strain
- Elastic constants
- Shear force and bending moment diagrams
- Principal stresses
- Mohr's circle
- Torsion of circular shafts
- Euler's theory of columns

#### Theory of Machines

- Kinematic chains and mechanisms
- Velocity and acceleration analysis
- Gear trains
- Flywheels and governors
- Balancing of rotating and reciprocating masses
- Free and forced vibrations of single-degree-of-freedom systems

#### Vibrations

- Natural frequencies of free and damped vibrations
- Resonance

#### Design

- Design of shafts, gears, bearings
- Design for static and dynamic loading
- Failure theories 0



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-327013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA. PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in

# 101

# GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS

Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

#### 2. Fluid Mechanics and Thermal Sciences

#### · Fluid Mechanics

- o Properties of fluids
- o Fluid statics, pressure measurement
- o Kinematics and dynamics of fluid flow
- o Bernoulli's equation
- o Flow through pipes, head losses
- o Boundary layer concepts

#### · Heat Transfer

- o Modes of heat transfer
- o One-dimensional heat conduction
- Unsteady heat conduction
- o Heat exchangers
- o Thermal boundary layers
- o Radiation

#### · Thermodynamics

- o Laws of thermodynamics
- Thermodynamic systems and processes
- o Ideal and real gases
- o Properties of pure substances
- o Air-standard cycles (Carnot, Otto, Diesel)
- Vapor and gas power cycles

#### · Applications

- o Refrigeration and air-conditioning
- o Psychrometrics

#### 3. Manufacturing and Industrial Engineering

#### · Engineering Materials

- Structure and properties of engineering materials
- o Heat treatment

#### Metal Casting

- o Casting processes and design
- o Risers and runners

#### Forming

- o Stress-strain relations in elastic and plastic deformation
- Rolling, forging, extrusion, and drawing.

#### Joining

- Welding processes
- Brazing and soldering





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

#### 2. Fluid Mechanics and Thermal Sciences

- Fluid Mechanics
  - Properties of fluids
  - Fluid statics, pressure measurement
  - o Kinematics and dynamics of fluid flow
  - Bernoulli's equation
  - Flow through pipes, head losses
  - Boundary layer concepts
- Heat Transfer
  - Modes of heat transfer
  - One-dimensional heat conduction
  - Unsteady heat conduction
  - Heat exchangers
  - o Thermal boundary layers
  - Radiation

#### Thermodynamics

- Laws of thermodynamics
- Thermodynamic systems and processes
- o Ideal and real gases
- Properties of pure substances
- Air-standard cycles (Carnot, Otto, Diesel)
- Vapor and gas power cycles

#### Applications

- Refrigeration and air-conditioning
- Psychrometrics

#### 3. Manufacturing and Industrial Engineering

- Engineering Materials
  - Structure and properties of engineering materials
  - Heat treatment

#### Metal Casting

- Casting processes and design
- Risers and runners

#### Forming

- Stress-strain relations in elastic and plastic deformation
- Rolling, forging, extrusion, and drawing

#### · Joining

- Welding processes
- Brazing and soldering



DIRECTOR
GGSESTC, Kandra, Chas
Bokaro, Jinakhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

- Machining and Machine Tool Operations
  - Mechanics of machining
  - Tool life and wear
  - o CNC machining
- Metrology and Inspection
  - Limits, fits, and tolerances
  - Measurement techniques
- Production Planning and Control
  - Forceasting, aggregate production planning
  - Scheduling
- Inventory Control
  - EOQ models
  - MRP
- · Operations Research
  - Linear programming
  - Transportation and assignment problems
  - Simplex method



# 1 OF

## GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS

Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## GATE Syllabus (Year 2022-23) Civil

#### General Aptitude (GA)

This section is common for all GATE papers.

#### 1. Verbal Ability

- English grammar
- · Sentence completion
- · Verbal analogies
- Word groups
- · Critical reasoning
- Verbal deduction

#### 2. Numerical Ability

- Numerical computation
- Numerical estimation
- · Numerical reasoning
- Data interpretation

#### **Engineering Mathematics**

#### 1. Linear Algebra

- Matrix algebra
- Systems of linear equations
- Eigenvalues and eigenvectors

#### 2. Calculus

- Functions of single variable
- Limit, continuity, and differentiability
- o Partial derivatives
- Maxima and minima
- Sequences and series
- o Test for convergence
- Integral calculus
- Line, surface, and volume integrals

#### 3. Differential Equations

- First-order equations (linear and nonlinear)
- o Higher-order linear differential equations with constant coefficients
- Cauchy's and Euler's equations
- Partial differential equations (linear)

#### 4. Complex Variables

- Analytic functions
- Cauchy-Riemann equations
- Cauchy's integral theorem



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkland-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

#### 5. Probability and Statistics

- Definitions of probability
- Conditional probability
- o Random variables
- Probability distributions (Normal, Binomial, Poisson)
- Mean, median, mode, and standard deviation

#### 6. Numerical Methods

- o Solutions of linear and nonlinear algebraic equations
- Integration using trapezoidal and Simpson's rules
- Single and multi-step methods for differential equations

#### Civil Engineering Core Topics

#### 1. Structural Engineering

#### Engineering Mechanics

- o Free-body diagrams and equilibrium
- Trusses and frames
- o Kinematics and dynamics of particles and rigid bodies
- o Impulse and momentum
- Work and energy

#### Strength of Materials

- Stress and strain, elastic constants
- Bending moment and shear force diagrams
- Bending and shear stresses
- Torsion of circular shafts
- Combined and principal stresses
- o Theories of failure
- Deflection of beams

#### Structural Analysis

- Static and kinematic indeterminacy
- Analysis of trusses, beams, and frames
- Influence lines
- o Matrix methods of structural analysis
- Basics of plastic analysis

#### Design of Structures

- Design of steel structures: tension and compression members, beams, column bases
- Design of concrete structures: limit state and working stress methods

Prestressed concrete: losses, analysis of beams

DIRECTOR GGSESTO, Kandra, Chas Bokaro, Jaanshand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

#### 2. Geotechnical Engineering

- Soil Mechanics
  - Origin of soils
  - Classification of soils
  - Permeability and seepage
  - Compaction and consolidation
  - Shear strength

#### Foundation Engineering

- Earth pressure theories
- Stability of slopes
- Shallow foundations: bearing capacity and settlement
- Pile foundations

### 3. Water Resources Engineering

- Fluid Mechanics and Hydraulics
  - o Properties of fluids
  - Fluid statics and dynamics
  - o Bernoulli's equation
  - Laminar and turbulent flow
  - Flow in pipes and open channels
  - Hydraulic machines
- Hydrology
  - Hydrological cycle
  - Rainfall and runoff analysis
  - o Groundwater flow
- Irrigation
  - Methods of irrigation
  - Duty, delta, and efficiency

### 4. Environmental Engineering

- Water and wastewater quality parameters
- Water supply systems
- Sewage and sewerage systems
- Treatment of water and wastewater
- Air pollution
- Noise pollution
- Solid waste management

### 5. Transportation Engineering

- Highway planning and geometric design
- Traffic engineering: traffic studies, capacity, and signal design
- Pavement materials
- Pavement design: flexible and rigid pavements



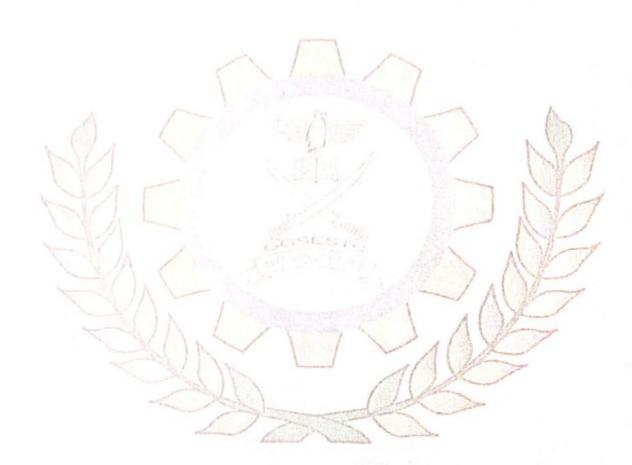
DIRECTOR GGSESTC, Kand Bokaro, Jharkhand ...

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA. PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: Info@ggsestc.ac.in Website: www.ggsestc.ac.in

Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

#### 6. Geomatics Engineering

- Principles of surveying
- Linear and angular measurements
- Levelling and contouring
- Basics of GPS, GIS, and remote sensing



THE CHEST OF STATE OF



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

#### GATE Syllabus (Year 2022-23) EEE

#### General Aptitude (GA)

This section is common for all GATE papers.

#### 1. Verbal Ability

- · English grammar
- · Sentence completion
- Verbal analogies
- Word groups
- Critical reasoning
- Verbal deduction

#### 2. Numerical Ability

- · Numerical computation
- Numerical estimation
- Numerical reasoning
- Data interpretation

#### **Engineering Mathematics**

#### 1. Linear Algebra

- Matrix algebra
- Systems of linear equations
- Eigenvalues and eigenvectors

#### 2. Calculus

- Functions of single and multiple variables
- Limit, continuity, and differentiability
- Partial derivatives
- Maxima and minima
- Sequences and series
- Test for convergence
- Integration by parts, partial fractions, and definite integrals

#### 3. Differential Equations

- First-order equations (linear and nonlinear)
- Higher-order linear differential equations with constant coefficients
- Laplace transforms
- Initial and boundary value problems

#### 4. Complex Variables

- Analytic functions
- Cauchy-Riemann equations
- Cauchy's integral theorem and residue theorem

#### 5. Probability and Statistics

- Definitions of probability
- Conditional probability
- Discrete and continuous random variables
- Probability distributions (Normal, Binomial, Poisson)
- Mean, median, mode, and standard deviation



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 6. Numerical Methods

- Solutions of linear and nonlinear algebraic equations
- Integration using trapezoidal and Simpson's rules
- Single and multi-step methods for differential equations

### **Electrical Engineering Core Topics**

#### 1. Electric Circuits

- KCL, KVL, and network theorems
- Transient response of DC and AC networks
- Sinusoidal steady-state analysis
- Resonance
- Coupled circuits
- · Two-port networks
- Three-phase circuits

### 2. Electromagnetic Fields

- · Coulomb's law, electric field, and potential
- Gauss's law and applications
- Ampere's law, Biot-Savart law, and Faraday's law
- Maxwell's equations
- Wave propagation in free space and dielectrics
- Transmission lines

### 3. Signals and Systems

- Representation of continuous and discrete-time signals
- · LTI systems: analysis and properties
- Fourier series and Fourier transform
- Laplace transform
- Z-transform
- Sampling theorem

### 4. Electrical Machines

- · Transformers: equivalent circuit, losses, efficiency
- DC machines: types, characteristics, starting, and speed control
- Induction motors: principle, performance, torque-speed characteristics
- Synchronous machines: performance, regulation, and parallel operation
- Basics of single-phase motors and special machines

### 5. Power Systems

- · Power generation concepts
- Transmission line parameters and performance
- Per-unit system
- Fault analysis: symmetrical and unsymmetrical faults
- Load flow studies
- Power system stability
- Protection and switchgear

### 6. Control Systems

- · Feedback principles
- Transfer functions
- Block diagram representation

1-he

# **GURU GOBIND SINGH EDUCATIONAL SOCIETY'S** TECHNICAL CAMPUS Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

- Stability analysis using Routh-Hurwitz, Nyquist, and Bode plots
- Root locus techniques
- Time-domain analysis of control systems
- State-space representation

# 7. Electrical and Electronic Measurements

- Bridges and potentiometers
- Measurement of voltage, current, power, and energy
- Instrument transformers
- Digital voltmeters and multimeters
- Oscilloscopes
- Basics of transducers

### 8. Analog and Digital Electronics

- Analog Electronics
  - Diodes, BJTs, MOSFETs: characteristics and applications
  - Operational amplifiers: configurations, filters, oscillators, and timers
  - Voltage regulators
  - Digital Electronics
    - Boolean algebra, minimization
    - Combinational circuits: multiplexers, decoders, encoders
    - Sequential circuits: latches, flip-flops, counters, and shift registers
    - Basics of microprocessors

### 9. Power Electronics

- Power semiconductor devices: characteristics and operation
- Diode rectifiers, controlled rectifiers
- DC-DC converters
- Inverters: voltage source and current source
- PWM techniques
- Applications of power electronics

DIRECTOR



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### GATE Syllabus (Year 2022-23)

CSE

### General Aptitude (GA)

This section is common for all GATE papers.

### 1. Verbal Ability

- English grammar
- Sentence completion
- · Verbal analogies
- Word groups
- Critical reasoning
- Verbal deduction

### 2. Numerical Ability

- Numerical computation
- Numerical estimation
- Numerical reasoning
- Data interpretation

### **Engineering Mathematics**

### 1. Discrete Mathematics

- o Propositional and first-order logic
- o Sets, relations, functions
- Partial orders and lattices
- o Groups
- o Graphs: connectivity, matching, coloring
- o Trees
- Combinatorics

### 2. Linear Algebra

- o Matrices, determinants, system of linear equations
- Eigenvalues and eigenvectors

#### 3. Calculus

- Limits, continuity, and differentiability
- Maxima and minima
- Mean value theorem
- o Integration

### 4. Probability and Statistics

- Probability: conditional probability, Bayes theorem
- Distributions: uniform, normal, exponential, Poisson, and binomial
- Mean, median, mode, and standard deviation
- Random variables

### Core Computer Science Topics

### 1. Digital Logic

- Boolcan algebra
- · Logic gates
- Combinational circuits
- Sequential circuits: flip-flops, latches
- Counters and shift registers



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

- Number systems
- Representation of signed and unsigned numbers
- · Binary arithmetic

### 2. Computer Organization and Architecture

- · Machine instructions and addressing modes
- ALU, data-path, and control unit
- · Instruction pipelining
- · Memory hierarchy: cache, main memory, and secondary storage
- I/O interface
- Microprocessors

### 3. Programming and Data Structures

- Programming in C, C++
- Recursion
- · Arrays, stacks, queues, linked lists
- Trees and binary search trees
- Binary heaps
- Graphs: representation and traversal algorithms

### 4. Algorithms

- Analysis: asymptotic notation, time and space complexity
- Searching, sorting, hashing
- Graph algorithms: shortest path, minimum spanning tree
- Divide-and-conquer
- · Greedy algorithms
- Dynamic programming
- Backtracking
- Complexity classes: P, NP, NP-complete

## 5. Theory of Computation

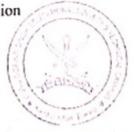
- Regular languages and finite automata
- Context-free grammars and pushdown automata
- · Turing machines
- Undecidability

### Compiler Design

- Lexical analysis
- Parsing: top-down and bottom-up approaches
- Syntax-directed translation
- Runtime environments
- Intermediate code generation
- Code optimization

### 7. Operating Systems

- · Processes, threads, and inter-process communication
- CPU scheduling
- Memory management: paging, segmentation
- File systems
- Deadlocks



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 8. Databases

- ER model
- · Relational model
- SQL
- · Integrity constraints and normal forms
- · Transactions and concurrency control
- Indexing and hashing

### 9. Computer Networks

- ISO/OSI and TCP/IP models
- LAN technologies: Ethernet
- Flow and error control techniques
- Switching
- IPv4, IPv6, routers
- Application layer protocols: HTTP, FTP, SMTP

### 10. Software Engineering (Optional)

- Software development lifecycle
- · Testing methods
- Agile development





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## GATE Syllabus (Year 2022-23) ECE

### General Aptitude (GA)

This section is common for all GATE papers.

### 1. Verbal Ability

- · English grammar
- · Sentence completion
- Verbal analogies
- · Word groups
- · Critical reasoning
- Verbal deduction

### 2. Numerical Ability

- Numerical computation
- Numerical estimation
- Numerical reasoning
- Data interpretation

### **Engineering Mathematics**

### 1. Linear Algebra

- Matrix algebra
- Systems of linear equations
- Eigenvalues and eigenvectors

### 2. Calculus

- Functions of single and multiple variables
- Limit, continuity, and differentiability
- Partial derivatives
- Maxima and minima
- Sequences and series
- o Test for convergence
- Line, surface, and volume integrals

### 3. Differential Equations

- o First-order equations (linear and nonlinear)
- o Higher-order linear differential equations with constant coefficients
- Cauchy's and Euler's equations

### 4. Complex Variables

- Analytic functions
- o Cauchy-Riemann equations
- o Cauchy's integral theorem

### 5. Probability and Statistics

- o Definitions of probability
- Conditional probability
- Random variables
- Probability distributions (Normal, Binomial, Poisson)
- Mean, median, mode, and standard deviation

### 6. Vector Analysis

Gradient, divergence, curl, and their physical interpretations

(14/



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

# Core Electronics and Communication Engineering Topics

### 1. Networks

- Network graphs: matrices associated with graphs
- KCL, KVL
- Network theorems
- Transient response of DC and AC networks
- Sinusoidal steady-state analysis
- Two-port networks
- Transmission line: characteristic impedance, reflection coefficient, VSWR

## 2. Signals and Systems

- Continuous-time and discrete-time signals
- Fourier series and transforms
- Sampling theorem
- Laplace transform
- z-transform
- Transfer function
- LTI systems

### 3. Electronic Devices

- Energy bands in semiconductors
- Intrinsic and extrinsic semiconductors
- Diodes and their applications
- Bipolar junction transistors (BJTs)
- Field-effect transistors (MOSFETs)
- LED, photodiodes, solar cells

### 4. Analog Circuits

- Small signal equivalent circuits of diodes, BJTs, and MOSFETs
- Amplifiers: biasing, equivalent circuits
- Frequency response
- Operational amplifiers: characteristics and applications
- Filters, oscillators, and voltage regulators

# 5. Digital Circuits

- Boolean algebra and minimization
- Logic gates
- Combinational circuits: multiplexers, decoders, adders, etc.
- Sequential circuits: flip-flops, counters, shift registers
- Number systems
- Analog-to-digital and digital-to-analog converters

# 6. Control Systems

- Feedback principles
- Transfer functions
- Stability analysis: Routh-Hurwitz, Nyquist, Bode plots
- Root locus techniques
- Time-domain and frequency-domain analysis



DIRECTOR GGSESTC, Kand Bokaro, J'arkhanc 2 13



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 7. Communications

- Analog communications: amplitude modulation, frequency modulation
- Digital communications: PCM, ASK, FSK, PSK, QAM
- Probability of error
- Information theory: entropy, mutual information
- Basics of error control coding

### 8. Electromagnetics

- Maxwell's equations
- Wave propagation in free space and dielectrics
- · Transmission lines: impedance matching
- Waveguides and antennas
- Basics of radar and optical communication





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### Career Counseling Syllabus (Year 2021-22)

### 1. Introduction to Career Counseling

- · Definition and importance of career counseling
- · Roles and responsibilities of a career counselor
- Ethical considerations in career counseling

### 2. Understanding Self and Skills

- · Self-assessment tools (e.g., personality tests, interest inventories, aptitude tests)
- · Identifying strengths, weaknesses, opportunities, and threats (SWOT analysis)
- Developing soft skills: communication, teamwork, leadership

### 3. Career Exploration and Planning

- Overview of career options and industry trends
- · Researching career opportunities
- Goal setting: short-term and long-term career goals
- Developing a career action plan

### 4. Educational Pathways

- Overview of academic and professional courses
- Choosing the right course or institution
- · Entrance exams, scholarships, and funding options

### 5. Resume and Interview Preparation

- Writing an effective resume and cover letter
- Preparing for job interviews: common questions, mock interviews
- Building an online professional presence (e.g., LinkedIn)

### 6. Career Development Skills

- Networking and relationship-building
- · Time management and productivity
- Dealing with workplace challenges

### 7. Specialized Career Guidance

- Counseling for specific groups (students, professionals, career changers)
- Preparing for government jobs, corporate roles, or entrepreneurship
- · Career opportunities in emerging fields (AI, sustainability, etc.)

### 8. Practical Applications

- Case studies and real-life scenarios in career counseling
- Role-playing counseling sessions
- Feedback and reflection exercises





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

# GATE Syllabus (Year 2020-21) Mechanical

### General Aptitude (GA)

This section is common for all GATE papers.

### 1. Verbal Ability

- · English grammar
- Sentence completion
- Verbal analogies
- · Word groups
- Critical reasoning
- Verbal deduction

### 2. Numerical Ability

- Numerical computation
- Numerical estimation
- Numerical reasoning
- Data interpretation

### **Engineering Mathematics**

### 1. Linear Algebra

- Matrix algebra
- Systems of linear equations
- Eigenvalues and eigenvectors

### 2. Calculus

- Functions of single and multiple variables
- Limit, continuity, and differentiability
- Partial derivatives
- Maxima and minima
- Taylor series
- Definite and indefinite integrals
- Application of integrals
- Divergence and curl

### 3. Differential Equations

- First-order differential equations
- o Higher-order linear differential equations with constant coefficients
- Euler-Cauchy equations
- o Partial differential equations
- Initial and boundary value problems

### 4. Complex Variables

- Analytic functions
- Cauchy-Riemann equations
- Cauchy's integral theorem and integral formula





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 5. Probability and Statistics

- Definitions of probability
- Probability distributions (Binomial, Poisson, Normal)
- Mean, median, mode, and standard deviation

### 6. Numerical Methods

- Numerical solutions of linear and nonlinear algebraic equations
- Integration by trapezoidal and Simpson's rule
- Single and multi-step methods for solving differential equations

### Applied Mechanics and Design

### 1. Engineering Mechanics

- Free-body diagrams and equilibrium
- Trusses and frames
- Virtual work
- Kinematics and dynamics of particles and rigid bodies

### 2. Mechanics of Materials

- Stress and strain, elasticity, and plasticity
- o Mohr's circle for plane stress and plane strain
- Thin cylinders
- Shear force and bending moment diagrams
- Bending and shear stresses
- Torsion of circular shafts
- Buckling of columns

### 3. Theory of Machines

- Displacement, velocity, and acceleration analysis of planar mechanisms
- Gears and gear trains
- Flywheels
- o Cams
- Balancing of reciprocating and rotating masses
- Gyroscope

### 4. Vibrations

- Free and forced vibration of single degree of freedom systems
- Effect of damping
- Vibration isolation

### 5. Design

- Design for static and dynamic loading
- Failure theories
- Fatigue strength and S-N diagram
- Principles of design for manufacturability

Charles South



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### Fluid Mechanics and Thermal Sciences

### 1. Fluid Mechanics

- Fluid properties
- Fluid statics and stability of floating bodies
- o Control-volume analysis
- Differential equations of continuity and momentum
- Bernoulli's equation
- Viscous flow of incompressible fluids
- Boundary layer
- Flow through pipes

### 2. Heat Transfer

- Modes of heat transfer
- Fourier's law, conduction equations
- o Fins
- Free and forced convection
- Radiation
- Heat exchangers

### 3. Thermodynamics

- Zeroth, First, and Second laws of thermodynamics
- Thermodynamic properties and processes
- Thermodynamic cycles

### 4. Applications

- Power and refrigeration cycles
- Air-conditioning
- Psychrometrics

### Manufacturing and Industrial Engineering

### 1. Engineering Materials

- Structure and properties of engineering materials
- Heat treatment
- Stress-strain diagrams for engineering materials

### 2. Metal Casting

- Design of patterns, molds, and cores
- Solidification and cooling

#### 3. Forming

- Stress-strain relations in forming
- Rolling, forging, extrusion, and drawing

#### 4. Joining

- Welding, brazing, and soldering
- Adhesive bonding

### 5. Machining and Machine Tool Operations

- Mechanics of machining
- Tool life and wear
- o Principles of non-traditional machining





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 6. Metrology and Inspection

- o Limits, fits, and tolerances
- Measurement of surface roughness

# 7. Production Planning and Control

- Forecasting models
- Aggregate production planning
- Scheduling

### 8. Inventory Control

- Deterministic models
- Safety stock inventory

## 9. Operations Research

- Linear programming
- Transportation and assignment problems
- Network flow models





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## GATE Syllabus (Year 2020-21) <u>Civil</u>

### General Aptitude (GA)

This section is common for all GATE papers.

### 1. Verbal Ability

- English grammar
- Sentence completion
- Verbal analogies
- Word groups
- Critical reasoning
- Verbal deduction

### 2. Numerical Ability

- Numerical computation
- · Numerical estimation
- · Numerical reasoning
- Data interpretation

### **Engineering Mathematics**

### 1. Linear Algebra

- Matrix algebra
- Eigenvalues and eigenvectors
- System of linear equations

### 2. Calculus

- Functions of single and multiple variables
- Limit, continuity, and differentiability
- Partial derivatives
- Maxima and minima
- Taylor series
- Definite and indefinite integrals
- o Application of integrals
- Double and triple integrals
- Vector calculus: Gradient, Divergence, and Curl

### 3. Ordinary Differential Equations (ODE)

- First-order equations (linear and nonlinear)
- Higher-order linear differential equations with constant eoefficients

### 4. Partial Differential Equations (PDE)

- Formulation and solution of PDEs
- Applications in fluid mechanics and structural mechanics

DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 5. Probability and Statistics

- Definitions of probability
- Probability distributions (Normal, Binomial, Poisson)
- Statistical methods: Mean, median, mode, and standard deviation

### 6. Numerical Methods

- Solutions of linear and nonlinear algebraic equations
- Numerical integration
- Numerical solutions of ordinary differential equations

### Structural Engineering

### 1. Engineering Mechanics

- Free-body diagrams and equilibrium
- Trusses and frames
- Kinematics and dynamics of particles and rigid bodies
- o Impulse and momentum

### 2. Strength of Materials

- Stress and strain
- Elastic constants
- o Mohr's circle
- Shear force and bending moment diagrams
- Flexural and shear stresses
- Torsion of circular shafts
- Buckling of columns

### 3. Structural Analysis

- Static and kinematic indeterminacy
- Slope-deflection and moment distribution methods
- Trusses
- Influence lines

#### 4. Concrete Structures

- Working stress and limit state design concepts
- Design of beams, slabs, and columns
- Bond and development length
- Prestressed concrete

#### 5. Steel Structures

- Design of tension and compression members
- Design of beams and beam-columns
- Connections



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### Geotechnical Engineering

### 1. Soil Mechanics

- Origin of soils, soil classification
- o Permeability and seepage
- Compaction
- Consolidation
- Shear strength

### 2. Foundation Engineering

- Earth pressure theories
- Bearing capacity
- Shallow and deep foundations

### Water Resources Engineering

### 1. Fluid Mechanics and Hydraulics

- Properties of fluids
- Pressure and its measurement
- Kinematics and dynamics of fluid flow
- Bernoulli's equation
- Laminar and turbulent flow
- Flow in pipes
- Open channel flow

### 2. Hydrology

- Hydrological cycle
- o Rainfall measurement
- Evaporation, infiltration, and runoff
- Hydrographs

### 3. Irrigation

- Duty, delta, and crop water requirements
- Irrigation methods
- Canal design

### **Environmental Engineering**

### 1. Water and Wastewater Quality

- Physical, chemical, and biological characteristics of water
- Drinking water standards

### 2. Water Supply

- Sources of water
- Treatment methods

### 3. Wastewater Treatment

- Sewerage systems
- Design of primary and secondary treatment units

DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 4. Air Pollution

- Pollutants
- o Dispersion of air pollutants
- o Air quality standards

### 5. Solid Waste Management

Characteristics and disposal methods

### Transportation Engineering

### 1. Highway Planning

- Geometric design of highways
- Traffic engineering
- o Pavement materials
- Design of flexible and rigid pavements

### 2. Railways, Airports, and Harbors

- Alignment and track geometry
- Airport runway design

### Geomatics Engineering

- · Principles of surveying
- · Errors and adjustments
- · Leveling and trigonometric leveling
- Horizontal and vertical curves
- · GPS and GIS concepts



DIRECTOR
GGSESTC, Kandra, Chas
Bokaro, Jharkhand-827012

ADDREŚS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## GATE Syllabus (Year 2020-21)

EEE

### General Aptitude (GA)

This section is common for all GATE papers.

### 1. Verbal Ability

- English grammar
- Sentence completion
- Verbal analogies
- Word groups
- · Critical reasoning
- Verbal deduction

### 2. Numerical Ability

- Numerical computation
- · Numerical estimation
- Numerical reasoning
- · Data interpretation

### **Engineering Mathematics**

### 1. Linear Algebra

- Matrix algebra
- Systems of linear equations
- Eigenvalues and eigenvectors

#### 2. Calculus

- Limit, continuity, and differentiability
- Partial derivatives
- Maxima and minima
- Sequences and series
- o Test for convergence
- Fourier series
- Vector calculus: Gradient, Divergence, and Curl

### 3. Differential Equations

- First-order linear and nonlinear differential equations
- Higher-order linear differential equations with constant coefficients

### 4. Complex Variables

- Analytic functions
- Cauchy-Riemann equations
- Cauchy's integral theorem and formula
- Taylor and Laurent series



DIRECTOR
GGSESTC, Kandra, Chas
Beliuro, Jarkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 5. Probability and Statistics

- Definitions of probability
- Conditional probability
- Random variables
- Distributions (Normal, Binomial, Poisson)
- Mean, median, mode, and standard deviation

### 6. Numerical Methods

- Solutions of linear and nonlinear algebraic equations
- Integration by trapezoidal and Simpson's rule
- Single and multi-step methods for differential equations

### 7. Transform Theory

- Fourier transform
- Laplace transform
- Z-transform

### **Electrical Engineering Core Topics**

#### 1. Electric Circuits

- Kirchhoff's laws
- Network graph, nodal and mesh analysis
- Network theorems
- Natural and forced response of RLC circuits
- Transient response of DC and AC networks
- Sinusoidal steady-state analysis
- Resonance
- Two-port networks
- · Three-phase circuits
- · Power and power factor in AC circuits

### 2. Electromagnetic Fields

- · Coulomb's law, electric field intensity, and flux density
- Gauss's law and applications
- Electric potential, energy density
- Biot-Savart's law, Ampere's law
- Magnetic flux and flux density
- Faraday's law
- Maxwell's equations
- Plane waves, wave propagation in dielectric and conducting media
- Transmission lines

### 3. Signals and Systems

- Continuous-time and discrete-time signals
- Fourier series and Fourier transform
- Laplace transform

ng media



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

- Z-transform
- Sampling theorem
- LTI systems: stability, causality, impulse response
- Convolution and correlation

### 4. Electrical Machines

- · Transformers: equivalent circuit, losses, efficiency, regulation
- Three-phase and single-phase induction motors
- Synchronous machines
- Principles of DC machines and generators
- Characteristics and performance of electrical machines

### 5. Power Systems

- Power generation concepts
- Transmission line parameters and performance
- Load flow analysis
- Voltage and frequency control
- · Power factor correction
- Symmetrical components
- Fault analysis
- · Protection and switchgear

### 6. Control Systems

- Open-loop and closed-loop control systems
- Block diagram representation
- · Transfer functions
- Stability analysis using Routh-Hurwitz criterion and Nyquist plot
- Frequency response analysis
- Root locus
- Bode and polar plots
- State-space representation

### 7. Electrical and Electronic Measurements

- Bridges and potentiometers
- Measurement of voltage, current, power, energy, and power factor
- · Instrument transformers
- Oscilloscopes
- Error analysis

### 8. Analog and Digital Electronics

- Diode circuits
- Transistor circuits
- Operational amplifiers
- Combinational and sequential logic circuits



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in

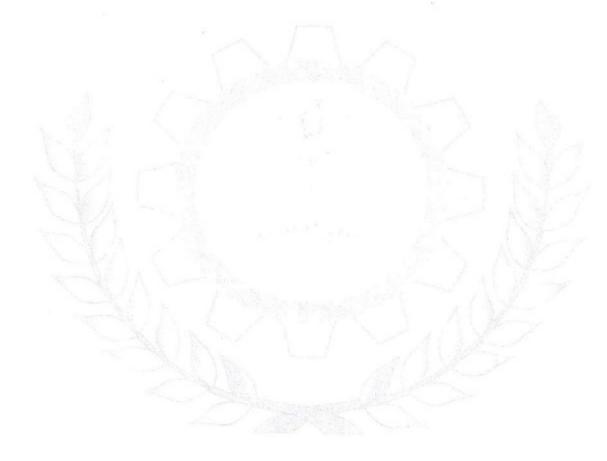


Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

- A/D and D/A converters
- Microprocessors

### 9. Power Electronics

- · Characteristics of power semiconductor devices
- · Diode rectifiers
- · Phase-controlled rectifiers
- · Choppers and inverters
- Principles of operation of DC-DC, DC-AC, and AC-AC converters





DIRECTOR
GGSFS 3. Kandra, Chas
Bokara Albant 827013



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### GATE Syllabus (Year 2020-21)

CSE

### General Aptitude (GA)

This section is common for all GATE papers.

### 1. Verbal Ability

- English grammar
- Sentence completion
- Verbal analogies
- Word groups
- Critical reasoning
- Verbal deduction

### 2. Numerical Ability

- · Numerical computation
- Numerical estimation
- · Numerical reasoning
- Data interpretation

### **Engineering Mathematics**

### 1. Discrete Mathematics

- Propositional and first-order logic
- Sets, relations, functions, partial orders, lattices
- Graphs: connectivity, matching, coloring
- Trees, spanning trees
- Combinatorics: counting, recurrence relations, generating functions

### 2. Linear Algebra

- o Matrices, determinants
- Systems of linear equations
- Eigenvalues and eigenvectors

### 3. Calculus

- Limits, continuity, and differentiability
- Maxima and minima
- Sequences and series
- Test for convergence
- o Integral calculus

### 4. Probability and Statistics

- Random variables, probability distributions
- Mean, median, mode, and standard deviation
- Bayes' theorem
- Sampling and hypothesis testing



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### Computer Science Core Topics

### 1. Digital Logic

- Number systems
- · Combinational and sequential circuits
- · Minimization of Boolean functions
- Logic gates
- Arithmetic circuits
- · Flip-flops, latches
- Counters, shift registers

### 2. Computer Organization and Architecture

- Machine instructions and addressing modes
- · ALU, data-path, and control unit
- Memory hierarchy: cache, main memory, secondary storage
- I/O interface (interrupt and DMA)
- · Instruction pipelining
- Basics of RISC and CISC architectures

### 3. Programming and Data Structures

- Programming concepts (C, C++)
- Recursion
- · Arrays, stacks, queues, linked lists
- Trees, binary search trees
- · Heaps, graphs, BFS, DFS
- Hashing-

### 4. Algorithms

- · Analysis of algorithms: time and space complexity
- Asymptotic notations
- Sorting and searching algorithms
- Divide and conquer
- Greedy algorithms
- Dynamic programming
- · Graph algorithms: minimum spanning tree, shortest paths
- NP-completeness

### 5. Theory of Computation

- · Regular languages and finite automata
- Context-free languages and push-down automata
- Turing machines
- Decidability and undecidability





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 6. Compiler Design

- · Lexical analysis
- · Syntax-directed translation
- Parsing techniques (LL, LR)
- · Runtime environments
- Intermediate code generation
- Code optimization

### 7. Operating System

- Processes, threads, inter-process communication
- Process synchronization, semaphores
- CPU scheduling
- Deadlock
- Memory management and virtual memory
- File systems

### 8. Databases

- · ER model, relational model
- Integrity constraints, relational algebra
- SQL
- · Transactions and concurrency control
- Normalization
- Indexing, B-trees, B+ trees

### 9. Computer Networks

- ISO/OSI model, TCP/IP model
- Network topologies, LAN technologies
- Switching: circuit and packet switching
- IP addressing, subnetting
- Routing algorithms
- Flow and error control
- Application layer protocols: HTTP, FTP, SMTP





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## GATE Syllabus (Year 2020-21)

ECE

### General Aptitude (GA)

This section is common for all GATE papers.

### 1. Verbal Ability

- · English grammar
- · Sentence completion
- Verbal analogies
- Word groups
- · Critical reasoning
- Verbal deduction

### 2. Numerical Ability

- Numerical computation
- Numerical estimation
- · Numerical reasoning
- Data interpretation

### **Engineering Mathematics**

### 1. Linear Algebra

- Matrix algebra
- Systems of linear equations
- Eigenvalues and eigenvectors

#### 2. Calculus

- Limit, continuity, and differentiability
- Partial derivatives
- Maxima and minima
- Sequences and series
- Test for convergence
- Fourier series
- Vector calculus: Gradient, Divergence, and Curl

### 3. Differential Equations

- First-order linear and nonlinear differential equations
- Higher-order linear differential equations with constant coefficients

### 4. Complex Variables

- Analytic functions
- Cauchy-Riemann equations
- o Cauchy's integral theorem and formula
- Taylor and Laurent series





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 5. Probability and Statistics

- o Definitions of probability
- Conditional probability
- Random variables
- Distributions: Normal, Binomial, Poisson
- Mean, median, mode, and standard deviation

### 6. Numerical Methods

- Solutions of linear and nonlinear algebraic equations
- Integration by trapezoidal and Simpson's rule
- Numerical solutions of ordinary differential equations

### **Electronics and Communication Core Topics**

### 1. Networks

- Network solution methods: nodal and mesh analysis
- · Network theorems: superposition, Thevenin, Norton, maximum power transfer
- Steady-state sinusoidal analysis using phasors
- · Time-domain analysis of first- and second-order networks
- · Transient response of networks
- Network graphs
- Two-port networks
- · Transmission lines

### 2. Signals and Systems

- Continuous-time and discrete-time signals
- Fourier series and Fourier transform
- Laplace transform
- Z-transform
- Sampling theorem
- · LTI systems: stability, causality, impulse response
- · Convolution and correlation

### 3. Electronic Devices

- · Energy bands in intrinsic and extrinsic semiconductors
- Carrier transport: diffusion, drift, and generation-recombination
- P-N junctions, Zener diode, BJT, MOSFET, and LED
- Integrated circuit fabrication

### 4. Analog Circuits

- Small-signal equivalent circuits
- Amplifiers: biasing, frequency response
- Feedback amplifiers
- Oscillators
- Operational amplifiers: characteristics and applications
- Filters: passive and active





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 5. Digital Circuits

- Number systems
- · Boolean algebra, minimization of Boolean functions
- · Combinational circuits: arithmetic circuits, multiplexers, decoders
- · Sequential circuits: latches, flip-flops, counters, shift registers
- Sample-and-hold circuits, ADCs, DACs
- · Semiconductor memories

### 6. Control Systems

- · Open-loop and closed-loop control systems
- Transfer functions
- Stability analysis: Routh-Hurwitz, root locus, Nyquist plot, Bode plot
- · Frequency response analysis
- State-space representation

### 7. Communications

- · Analog communication: amplitude modulation and demodulation, frequency modulation
- Digital communication: PCM, DPCM, delta modulation
- · Digital modulation techniques: ASK, PSK, FSK, QAM
- · Information theory: entropy, mutual information
- Error control coding

### 8. Electromagnetics

- Coulomb's law, electric field, Gauss's law
- Ampere's law, Faraday's law
- Maxwell's equations
- Plane waves
- Transmission lines: impedance matching, Smith chart
- Waveguides



DIRECTO S GGSESTC, Kan-Bokaro, Jharkh

Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## GATE Syllabus (Year 2018-19) Mechanical

## 1. Engineering Mathematics

- Linear Algebra: Matrix algebra, systems of linear equations, eigenvalues, and eigenvectors.
- Calculus: Functions of a single variable, limits, continuity, and differentiability, Taylor series, maxima and minima, partial derivatives, multiple integrals.
- Differential Equations: First and second-order differential equations, linear differential equations with constant coefficients, solutions using various methods.
- Complex Variables: Analytic functions, Cauchy-Riemann equations, conformal transformations.
- Probability and Statistics: Mean, variance, standard deviation, distributions, sampling, hypothesis testing.
- Numerical Methods: Numerical solution of equations, interpolation, numerical integration, numerical solution of differential equations.

## 2. Applied Mechanics and Design

- Engineering Mechanics: Static equilibrium, friction, dynamics, work and energy, virtual work, rigid body dynamics.
- Strength of Materials: Stress and strain, axial, bending, shear, torsion, and thermal stresses, moment-curvature relations, deflection of beams, thin-walled pressure vessels.
- Theory of Machines: Mechanisms, velocity and acceleration analysis, cams, gear trains, friction in machines, governors, flywheels.
- Machine Design: Design of shafts, bearings, gears, clutches, brakes, couplings, springs, and fasteners.

## 3. Thermodynamics

- Laws of Thermodynamics: Zeroth, first, second, and third laws, heat engines, Carnot cycle, entropy.
- Properties of Pure Substances: P-V-T surfaces, phase diagrams, property tables.
- Power Cycles: Rankine, Carnot, Otto, Diesel, Brayton, and refrigeration cycles.
- Heat Transfer: Modes of heat transfer, conduction, convection, radiation, heat exchangers, thermal resistance.

## 4. Fluid Mechanics and Thermal Sciences

- Fluid Mechanics: Fluid properties, fluid statics, kinematics and dynamics of fluids, continuity equation, Bernoulli's equation, flow measurement, boundary layer theory, flow in pipes.
- Fluid Machines: Turbines, pumps, compressors, fans, blowers.
- Heat Transfer: Conduction, convection, radiation, heat exchangers, thermal resistance.





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 5. Manufacturing and Industrial Engineering

- Manufacturing Processes: Casting, welding, forming, machining processes, and non-traditional machining.
- Production Planning and Control: Inventory control, project management, optimization techniques, operations research.
- Metrology and Inspection: Measurement of dimensions, tolerances, surface finish, and inspection techniques.

### 6. Material Science and Engineering

- Structure of Materials: Atomic structure, bonding, crystalline solids, x-ray diffraction, crystallography.
- Properties of Materials: Mechanical properties, stress-strain diagrams, hardness, toughness, fatigue, creep.
- Phase Transformation: Phase diagrams, solidification, heat treatment processes, diffusion in solids.
- Materials for Engineering Applications: Ferrous and non-ferrous materials, composites, polymers, ceramics, and smart materials.

### 7. Strength of Materials

- · Stress and Strain analysis in various types of loading conditions.
- Bending, torsion, and shear stresses in beams and shafts.
- Columns and buckling analysis.
- Combined loadings and elastic deformations.

### 8. Theory of Machines

- · Kinematics of machines.
- Analysis of linkages and mechanisms.
- Design and analysis of gears and cams.
- Vibrations (Free and Forced vibrations, damping, resonance).

### 9. Heat Transfer

- Conduction, convection, and radiation principles.
- Heat exchanger analysis and design.
- Thermal boundary layer theory.

### 10. Fluid Mechanics

- Fluid properties, fluid statics, fluid dynamics.
- Bernoulli's equation and its applications.
- Flow through pipes, fluid flow measurement, and boundary layer concepts.

### 11. Manufacturing and Industrial Engineering

- Basic principles of manufacturing processes like casting, welding, and machining.
- · Process planning and production scheduling.
- Quality control and maintenance engineering.

Charles Down

Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## GATE Syllabus (Year 2018-19) Civil

## 1. Engineering Mathematics

Linear Algebra: Matrix algebra, systems of linear equations, eigenvalues, eigenvectors.

 Calculus: Functions of a single variable, limits, continuity, differentiability, Taylor series, maxima and minima, partial derivatives, multiple integrals, vector calculus, gradient, divergence, curl, Stokes' and Gauss' theorems.

 Differential Equations: First and second-order differential equations, linear differential equations with constant coefficients, solutions of ordinary differential equations, methods of solution.

 Complex Variables: Analytic functions, Cauchy-Riemann equations, conformal transformations, contour integration.

 Probability and Statistics: Mean, variance, standard deviation, probability distributions (Binomial, Poisson, Normal), sampling, hypothesis testing, regression analysis.

 Numerical Methods: Numerical solution of algebraic equations, interpolation, numerical integration, solution of linear systems, numerical solution of differential equations.

## 2. Structural Engineering

 Strength of Materials: Stress-strain relationship, axial, shear, bending, torsion, thermal stresses, deflection of beams, columns.

 Structural Analysis: Equilibrium equations, analysis of indeterminate structures, bending moments and shear force diagrams, energy methods, influence lines, moment-curvature relations.

 Design of Concrete and Steel Structures: Working stress method and limit state method for design of beams, slabs, columns, and foundations (concrete), design of tension and compression members, beams, columns, and connections (steel).

Theory of Structures: Analysis of trusses, frames, arches, cables, and suspension bridges.

 Dynamics of Structures: Free and forced vibration, damped and undamped systems, natural frequencies, and modes.

## 3. Geotechnical Engineering

 Soil Mechanics: Properties of soil, classification, compaction, permeability, consolidation, shear strength, and soil stress distribution.

 Foundation Engineering: Shallow foundations (spread footings, slab and beam foundations), deep foundations (piles, pile load tests), settlement of foundations, bearing capacity of soils, earth pressure theories.

 Soil Dynamics: Dynamic properties of soil, machine foundation design, ground vibrations, seismic design considerations.

Superior # China Charles



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 4. Water Resources Engineering

- Fluid Mechanics: Fluid properties, fluid statics, Bernoulli's equation, flow through pipes, open channel flow, flow measurement techniques.
- Hydrology: Hydrological cycle, precipitation, evapotranspiration, infiltration, runoff, hydrograph, flood frequency analysis.
- Water Supply and Treatment: Water quality, treatment methods (coagulation, filtration, disinfection), distribution systems, pipes and pumps, reservoirs.
- Irrigation Engineering: Types of irrigation systems, irrigation water requirement, conveyance losses, drainage, and canal lining.

### 5. Environmental Engineering

- Environmental Chemistry: Water quality parameters, sewage, industrial effluents, air quality, and noise pollution.
- Wastewater Engineering: Collection, treatment, and disposal of sewage, primary, secondary, and tertiary treatment, activated sludge process, anaerobic digestion, septic tanks.
- Solid Waste Management: Collection, transportation, and disposal of solid wastes, landfill design, recycling.
- Air and Noise Pollution: Sources, effects, and control of air and noise pollution, air quality standards.

### 6. Transportation Engineering

- Highway Engineering: Geometric design of highways, traffic surveys, traffic flow theory, intersection design, pavement design (flexible and rigid pavements), road materials, and construction methods.
- Railway, Airport, and Dockyard Engineering: Railway track design, railway stations, signaling, and control systems, airport planning, and design, harbor and dock design.

### 7. Environmental and Ecology

- Ecology and Ecosystem: Biotic and abiotic factors, energy flow, ecological pyramids, biodiversity, sustainable development, environmental ethics.
- Environmental Policies and Legislations: Environmental protection laws, environmental impact assessment (EIA), environmental audit.

### 8. Surveying

- Plane Surveying: Linear and angular measurements, leveling, contouring, measurement of areas, triangulation, and trilateration.
- Geodetic Surveying: Curvature of the Earth, correction for curvature and refraction, satellite surveying, GPS.
- Total Station and Remote Sensing: Modern surveying equipment and techniques.
- · Surveying and Mapping: Cartography, map reading, and interpretation of survey data.

DIRECTOR
GGSESTC, Kandra, Chas
Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 9. Construction Management

- Construction Materials: Properties, use, and testing of construction materials like cement, aggregates, concrete, bricks, etc.
- Project Planning and Control: Project scheduling, PERT/CPM, cost estimation, project financing, tendering, and contracts.
- Construction Techniques: Construction of buildings, roads, bridges, tunnels, dams, and other infrastructure.
- Quality Control: Inspection, testing of materials, and quality assurance in construction.

### 10. Building Materials and Construction

- Properties of Building Materials: Cement, bricks, tiles, stones, timber, steel, polymers, composites, etc.
- Building Construction: Various building construction techniques, construction safety practices.

DIRECTOR
GGSESTC, Kandra, Chas
Bokaro, Jharkhand-827013



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### GATE Syllabus (Year 2018-19) EEE

### 1. Engineering Mathematics

- · Linear Algebra: Matrix algebra, systems of linear equations, eigenvalues and eigenvectors.
- Calculus: Functions of a single variable, limits, continuity, differentiability, Taylor series, maxima
  and minima, partial derivatives, multiple integrals, and vector calculus (gradient, divergence, curl,
  Stokes' and Gauss' theorems).
- Differential Equations: First-order and second-order linear differential equations, linear differential
  equations with constant coefficients, methods of solution, Laplace transforms, and its inverse.
- Complex Variables: Analytic functions, Cauchy-Riemann equations, contour integration, and residue theorem.
- Probability and Statistics: Mean, variance, standard deviation, probability distributions (Binomial, Poisson, Normal), sampling, hypothesis testing, regression analysis.
- Numerical Methods: Numerical solution of algebraic equations, interpolation, numerical integration, solution of linear systems, and numerical solutions to differential equations.

### 2. Electric Circuits and Fields

- Circuit Laws: Ohm's law, Kirchhoff's current and voltage laws.
- Network Theorems: Thevenin's theorem, Norton's theorem, superposition theorem, maximum power transfer theorem.
- AC Circuits: Phasor representation, impedance, reactance, resonance, power factor, and power in AC circuits, analysis of RLC circuits.
- Magnetic Fields: Biot-Savart law, Ampere's law, Faraday's law of induction, Lorentz force, Maxwell's equations in integral and differential form.
- Electrostatics and Electromagnetic Waves: Electric field, potential, Gauss's law, capacitors, electric
  field energy, wave equations, propagation of electromagnetic waves.

### 3. Signals and Systems

- Continuous and Discrete Time Signals: Basic operations on signals (scaling, shifting, etc.), signal representation (sine, exponential, impulse, step).
- System Properties: Linearity, time invariance, stability, and causality.
- Transform Techniques: Fourier transform, Laplace transform, Z-transform, inverse transforms.
- Time-Domain and Frequency-Domain Analysis: Convolution, correlation, and impulse response.
- Filtering: Low-pass, high-pass, band-pass, and band-stop filters.





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 4. Electrical Machines

- DC Machines: Construction, working principle, armature reaction, commutation, characteristics of DC motors, and DC generators.
- AC Machines: Single-phase and three-phase induction motors, synchronous motors, transformers, their construction, operation, and applications.
- Transformers: Working principles, equivalent circuit, regulation, efficiency, autotransformers, and three-phase transformers.
- Special Machines: Stepper motors, permanent magnet motors, and reluctance motors.

### 5. Power Systems

- Power Generation: Thermal power plants, hydroelectric power plants, nuclear power plants, and renewable energy generation.
- Transmission Lines: Transmission line models, performance, and characteristics, short, medium, and long transmission lines, voltage regulation, and power loss in transmission lines.
- Power System Protection: Protection of generators, transformers, transmission lines, and busbars using relays and circuit breakers.
- Load Flow Analysis: Power flow equations, bus admittance matrix, Gauss-Seidel, Newton-Raphson methods.
- Stability and Control: Stability of power systems, voltage stability, and transient stability analysis.
- Economic Operation and Unit Commitment: Economic load dispatch, optimal generation scheduling, unit commitment problem.

### 6. Control Systems

- System Modeling: Mathematical models of mechanical and electrical systems (transfer function, state-space representation).
- Time Domain Analysis: Transient and steady-state response, first-order and second-order systems, stability, and performance indices.
- Frequency Domain Analysis: Bode plots, Nyquist plots, frequency response, and stability criterion (Nyquist, Bode, Root Locus).
- Control System Components: Feedback, controllers, and compensators (PID controllers).
- Stability Analysis: Routh-Hurwitz criterion, root locus, Nyquist criterion, and stability of closed-loop systems.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 7. Electromagnetic Field Theory

- · Electrostatics: Electric field, potential, capacitance, and energy in electrostatic fields.
- Magnetostatics: Magnetic fields, Ampere's law, magnetic potential, inductance.
- Maxwell's Equations: Formulation in integral and differential form, physical interpretation, wave propagation, and plane wave propagation in free space.
- Transmission Lines: Voltage, current, impedance, and power on transmission lines, standing wave ratio (SWR), reflection coefficient.

### 8. Power Electronics

- Power Semiconductor Devices: Diodes, thyristors, transistors, MOSFETs, IGBTs, their characteristics, and applications.
- Rectifiers and Inverters: AC to DC conversion, DC to AC conversion, single-phase and three-phase inverters, controlled rectifiers, and choppers.
- Converters: Voltage, current, and resonant converters, pulse-width modulation (PWM), and applications in DC drives.
- Switch Mode Power Supplies: Buck, boost, and buck-boost converters.

### 9. Instrumentation and Measurement

- Measurement of Electrical Quantities: Voltage, current, power, energy, and their measurement using appropriate instruments.
- Signal Conditioning: Amplifiers, filters, and digital conversion (ADC/DAC).
- Transducers and Sensors: Types of sensors (temperature, pressure, position, velocity), strain gauges, thermocouples, etc.
- Electrical and Electronic Instruments: Working principles of voltmeters, ammeters, wattmeters, oscilloscopes, and digital instruments.

### 10. Electrical and Electronic Circuits

- Resistor Networks: Series and parallel resistive circuits, voltage dividers.
- Basic Semiconductor Circuits: Diode circuits, BJT amplifiers, FET amplifiers, and operational amplifiers.
- Power Electronics Circuits: Thyristors, MOSFETs, and IGBT circuits.
- Filters and Oscillators: RC, RL, and RLC circuits, frequency response, filters, and oscillators (LC, crystal).





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### GATE Syllabus (Year 2018-19) CSE

### 1. Engineering Mathematics

- · Linear Algebra: Matrix operations, determinants, eigenvalues, eigenvectors, and diagonalization.
- Calculus: Functions of a single variable, limits, continuity, differentiability, Taylor series, maxima and minima, partial derivatives, multiple integrals, and vector calculus (gradient, divergence, curl).
- Probability and Statistics: Mean, variance, standard deviation, probability distributions (Binomial, Poisson, Normal), Bayes' theorem, sampling, hypothesis testing, regression analysis.
- Differential Equations: First-order and second-order differential equations, linear differential
  equations with constant coefficients, methods of solution, Laplace transforms.
- Numerical Methods: Numerical solution of algebraic equations, interpolation, numerical integration, solution of linear systems, and numerical solutions of differential equations.

### 2. Digital Logic

- Boolean Algebra: Logic gates, Boolean expressions, simplification using Boolean algebra and Karnaugh maps, and minimization techniques.
- Combinational Circuits: Adders, subtractors, multiplexers, decoders, encoders, code converters.
- Sequential Circuits: Flip-flops (SR, D, JK, T), registers, counters, state diagrams, and state minimization.
- · Number Systems: Binary, octal, hexadecimal, and conversions between them.

### 3. Computer Organization and Architecture

- Basic Computer Organization and Design: CPU structure, memory, ALU, I/O systems, control unit, instruction cycle, addressing modes, instruction formats.
- Assembly Language Programming: Basic instruction formats, addressing modes, control flow instructions, simple programs.
- Processor Design: Design of ALU, control unit, and data path.
- Memory Hierarchy: Cache memory, main memory, virtual memory, paging, segmentation, and TLB.
- I/O Systems: Interrupts, DMA, I/O devices.

### 4. Programming and Data Structures

- Programming Languages: C programming language (syntax, data types, operators, control structures, functions, arrays, pointers).
- Data Structures: Arrays, linked lists (singly, doubly), stacks, queues, trees, binary search trees, heaps, graphs, hash tables.
- Algorithms on Data Structures: Searching, insertion, deletion, traversal (in-order, pre-order, post-order), balanced trees (AVL, Red-Black), graph algorithms (DFS, BFS).

Recursion and Backtracking: Solving problems using recursion and backtracking (e.g., N-Queens, subset sum, etc.).

GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 5. Algorithms

- Algorithm Design Techniques: Divide and conquer, greedy algorithms, dynamic programming, backtracking, branch and bound.
- Sorting and Searching: Sorting algorithms (quick sort, merge sort, bubble sort, insertion sort, heap sort), searching algorithms (binary search, linear search).
- Complexity Analysis: Time complexity (Big-O, Omega, Theta), space complexity, and analysis of algorithms using recurrence relations.
- Graph Algorithms: Shortest path algorithms (Dijkstra, Bellman-Ford), minimum spanning tree (Prim's, Kruskal's), and network flow algorithms (Ford-Fulkerson).

## 6. Theory of Computation

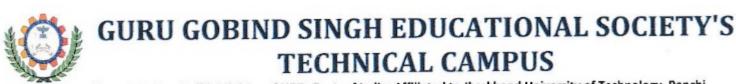
- Automata Theory: Deterministic and non-deterministic finite automata, regular expressions, pumping lemma for regular languages.
- Context-Free Grammar (CFG): Pushdown automata, context-free languages, parsing, ambiguity in context-free grammar.
- Turing Machines: Turing machines and their variants, decidability, halting problem.
- Formal Languages and Automata: Chomsky hierarchy, closure properties of regular and contextfree languages.
- · Computability Theory: Decidability, reducibility, and tractable problems.

### 7. Compilers

- Lexical Analysis: Tokenization, regular expressions, finite automata for lexical analysis.
- Syntax Analysis: Context-free grammars, parse trees, top-down and bottom-up parsing (LL, LR parsing), syntax-directed translation.
- Semantic Analysis: Type checking, symbol tables, and scope resolution.
- Intermediate Code Generation: Three-address code, intermediate representations (abstract syntax trees).
- Code Optimization: Optimization techniques (loop unrolling, dead code elimination).
- Code Generation and Code Scheduling: Instruction selection, register allocation, instruction pipelining.



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## 8. Operating System

- Process Management: Processes, threads, process synchronization, inter-process communication, scheduling algorithms (FCFS, SJF, RR, priority).
- Memory Management: Paging, segmentation, virtual memory, page replacement algorithms (LRU, FIFO, OPT).
- File Systems: File concepts, file operations, file systems implementation, directories, file access methods, file allocation methods (contiguous, linked, indexed).
- Concurrency: Deadlock detection, prevention, and avoidance (Banker's algorithm), synchronization mechanisms (semaphores, mutexes).
- I/O Systems: I/O management, device drivers, disk scheduling algorithms (FCFS, SSTF, SCAN).

#### 9. Databases

- Database Design: Entity-relationship model, relational model, normalization (1NF, 2NF, 3NF, BCNF), functional dependencies.
- SQL and Query Processing: SQL commands (SELECT, INSERT, DELETE, UPDATE), joins, aggregate functions, group by, nested queries, indexing.
- Transaction Management: ACID properties, transaction isolation levels, concurrency control (locking, timestamp ordering).
- Database Management Systems (DBMS): Database architecture, storage models, indexing (B-trees, hash indexing), query optimization.

## 10. Computer Networks

- Network Models: OSI and TCP/IP models, layers, protocols, and services.
- Data Link Layer: Framing, error detection and correction, flow control, MAC protocols (Ethernet, Wi-Fi).
- Network Layer: IP addressing, routing (distance vector, link-state, and path vector protocols), subnetting, CIDR, NAT.
- Transport Layer: TCP, UDP, congestion control, flow control, error detection, and recovery.
- Application Layer: DNS, HTTP, FTP, SMTP, POP, and IMAP.
- Network Security: Encryption, public key infrastructure (PKI), digital signatures, SSL/TLS, firewalls.



# 101

# GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS

Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## 11. Software Engineering

- Software Development Life Cycle (SDLC): Models (waterfall, agile, spiral, V-model), requirements gathering, design, testing, deployment.
- Software Design: Design patterns, principles of software design (modularity, abstraction), objectoriented design.
- Testing: Types of testing (unit testing, integration testing, system testing, acceptance testing), test
  case design, black-box, and white-box testing.
- Software Project Management: Project planning, estimation techniques, risk management, quality assurance, team management.

## 12. Miscellaneous Topics

- Distributed Systems: Architecture, synchronization, mutual exclusion, consensus, distributed file systems.
- Artificial Intelligence and Machine Learning: Search algorithms (A\*, BFS, DFS), knowledge representation, decision trees, neural networks, supervised and unsupervised learning.

DIRECTOR
GGSESTC, Kandra, Chas
Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

PHONE: 06542-265293, FAX: 06542-265346 E-MAIL: info@ggsestc.ac.in Website: www.ggsestc.ac.in



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## GATE Syllabus (Year 2018-19) ECE

## General Aptitude (GA)

- Verbal Ability
  - English grammar
  - Sentence completion
  - Verbal analogies
  - Word groups
  - Critical reasoning
  - Verbal deduction
- Numerical Ability
  - Numerical computation
  - Numerical estimation
  - Numerical reasoning
  - o Data interpretation

## **Engineering Mathematics**

- 1. Linear Algebra
  - Matrix algebra
  - Systems of linear equations
  - Eigenvalues and eigenvector

#### 2. Calculus

- o Limit, continuity, and differentiability
- Partial derivatives
- Maxima and minima
- Sequences and series
- Test for convergence
- Fourier series

#### 3. Differential Equations

- First-order equations (linear and nonlinear)
- Higher-order linear differential equations
- Method of variation of parameters
- Partial differential equations
- Initial and boundary value problems

### 4. Complex Variables

- Analytic functions
- Cauchy's integral theorem and integral formula
- Taylor and Laurent series

#### 5. Probability and Statistics

- Definitions of probability and sampling theorems
- Random variables



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

- o Probability distributions (Poisson, normal, binomial)
- o Mean, median, mode, and standard deviation
- Conditional probability and Bayes' theorem

### 6. Numerical Methods

- Solutions of linear and nonlinear algebraic equations
- Integration by trapezoidal and Simpson's rule
- Single and multi-step methods for differential equations

### 7. Transform Theory

- Fourier transform
- Laplace transform
- Z-transform

### **Electronics and Communication Engineering**

#### 1. Networks

- Network graphs
- Kirchhoff's laws
- Node and mesh analysis
- o AC and DC network theorems
- Frequency domain analysis of RLC circuits
- Two-port network parameters
- Resonance
- Coupled circuits
- Passive filters
- Network synthesis

#### 2. Signals and Systems

- Continuous-time and discrete-time signals
- Fourier series and transform
- Laplace transform
- Z-transform
- Sampling theorem
- LTI systems (stability, causality, impulse response)

#### 3. Electronic Devices

- Energy bands in semiconductors
- Intrinsic and extrinsic semiconductors
- PN junction diodes
- Bipolar Junction Transistors (BJT)
- Field-Effect Transistors (MOSFET and JFET)
- Operational principles and characteristics
- Power devices (SCR, TRIAC, UJT)





ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

### 4. Analog Circuits

- Small-signal equivalent circuits
- Diode circuits
- BJT and MOSFET amplifiers
- Feedback amplifiers
- Operational amplifier characteristics and applications
- Oscillators and multivibrators

## 5. Digital Circuits

- Number systems
- Boolean algebra
- Logic gates
- Combinational and sequential circuits
- Flip-flops
- Counters
- Shift registers
- Microprocessors

### 6. Control Systems

- o Feedback principles
- Transfer functions
- Signal flow graphs
- Time and frequency domain analysis
- Stability criteria
- Root locus, Bode, and Nyquist plots

#### 7. Communications

- Analog communications (AM, FM, PM)
- Digital communications (PCM, ASK, FSK, PSK)
- Information theory and coding
- Sampling theorem
- Modulation and demodulation

### 8. Electromagnetics

- Electrostatics and magnetostatics
- Maxwell's equations
- Plane waves
- Transmission lines
- Waveguides and antennas



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## Time- Table for GATE Classes (EEE) (Year 2022)

GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS

Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

EEE DEPARTMENT ROUTINE OF B.Tech(3rd SEM)

Branch :- EEE

w.e.f 21.10.2022 Session:-2022-23

Days / Time	lst (9:45am- 10:35am)	2nd (10:35am- 11:25am)	3rd (11:25am- 12:15pm)	4th (12:13pm- 01:05pm)	
MON	EM-I	NT	EMFT	Math-III	
TUES	BE	NI	EVS	Math-Iti	i de
WED	BE	EM-I	EM-1	EMFT	174
THUR	Math-III	EVS	EM-I	NT	0050011
FRI	EVS	BE	EMFT	Math-III	N-DOWN I
SAT	NT	EVe	EMI	CV	-

5th-7th (1:45pm-4:00pm) G.P(Sweta mam) Extra Activity( .....) N.T LAB(Alok sir) BE LAB [... EM-I Lab(N.K) GATE

EM-I- Niraj kr (N.K.) NT:- Alok Kumar BE:- Salim Ahmad EMFT:- P.K. Ray Math-III - Mukesh Kr Sinha

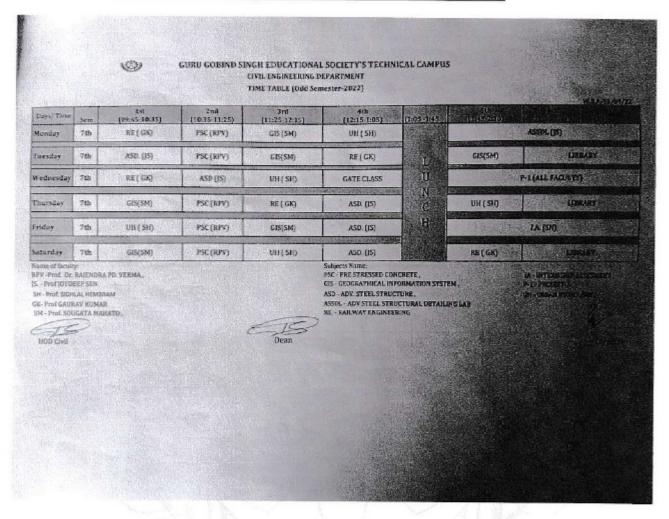


DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## Time- Table for GATE Classes (CE) (Year 2022)





DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## Time- Table for GATE Classes (CSE) (Year 2022)

			LECTURE & PRA	CTICAL PLAN FOR D	KANDRA (V), OMPUTER SCIENCE & ID. STH & 7TH SEMEST	CHAS, BOKA ENGINEERING DEPI ER	ARO - 827013 ARTMENT		
Days	Perion/Semeson	lar .			TIME TABLE				
41.130	5th	109-85 AM 12 95AM	(10 HAM (1 PLAN)	34	40-	gares Awares Awares	- M	10	-
STA.		CG (MA)	CDIBNI	DE 25 AM 12 ESPAN	10 to Fee of 100 Peet	gara; em-arreseq	(01-85PM-07-3 PM)	(65'00s/rest Phone)	13.15.764-LOS PM
4	7th	MURTIMEDIA INKO	OM & DW PK)	VALOU	DC (GV)		COA IPKET	WEB TECH (AS)	AUSALARY
-	3rd	DEBLO (SA)	DOP (NK)	MATH- III (APR)	CRIPTO PIA)		The second second	AI (NX) LAS	
	-	THE WATER	Part of the leading to the lead	Polymer Holes	IFVS (DK)		BE (PXH)	DEBLD (SA)	DIELD (SA)
A.	5th	CG (HA)-T	CO (BN)	WES TECH (AS)	GP [AP]		PORGENT SCHOOL	WEB TECH JASI LAS	THE RESERVE THE PERSON NAMED IN
40	7th	Al (NX)	VEENO	CREPTO (HA)	MULTIMEDIA (NK)	l L		PROIECT	
NAME OF TAXABLE PARTY.	3rd	SE (PKR)	DOP (NO)	MATH III JAPE)	DSA (NA)	U		OSA PHATLAB	
-	5ch	SOMEON PROPERTY.	The second second		Mary Constitution of the Party	N	DOWNERS OF THE PERSON	STATE OF THE PARTY.	
*10	The second	DC (GIC)	CD (BN)	COA (PX)	WEB TECH (AS)	c	State of the last	CG (HA) LAB	
4	7th	A1 (50)	CRYPTG (HA)- T	V&E(VI)	GATE (BN/PK/MK)	200 F 10 F	MULTIMEDIA (NK)	Committee of the Commit	LIBRARY
THE	3rd	DSA (NA)	EVS (DX)	DEBLD (SA)	at (PKH)	н		DEALD (GIX) LAB	
	54h	CD (BN)	CG (MA)	COA (PX)	WERTECH (AS)-T		Sales Charles Total	CD (BH) LAB	
Total .	7th	DM & DW (PX)-T	VACION	AU (NX)	CRYPTO (HA)	В	R. P. L. S.	PROJECT	
	3rd	DOPINO	LIBRARY	evs (bk)	Comm. Strik	R	DSA (HA)	COPINIC	MATH-III (APII)
HEE	STATE OF THE PARTY	A CONTRACTOR	JUNE BOY WET CASE	SAPERPERPORT OF A	THE SALES OF THE PARTY OF THE P	E	DESCRIPTION OF STREET	THE RESERVE	AND THE PERSON NAMED IN COLUMN 1
	Sch	CO (BN)- T	CG (HA)	DC (GX)	COA(PK)	A		COA (PL) LAB	
100	725	AF (NK)-T	MULTIMEDIA (NK)	DM & DW [PX]	ОКУРТО (НА)	K		PROJECT	
	3-10	DSA (HA)	MATH-III (APS)	OOP (NX)	DEALD (SA)			009 (NX) LAB	
	STOP OF THE SER	remainded to the	distriction of the party	CONTRACTOR OF THE PARTY OF TAXABLE PARTY.	中中的時間開送到日		THE SECTION AND ADDRESS.	Service of the last of the las	
	5th	DC (GK)-T	COA (PX)	GP (AP)	OG (HA)		EX	TRA ACTIVITIES/ELI	165
at .	765	AI (NIC)	V&E(W)	DW & DW (PK)	MULTIMEDIA JNKI-T			PROJECT	
	3rd	DSA [HA]	EVS (DIC)	BE (PKR)	MATH-BE(APB)			TRA ACTIVITIES/CL	UBS
1	SATS OF REAL	And the second second	No Eddings .	Carle and Control of	CONTROL OF THE PROPERTY OF THE	<b>经</b> 的公司的经过的	杨阳明经经验	SECTION SHAPE	
ci Oriente Electroni el Giectron ur ill conental S	o and Agonitoms of Angueroning os osci and logic Design		W 00 00	h Semesorr se Technologi maler Denyn maler Denyn mywr Shawlest pe Dawnswicktor mount Organisator & Arch	DISTRICT CONTRACTOR	? Pm	Thi Semester Artificial vicing poor Data Mening & Data Went Marketon and Applicat Values and Edect in Prof. Crystography	-	Pur

DIRECTOR
GGSESTC, Kandra, Chas
Bokaro, Jharkhand-827013



ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## Time- Table for GATE Classes (EEE) (Year 2020)

#### GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013 **ELECTRICAL DEPARTMENT** ROUTINE of STHUTTH SEM Branch :- EEE Year - 2020 w.e.f. 07.3.2020 Days / Time lst 3rd 4th 6th 7th MI DSA PS-I MON Engg Eco T.T.L (N.K) SAS MPMC Electrical Sim. Lab(PXR) MI DSA 4th PS-1 Engg Eco G.P./ Library TUES 6th SAS DCS MPMC PE Lub (Jayantii) 4ht MI DELD DSA PS-11ab WED MPMC SAS GATE 4th DELD DELD Lab PS-1 Engg. Eco THUR D.C.S MPMC MPMC Lab(Alok sir) 6th PE DELD AE Engg Eco M.I. Lab MJ 4th FRI DCS S & S Lab(AVK) 545 NSS/Extra Act/ Mini Project(Alok sir AE DELD DCS GS(upec) MPMC SAS P.P.E Theory paper( 7th sem) Theory paper( 3th sem) EECS01 Power Electronics(P.E)> Miss layanti EE401 Power System - I (PS-I)> AVX-Dr. Avinash Kr EEC602 Signals and Systems(\$ & 5)> AVX-Dr. Avinsh Xx EE402 Measurement & Instrumentation(M.I)> Miss Jayanti EECG03Microprocessors and Microcontroller(MPMC)> Mikr Alok KR

EC481 Analog Electronics And Circuits(A.E)> Binita Madam EC403 Digital Electronics And Logic Design (DELD) > Binks Madam CS301 Data Structure And Algorithm (DSA)> Add. Hussain Ansari EN401P Engineering Economics(Engg. Eco.)> Mr. Vikas jain Lab( 3th sem)

EE401P Power System-1 Lab ££402P Measurement & Instrumentation Lab

EX401 Extra Activities (NSO/NSS/NCC/roga/Mini project (NADS Internship/Tour and Training/Industrial Training

ECADIP Digital Electronics And Logic Design Lab

EEPS06 Digital Control Systems[Pf-III][D.C.S]>PKR Pankaj kr.Ray EEDG07 Power Plant Engineering(OE-II)(P.P.E)> N.K. Nira) Kr

#### Lab( 7th sem)

EC601P Power Electronics Lab EEG02P Signals and Systems EE603P Microprocessors and Microcontroller

**EEGDAP Electrical Simulation Lab** 

££605) internship/Tour and Training/Industrial Training

HO. OF FEE Dept.)

GGSESTO, Kandra, Chas Bokaro, Jharkhand-827013





Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## Time- Table for GATE Classes (CSE) (Year 2020)

		15t	DISTIMETABLE B.TECH. 3rd, STM & 7TH SEMES 2nd	3rd
Days	Period/ Semester	(10:30 AM - 11:30 AM)	12:00 Noon - 01:00 PM	03:00 PM - 04:00 PM
Sir Library	3RD	OOP (SK)	MATHS-III (MK)	BE (GK)
MON	STH	CG (HA)	CD (BN)	
	7TH	AI (NK)	ML (RR)	
			THE STATE OF THE S	
1-11-05	3RD	DSA (HA)	MATHS-III (MK)	DE & LD (BK)
ANE.	STH	WEB TECH (AS)	COA (PK)	CG (HA)
	7TH	DM & DW (PK)		CRYPTO (AS)
			The second second second second	
	3RD	EVS (Ap)	GS (SK)	BE (GK)
MED	5TH	COA (PX)	CD (BN)	DC (RV)
	7TH	SE (SK)	CRYPTO (AS)	ML (RR)
				Mills may be nest the 188
	3RD	DSA (HA)	MATHS-III (MK)	DE & LD (BK)
THO	STH	COA (PK)	WEB TECH (AS)	DC (GK)
	7TH	AI (NK)		DM & DW (PK)
		The state of the s	the state of the same of the same of	
	3RO	BE (GK)	EVS (Ap)	OOP (SK)
thy.	5TH	CG (HA)	COA (PK)	
	<i>7</i> 7H	SE (SK)	Al (NK)	ML (RR)
				A CONTRACTOR OF THE CONTRACTOR
4	3RD	DSA (HA)	DE & LD (BK)	MATHS-III (MK)
SAT	5TH	WEB TECH (AS)	GATE(BN)	DC (GK)
100000	7TH	DM & DW (PK)	5E (SK)	CRYPTO (AS)
SEM  I ALLOTED - DELEVED PROCESSOR  III PACTURE & MICHICIAN RECORDINA ACTORICA RECORDINA SELECTRORICA RECORDINA SELECTRORICA RECORDINA TO ALLOTED -		Prof. SANTA HISHORY Prof. ARACIDA RA SANAA Prof. GOUTAN KANAA Prof. GOUTAN KANAA Prof. ARACIA RA SANAA Prof. ARACIA RA SANAA Prof. ARACIA RA SANAA Prof. ARACIA RA SANAA	TTH SEAR SOMET ALLOYED ARTHRISE SIPPLISENCE DATA RAWING A DATA WARRINGSING CAPTOGRAPH MACRING CLAMANIC SOTTWARE ENGINEERING	> Proj. Nadorant zemana > Proj. Projance emana > Proj. Afuera sipua > Proj. Ratesi rakoan > Proj. Santa eeroone
ECHNOLOGY FITH OMGANIGATION A LUN DESIGN/GATE	A AMONITICITUMS	- Prof. MARIES VINIS - Prof. PARMOD SINNEY - Onc. SHIESDER NAND	(le	for, Md hussain H.O.D
COMMUNICATION		- Prof. NO RESISTANDENO - Prof. CONTRANDENSE		H.O.D C.S.E Department

DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013



ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## Time- Table for GATE Classes (CSE) (Year 2018)

CARRIED S	3023 120		Control of the Contro		RO - 827013 TIM	E IMPLE D.IL	Participation of the Participa	1 Jun Schlieste	W - 2018				
Days	Feriod/Serviciter	201	Ded	3rd	40	(12:20 PA) 12:50PM)	50	\$D-					
10.000		(05:30 AAA 50:20AW)	(10:20AM-(1:10AM)	(31-35-AM-17:50AM)	(12:00 AM-12:59 PW)		(01:30/M-62:20 FM)	(32 20FB 03.30FM)	[3, 10 PM-2 D0 PM				
4	3 RD	Machs W (APE)	DSA(HA)	DERTO BIK)	00PS(5K)		The Control State of the State of the	A LABJHAJ / DEBLO LA	A STATE OF THE PARTY OF THE PAR				
NOT.	5TH	PPL (SK)	CD (BN)	DBMS(PK)	OS (AS)			CO LAB (BN) / O5 LAB (AS)					
100	778	DW & DM(PX)	GP GP	(AP)	CG(HA)		ALR ESING	C & NS(SK)	DBRARY				
	The state of the later	N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		161-194				THE RESERVE OF THE PARTY OF THE					
	3 80	BE (PK)	DSA(NA)	EVS (RP)	DESLD (BX)			LD tab (BX) / DOPS LA	The State of the S				
N.	579	OS (AS)	DBMS(PK)	WEB TECH, (NK)	LERARY	L	DB	MS LAB (PX) / OS LAB	(45)				
100	778	ALE ES(NA)	C & NS(5X)	LP &SA(AS)	CG(NA)	U	A	LAB (NK) / CG LAB (N	A)				
	And the second	windling we like	<b>网络罗马伯格克</b> 克	"是"是"全"的		N	Season Company	ALL SECTIONS	<b>计块一名图</b> 图				
0	3 KD	BE (PK)	Mathi III (APB)	OOPS(SK)	(DSA(HA)	c	COF	SLAB (SX) / DSA LAB	(MA)				
MED	5 781	WES TECH. (NK)	PPt (PK)	CD (BN)	O5 (A5)	1379541373355555	CD LAB (EIN) / DBMS LAB (PK)						
100	7 314	C & NS(SK)	CG(HA)	Gate/Tech (NK)	DW B DM(PK)	н	L.	1					
		State Line	a the aid kill	<b>《公司》</b>	WWW. Company		The party of the	50000000000000000000000000000000000000	MAN THE				
	SRD	Maths III (APS)	BE (PX)	SEATBLAR (SK)	DOPS(SIX)	В	REASONING(PRS)	TVS (RP)	APPTITUDE (NOC)				
CHI	5 794	WEB TECH. (RK)	PC	(AP)	TUTORIAL (AS)	R	APTITIADE (MIK)	DBMS(PK)	CD (BN)				
	7 TH	Gate/Tech.(PX)	LP &SA(AS)	APTITUDE (MIX)	CG(H4)	Control of the Control	C	S LADINA) / LP LANA	9				
			NAME OF BRIDE		金融を発送されてい	E		4-9-29					
	3 RD	DESLO (BK)	EVS (RP)	00%(50)	LIBRARY	A	Comm. \$	aidt (SK)	BE (PK)				
P	5 TH	DBMS(PK)	CD (NN)	PPL (PK)	REASONING(PIS)	K	TUTORINL INK)	SEMBURARO	(A+BN+A5)				
	778	AI 8. ES(NX)	(PRSAJAS)	Gatt/Tech.(NK)	SEMINAR(SX+NE-PK)		C & MS(SK)	REASONING(PRS)	DW & DW(PK)				
	THE PARTY	(A) (A) (A) (A)	STATE OF THE STATE OF	<b>计量型数据</b>					1000				
1116	3 RD	DEALD (BK)	Moths III (APS)	DSA(HA)	EVS (RP)		4	EXTRA ACTIVITIES/CLI	PBS.				
SA	5 TH	WEB TECH. (NK)	P91 (5K)	TUTORIAL (PK)	OS (AS)			EXTRA ACTIVITIES/CU	nes				
7	2 TM	DIV & OM(PK)	LP & SA(AS)	Gate/Tech (BN)	ALS ESDNO		Commence of the last	GS(UPSC)	NAME OF TAXABLE PARTY.				

for, 1nd husesing

GGSE Bokard

DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## Time- Table for GATE Classes (EEE) (Year 2018)

# GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS Kandra (V), Chas, Bokaro Steel City, Jharkhand, India-827013

ROUTINE OF 4th SEM Branch - EEE w.e.J 17.4.2018

	İst	2nd	T			317.4.2018
Days/Time	(9:45am- 10:35am)	(10:35am- 11:25am)	3rd (11:25 <sub>am</sub> - 12:15pm)	4th (12:15pm-	BREAK(1:05pm-1:45pm)	5th-7th
MON	DS	PS-I	Committee of the Commit	01:05pm)	41.4	(1:45pm-4:00pm)
TUES	Engg. Eco	DELD	MI	AE	mdi	GATE(sushma)
WED	Engg. Eco		DS	PS-1	1:0	PS-I Lab(U.K.O sir)
THUR	MI	DELD	DS	AE	EAK	Ml Lab(jayanti)
FRI	PS-I	PS-1	DS	GS		G.P./ Library
SAT	CONTRACTOR OF THE PARTY OF THE	AE	MI	DELO	LUNCH	NSS/YOGA(Dr.A.P Burnwal
UAI	Engg. Eco	AE	DELD	MJ	3	Internship/ppt/seminar(P.K.R)

Theory paper(4th sem)

Inhi	Ast	
Lau	440	sem)

	Lab( sem)
[EE401] Power System - I (PS-I)> A.Prof. Uttam Kr.Das	[EE401P] Power System-1 Lab
[EE402 ]Measurement & Instrumentation(M.I)> A.Prof. Jayanti	[EE402F] Measurement & Instrumentation Lab
[EC401 JAnalog Electronics And Circuits(A.E)> A.Prof. Salim Ahmad	
	[EC403P] Digital Electronics And Logic Design Lab [EX401] Extra Activities [NSO/NSS/NCC/Yoga/Mini
[EC403] Digital Electronics And Logic Design(DELD)GATE> A.Prof. Sushma	project
[CS301] Data Structure And Algorithm(DSA)> A.Prof. Md. Hussain Ansari	
[EN401P] Engineering Economics(Engg. Eco.)> A.Prof. Rohi Prasad	[IN401] Internship/Tour and Training (Industrial Training

100 / XX

Dean(A & A)

Director



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013



Approved by AICTE, New Delhi, Ministry of HRD, Govt. of India: Affiliated to Jharkhand University of Technology, Ranchi

## Time- Table for GATE Classes (CE) (Year 2018)

		T. 60.200 10 11		UTINE (Odd Semeste		Total Service	5th(2:00-2:50)	6th(2:50-3:40) = 2	the state a surplier of
Days	Sem	1st [10:00-10:50]	2nd(10:50-11:40)	3rd(11:40-12:30)	4th (12:30-1:20)	100.25	Stilleronardy	CEM Lab (SDM)	
	3rd	EVS(Or Ranjana)	Maths-III	SOM (NK)	GEO & SM (XS)			Lab (JS )/ Env Lab (SI	a de aran
Monday	5th	Steel-I (15)	Air Pollution (KS)	WRE-T(SH)	ENV-I (NN)			CS Detailing Lab (RN)	1 de NA)
	7th	осн (SH)	Geo-II (NN)	Bridge (35)	CS-II (RN)		Land Association	C2 Decayonal rep Dust	
	3rd	EVS(Dr Ranjana)	SOM (NX)	CEM (SDM)	Surveying (NN)		SOM	Lab (NK)/Geology La	b(5H)
Tuesday	5th	Steel-I (JS)	Comm.	Skills (AP)	Reasoning (Mr Pankaj)	U	Env Lab	(SH & NN)/ Concrete	Lab (RN)
	7th	Geo-II (MN)	Comm.	Skills (SK)	Bridge (IS)		EE(KS)	Pro	ect
	3rd	Surveying (NN)	Maths-III	CEM (SDM)	SOM (NK)	1	Comm. 5	kilis (SK)	Maths-III
Wednesday	5th	Steel-I (JS)	MOM (RN)	ENV-1 (NN)	Air Pollution (KS)	N	WRE-1[SH]	Seminar	(JS, KS)
	7th OCH		EE(KS)	Reasoning (Mr Pankaj)	Gate/ Technical (RN)		Library	Seminar	SH, NN)
	3rd	EVS(Dr Ranjana)	CEM (SDM)	GEO & SM (KS)	SOM (NK)		Fie	ld Survey Lab (SH & f	(N)
Thursday	5th	Air Pollution (KS)	ENV-I(NN)	WRE-T(SH)	MOM (RN)	C	Concret	e Lab (RN)/ Geotech	Lab (JS )
	7th	OCH (SH)	CS-II (RN)	Bridge (IS)	Geo-II (NN)		Est	imating & Costing (SI	OM)
	3rd	GEO & SM (KS)	CEM (SDM)	Maths-III	Surveying (NN)		Reasoning (Mr Pankaj)	CEM (SDM)	Aptr & Ressort
Friday	5th	ENV-1 (NN)	WRE- I (SH)	Steel-I (J5)	MOM (RN)	H	Apti & Reasoning (MK5)	Alr Pollution (KS)	Hibrary
	7th	Bridge (35)	CS-II (RN)	Apti & Reasoning (MKS)	EE(KS)			Foundation Lab ()S	
	3rd	EVS(Dr Ranjana)	Maths-III	GEO & SM (KS)	Surveying (NN)		SOM (NK)	GEO & SM (KS)	5 800 you (197)
Saturday	5th	WRE-1 (SH)	ENV-I (NN)	Steel-I (IS)	(MKS)   (MKS	Steel-I (J5)	MOM (RN)	Promisi (400)	
	7th	· EE(KS)	CS-II (RN)	OCH (SH)	Bridge (JS)		Geo-II (NN)	OCH (SH)	Market District

DIRECTOR GESESTO, Kandra, Chas Bokaro, Jharkhand-827013



ADDRESS: KANDRA (V), CHAS, BOKARO - 827013, JHARKHAND, INDIA.

Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2019-23

Year- 2022

## Branch- COMPUTER SCIENCE AND ENGINEERING

SL.	Univ. Roll No	Name of the Students		/	91/	12/	٠,	W		ATI		00	16/	20/1	વઝ	7/	90
No.			3/03		1/03	100	10	10	Po	% D	11	10	11	5 100	37,	ん	7
1	19031440001	AANCHAL KUMARI		,	r	,		-	-	Ρ	•		*	P	*	-	P
2	19031440002	ABHAY RANJAN				P	-	,	•	-		P	-	•	P	-	
3	19031440004	ADITI SUMAN	P	,		•		ρ	•	P	-	-	•	ρ	-	-	-
4	19031440005	ADITYA JYOTI	,	,	P	-		*	P	*	-	ρ	a	•	-	P	-
5	19031440006	ADITYA PRAKASH	-	-	,		P	-	-	*	P	-	-	P	-		L
6	19031440007	AISHA PARWEEN	•	P	-			4	P			*	*	•		•	1
7	19031440008	ARUN KUMAR		•		P	1	•	κ.	P			,	•	P		L
8	19031440009	AVINASH MAITY	P	4			-		P		٠		P	*	1/2		1
9	19031440010	BARKHA RANI			P	P	^			p				P		**	1
10	19031440011	BIJAY KUMAR	P	-	.79		P		,	•		P				P	
11	19031440012	CHANDRAMOULI JUGAL	,	,	P	*		•	P	n	*		•	P	-	-	
12	19031440013	DEEPSHIKHA SINGH	P		,		P		-		P				P	-	
13	19031440014	DHANANJAY KUMAR			P				P	,	•		P	*	•	-	1
14	19031440016	HARSHIT KUMAR	P	a	-	P	-			-	P	-		*		P	1
15	19031440017	INDERJEET SINGH					P	4	•	*	P		•		P	-	
16	19031440018	JAHID ANSARI	P	*	P		,		P	*			P	*			1
17	19031440019	JHULAN KUMAR NAYAK		•	•	ρ				P				P		,	1
18	19031440020	KISHAN KUMAR	P	1			+	P	,			P	,	*		P	
19	19031440021	MD AKTHAR RAZA	,			P		*		P	4	,		P		a	
20	19031440022	MD SHADAB AHAMAD	P				P	-				P			P	*	
21	19031440023	MEGHALI KUMARI		10	p	i.	-		P				P			P	
22	19031440024	MIHIR KUMAR SINGH	P	,		P			-	P	3				P		
23	19031440025	NANDITA KUMARI					P	-			P		-	P	-	-	
24	19031440026	PAWAN KUMAR	P		P				P				P		P	-	
25	19031440027	PUJA KUMARI		,			P	1			P			· e	,	P	
26	19031440028	PURNENDU MONDAL	P		P		,		p	,			P	,	P		
27	19031440029	PURNIMA KUMARI					P				P	,	,			P	
28	19031440031	RAHUL KUMAR BHAGAT			P		-		P	-				p			
29	19031440032	RAHUL KUMAR SHARMA	P				P					P		- 24		P	
30	19031440033	RUPALI KUMARI	-					p					P				1
31	19031440034	SABA PARWEEN		,		P					P				P		Í
32	19031440035	SATYAM KUMAR	p			1	SULF	10700	P	A			P	B	•		1
33	19031440036	SHAILESH KUMAR	1		H	3/	1	9	1	R	1.	D	IR	1º	P	5	ť
34	19031440037	SMRITI RANI			1		P	100		6	Ġs		TE	K	p		1

			G. Cm	3	イウン	20	300	75015	3		20,5	100		707		40	Ld. Sm
		SIGNATURE OF FACULTY	-	3	1	1	7	3	1	De	1	2	Dec	5	De .	3	1
49	20409008D	SUNNY KUMAR				P				P.		-		1	P		,
48	20409007D	SIMRAN PRIYA		P				P				P	,			p	
47	20409006D	SAURAV KUMAR	P	*		P	Ä	2		×	P	4	*	P		4	F
46	20409005D	PUJA KUMARI		•			P		P	0			P			P	4
45	20409004D	NIRAJ KUMAR	P	4		P		*		•	P	•		-	P	1.0	
44	20409003D	MANISH KUMAR MAHATO	P		٠			P	,		,		P			P	,
43	20409002D	KUMARI VAISHALI	4.	2	,	P	*			P				P	-		
42	19031440045	VISHAL KUMAR	P	*			0	P		,			•	*	*	P	*
41	19031440044	VERSHA RANI	4	*		P				P		-	P			-	1
40	19031440043	VAIBHAV			p		-	,			.4:	•	P	-			1
39	19031440042	TRISHA	P			P			*	-	P	-	*	-	p	-	-
38	19031440041	TABISH BOSTAMI		P	*	-		P			-	-	P	•			1
37	19031440040	TABASSUM PRAVIN	P			P	-		,		P		*	-	p	•	
36	19031440039	SUJIT KUMAR PRAMANIK				,	P	2		ρ			P		1		+
35	19031440038	SOMNATH DUBEY				p			•		p	2	~	*	p		-

DIRECTO:
GGSESTC, Kan
Bokaro, Jharkha

Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2019-23

Year- 2022

Branch- Civil Engineering

No.         Univ. Roll No         Name of the state of	SL.									_	ATE						-	
1       19031430001       Deepak Kumar Mahto       • • • • • • • • • • • • • • • • • • •		Univ. Roll No	Name of the Students	101	14	21	34	30	120	18		2		11	77		12	13
19031430002   Doly Kumari   P   P   P   P   P   P   P   P   P	1	19031430001	Deepak Kumar Mahto						e	P	-		P	-		P	-	-
19031430003   Krishna Baske	2	19031430002	Doly Kumari	P				P	-	-	P	•	-		P	-	•	-
5       19031430004       Kumar Shubham       γ </td <td>3</td> <td>19031430003</td> <td>Krishna Baske</td> <td></td> <td>,</td> <td>P</td> <td></td> <td></td> <td>-</td> <td>,</td> <td>,</td> <td></td> <td></td> <td></td> <td>-</td> <td>P</td> <td>,</td> <td>^</td>	3	19031430003	Krishna Baske		,	P			-	,	,				-	P	,	^
6       19031430007       Prasanji Dinoa         7       19031430010       Roshan Raja       • • • • • • • • • • • • • • • • • • •	4	19031430004	Kumar Shubham	P	•		•	P	*	*		P	-	*	P	- 1	-	P
19031430008   Praveen Kumar   Proceeding   Proceedin	5	19031430007	Prasanjit Dhibar		,	P	-		,	*	P			-	-	-	-	P
8       19031435001       Rosnan Raja       ρ        ρ        ρ       ρ       ρ       ρ       ρ       ρ       ρ       ρ </td <td>6</td> <td>19031430008</td> <td>Praveen Kumar</td> <td>P</td> <td>~</td> <td></td> <td></td> <td>P</td> <td>-</td> <td>*</td> <td>-</td> <td></td> <td>,</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>1</td>	6	19031430008	Praveen Kumar	P	~			P	-	*	-		,		-	-	-	1
8       19031435001       Akash Kumar Burman       P <t< td=""><td>7</td><td>19031430010</td><td>Roshan Raja</td><td>4</td><td></td><td>P</td><td>0</td><td></td><td>-</td><td>-</td><td>•</td><td>P</td><td></td><td>-</td><td></td><td>*</td><td>-</td><td>F</td></t<>	7	19031430010	Roshan Raja	4		P	0		-	-	•	P		-		*	-	F
19031435002   Akash Ranjan	8	19031435001	Akash Kumar Burman	P	1			P				P		,	P			,
10 19031435006 Divyansia Singii dunjan 1 19031435009 Manish Kumar 1 19031435012 Rana Pratap Pandey 1 19031435012 Rana Pratap Pandey 1 19031435013 Riya Verma 1 19031435014 Sanjeet Kumar 1 19031435015 Shalu Kumari 1 19031435015 Shalu Kumari 1 19031435016 Sharib Anwar 1 19031435017 Shivam Kumar 1 19031435018 Shivam Kumar 1 19031435018 Shivam Kumar 1 19031435019 Shravan Kumar 1 19031435019 Shravan Kumar 1 19031435019 Shravan Kumar 1 19031435020 Shubham Kumar 1 19031435020 Shub	9	19031435002	Akash Ranjan	,	1	P			2	P	-		P	-		-	P	-
11 19031435009 Manish Kumar  12 19031435012 Rana Pratap Pandey  13 19031435013 Riya Verma  14 19031435014 Sanjeet Kumar  15 19031435015 Shalu Kumari  16 19031435016 Sharib Anwar  17 19031435017 Shivam Kumar  18 19031435018 Shivam Kumar  19 19031435019 Shravan Kumar  19 19031435019 Shravan Kumar  20 19031435020 Shubham Kumar	10	19031435006	Divyansha Singh Gunjan	F		18		P			P			1			•	F
12 19031435012 Rana Pratap Pandey 13 19031435013 Riya Verma 14 19031435014 Sanjeet Kumar 15 19031435015 Shalu Kumari 16 19031435016 Sharib Anwar 17 19031435017 Shivam Kumar 18 19031435018 Shivam Kumar 19 19031435019 Shravan Kumar 19 19031435019 Shravan Kumar 20 19031435020 Shubham Kumar	11	19031435009	Manish Kumar			p	4		-	P	-	-	-	P	-	-	-	F
13 19031435013 Riya Verma  14 19031435014 Sanjeet Kumar  15 19031435015 Shalu Kumari  16 19031435016 Sharib Anwar  17 19031435017 Shivam Kumar  18 19031435018 Shivam Kumar  19 19031435019 Shravan Kumar  20 19031435020 Shubham Kumar	12	19031435012	Rana Pratap Pandey	P		*	×	P		,		P	4				P	-
14 19031435014 Sanjeet Kumar  15 19031435015 Shalu Kumari  16 19031435016 Sharib Anwar  17 19031435017 Shivam Kumar  18 19031435018 Shivam Kumar  19 19031435019 Shravan Kumar  20 19031435020 Shubham Kumar	13	19031435013	37.380	,		P		-	-	P			-		P	-	-	
15 19031435015 Shalu Kumari 16 19031435016 Sharib Anwar 17 19031435017 Shivam Kumar 18 19031435018 Shivam Kumar 19 19031435019 Shravan Kumar 20 19031435020 Shubham Kumar	14	19031435014	1/2/1/4	P	1			P			300-	-	P	-	-	-	P	-
16 19031435016 Sharib Anwar	15	19031435015	1000			P	1				P	-	-		P		*	-
17 19031435017 Shivam Kumar  18 19031435018 Shivam Kumar  19 19031435019 Shravan Kumar  20 19031435020 Shubham Kumar  10 19031435020 Shubham Kumar		19031435016	Sharib Anwar	P				F					p	-	e	•		F
18 19031435018 Shivam Kumar		19031435017	Shivam Kumar	4	1		ρ		+		P	-			-	F		1
19 19031435019 Shravan Kumar	77.00		- 1976)		P				P	1		-	1			-		1
20 19031435020 Shubham Kumar ρ · · · · · · · · · · · · · · · · · ·			TOWARDS.				F	) .				P				P	-	1
	2,000		CARCONICA .	P				F			•			F		,	*	1
41 1700110001 Jula Kuma IIII			The state of the s	,	,	P				-	1	:	1			F	,	-
Sign. of Teacher	41	17051455021		1	L	Du	1	1	1	1	Du	1	1	R	1	Dee	1	1



Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2019-23

Year- 2022

Branch- Electrical and Electronics Engineering

SL. No.	Univ. Roll No	Name of the Students	100000						1	DAT	E						
L. NO.	Only. Kon No	Name of the Students	3/01	14	21	3	25	10	10	4	2	3	16	22	20	七	-4
1	19031470001	ABHISHEK GUPTA	P			P				P	-	-		P	-		
2	19031470002	AKASH KUMAR	1.				p				p			-	D	-	t
3	19031470003	JULI KUMARI	P	P	-	-	0	P	-		P		P		P		1
. 4	19031470004	KOMAL SHIKHA			P					P			0.0	p		*	i
5	19031470005	KRISHNA KUMAR			10.	. Mis	P			١.		P		-		p	-
6	19031470006	MANOJ KUMAR SWARNKAR	P	P			P		P			P		P		P	
7	19031470007	MD. SAIF AKHTAR				P					P		-	-	P	,	ŀ
8	19031470008	NIKHIL SAWAN	P		,		1	P	×	-	-		P		-		1
9	19031470009	PAMELA MUKHERJEE	P	P	p	,		0		P	P.			P	P		-
10	19031470010	PRIYANKA HEMBROM	P		-		P	-			P		-			P	-
11	19031475001	AMAN GOURAV	-	×	P				P		,		D		-	/	
12	19031475002	ANAND RAJ SAGAR	P	-	P		P		P		P		P		p		1
13	19031475003	BIJAY PRASAD	-	-	D	-			P			-	P				1
14	19031475004	GEETA KUMARI	-8		P		P	-			P				P		1
15	19031475005	GOURAV KUMAR SINGH		P	- 3			D			-		p				-
16	19031475006	GULAM AHMAD RAZA				p				, .	D				P		-
17	19031475007	MILI KUMARI		N.			p	-		P				P			
18	19031475008	NIDHI KUMARI	P	0		P	-		P			,	P	.D		P	
19	19031475009	PRATEEK KUMAR			p		-			p				-	P		
20	19031475011	SAKSHI SINGH	P	-	P		p	P		P		P				P	
21	19031475012	SIMRAN KUMARI	P				•	R		1				P		-	1
		Sign. Of Teacher		展	F	5	1	8		\$	1	1	N	1	1		+



Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2019-23

Year- 2022

DEPARTMENT OF MECHANICAL ENG	SINEERING
------------------------------	-----------

		DEPARTMENT OF MECH	-27	y.	321	6.5			TE		-71	2.1	an In	·/lat	-17		. 1
L. No.	Univ. Roll No	Name of the Students	1201-21	19.09.2	260B21	10.80.2	1%	ex.	W.	2/4	2	%,	7,3	43	14	1/84	11
-	19031490001	ALTAMAS MALLICK			P	2	-		P	-		-	P		1	1	P
1	TOODE .DOOL	AMANDEEP SINGH	-			P			-		P		1		-	P	1
2	TOOOT	ASHOK KUMAR MAHATO		P			*		•		1			P		-	-
3	15052.5	GULSHAN KUMAR	D			P		P		*	,				P	-	
4	19031490004	RAHUL YADAV	1		D	*	P		P	*	E	P			-	P	*
5	19031490007	RAVIKANT RAY		1	,	1	,	,		P		-		P	-	-	•
6	19031490008	ROHIT KUMAR	P	100	1	P		P	1		P	-		-	P	-	0
7	19031490009	RUPESH KUMAR	Section 1	P					1		-		P	-	0	-	P
8	19031490010	SAKIR AHMAD ANSARI	100		D	,	P		P	,		-		*	P	-	-
9	19031490011	VICKY PASWAN	P			hini	18 6			,	1	P	*	-	-	-	P
10	19031490012	VIJAY KUMAR MAHTO				P		P		P				P	n		P
11	19031495001	AMAN RAZA	1	P	13	100	1		1	,	P	-	-		P		-
13	19031495002	BHASKAR KUMAR	,		P		1	-	P	+-	1		P		,	-	F
14	19031495003	CHHATU KUMAR	P		1		120 35			1	,	-			P		-
15	19031495004	JAIKISHAN MAHTO			1.	P	4	1	0	1	1			P		P	-
16	19031495005	KAMDEO MAHTO	,	P	1	13		1		1.	1		-	F	-	F	-
17	19031495006	MAHAVIR HEMBROM	to	-	,			b,	P	,	1	1	1		-	p	+
18	19031495007	MD INZAMAM ANSARI	P	1.	1	A COLUMN TWO IS NOT THE OWNER.				-	F	1	0		-	1	+
19	19031495008	MRITUNJAY KUMAR	,	,	N	P		28	1			-	1	-	-	F	+
20	19031495009	PRAHLAD ORAON	-	1		CHIN			0	-11			7	P		-	+
21	19031495010	RAHUL HEMBROM	1	223 550		*	0		-1		10	b.		1	1	P	1
22	19031495011	RAJA MODAK				1			1	2	-	1 8		_	7-	1	+
23	19031495012	RITESH LAL NAYAK	P			P.		P			-		1	7.	1.	1	+
24	19031495013			_	1	2	-	:			0	1	1	1	) -	-	+
25	19031495014	SATYA GUPTA	,	f	-	1	,		0	-	P	1		F		,	1
26	19031495015	SHUBHAM KUMAR				1	0	St.	r	0	+	1		1	-	1.	+
27	19031495016	SUMAN KUMAR	I f	)	y .		P	-		P	1	-	-	1	-	1	1
28	19031495017	SUMANT KUMAR	100	200	0	A 10 5 5 5	•	p	-	+		P	1	1	) .	-	5
29	19031495018			-	P	2		-		•	-	-	P.	+	1	0 -	1
30	19031495019		P		-	-	*	-	P	-		-		+	1	-	-
31	19031495020	YOGENDRA KUMAR				+			+	+	-	2	+	+	1	+	-
		Teachers Signature	-	+	+	+			1	1		Dw.	9	1	1	1	

TOWN TOWN TOWN TOWN

Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2019-23

Year- 2022

_		Elect	ronics	id of	onth	unit	atio	n Eng	ginee	ering	·W	100	100	21	. 0	6	10
1	19031460001	Aftab Alam		P	-		1	P	-	-	11	E	1.8	-XI	1	D	-
2	19031460002	Koushik Mandal	,		-	D	,		-	P	-	-	-	n	-	P	-
3	19031460003	Surject Kumar Gope	+	-	P	p			P	1	-	-	D	P	-	B	1
4	19031465001	Anshu Kumari	ρ	,		2		D	,			D			D	1	-
5	19031465002	Muskan Ezaz					P	-	-		0			n	P		r
6	19031465003	Puja Kumari			P			-	p	,		P		P	,	D	+
		Sign. Of Teacher	4		4	400		0.	100	di:		Der		1.	AN)	7	-



Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2017-21

Year- 2020

## Branch- COMPUTER SCIENCE AND ENGINEERING

SL.	Univ. Roll	anch- COMPUTER SC		,						DATI	200						
No.	No	Name of the Students	3	100	16,	100	25	20				4	et.	兴	13	2	9
1	17409001	AADIL HUSSAIN			p			p	-			P			-	D	-
2	17409002	ABHILASHA KUMARI	-			10	-	-	P			-	P		-	-	P
3	17409003	ABHISHEK KUMAR	P	,			p			P			,	P		P	
4	17409006	AMAN SEN	e	-		P	-	-	-	P	-		p	-	·p	-	D
5	17409007	AMIT KUMAR	P	1		1	-	P					P				P
6	17409008	AMIT KUMAR SINGH	P	_	1	D	-		p			P	-		þ	-	P
7	17409009	ANAMIKA SINGH		D		,	p			p		1		P	-	P	
8	17409010	BIKASH KUMAR ROSHAN	p	ngah.		p		p		p		p		,	,	P	P
9	17409012	DEEPAK KUMAR		p	170		P	-	P	- 60			p			P	,
10	17409013	HARJOT SINGH	0		P					P				P			p.
11	17409014	JAHIN JAYA	1	,			·p		0.			P				*	
12	17409015	ЈУОТІ ЈНА	1							P				D		-	
13	17409016	KAPIL DEV VERMA	,	P				P		-					*		
14	17409017	KUMARI NISHA	D			p				1	-0			,	P	-	
15	17409018	KUNDAN KUMAR		P								·p				P	
16	17409019	MANISHA KUMARI					P		P						P		
17	17409020	MD.ASIF	P		P	_	-					D		-			
18	17409021	MD.ASIF KHAN	٠.					P	8						P	,	
19	17409022	MD.GAUHAR IMAM	ı		p	+61		p		P			P	5	,		6
20	17409023	MD. KAIF RAZA			- 1					1		P	_	,		P	
21	17409024	MD.RAQUEEB RAZA	p	*			P					1	P		p		-
22	17409026	NEHA KUMARI	-			O			P	-		P	5				
23	17409027	NIVEDITA SHAW	P			1.	P				P					D	4
24	17409028	POOJA KUMARI		4	P				P	18		P	4				P
25	17409029	POOJA PATEL	P	÷.		,	P	130			P	·			P	g.	
26	17409030	PRERNA		P	-	N.			p			2.0	P				P
27	17409031	PRINCE PRABHAT	,		P	×		P			P	,				p	
28	17409032	PRIYA KUMARI	P	1.33			P.	1			•		P	-	-		P
29	17409033	PRIYANKA KUMARI			p					P		-		P			-
30	17409034	PUJA KUMARI	P				P				P					P	
31	17409035	PUJA KUMARI	20	P	- 1	×		P			-		P		-		P
32	17409036	PUSHPA KUMARI	-			0		-		P	-	-	,	P	2	-	
33	17409037	RAHUL DUTTA	P		-			P		-		-	P			-	P
34	17409038	RAHUL KUMAR PANDEY		P			P			P	-			P		-	p
35	17409039	RAJPRIYA	,	-	P			P				ρ			P		-
36	17409040	RAKESH KUMAR	•	•		P		1.00	,	-	P			-9	-	p	-
37	17409041	RAVI KUMAR	•	-	P	(3)	211.00	-	P	-		6	P	-11	W	-	P
38	17409042	RICHA KUMARI		•	./:	1/-	P	1	7	13	P	- L	DIR	EC	P	R	-

Bokaro, Jharkhand-827043

Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2017-21

Year- 2020

Branch- Electrical Engineering

01001 01002 01003 01004 01005	ABHISHEK KUMAR ABHISHEK RANJAN AMAR KUMAR GORAI ASIF ALI	p .	200	10	P P	265	30	40	洁	*	4	4	718	7	12	3
01002 01003 01004	ABHISHEK RANJAN AMAR KUMAR GORAI	p	٠							_	-	1	-	-11	11	
01003 01004	AMAR KUMAR GORAI	,	1		1		ı		1	P			P			1
01004		,			-	p	-		P			P			P	-
	ACIE ALI		P		*		P	,	,			1,	p	2	,	
01005	ASIF ALI	p			*	p			D		0	,			p	,
	BALRAM KUMAR	9	P	0	P	P	P			p	-		p	P	P	1
01006	DEVASHISH DEV			١.		ρ			P		2	0		-	P	1
01007	KUMAR VICKY			D			P		,	,	P					1
01008	MD. NAZISH ALAM	P				P			P		-	р			,	1
01009	RITESH KUMAR	,			D			P			P				ρ	1
01010	SANJAY RAJWAR		P				P			D	,			P	-	1
01011	VIDYA KUMARI		P			p			0				P			
01012	VIVEK KUMAR	P		,	D			0		p.		P				P
1001D	ASHISH KUMAR		+			-			ρ		-	-			D	r
1002D	BHARTI BECK	P			,		p		1		D			0	P	
1003D	KHUSHBOO KUMARI	-		`	,	0	,		P		-	0	-	P	D	
1004D	MALA KUMARI	P	•1	-	0			D	-	- 1	0	-	- 1	0	1	1.
	Sign. Of Teacher	1	A	对	\$	3	T		1	1	1	6		1	1	1
		004D MALA KUMARI	004D MALA KUMARI P ., P	004D MALA KUMARI P ., . , P .	004D MALA KUMARI P.,	004D MALA KUMARI P ., . P	004D MALA KUMARI P	004D MALA KUMARI P., P.	004D MALA KUMARI P., P. P.	004D MALA KUMARI P., P. P. P.	004D MALA KUMARI P ., . , P	O04D MALA KUMARI P P P P P P P P P P P P P P P P P P P	004D MALA KUMARI P., P. P. P. P.			



Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2017-21 Year- 2020

		Branch-	-	* * * *		,		-6	-	ATE							
SL.	Univ. Roll	N fal - Chudomto	•	9	16	25	39	7	10	-	24	4	11.	16	25	2	3
No	No	Name of the Students	2/3	65	0	3	6	10		1	(0	U	11	U	10	12	1
1	17405001	ADITYA KUMAR		*	P			p	-	-	P	٠			P		•
2	17405002	AMIT RANJAN			P	•	P					P	-	-	-	-	p
3	17405003	AMRIT KUMAR JHA	P		*		,	-	p	-	-	-	~		P	*	_
4	17405004	ANKIT KUMAR YADAV		P		÷	٠	P		٠	P			•	3	*	
5	17405005	ARMAN HUSSAIN			-		P				9		P		*		1
6	17405006	ARSHAD SHADAB			*	-	-		P				*	-	P	*	
7	17405007	ASHISH KUMAR	-	1	P	-	1	-		-	-		,			- 6	1
8	17405008	BHAKTI KUMAR PANDAY	200					P				-	1-				1
9	17405009	HAFIJUR RAHMAN	P		200	P			9	p	-		-		P	¥	
10	17405010	KARANDEEP SINGH		×	×		p	· ·				p	,		-1		F
11	17405011	MD. EHTESHAM AHMAD			-		. 3		-	P		7.					1
12	17405012	MD. FAIZAN ABID				P				-	2	1	-		.0	-	
13	17405013	MEHBUB ANSARI	-	-			P	100	1	*	P		*	P		-8	*
14	17405014	MITHUN KUMAR MAHATO	P		P	,	1	P	100	100		P		,	2	*	1
15	17405015	NILESH KUMAR DAS					P			P		4	5.	P			9
16	17405016	NISHANT KUMAR	-	P	-	-	P				P		-				1
17	17405017	PRSHANT MEHRA	-	-	P	-	-	-	P			5	P			-	
18	17405017	RAJDEO MAHATO				+	P				8				P		
19	17405019	RAVI SHANKAR			p	,			p	1.	*		P				-
	17405020	ROHIT RAMAN DAS			-		P	W.			P					P	
20	17405020	RUPENDRA KUMAR SINGH	p	v		-10	P					P				5	1
21	17405021	SHRAWAN KUMAR	u Ba		P			1.	P			-	-	20	P		
22	- 200	SHARMA		1		1	-		,	,	,						-
23	17405028	TUFAIL AHMAD	,	-	-	p	1		+		P			,	1.		
24	18405001D	MD. SHARIQUE SHAMIM	-	+		_	P	1		P	1	1	1.	p	4	D	1
25	18405002D	SATYAJIT ROY	n	+		1			D	-	-	0	-	1		,	
26		ABHISHEK KUMAR	P	-	D	-	1	P	-	+	P				D	,	
27	18405004D	VIKASH KUMAR MAHATO	+;	P	V	-		1	1	b	1	,	0		1		
28		CHANDA KUMARI	-	-	1	P	+ '		-	Y		١,	T	-	,	P	1
29		DIVAKAR KUMAR	1	r		1,	1	),	-		P			P			t
30			1	P	p	5 15	1	-	-	p	1	1.	+.	-	P		+
31		ANKITA ANSHUL	6	,5	1		,	P	0	P	-	F		1.	1		+
32	18405011D		P	-	+	,	1		F	-	-		1	-	1		+
33			1		,	P			*	p	-	1	+	P		-	+
34	18405013D		,	ρ		F		+	-	,	+-	-	,	1	P	1	+
35	18405014D	DHAN SINGH MUNDA	1	+	i				1	1	P	-	1	-	P	,	+
36	18405015D	ABDULLAH AZMI		,	1	1	P	+		1	1	-			0	r	2
37	18405016D	RUPESH KUMAR		2 .	,	-	1	Varie	1 50	P		1	P	1	412	1	+
38	18405017D	SUBHANSHU DEWA		1 1		F	30	1	)	37.	0	1	1	-	u	1	+
39	18405018D	AMAR MURMU		P	1	1	19/	1.	11/	1/2	r	-	D	IR	-	400	1
40	18405019D	ISHRAT PARWEEN	'	- 1	-		100	6	P	P		GQ		1	_	- 0	-
		Sign. of Teacher	IC		. 6	4	13/	703	1300	1/3	1.	Bok	aldh	O I IGI	khai	In-S	27

Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2017-21

Year- 2020

Branch-	Electrical	and	<b>Electronics</b>	Engineering
---------	------------	-----	--------------------	-------------

1 2 3	Univ. Roll No 17407001	Name of the Students	230	15,2			3.11	1 -1	-	- 10-	_						
2	17407001			-	23.2.	15.3.21	22.	5	101	2	24.5.21	315.21	11	23	2	10	13
		AKANKSHA KUMARI	P	1			D			P		-		1	1		1
2	17407002	ANMOL KUMAR	P	P	P	0		p			10		P.	D	P		†
	17407003	BIMLESH KUMAR	P			P			p			P			-		t
4	17407004	CHANDRAKANT PATHAK		P				p		P	-		P		,	0	T
5	17407005	DEEPESH KUMAR				P	P		6			P	-	,			6
6	17407006	HARIOM KUMAR	P		P			,		p			+	-	p		1
7	17407007	KISHAN KUMAR	1	u ja ja		,		0			P					P	,
8	17407008	MADHUSUDAN MAHATO	P	P	,	P			p	-	-		P	D	0	0	1
9	17407009	MANISH KUMAR		Ĺ				P	,	-	P		+	,	P	1	1
10	17407010	MD. MAHTAB ALAM	P		p				p			P		,		P	1
11	17407011	PRABHAKER KUMAR				P		P		,	D		The second	P		*	•
12	17407012	RAJNISH MAYANK		P	,				D		-	D		,		-	
13	17407013	ROHIT KUMAR MAHATO			P	7		P	,	,	P	-	,	,	P		0
14	17407014	SAURABH KUMAR	P			p		-	P			P		D	-	p	Ľ
15	17407015	SHAMBHU KUMAR RAWANI		P		-	p		,	P.				P	P	P	-
16	17407016	SHREYA SHARMA	P		p	,		P	,	,	0			0		P	P
17	17407017	SURAJ PRAKASH			p				p		-		D		F		0
18	17407018	VISHAL KUMAR	P	-			P		-	P				0		-	$\frac{\nu}{}$
19	17407019	VIVEK KUMAR	-		p			P		-		P		F		P	
20 1	18407001D	HIMANSHU			,	0	-		1		0				n	-	_
21 1	18407002D	REENA KUMARI	P	P	P	, -	P	0	. 1	0			0	PI	0	0	0
		Sign. Of Teacher	Page 1	1	7	*	1	इ	4	2	T	T	1	1	H		F
			1	*	V	4	1	4	T.	뮋	4	8	4-	2.1	B	5	#



39	17409043	RISHAV RAJ				p			P		-				P		
40	17409044	SAMIR KUMAR	P			,	p	4		P		P		P		P	,
41	17409046	SHAKSHI SINGH						P			P	-	P		P	,	•
42	17409047	SHASHANK	,	P		P	4	,	P			P		p	,		p
43	17409048	SHASWAT	P		P				P	,		0	,		,	0	
44	17409049	SONAM		P		P.	p			P	,	-	P	,	p		
45	17409051	SUMIT KUMAR			,	P	,	p	,	,	P	,	,	P	,	,	ρ
46	17409052	SUMIT KUMAR		,	P				P		,	P		,	P	,	,
47	17409053	SUSHANTO SINGH	P				P		,	P			P	,	-	P	,
48	17409054	VISHAL KUMAR SINGH			-	P		P			P	-		P			D
49	17409055	VIVEK KUMAR				p			P			P				p	-
50	18409001D	MAHENDRA KUMAR MAHTO	ρ	,	P	P	P		p	P		ρ		P	P	P	P
51	18409002D	NISHA RANI	P		P	P	ie l	P	0	t	P	P		P	p	,	p
		SIGNATURE OF FACULTY		t t	1	MA	N DW	100	7 22	mg m	NE.	1 14	4	M	2	Į.	
			Solv.	d.husz	lath	W.hnn	Co. hur	4.10	19.0	4.6	Johns.	4.6	10/2	4.0	10	10	1.1.



Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2017-21

Year- 2020

		DEPARTMENT OF MECHAN	CAL ENGINEERING
SL. No.	Univ. Roll No	Name of the Students	DATE
1	17400003	AJAY KUMAR PRAJAPATI	p p p
2	17400004	AKSHAY KUMAR	. p p p p
3	17400005	AMBER RAZA KHAN	p. 1 p p p
4	17400007	ANIL KUMAR SINGH	1 p p p
5	17400008	ANIRUDH KUMAR PAL	P P P
6	17400009	ANUJ KUMAR GOSWAMI	p. P. P. P. P. P
7	17400011	AVINASH KUMAR	11.1.1.1.0.
8	17400012	BIPIN KUMAR SINGH	1 P. P. P P P
9	17400013	CHANDRASHEKHAR MAHATO	1
10	17400015	DEEPAK YADAV	P. P. P. P. P - P
11	17400016	DINESH KUMAR	, p p
12	17400017	GAURAV KUMAR SINGH	P P P .
13	17400020	INDIRA PRIYADARSHINI	. PPP.P.PP
14	17400021	INDERPREET SINGH	p p p . p
15	17400021	JITENDRA KUMAR	D P P .
16	17400022	KUNAL CHOURASIA	
17	17400025	MANI SHANKAR	P P P P P P P
18	17400027	MAYANK KUMAR	
19	17400027	MD. AABID HUSSAIN	P P
20	17400028	MD. AHZAM EZAZ	ρ ρ. ρ
	17400023	NAVEEN KUMAR SINGH	P - P . P
21	200000000000000000000000000000000000000	PANKAJ KUMAR	. p · p p
22	17400032 17400033	PRAKASH KUMAR	· · · · · · · · · · · · · · · · · · ·
23		PRAVEEN KUMAR	p.p.p.p.
24	17400034	PREM RAJWAR	P . P . P . P . P
25	17400035 17400037	RAHUL KARMAKAR	0
26	17400037	RAVI KANT CHOUDHARY	· · · · · · · · · · · · · · · · · · ·
27		RAVI SHANKAR KUMAR	p
28	17400039	RUPESH KUMAR	, , , , , , , , , , , , , , , , , , ,
29	17400040	SANTOSH KUMAR	P. P. P. P.
30	17400041	SANTOSH KUMAR	P
31	17400042	SHALAYAJIT KUMAR	p p p
32	17400043	SHIV SHANKAR MAHATO	, , , , , , , , p
33	17400044		P. P. P P P
34	17400045	SHIVAM KUMAR	· · · · · · · · · · · · · · · · · · ·
35	17400046	SHIVAM KUMAR SHUBHAM KUMAR RANJAN	ρ.ρ.ρ. ρ ρ ρ
36	17400047		D D D
37	17400048	SUDESH KHAWAS	0,00,0
38	17400049	SUDHIR SINGH	Perilipin
39	17400050	SUJEET KUMAR MAHATO	POPPIP
40	17400051	SURAJ KUMAR	P P P P P P P P P P P P P P P P P P P
41	17400052	VIKRAM SHARMA	Bolgaro shalkklandra Char
42	17400053	ZAINUL HUSSAIN	Name of the second of the seco

		Teachers Signature		_		_	-									-	
53	18400011D	RAKESH KUMAR	-	٠		p		-	P	-	18	P			P	*	•
52	18400010D	ASHISH KUMAR	-	3	P	+	-	* ·	P	*			P	-		2/3	Р
51	18400009D	ASHWANI KUMAR			*	P			-	P		*	-	P	,		
50	18400008D	ANAND KUMAR			P			ρ			-	P			9	P	-
49	18400007D	AFTAB ALAM		P					ρ		P	-		P	-	-	1
48	18400006D	SANJEEV KUMAR	P			P				P			P			P	_
47	18400005D	BHAGIRATH KUMAR				*	P	-		•	P		-	2	₽		*
46	18400004D	SURAJ KUMAR	P			P			P	*	,	P	-			P	*
45	18400003D	SURAJ KUMAR			P		*	P			P	*		P			P
44	18400002D	MANOWAR HUSSAIN	P	۵.		P		,		P			P			P	· de
43	18400001D	BIRENDRA HEMBRAM		-	P	-	+	P			P	-	-	P		P	-

8.2



DIRECTOR GGSESTC, Kandra, Chas Bokaro, Jharkhand-827013

ly

# GURU GOBIND SINGH EDUCATIONAL SOCIETY'S TECHNICAL CAMPUS Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2015-19

Year- 2018

1										DATE						- 1	
SL. No.	Univ. Roll No	Name of the Students	401	1/2	忠	25	3/10	160	1701	Po	3/0	3/		2/	20	20	3
	15409001	AAISHA MUJIB	P		P		,						P	1.0	*		1
	15409003	ABHISHEK KUMAR VERMA						P		1	p				15		
	15409004	ADITI SINGH			*	P				,	-		-		P		
	15409006	ANITA KUMARI		P	'			P		*	P		•			N	
	15409007	ANSHU GUPTA			`									-	*	p	
	15409009	ARCHANA KUMARI			,			,	-					P	,	*	•
	15409011	AVINASH KUMAR DUBEY	P		P					P	•			-		,	
	15409012	DEVANSHU DEV			,											,	-
	15409013	DHEERAJ KUMAR		*	`,	P			P			P		P		P	
0	15409014	DILIP CHANDRA MANDAL				,				*			1		-		
1	15409016	JAYA KUMARI		P	,	P	*		P					*:	P		
2	15409017	JYOTI KUMARI	P							٠,		6	P.		-		,
3	15409018	KAIFIA ANAM	NAME OF STREET	P	,	P				*			*		4		
4	15409021	MANISH KUMAR SINGH	Dalle Sales	1	P			·p	,					P			
5	15409022	MANJESH KR HEMBRAM	P		1		Fig.	4		P	1	*	1		4		L
6	15409023	MD MODASSIR KHAN			,						٠.		,		,	P	
7	15409024	NITISH KUMAR PRAJAPATI	-	P			P		P	,							L
8	15409025	PANKAJ KUMAR		,				1		~		~	P	-		P	1
9	15409027	PUJA KUMARI	p		3	p	×		10		-			-		-	1
20	15409028	RAJA BABU	1	p			P	. 5		P	,		P		P	,	1
21	15409029	RAVI KUMAR JHA			,	-	+				-				-	-	
22	15409030	RISHAV KUMAR	p	P	4	-	1			-	-					_	-
23	15409031	RITWIK ROHITASHWA			1	p		1		P		-	-		P		-
24	15409032	ROSHAN KUMAR		p		100	1		P		-		P			. ,	L
25	15409033	SARITA KUMARI	i.		7		1	-			4				4	,	L
26	15409034	SATYAJEET KUMAR	.p		P				P		.:		P	-	-	P	1
27	15409035	SHAHEEN PARVEEN	-	-	To the second		P	P				P			P		1
28	15409036	SONU CHOUDHARY	in the second		,		'.	*				P	-	1	P	_	1
29	15409037	SONU KUMAR	100		P	1		٢	P	•	.00	P	-		P	1	1
30	15409038	SUJATA LAKSHMI				-				-	,		,	P			1
31	15409039	SUMAN KUJUR	P	*	P		P				P		-		-	P	1
32	15409040	UJJWAL BANERJEE			,			P	*	-		P			P		
33	15409042	VIVEK NISHANT	P	1	P	A.	-	P			P	;				P	1
34	154D9043	ASMITA KUMARI	Filte 1888	4		P		-			,			P		1	1
35	154D9044	KAVITA KUMARI	P		,	-			P			P			1	,	
36	154D9046	PANKAJ KUMAR MAHTO				p	18	1			0		- 1		L		1
37	154D9047	PUJA KUMARI		-			1	P		F			P	*	P	+-	, '
38	15104	TANIA SAHA		P	1	P	1	0	P	1	-4			*	1:	P	+
39	14409021	RINA KUMARI	P	-	,	P		P	-		P	,	If	1.	1	1	0
40	14409012	GUDIYA KUMARI			P	1		2	P				1	P			1
		TEACHERS SIGNATURE		1.	1.5	12	3	R	. \$	3	1.5	11/1	3	3	K		1

Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2015-19

Year- 2018

Branch- Electrical Engineering

SL. No.	Univ. Roll No	Name of the Students							- 1	DAT	E						
JL. NO.	Oliv. Koli No	Name of the Students	25	165	P	25	3/	100	12º	2	32	12	14	210	24	31	1
1	157001	AJAY KUMAR DAS	P	,		-		p			1	1		1.	1.	1	
2	157002	ANAND KUMAR MAHATO			P			.,					p				
3	157003	BALRAM KUMAR	1			P	P		^	,		×		-	P	-	6
4	157004	BISHAL MURMU		,	X	,			P	ν.	١,		٠.	,			,
5	157005	DEWASHISH ROY	١,	P			,						P	١,			
6	157006	DURYODHAN MAHTO	+		100		D		,		P					P	-
7	157007	DWARIKA NATH MAHATHA	19	, ,		·	1		·P	·	1	-		v			
8	157008	GYAN PRIYADARSHI		,	P		,	,	. ,	,	,	-				· p	,
9	157009	KUNDAN KUMAR		d		•	P				٠.	P			P		
10	157010	NAWAJISH MAEEN				1				•		-	P		P	,	
11	157011	RABINDRA KUMAR		P	-	. 18		P		-	, ,			,	P		
12	157012	ROHIT KUMAR JHA	_						p						P		
13	157013	SAMPAD BANERJEE	,	P.						P		P			*	D	
14	157014	SHALINI OREYA	- 3					7	4.					,	5		
15	157015	SHANTI KUMARI	P	+	1	P		-				p				_	,
16	157016	SHUBHAM SINGH CHOUHAN					P.		A	^		, 4			.0		
17	157017	SWETA KUMARI			P					P					0		
18	157018	URMILA KUMARI			P			. [		4	4	P	,		,	P	
		SIGN. OF TEACHER		3	. 5	T	\$	1	A			i	1	A		1	
			3	4	4	V	4	0	4	3	3		1	\$	1	*	4

Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2015-19

Year- 2018

**Electronics and Communication Engineering** 

SL.		None of the Students							1	DATE							
No.	Univ. Roll No	Name of the Students	203	1/3	18	37	Po	120	12	20	21	2	3	P	16	18	18/
1	15406001	Anita Kumari	P	,	p.		-		P		-		-	P	-	-	K
2	15406002	Anubhav Kumar	-			P	*			P		-		8	·p		
3	15406003	Avinash Kumar Dhar	*	-	p			p		-		P	-	-		P	
4	15406004	Harpal Singh			P			P		P	*			P	-	*	
5	15406005	Khushbu Kumari	-		*	P	ĸ				P					P	
6	15406006	Mamta Soren			P			P					P				P
7	15406007	Mohammad Abid Ali Ansari	-			p				P					P		٠
8	15406008	Md. Nayyar Alam	٠	×	*	٠	,	P	100			•				P	
9	15406009	Neetu Kumari				P	15	*		P	•		P				P
10	15406010	Nikita Dwivedi	-	P		100	P				P				P	-	
11	15406011	Ravi Vikash Hansda	-		P	100			P		•		P	-	•	P	
12	15406012	Rohit Kumar	-			P				P		*	-	P			
13	15406013	Ruby Kumari	-	-			P		•	-	P			*	P	-	-
14	15406014	Sanjeev Kumar			P	*	4	7.		P		•		*			
15	15406015	Shreysi Subhra	-		-	P						P		-			,
16	154D6017	Abhishek Kumar	P	100					P		~		P	×		P	4
17	154D6019	Nishi Kumari				× .	P							P			•
18	154D6020	Raj Laxmi	-	*	P			1		P.	-		P	*1	*	P	
19	154D6021	Sumitra Tudu			- 7	P		*			P			P			
		Sign. Of Teacher	7	14	A	-	1	P	-	-	7	P	+		- 4		
			4	1	*	M	1/21	3	is.	30/	11.	.6	11	i	12.	1	4

Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2015-19

Year- 2018

**Branch- Civil Engineering** 

			1		<b>5</b>							-				-	
SL. No.	Univ. Roll No	Name of the Students	_				0			DATI			14			-	
		17 (182 7 - 21/2004) 2010 2010 2000 200 (2000) 2010	6	18	0	30	6	100	2	21	34	11	TI	#	7	10	光
1	15405002	AKASH KUMAR VERMA	-		P		,				P	*			*	P	1
2	15405003	ALOK KHESS	P	,			P			-	P			P		1	P
3	15405004	ALOK PRABHAT		P				P				P			P	180	P
4	15405005	BABLU ORAON				P		*		٠				P	•		
5	15405006	CHANDRAKANTA KUMARI	P	P	*				P		٠				P	*	
6	15405007	DHANANJAY KUMAR		•	P		-				•	P		•		ı	P
7	15405008	DHARAMNAT MAHATO			7		P			P	•	٤	P		P		
8	15405009	DIWESH KUMAR	P	,	P				×.		,	,		P	,	P	×
9	15405010	GOBIND RAVIDAS	State.	2	in a	p	-	P			P						P
10	15405011	GOURAV KUMAR	-	P			P			P	i	*	P		p		
11	15405012	GOUTAM RAJAK	P	-	*			P	*	*	,		P			·	P
12	15405014	IRFAN KHAN	3	-	D		1			P				,	P		
13	15405015	KAVINDRA ORAON		*			P					P			,	P	
14	15405016	KRISHN KUMAR	P		P			P		,	P	١.		P			P
15	15405017	KRISHNA NAND KUJUR		P		,	P			P			P	1		p	-
16	15405018	MD AKRAM QURASHI		,	0			P			Ø				P		P
17	15405019	MD IRSHAD ALAM	P		-	P			0		-	p			,	p	T
18	15405020	MD ISTIYAQUE ANSARI	1	P		-	p		1.	P		1		P	- 1		
19	15405021	MD SAIYAZ ALAM			0			1	Š.,			P				0	
20	15405022	MD. SARTAJ HUSSAIN	P	6		7	Y				,	1.	p				
21	15405023	MD. TAJ HASSAN	'.	D		Tarib		p			-				D		p
22	15405024	MOMITA BHAKAT		,	0							D					
23	15405025	NUREJ ALAM ANSARI		4	0										*	D	
24	15405026	PAPPU KUMAR DAS	p				0		D	,		D		p			
25	15405027	POOJA KUMARI	1	14:			1	,							s:		-
26	15405028	PUJA KUMARI	,	n				,			4	p	4	O	t	P	
27	15405029	RAHUL KUMAR				2		1,28		,				-			
28	15405030	RAJEEV KUMAR	-1			I	P	4		P			P			P	
29	15405032	RAJ KUMARI KISKU	OF THE	0			-		- 00	,			F.		*	P	
30	15405032	RANJAN KUMAR GUPTA	P	Y	,		D					p				P	
31	15405035	RAVINDRANATH MAHATO															
32	15405036	SAIF ALI			P				P			ρ		P			0
33				0	T				-		P	T			.0		
	15405037	SAMEER KUMAR		r			D				P		-	P	P		
34	15405038	SANJAY MAHTO	P	-1		p	P	-	,	P		'		1			P
35	15405039	SARFARAJ ALAM		2		F				P	n	-	P		D		7
36	15405040	SAVITRI KUMARI		P		· n	-	p	D		p	P	r	0	P	-	0
37	15405041	SHAILENDRA KR VERMA		*		P	-	-	1_	0		1	0	P	n		P
38	15405042	SHAMSHER ANSARI	P		•	*	P	NO.Z4	180	P			r	1.	P		•
39	15405044	SHASHI PRASAD		P		N	S COLUM	_	400	1			•		w		•
40	15405045	SONALI KUMARI	P			P	71	P	1	B	1.	p	D	R	CT	PR	
41	15405046	USHA KUMARI	*	P		NS S		3	P	1	and section 2.	GS		IC,	Kar	P	Cha
42	15405047	VIMAL KUMAR GUPTA		•	P.	13	13	P	56	15	/· E	ORE	ro,	hár	chai	nd-8	2701
						1	1		1	34							

		Sign. of Teacher	20	M	A	cù	R	(La	w:	R	αù	41	B	ria	iu	1,	48
50	154D5057	SUSHIL KUMAR		*	*	P			P			P				P	-
49	154D5056	SARITA KUMARI		•	P			P		2	p				P		1
48	154D5055	PUJA KUMARI	P				P		i.					P			
47	154D5054	PRIYANKA KUMARI	r			F				P		-			,	p	
46	154D5053	PRATIK KUMAR		,	· v	P			P				p.		P		
45	154D5052	NIMAY RAJAK		P			-			×					-		E
44	154D5051	DHIRAJ KUMAR		x	Ä.		~	P				P				p	1
43	154D5050	ARUN PRASAD	*	P		P	*				P	-			P		1



Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

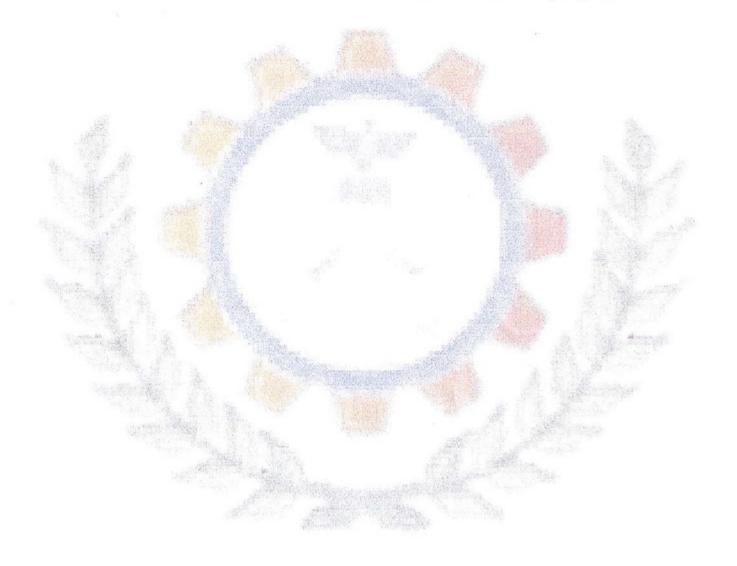
Session 2015-19

Year- 2018

Branch- Electrical and Electronics Engineering

		Branch- Electrical and	T					-		DAT							-
SL. No.	Univ. Roll No	Name of the Students	4	1	18	23	78	10	-		21	3	19	11	u	2	18
1	15407001	ADITYA AMBEY		0	6		is	P	10	10	P		40	P	11	in	F
2	15407002	AJIT KUMAR	p		-					-	-		-		D		
3	15407003	AMAR NATH GOSWAMI	1	0		_		p		p			p				
4	15407004	AMIT KUMAR		1	-	n	Ι.	1.							-	D	
5	15407005	ANSHU KUMARI SINGH		p		-	-	p	_	-	-	-		,	-	-	
6	15407006	ANUJ KUMAR			P		-	-	p	-	-	D	-	-	p		
7	15407007	ASIF HUSSAIN	P		-		P		-	-	p		P	-	-	-	6
8	15407008	AVNISH MAYANK					1.										
9	15407009	BARSHA SINGH	P		S. F.	p			P	+		P	,	,	P	,	-
10	15407010	CHANDAN KUMAR	1	P			-	P			0	,	P		1		1
11	15407011	DEVENDRA KUMAR	P	,	0	-2,000		P			-		•	0		1	1
12	15407012	DINESH THAPA	1	P		P			0			0	4	1.		D	
13	15407013	INDRAJEET SINGH CHOUDHARY		0		,				,	P		p	P			
14	15407014	JAKIULLAH ANSARI		P			P		000.00	P.		P			P		1
15	15407015	JUHI KUMARI	P		-							1		p	-		1
16	15407016	KANIZ FATIMA			b			0	fly 2		p		p.	1. A. A.		P	
17	15407017	KUMARI PARVATI VERMA				p				p				P		1	
18	15407018	MD AAMIR ENAM	P	,		-	P			•	P				P		-
19	15407019	MD ISMAIL ALAM		.0		D		p		P			p.		1	p	
20	15407021	MD SHAMS PERWEZ					P		3.5	,	P	•	100	p			E
21	15407022	MITHUN KAIBART	P	•				P				P			D		1.
22	15407023	NAGMA PRAWIN			P		p	-	jië.	P		D	100		D		15
23	15407024	NEHA KUMARI		P	P	7	P	p		P.	P		P	1	P	-	P
24	15407025	NEHA KUMARI	0	0	p			1.	D			D		P		p	P
25	15407026	RAHUL BHARDWAJ			- with	D	-	P			0	-	D		P	F	
26	15407027	ROSHAN KUMAR		D				P	10.7	, 1	,	1	1	,	P	,	ŧ
27	15407029	SAGAR JAMIL ANSARI	14.5	1	p		0	,		D		D		p			
28	15407030	SALONI KUMARI				p	ij.		P				P			D	v
29	15407031	SAPNA KUMARI	200	P	-	,	0		-	,	P			P	*	,	p
30	15407032	SARFARAJ KHAN	4		p.	,		-	P	P	-			',	P	-	
31	15407033	SHAHNAWAZ JAMAL	P					D			0		D				
32	15407034	SOMNATH JHA	,		P		,	1.	P			p	'.	P	,	D	,
33	15407036	SURYAKANT SHARMA	P		-	p		P			P		,	P	,	-	,
34	15407037	UMME HANI BEGAM	-	P		,		0		P		P		-	p	-	
35	15407038	VASEEM ÄNSARI	,		0				,	,		,		,	,	P	,
36	15407039	VIJAY KUMAR					P		P	["	P			p	0.		r
37	15407040	VIVEK KUMAR	P			100	- Carlo	-	1	,		. 1	P	EX	W	R	•
38	14407022	SHIV SHANKAR MAHTO		P	18	1.	10	P	1	1.	GR.	SF	STO	D	-		F
39	14407023	SHIVANI KUMARI KHALKHO		-	GOEWO SA		0	20	P		Bok		_	_	_	_	70
40	154D7001	ADITI MUNDA		0	18	71	di.	200	13	P	,			0			P

41	154D7002	LILY LAKRA	P		-		P			p	-		P				F
42	154D7003	BABLU KUMAR			P		-	P			•	P	-	×		P	
43	154D7004	DILIP KUMAR			p	.5			p			-	P				,
44	154D7006	KUMARI MANISHA				-	P				P					P	,
45	154D7007	LOVELY KUMARI	-			P	-			P	-	•			*	P	,
46	154D7008	PALLAVI PARDHIA		P		-			p	-		P			P		•
47	154D7009	ROHIT KUMAR	·	-		-	P				P		*	P		-	
48	154D7010	SONY KUMARI			R			٠,	p	-		p			P	-	1
		Sign. of Teacher	17	S	5	1	X	1	5	7.	P	1	+	1	p	-	1.
			*	1	4	A	1/	A	4	~	*	0	0	5	3	-	0





Kandra(V), Chas, Bokaro Steel City, Jharkhand, India-827013

Session 2015-19

Year- 2018

## **DEPARTMENT OF MECHANICAL ENGINEERING**

SL. No.	Univ. Roll No	Name of the Students	0/0	1/0	18/	28.	%	170		DATI		ti	11	- 4	24	7	14
1	15400002	ABHIJEET KUMAR	1	P	P	,	P		P		P	P	P	P	11	P	P
2	15400003	ABHIMANYU KUMAR	P	P	P	P	P	P		P	P	P	P	P		p	P
3	15400004	ABHISHEK KUMAR SUMAN	P	p	p	P		p	P	P	P	-	P	P	P	P	
4	15400005	AKASH DEEP		P	p	p	P	P	P	P			P	P			P
5	15400006	ALTAF RAZA		,	p	,		P		P		P	P	p	p	P	
6	15400008	AMAR KUMAR MAHATO	P		P	-			P	p	,	p	1	-	P	P	
7	15400009	AMIT KUMAR MAHATO	p	P	P		,	P	10	,	P				P	P	
8	15400010	AMIT KUMAR SHARMA			,		4	P			P			•	P	-	
9	15400011	AMLESH KUMAR			p		~	-	P					P			
10	15400012	AMRITESH KUMAR	,	,		p					P	,		-	-		P
11	15400013	ANAND KUMAR BAURI	P			p				P		P				P	-
12	15400015	ANISH RAJ		P		-		0		,	-		-		P	-	
13	15400016	ANKIT ANAND					P					P	,			p	
14	15400017	ANSURI PRAKASH RAO		,		p	20								P		_
15	15400018	ANUJ KUMAR RAJWAR	,	,				p	,			,	p				
16	15400019	ASHISH KUMAR MAHATHA	P			P					,	P				-	-
17	15400020	BAIDYA NATH MAHATO	0	,							p				p		
18	15400021	BAUU SHARMA	,	,	P		,			P		_					P
19	15400022	BIMLESH KUMAR YADAV	,		P	,			P	,		,	-	-		P	
20	15400023	CHANDAN KUMAR MAHATO	•	0	,	-					P			-	p		
21	15400024	CHHUTU LAL BAURI	p			* 3	P			P		-	-		-	P	-
22	15400025	DABLU KUMAR	t	+		20	1	,	-	,			-	,		r	
23	15400026	DEEP DUTTA	MES.		2455	WEIV (	•	-	8					p			
24	15400027	DEEPAK KUMAR	. ,	r	,				•	-	,	-	,	,		-	
25	15400028	DULAL CHANDRA NAYAK		1	r	,	_	p	,	r	,	-			2	p	
26	15400029	GAURAV KUMAR	2														,
27	15400031	GIRIDHARI MAJHI	+	٠		1	P			,	,	.p.	,	£.		P	·
28	15400032	GOVIND KUMAR			P		JICP.			•	,					-	
29	15400033	HARIHAR MAHATO					,			i		,	,	P	,		
30	15400034	HITESH RAJWAR	,	1				P		*	,	1	-	,			
31	15400035	HRITHIK RAJ			-			-	,						p		
32	15400036	JAYDEV KUMAR OJHA	×		P		1		P.								
33	15400037	KAILASH PRASAD MAHATO				,			,		,				,	P	,
34	15400038	KAMLESH DAS	,	,	A	,	,	,		,	,	P		,	,		
35	15400039	KAUSHAL KISHOR YADAV	,	,	p	-	,	·n		,			,		P	,	,
36	15400041	LAKSHMAN KUMAR			,				,			P	,				4
37	15400042	MANDEEP SINGH				-	-		-		-	1			•	D	
38	15400042	MANISH KUMAR	·P	,			P	,	som wit	***	.p			.1	n	-	
39	15400044	MANISH PANDEY			,	,	-/	35		-	1		P		- m	20	
40	15400044	MANORANJAN KUMAR MAHATHA	•	_			12	6.	P	21	10		Di	RE	R	DR	Ch
41	15400047	MANZER RABBANI		p.			305	P.	27	2 3	100	CS	=81	C,	can char	dra:	270
42	15400047	MD ABUL HASSAN CHISHTI		/		-	13	TE	WEN.	ď.	B	pka	P	hari	mar		P
42	13400046	MID ADOL HASSAN CHISTIII					1	1	ds gos	0.	81		-				,

5												٠.				7	
43	15400049	MD AMANULLAH		•	,	V	•	1	,		,	1	^	-	•	-	5
44	15400050	MD ANJAR HASSAN	1				P			-		*		P		-	_
45	15400051	MD ARIF ANSARI	,	,	٢	1		1	*		,	,		•	•		*
46	15400052	MD FAIYAZ AHMAD		240	P	4			-	4	,	,	-	þ			3
47	15400053	MD M ISLAM ANSARI				r	*	v	•		*	,		,		,	
48	15400054	MD SADDAM HUSSAIN		P					Þ			+		1			
49	15400055	MD SOHAIL AKHTER							•	-	P		*	-	-	-	*
50	15400056	MD TANVIR ALAM			P	*					P	×			6	*	
51	15400057	MD TASSAWAR IQBAL		1	1	1	R		1		i	1	1	,		-	
52	15400058	MOHAR LAL MAHATO				L		•					À			P	•
53	15400059	MOHIT KUMAR SINGH	P				7			9	+	1	,	,		-	-
54	15400060	NAVDITYA PRASAD			P		-		•			*		1			
55	15400061	NIRANJAN KUMAR	×		,					•				+			7
56	15400063	PINTU KUMAR	P			4.	1		*.		p		•			,	
57	15400064	RAHUL KUMAR	-							•		p	,			-	
58	15400065	RAHUL KUMAR PATHAK					1	1				1		•		,	
59	15400066	RAJU PRASAD		A								8			+	P	
60	15400067	RAVI KUMAR	1	1		,	1		P					P		,	•
61	15400069	RISHAV RAJ				6				P							
62	15400070	ROSHAN KUMAR PASWAN		x				100		•	4			Lans.	,		1
63	15400071	SACHIN KUMAR SHAH		1.						1					*		
64	15400072	SAJID ANSARI	1	1		×		b		1		*		P			'
65	15400072	SANDEEP KUMAR				0		1		. 1							P
66	15400074	SARUP KUMAR BARIK		1,	-		*	1		1			,				
67	15400075	SATISH KUMAR		P	-	-				A.			10		*	+	
68	15400076	SATYAM KUMAR		,	-	P			19				P		p	•	-
69	15400077	SATYAM SHIV				P	1	N.		٠,			k		-		P
70	15400078	SEWACHAND PRAJAPATI		1	1	P	P	4	,		1	1	p	1		1	
71	15400079	SHRAVAN KUMAR	1	1	45		1	1			,	P	P	'	,		1
72	15400080	SIKANDAR SOREN	100	×				*									r
73	15400081	SAURABH KUMAR	N	,			-		e		Y	7	p				
74	15400082	SUDHIR GORAIN			,	1			•	6	1				1		
75	15400083	SUJEET KUMAR	١.	1				,		,	<					e	
76	15400084	20 V		1		b	P					,	,				-
77	15400085	NIVER SEC.	1.08			,	•	5	4,	r			,				
78	15400086	The second secon		100	-	1.	+	,	-			1					t
79	15400087	UMA SHANKAR KUMAR	+	P	,	1.								p	P		,
80	15400089		+	1		þ	F			0		,	١.	1	1		
81	15400090		P		1		,			-			+				
82	15400091	VEER ABHIMANYU SINGH	-	1	1	P	-		-		,			+			
	15400091		+	1	-	1			P		P						1
83	15400092		١,	-		1	p		+	,				4	5	1.	,
84	15400093		-		1,	7	-			-			,	-	0	,	,
85	15400094			T	-	1	1	-			₽	1.		1.0	14		-
86			1	1	1.	-	+	1	P	CHAS 8	1	1	1		1.6		
87	15400096		1	1	1	1	10	10	1.		1	1.	,	TITE	FXC	TO	R.
88	15400097		+		-	1	1	1/.	1	100	1	do	SE	STO	, K	anPi	a, (
89	15400098		1	N	-	1.	1	1.	b			Bo		_	arkt	and	1
90	15400099	KUNAL KUMAR CHOUDHARY	1		1	1	1	13	19 (1)	I de	1./	14			_	1	

91	154D0100	AKSHAY ANAND	1		1	1.	1.	1.	1	1	1	1	I	1	1	I	1
92	154D0103	ARYAN KUMAR		1			1		+		P		-	1.	1	+	+
93	154D0104	CHANDAN KUMAR		Y	Y	P	1	1.	1	1.			1		+		+
94	154D0105	DANISH AKHTAR ANSARI		1	1.	-	-	1	,	P	,	-	P	,	1		- 5
95	154D0106	GOPI KUMAR		1	*		-	P	1			-	1	+		1	+
96	154D0107	KISHOR KUMAR GORAIN		1	1	1	P	P	b	1.	,		1	P	+	1	1
97	154D0109	MAN MOHAN KUMAR DAS	+			1	1	1	1		*	2	*		1.	-	P
98	154D0110	MANOJ KUMAR MAHTO					1		,	1	D	-	-			P	-
99	154D0111	MUKESH KUMAR BHAGAT			r	*		1	r		P	1		+		- 1	
100	154D0113	PRADEEP KUMAR				-	-	*	,		N.	1-	1	1	,	1	+
101	154D0114	PRITISH KUMAR SINGH	-	7						1	-	0	,	1	-	1.	+
102	154D0116	RAHUL RANJAN	*	-	,			1.	1	-				-	-	-	+
103	154D0117	RAUNAK KUMAR		P	1	P						1	1	1		1	-
104	154D0118	RUPESH KUMAR			,	-	-	1	P	8.		-	-	1			
105	154D0119	ROHIT MAHTO	ALI DE	Service.	*				-	1	1		-	P			+
106	154D0120	SANDEEP KUMAR MANDAL		1	•					,		,	-	,		do.	-
107	154D0121	SANJEEV KUMAR	•		D	Tigh.		1				-	$\vdash$	1	<	<u>in</u>	-
108	154D0122	SHAILESH PRASAD			1	. 1		1				P	-			(	-
109	154D0123	SUMIT KUMAR					-		,			4			,		
110	154D0124	VIKRAM KUMAR		,	,					,	P		-	-			-
111	14400034	KAPIL DEO MAHATO	P	,				. 200						-0	*	P	,
112	14400050	MANWWAR HUSEN		,			Þ									P	-
113	14400051	MD ASHIQUE					7		p			,			,	1	,
114	14400068	NIRAJ KUMAR			P			- 57					þ		1		
115	14400076	RAJEEV RANJAN						13.			,		6		-		
116	14400093	SHIVAM KUMAR SHARMA	۲		D	P			,	7.			+	)			
117	133060	NAVIN KUMAR SINGH		-		,						Þ	1	-	b	,	
,		Teachers Signature	7	1		1	P	,		,	P	1	P	-	r	-	P
	L	. cachers signature		SONO B	E.	7.	9				2		1	1	6	P	,