Godavari Institute of Engineering & Technology
Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada
Chaitanya Knowledge City, NH-16, Rajamahendravaram
Andhra Pradesh, INDIA, PIN: 533296 | www.giet.ac.in
AUTONOMOUS
NAAC 'A+' INSTITUTION

ICT Integration in Examination Management System(EMS)

BEES EXAMINATION TOOL PLUS (BET PLUS)

GIET (A)

INTRODUCTION

Information and Communication Technology (ICT) has become a valuable, decisive, and critical resourcefor individuals, communities, enterprises and organizations.

ICT is an effective tool for integration and automation of various activities of Examination and Evaluation process at different administrative levels to obtain reliable, efficient, scalable, transparent, and robust solutions. GIET has a credible and streamlined system of examinations by the integration of ICT transforming from conventional practices.

The Examinations Section & Quality Assurance Department of GIET (A), Rajahmundry strives to achieve a unique, student friendly, technology supported, transparent, reliable and credible assessment and certification process. The Institution has a well - established and efficient examination management system where processes related to pre - examinations, during the examinations, declaration of results and issue of PC and CMM to the concerned students are controlled and monitored by Examination Section.

The Institution uses **BEES Examination Tool Plus** software for processing of the results and maintaining the results data. This user manual contains all essential information for the user to make full use of the tool. The tool has Pre and Post Examination modules that are used for different examination activities.

Pre – Examination:

1. Generation of admit cards
2. Generation of Attendance sheets
3. Generation of seating plan and seating arrangement sheets
4. Generation of list of detained students
5. Generation of OMR sheet/ Cover page of answer booklet with confidential coding

Post – Examination:

6. Entering/Uploading OMR sheet scanned marks
7. Processing of Results
8. Publication of Results
9. Grade - Sheet Generation
10. Generation of Consolidated Marks Memo
11. Generation of Provisional Certificate

This report will briefly discuss with relevant snapshots about the processes being carried out in online as well as in **BEES Examination Tool**

NEED OF ICT IN EXAMINATION SECTION

ICT has provided means for faster and better communication, efficient storage, retrieval and processing ofdata & exchanging the data with concerned stakeholders. Integration of ICT has made quicker the publication of result, made the process error free, subjectivity has been reduced and objectivity is increased. Grievances of the students were redressed in a time bound manner.

ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

ORGANIZATION OF EXAMINATION AT DIFFERENT PHASES

Organization of examination is a monotonous job involving different types of data processed and managed by different sections within the examination wing of the Institution itself.

Its complexity increases with the increasing number of examinations during the sessions. Right from the initial stage of students' enrolment to the final stage of the declaration of result, various jobs are required to be under-taken with proper care and in a secured manner.

The Institution conducts examinations for eligible students of different semesters of all the programs, who are in the rolls of the Institution. If any student fails to perform well in any of the examinations he can appear for consequent supplementary examinations also. All the eligible students have to apply for regular/ supplementary examination through online mode.

The examination related data management can be divided into THREE phases:

Pre-Examination Phase: In this phase the application form of the students are processed and all the relevant details of students like registration number, fee payment details, paper code, hall ticket etc. are generated. Any discrepancy in the application form is communicated to the student so that it can be corrected within the time. This is a one-time activity carried out at least one month before the examination.

During Examination:
During the examination phase D-form will be generated to mark the attendance of the students for the examination. If any student indulges in any unfair means will be recorded as malpractice and corresponding reports will be generated for further processing. Appropriate action will be taken against the erring students by the committee.

Post-Examination Phase: This phase involves collection of answer scripts, sending answers scripts for evaluation, collecting evaluated answer books, entering of marks, applying moderation, if any, with the consent of the committee, declaration of results, processing student's request for revaluation, conducting revaluation, processing revaluation results, generating & dispatching grade sheets to the concerned department etc. In this phase some processes can be carried out time and again, like students requesting for duplicate grade sheets when they lost their original grade sheets due to some untoward incidents.

Outcome Based Education: The curricula of different programmes have been incorporated in the Outcome Based Education (OBE) structure and the evaluation pattern has also been modified accordingly. It helps the Institution in terms of assessing different levels of knowledge of the learners based on the Revised Bloom's Taxonomy. This structure facilitates adopting required changes in the teaching and learning process and also knowing the outcome levels of the learners in the evaluation process.

National Academic Depository (NAD) and Academic Bank Of Credits (ABC)

The Institute joined hands with National Academic depository (NAD) which is online, permanent and safe to store the Academic awards of the students. The efforts are on to introduce the ACADEMIC BANK OF CREDITS (ABC) which shall provide a variety of services.

ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Examination Grievances:

The students may express their grievance(s) through e-mail for any examination and other service-relatedissues.

Public Access Web Portal – Examination Section

1. Organization Chart of Examination Branch
2. Notifications and Examination Timetables on Web portal
3. Student Online Examination Registration Page
4. Online Fee Payment and Examination Registration page
5. Payment Receipt (Online)
6. Student Regular/Supplementary Examination Admit Card
7. Examinations Result Page (online)
8. Online Student Result Checking Page
9. Student Result Display Page
10. Student Result Grievance – RV Application Page
11. Malpractice Rules

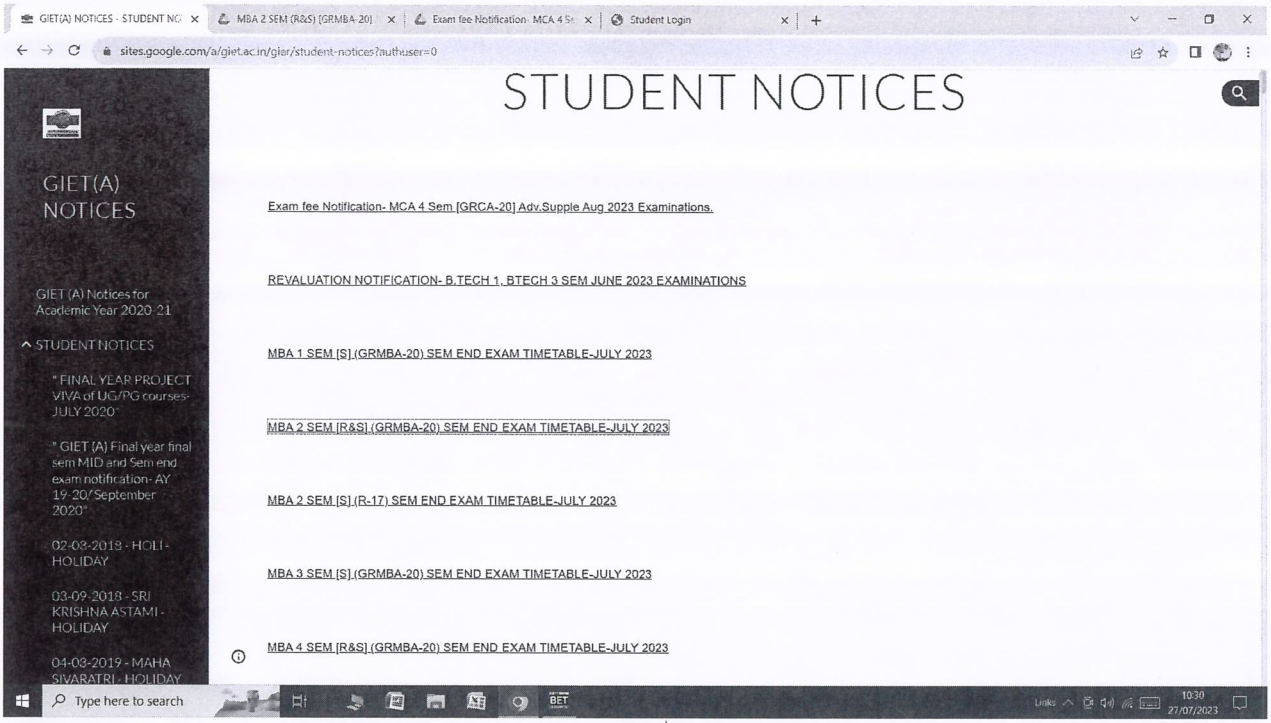
By the use of ICT at Examination section

12. Download Hall ticket
13. Marks Entry Page
14. Award List (Reports) Page Examination wise
15. Examination Timetable Entry Admin Page
16. Seating Arrangement /Plan Admin Page
17. D-Form Entry on the day of Examination Admin Page
18. Consolidated Marks Report Branch Wise Admin page
19. Mid Marks – Excel format for Result Processing
20. Student Grievances
21. Student Name Correction Admin Page (if not as per SSC on Roll List)
22. Result Publish Page
23. Certificate Print Page (Grade Sheet/PC/CMM/Transcript)
24. Online fee Payment Settlement from Bill Desk – Payment related issues for refund (if any)
25. Desktop Application Results Processing Application (Confidential)

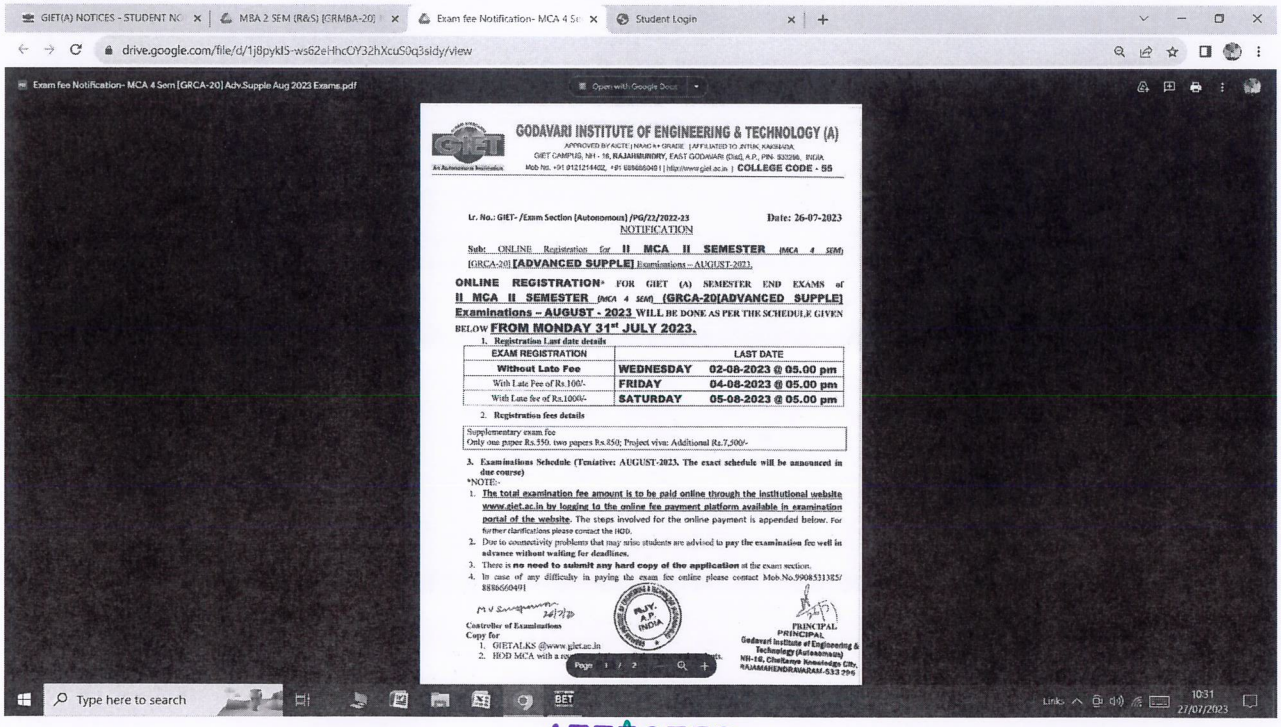
ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Notifications and Examination Timetables on Web portal



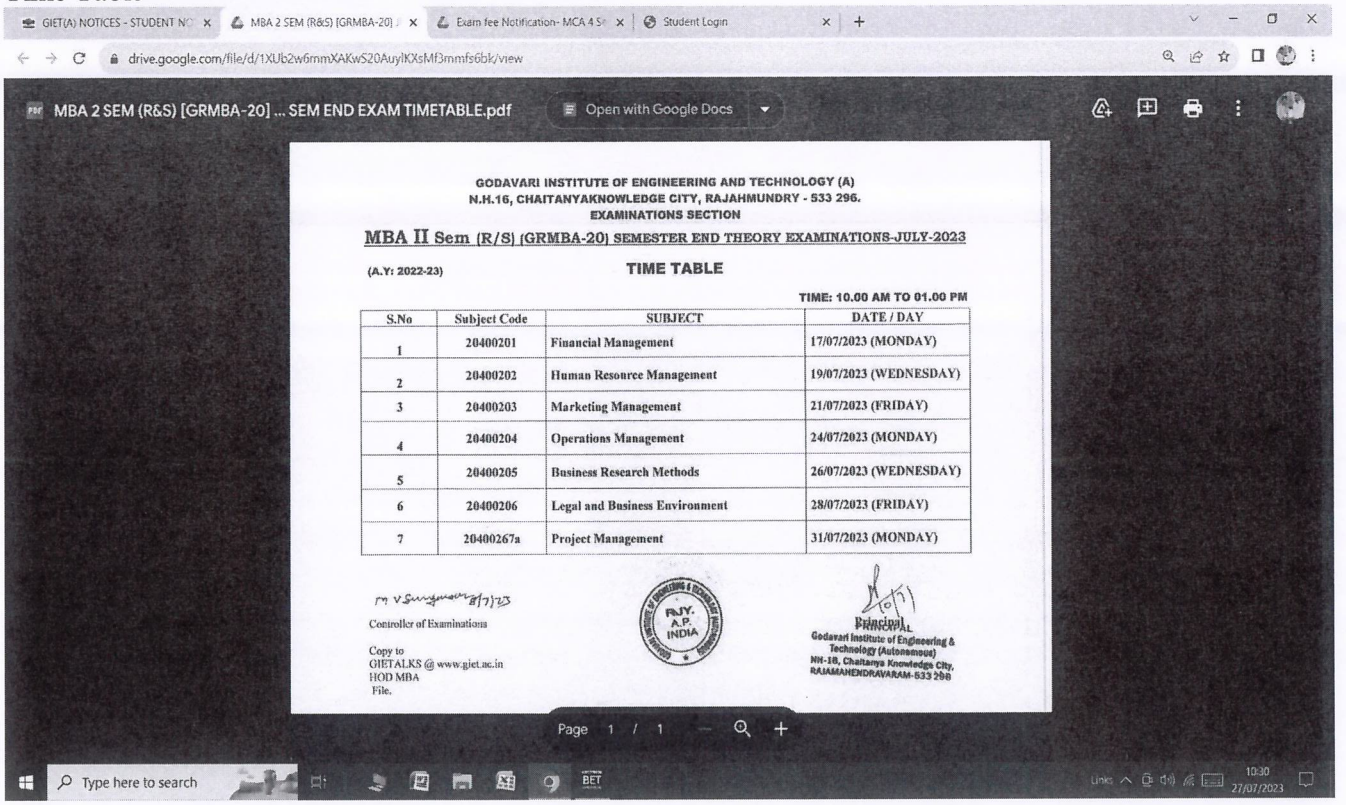
Notification



ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Time Table



GODAVARI INSTITUTE OF ENGINEERING AND TECHNOLOGY (A)
N.H.16, CHAITANYAKNOWLEDGE CITY, RAJAHMUNDRY - 533 296.
EXAMINATIONS SECTION

MBA II Sem (R/S) (GRMBA-20) SEMESTER END THEORY EXAMINATIONS-JULY-2023

(A.Y: 2022-23)

TIME TABLE

TIME: 10.00 AM TO 01.00 PM

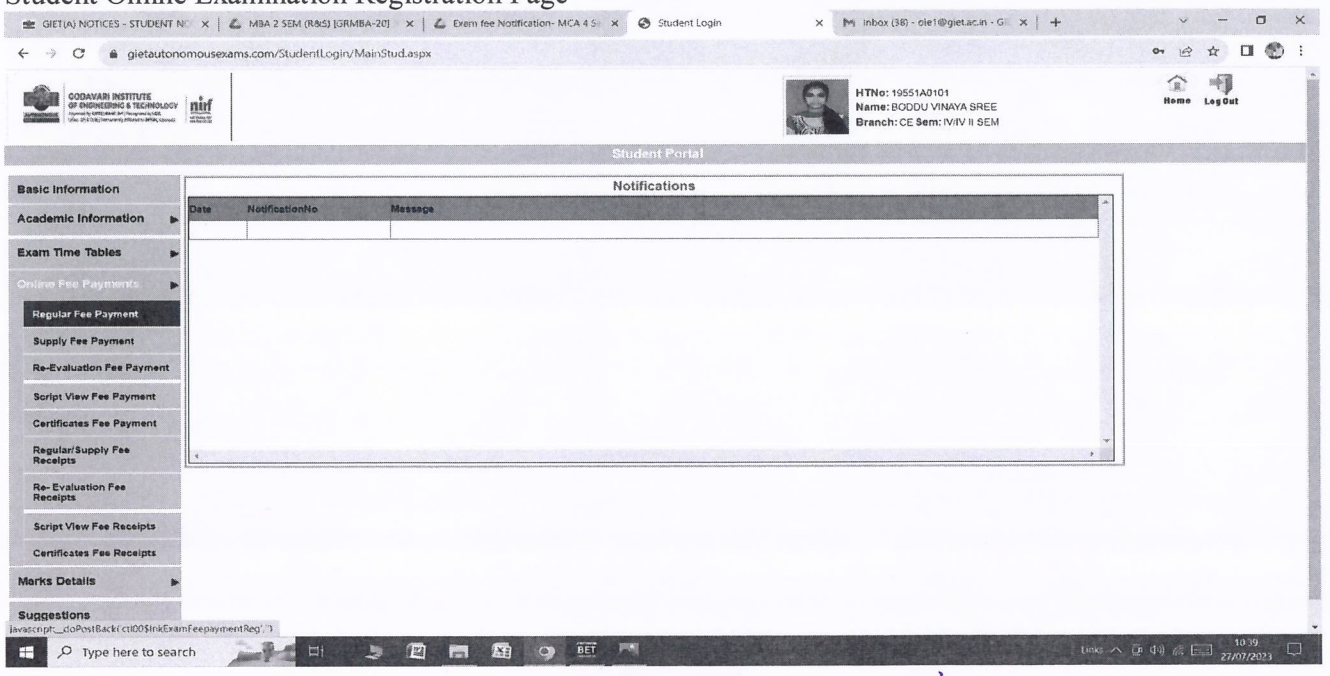
S.No	Subject Code	SUBJECT	DATE / DAY
1	20400201	Financial Management	17/07/2023 (MONDAY)
2	20400202	Human Resource Management	19/07/2023 (WEDNESDAY)
3	20400203	Marketing Management	21/07/2023 (FRIDAY)
4	20400204	Operations Management	24/07/2023 (MONDAY)
5	20400205	Business Research Methods	26/07/2023 (WEDNESDAY)
6	20400206	Legal and Business Environment	28/07/2023 (FRIDAY)
7	20400267a	Project Management	31/07/2023 (MONDAY)

Controller of Examinations

Copy to
GIETALKS @ www.giet.ac.in
HOD MBA
File.

Principal
PRINCIPAL
Godavari Institute of Engineering & Technology (Autonomous)
NH-16, Chaitanya Knowledge City,
RAJAMAHENDRAVARAM-533 296

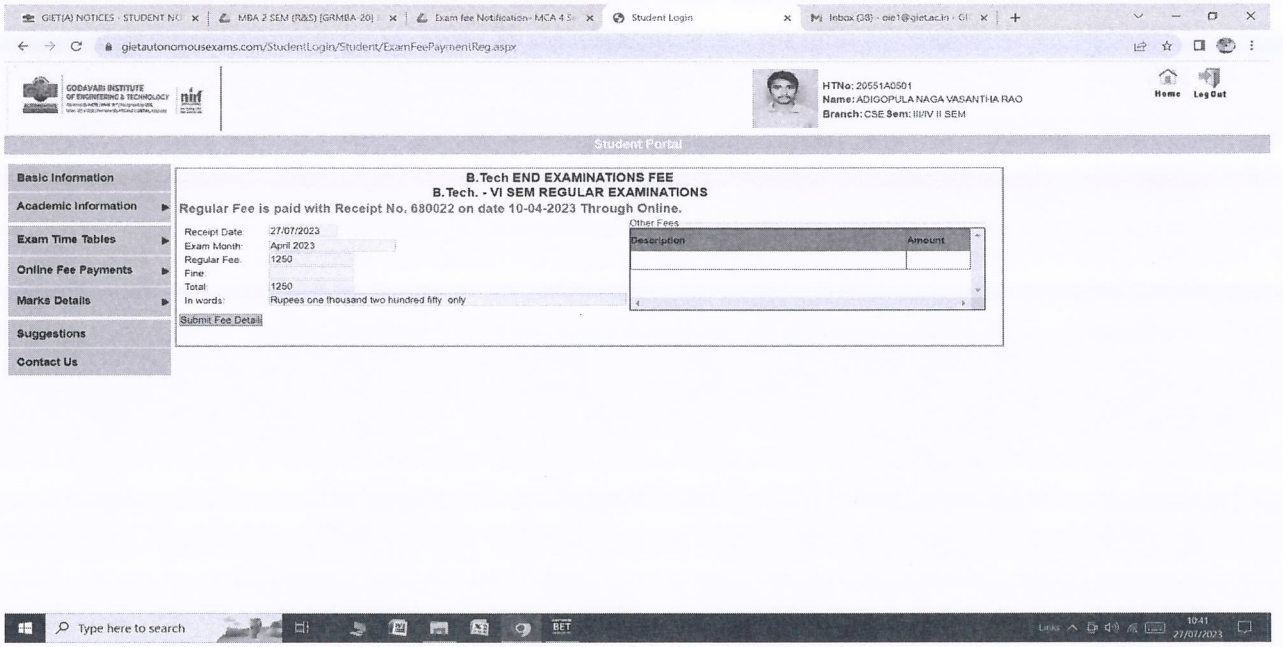
Student Online Examination Registration Page



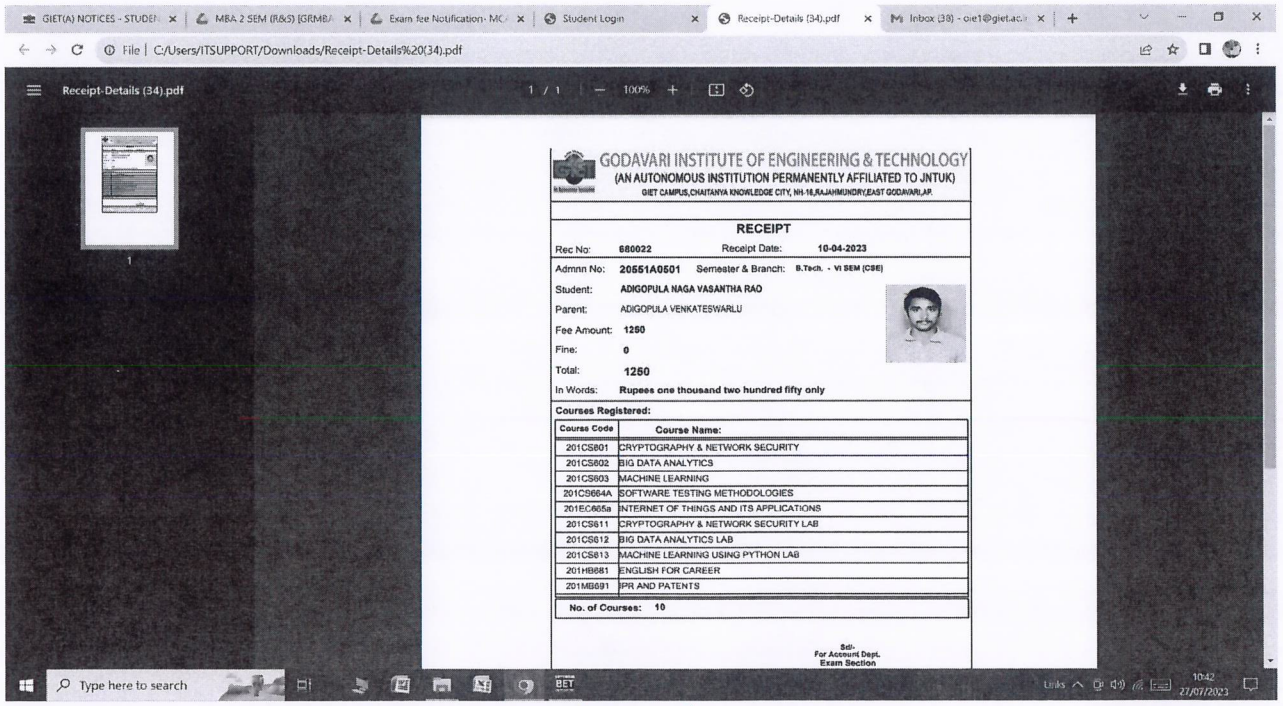
ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Online Fee Payment and Examination Registration page



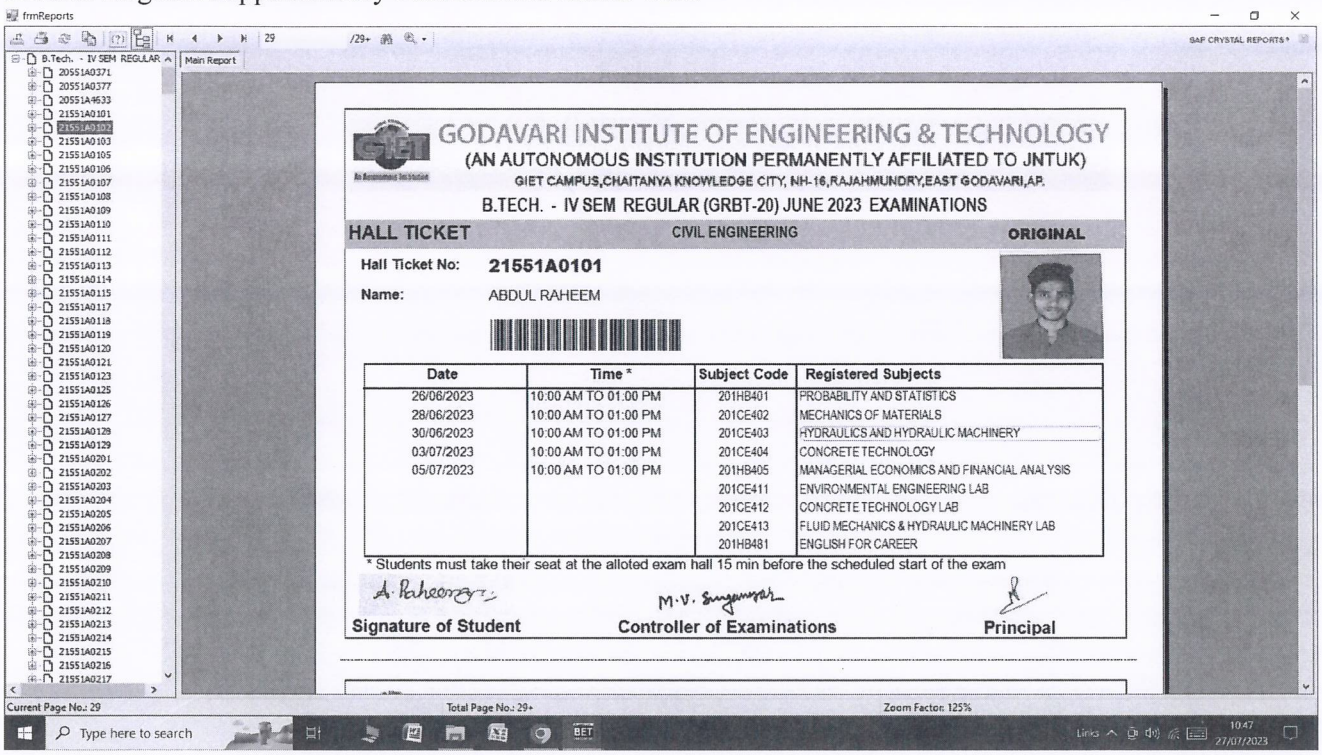
Payment Receipt



ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Student Regular/Supplementary Examination Admit Card



GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY
(AN AUTONOMOUS INSTITUTION PERMANENTLY AFFILIATED TO JNTUK)
GIET CAMPUS,CHAITANYA KNOWLEDGE CITY, NH-16,RAJAHMUNDRY,EAST GODAVARI,AP.
B.TECH. - IV SEM REGULAR (GRBT-20) JUNE 2023 EXAMINATIONS

HALL TICKET — CIVIL ENGINEERING — ORIGINAL

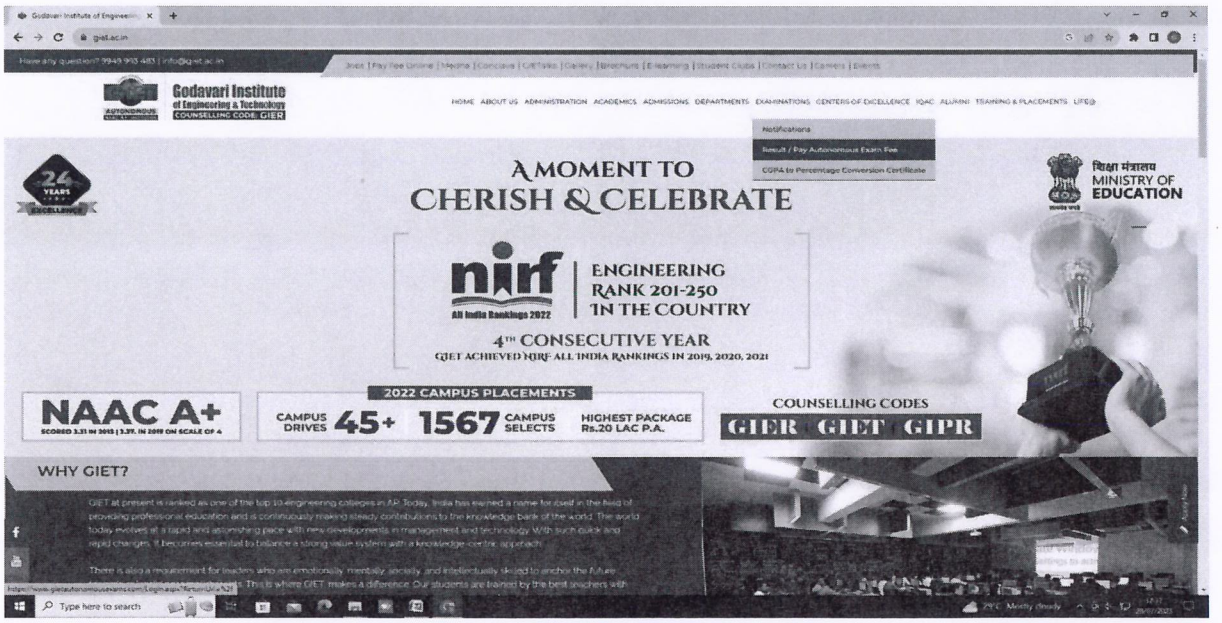
Hall Ticket No: 21551A0101
Name: ABDUL RAHEEM

Date	Time *	Subject Code	Registered Subjects
26/06/2023	10:00 AM TO 01:00 PM	201HB401	PROBABILITY AND STATISTICS
28/06/2023	10:00 AM TO 01:00 PM	201CE402	MECHANICS OF MATERIALS
30/06/2023	10:00 AM TO 01:00 PM	201CE403	HYDRAULICS AND HYDRAULIC MACHINERY
03/07/2023	10:00 AM TO 01:00 PM	201CE404	CONCRETE TECHNOLOGY
05/07/2023	10:00 AM TO 01:00 PM	201HB405	MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS
		201CE411	ENVIRONMENTAL ENGINEERING LAB
		201CE412	CONCRETE TECHNOLOGY LAB
		201CE413	FLUID MECHANICS & HYDRAULIC MACHINERY LAB
		201HB481	ENGLISH FOR CAREER

* Students must take their seat at the alloted exam hall 15 min before the scheduled start of the exam

Signature of Student — Controller of Examinations — Principal

Examinations Result Page (online)



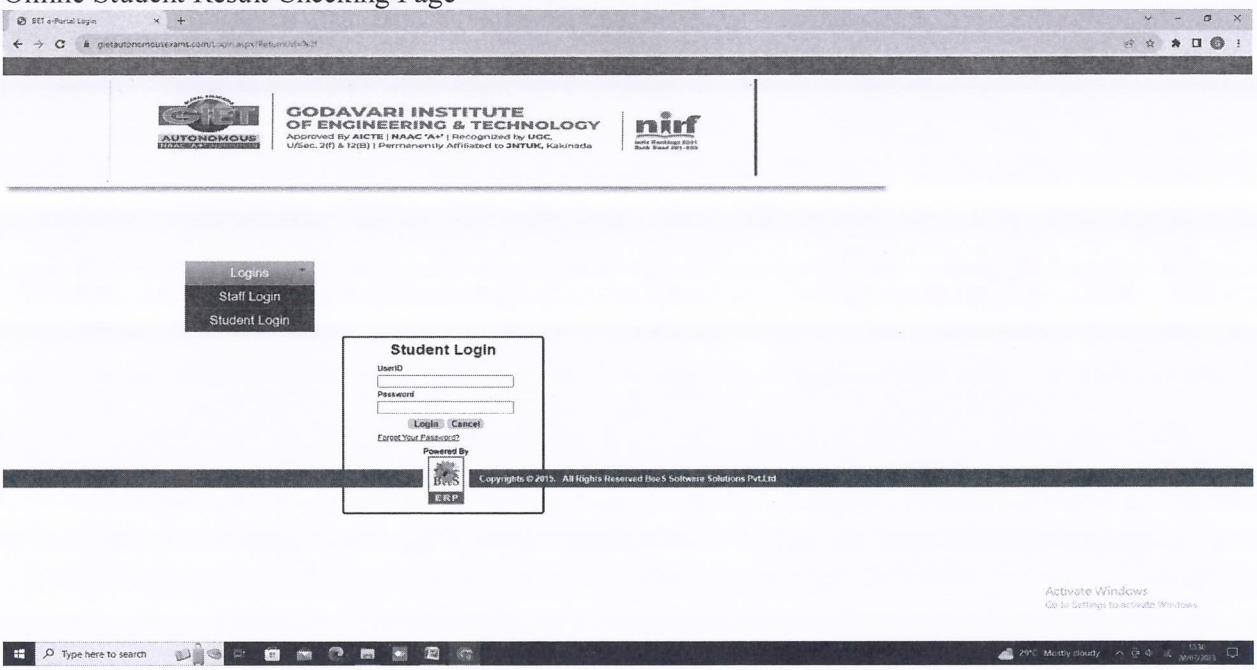
ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

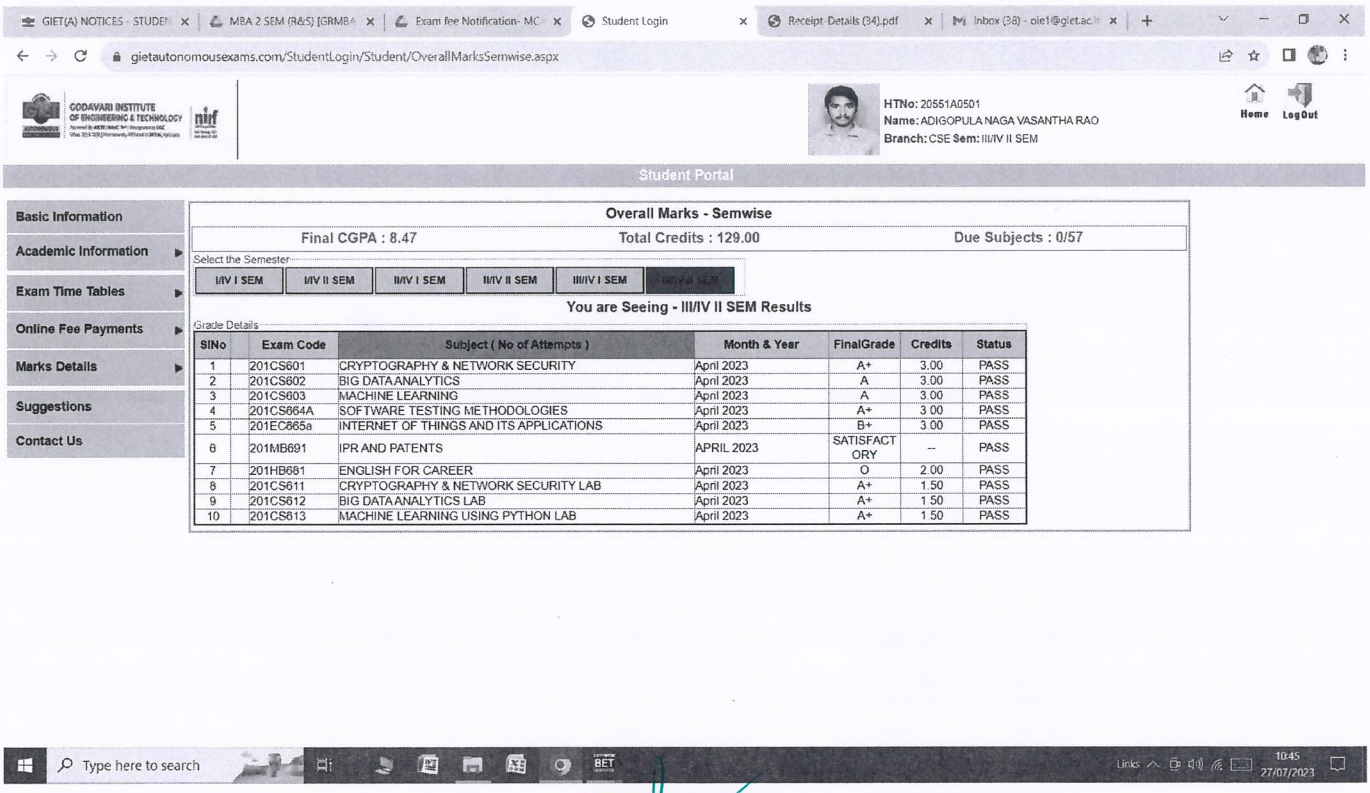
Godavari Institute of Engineering & Technology
Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada
Chaitanya Knowledge City, NH-16, Rajamahendravaram
Andhra Pradesh, INDIA, PIN: 533296 | www.giet.ac.in

AUTONOMOUS
NAAC 'A+' INSTITUTION

Online Student Result Checking Page



Student Result Display Page



SlNo	Exam Code	Subject (No of Attempts)	Month & Year	FinalGrade	Credits	Status
1	201CS601	CRYPTOGRAPHY & NETWORK SECURITY	April 2023	A+	3.00	PASS
2	201CS602	BIG DATA ANALYTICS	April 2023	A	3.00	PASS
3	201CS603	MACHINE LEARNING	April 2023	A	3.00	PASS
4	201CS664A	SOFTWARE TESTING METHODOLOGIES	April 2023	A+	3.00	PASS
5	201EC665a	INTERNET OF THINGS AND ITS APPLICATIONS	April 2023	B+	3.00	PASS
6	201MB691	IPR AND PATENTS	APRIL 2023	SATISFACTORY	--	PASS
7	201HB681	ENGLISH FOR CAREER	April 2023	O	2.00	PASS
8	201CS611	CRYPTOGRAPHY & NETWORK SECURITY LAB	April 2023	A+	1.50	PASS
9	201CS612	BIG DATA ANALYTICS LAB	April 2023	A+	1.50	PASS
10	201CS613	MACHINE LEARNING USING PYTHON LAB	April 2023	A+	1.50	PASS

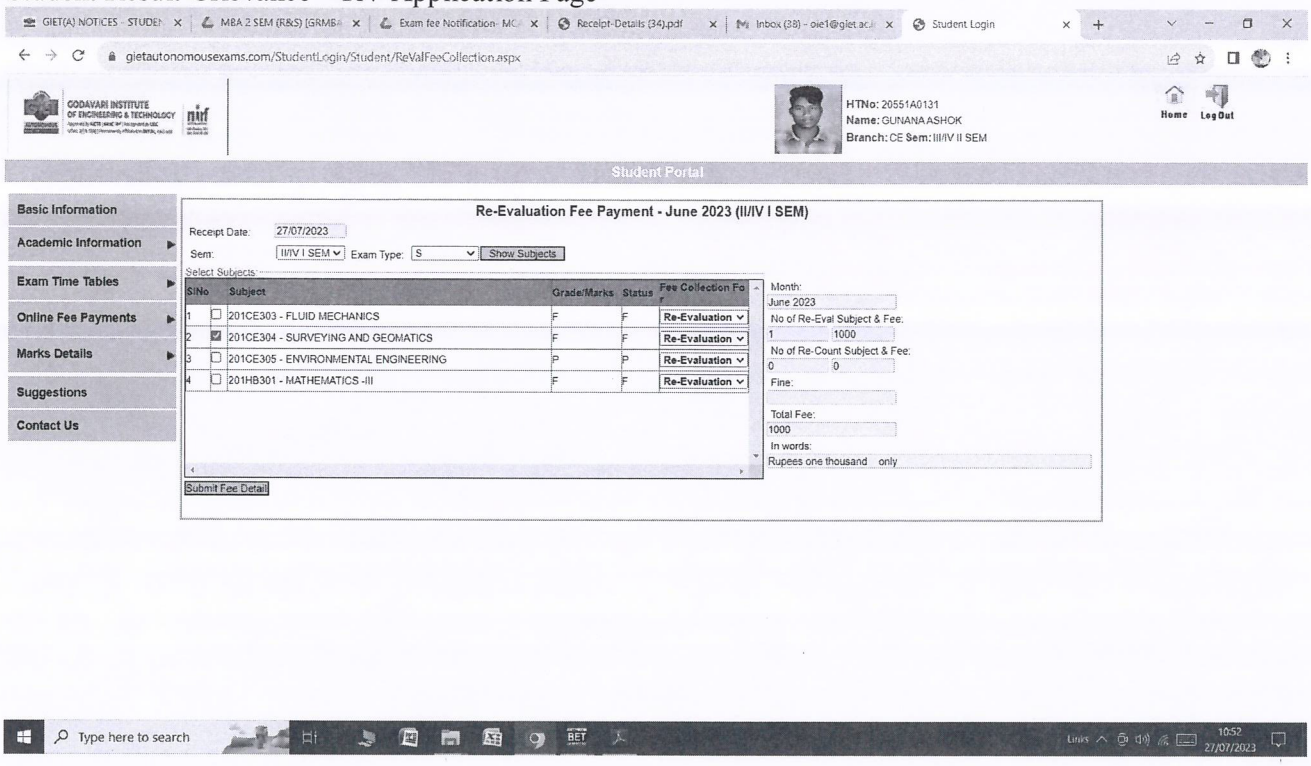
ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

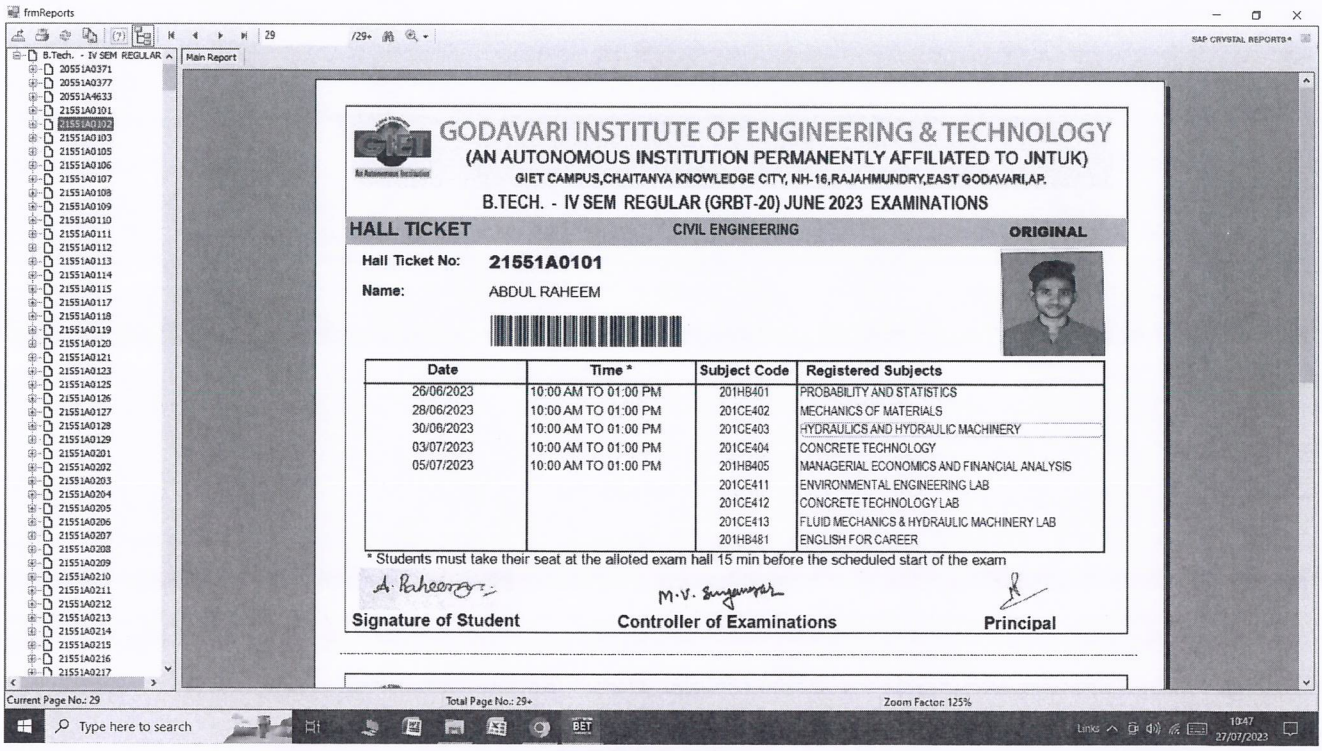
Godavari Institute of Engineering & Technology
Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada
Chaitanya Knowledge City, NH-16, Rajamahendravaram
Andhra Pradesh, INDIA, PIN: 533296 | www.giet.ac.in

AUTONOMOUS
NAAC 'A+' INSTITUTION

Student Result Grievance – RV Application Page

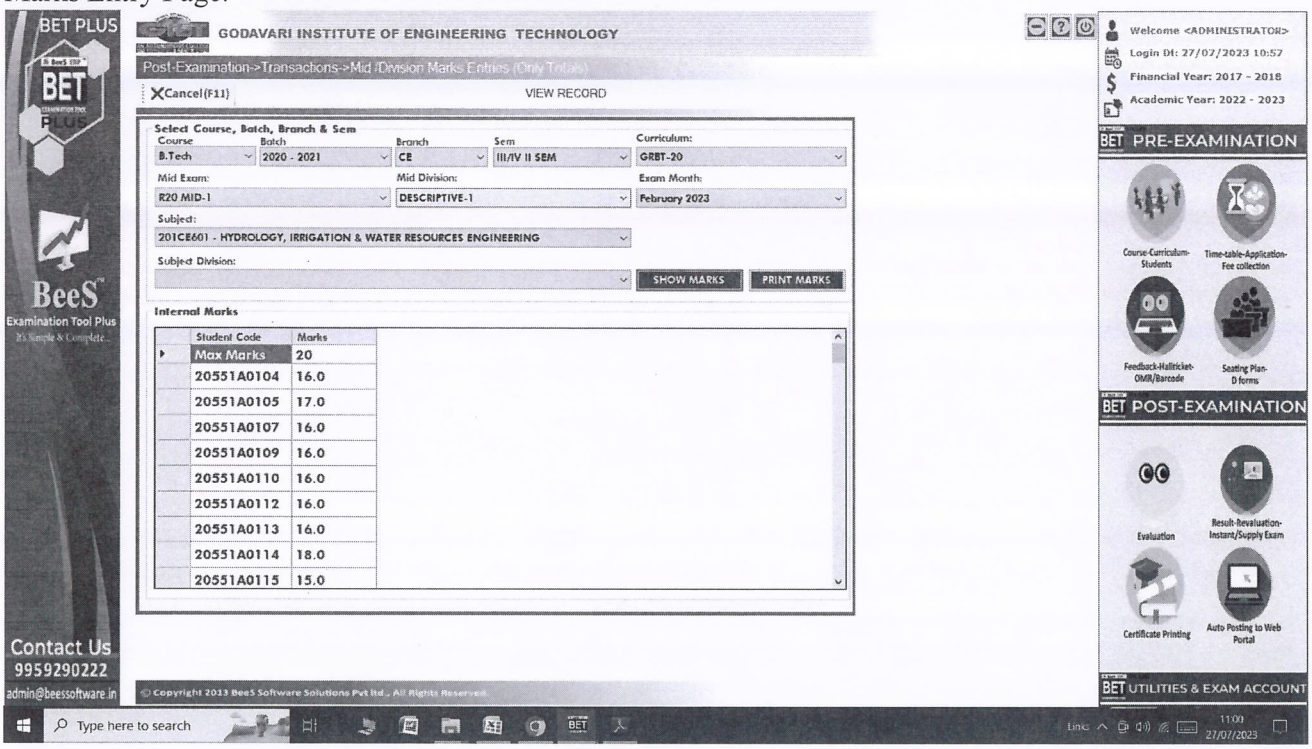


Download Hall ticket

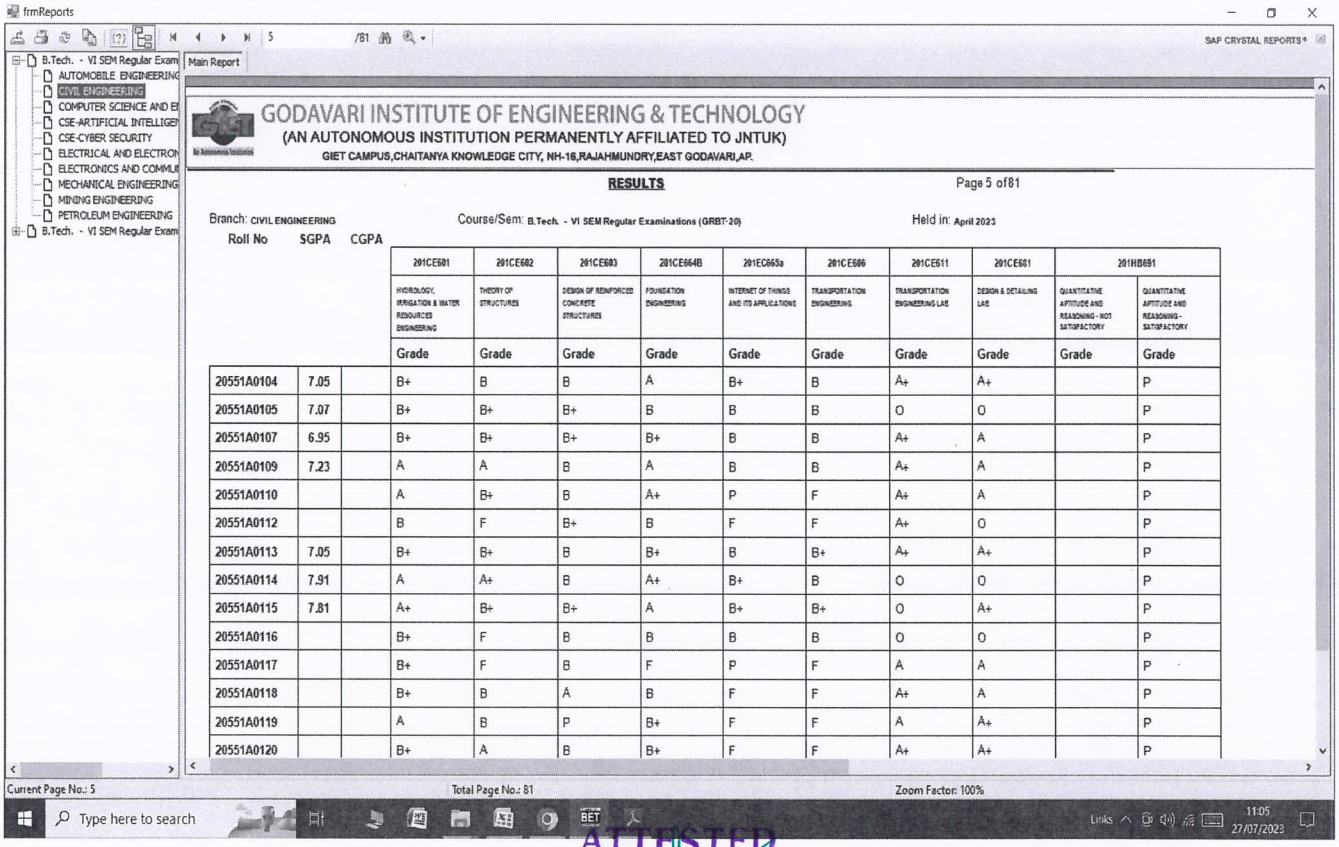


ATTESTED
PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Marks Entry Page.



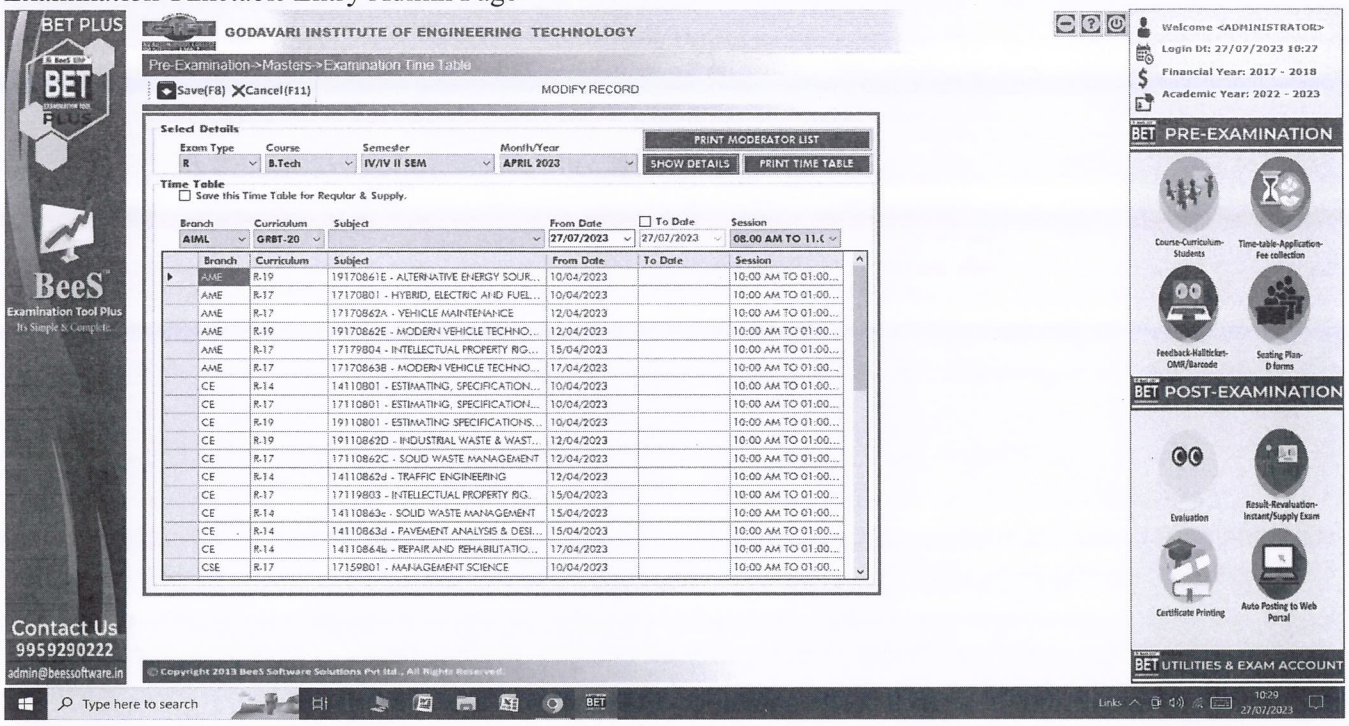
Award List (Reports) Page Examination wise



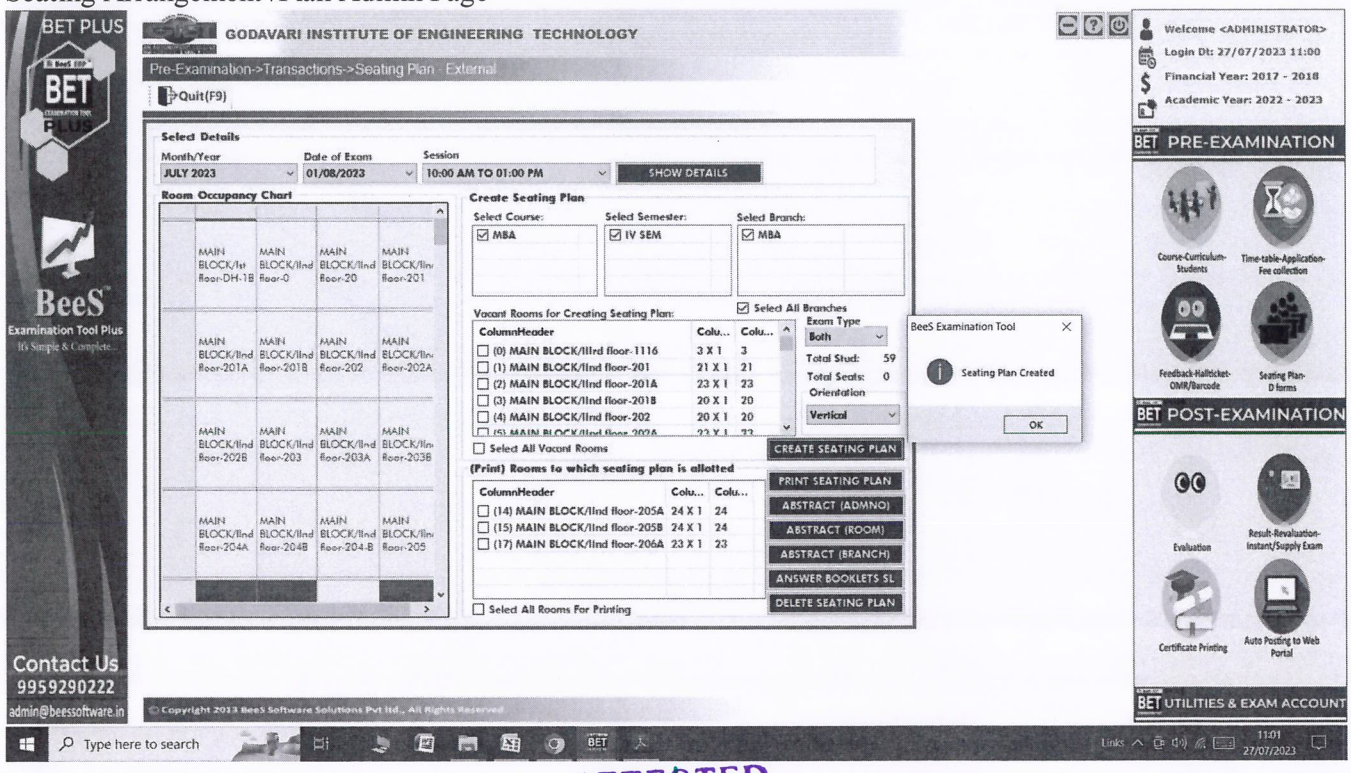
ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Examination Timetable Entry Admin Page



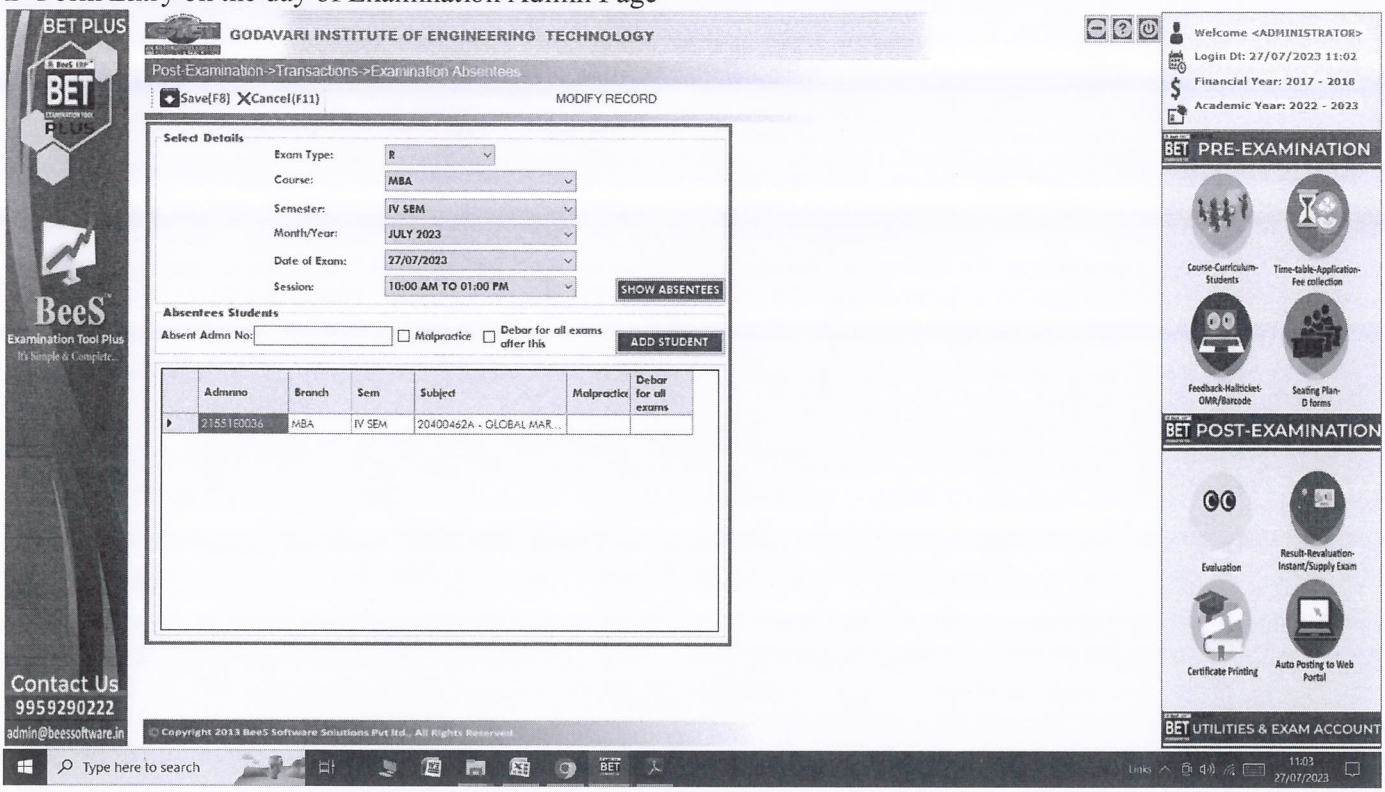
Seating Arrangement /Plan Admin Page



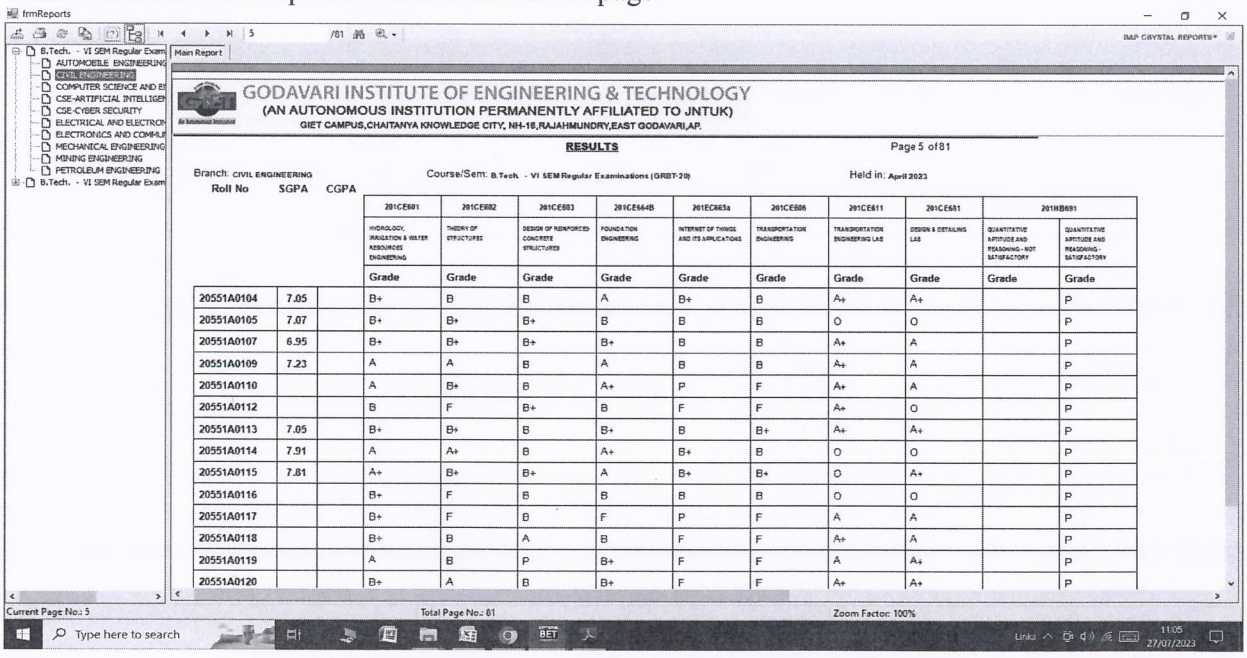
ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

D-Form Entry on the day of Examination Admin Page



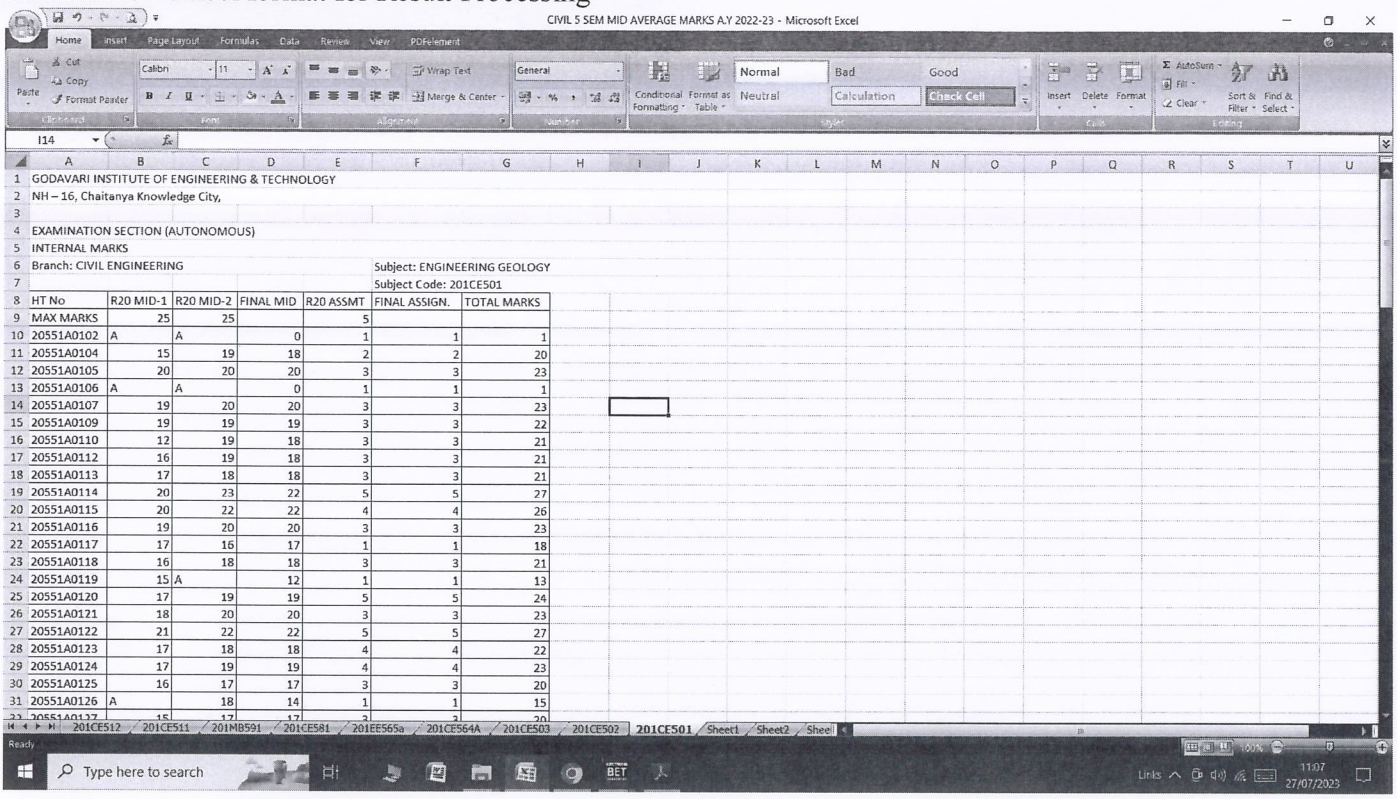
Consolidated Marks Report Branch Wise Admin page



ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Mid Marks – Excel format for Result Processing



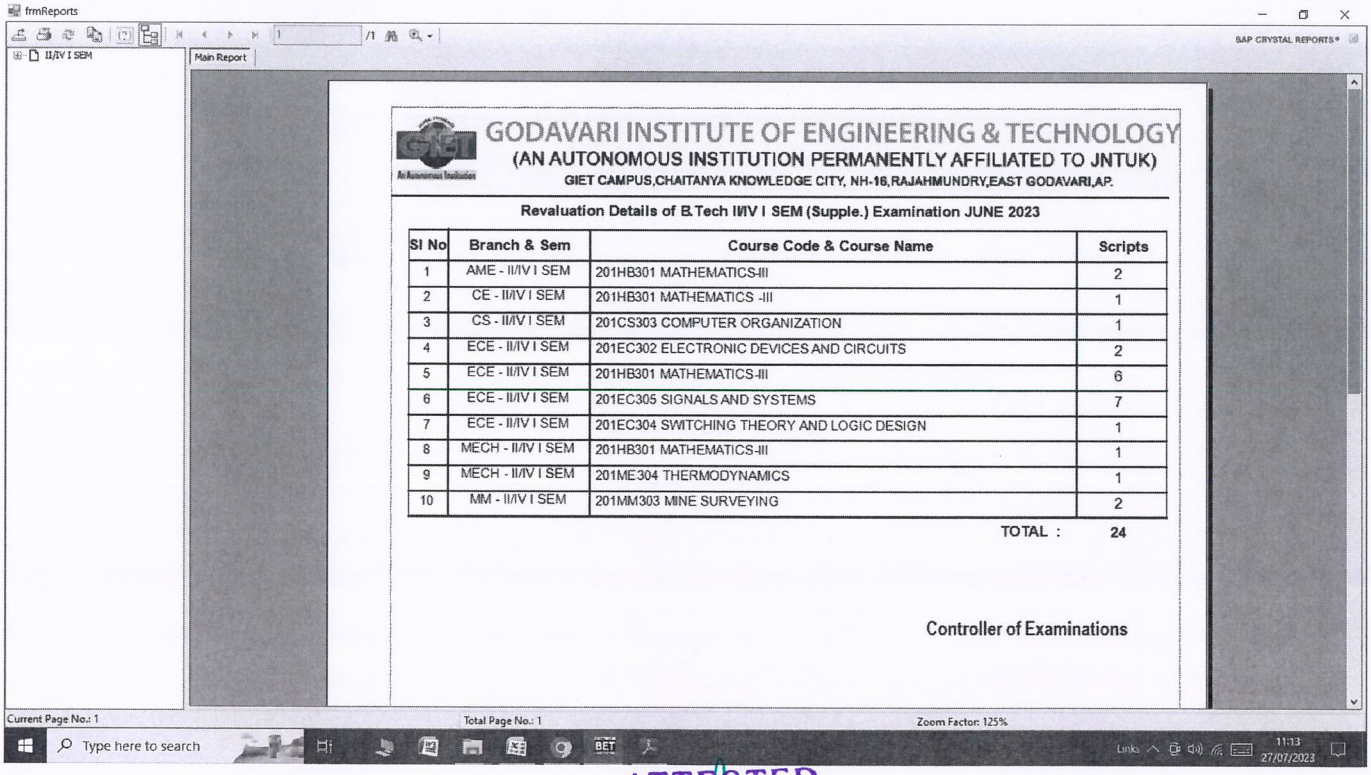
CIVIL 5 SEM MID AVERAGE MARKS A.Y 2022-23 - Microsoft Excel

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY
NH – 16, Chaitanya Knowledge City,

EXAMINATION SECTION (AUTONOMOUS)
INTERNAL MARKS
Branch: CIVIL ENGINEERING — Subject: ENGINEERING GEOLOGY
Subject Code: 201CE501

HT No	R20 MID-1	R20 MID-2	FINAL MID	R20 ASSMT	FINAL ASSIGN.	TOTAL MARKS
MAX MARKS	25	25		5		
20551A0102	A	A	0	1	1	1
20551A0104	15	19	18	2	2	20
20551A0105	20	20	20	3	3	23
20551A0106	A	A	0	1	1	1
20551A0107	19	20	20	3	3	23
20551A0109	19	19	19	3	3	22
20551A0110	12	19	18	3	3	21
20551A0112	16	19	18	3	3	21
20551A0113	17	18	18	3	3	21
20551A0114	20	23	22	5	5	27
20551A0115	20	22	22	4	4	26
20551A0116	19	20	20	3	3	23
20551A0117	17	16	17	1	1	18
20551A0118	16	18	18	3	3	21
20551A0119	15	A	12	1	1	13
20551A0120	17	19	19	5	5	24
20551A0121	18	20	20	3	3	23
20551A0122	21	22	22	5	5	27
20551A0123	17	18	18	4	4	22
20551A0124	17	19	19	4	4	23
20551A0125	16	17	17	3	3	20
20551A0126	A	18	14	1	1	15

Student Grievances/Revaluation



frmReports — II/IV I SEM — Main Report — SAP CRYSTAL REPORTS®

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY
(AN AUTONOMOUS INSTITUTION PERMANENTLY AFFILIATED TO JNTUK)
GIET CAMPUS,CHAITANYA KNOWLEDGE CITY, NH-16,RAJAHMUNDRY,EAST GODAVARI,A.P.

Revaluation Details of B.Tech II/IV I SEM (Supple.) Examination JUNE 2023

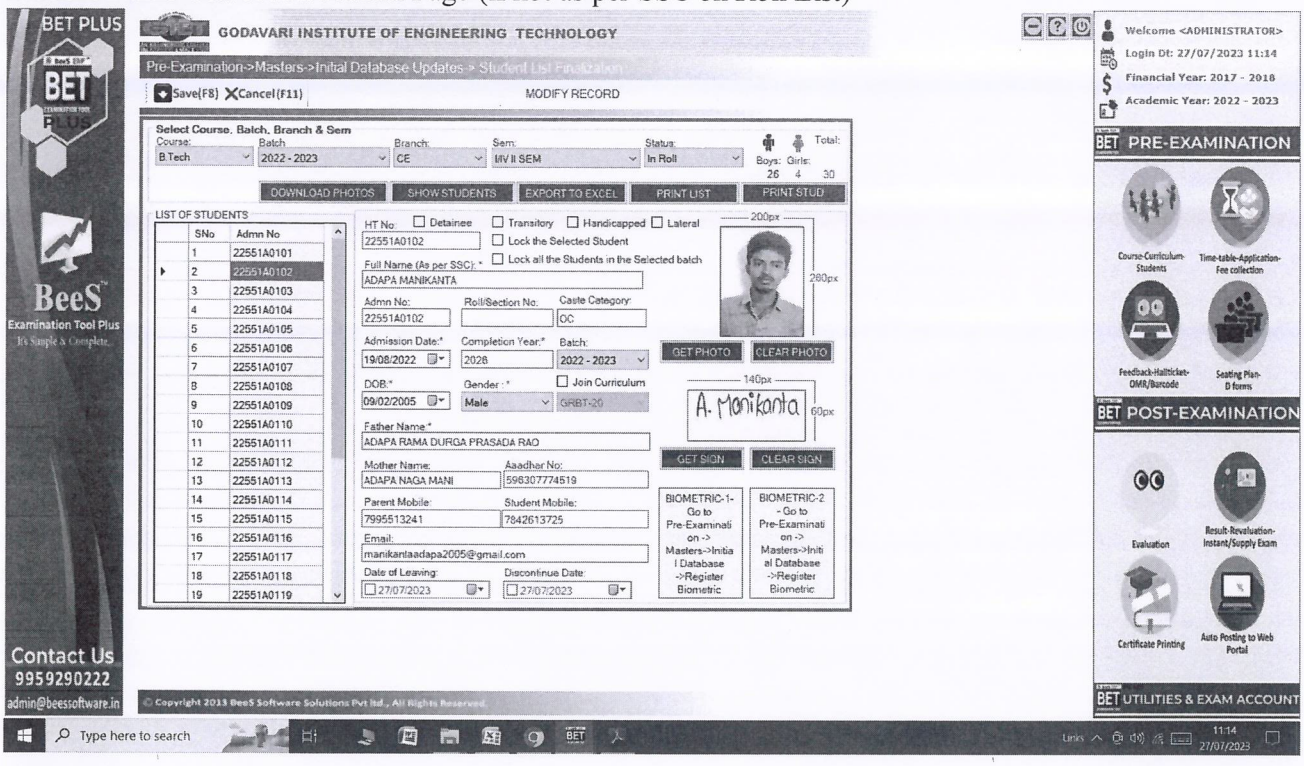
Sl No	Branch & Sem	Course Code & Course Name	Scripts
1	AME - II/IV I SEM	201HB301 MATHEMATICS-III	2
2	CE - II/IV I SEM	201HB301 MATHEMATICS -III	1
3	CS - II/IV I SEM	201CS303 COMPUTER ORGANIZATION	1
4	ECE - II/IV I SEM	201EC302 ELECTRONIC DEVICES AND CIRCUITS	2
5	ECE - II/IV I SEM	201HB301 MATHEMATICS-III	6
6	ECE - II/IV I SEM	201EC305 SIGNALS AND SYSTEMS	7
7	ECE - II/IV I SEM	201EC304 SWITCHING THEORY AND LOGIC DESIGN	1
8	MECH - II/IV I SEM	201HB301 MATHEMATICS-III	1
9	MECH - II/IV I SEM	201ME304 THERMODYNAMICS	1
10	MM - II/IV I SEM	201MM303 MINE SURVEYING	2
		TOTAL :	24

Controller of Examinations

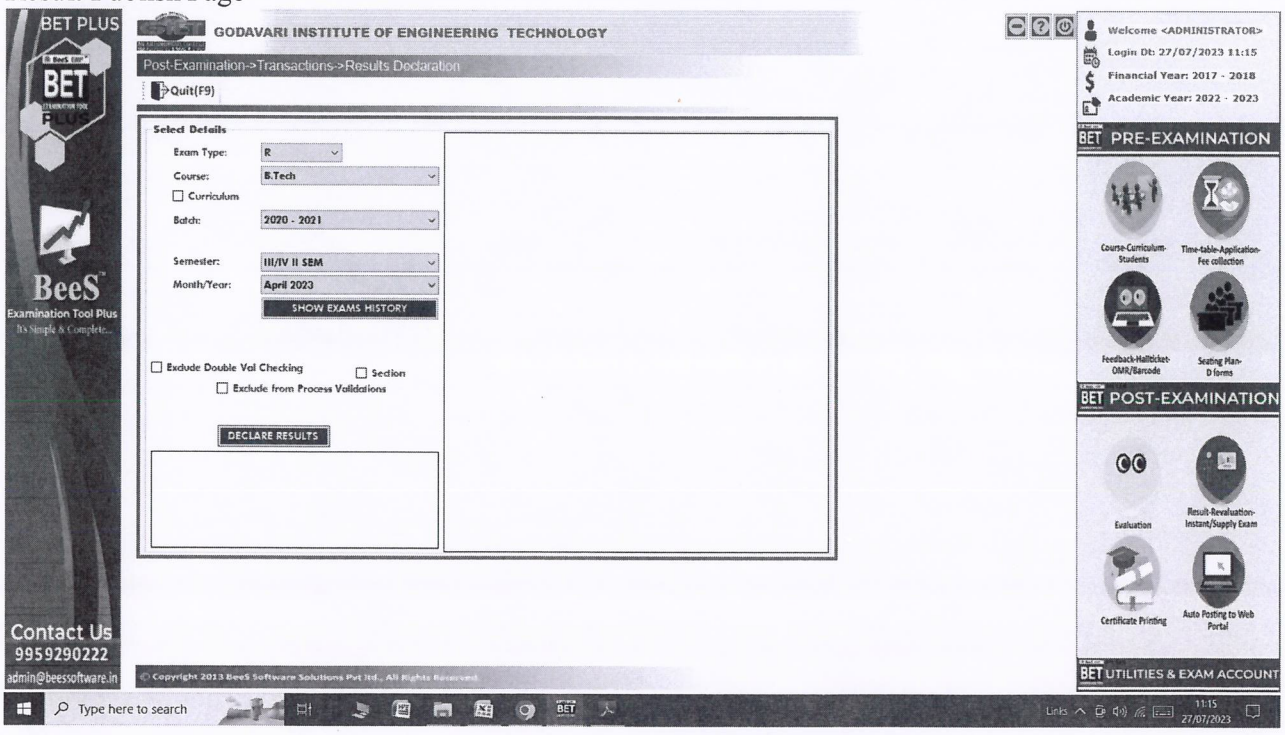
Current Page No.: 1 — Total Page No.: 1 — Zoom Factor: 125%

ATTESTED
PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Student Name Correction Admin Page (if not as per SSC on Roll List)



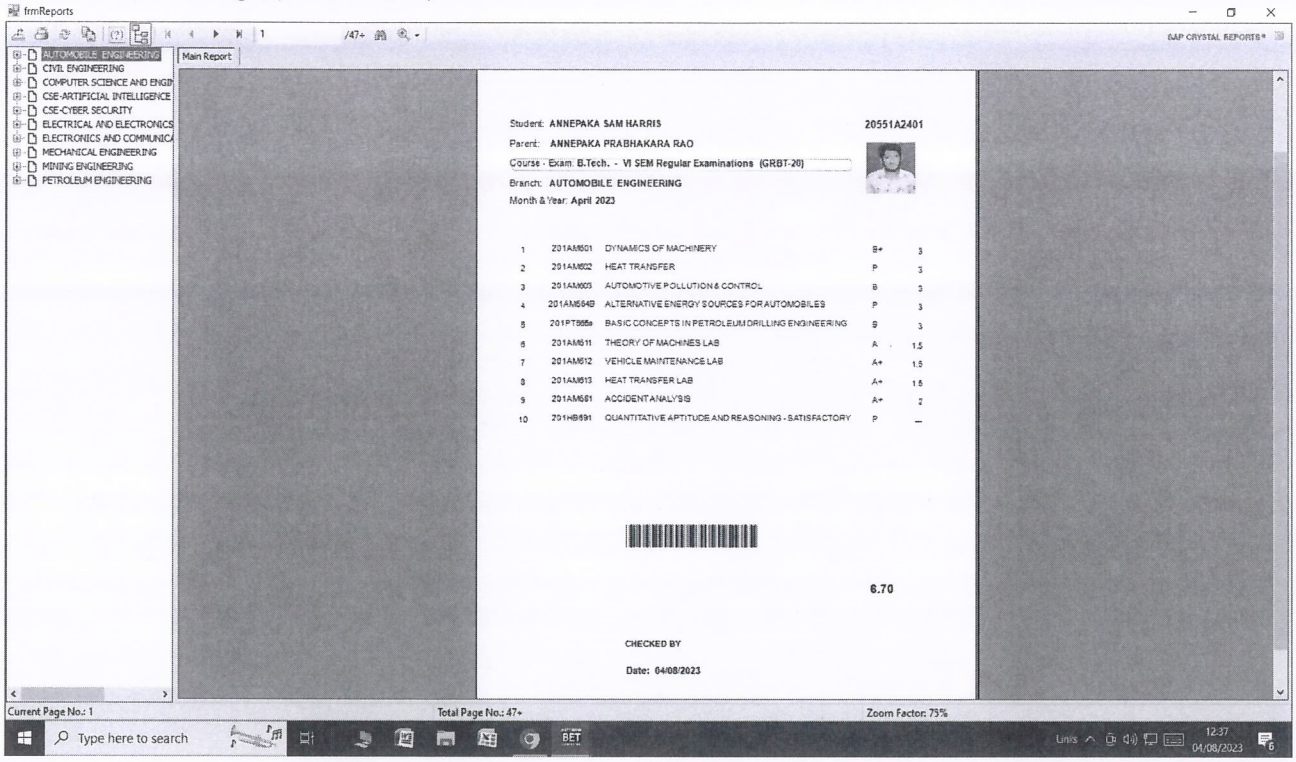
Result Publish Page



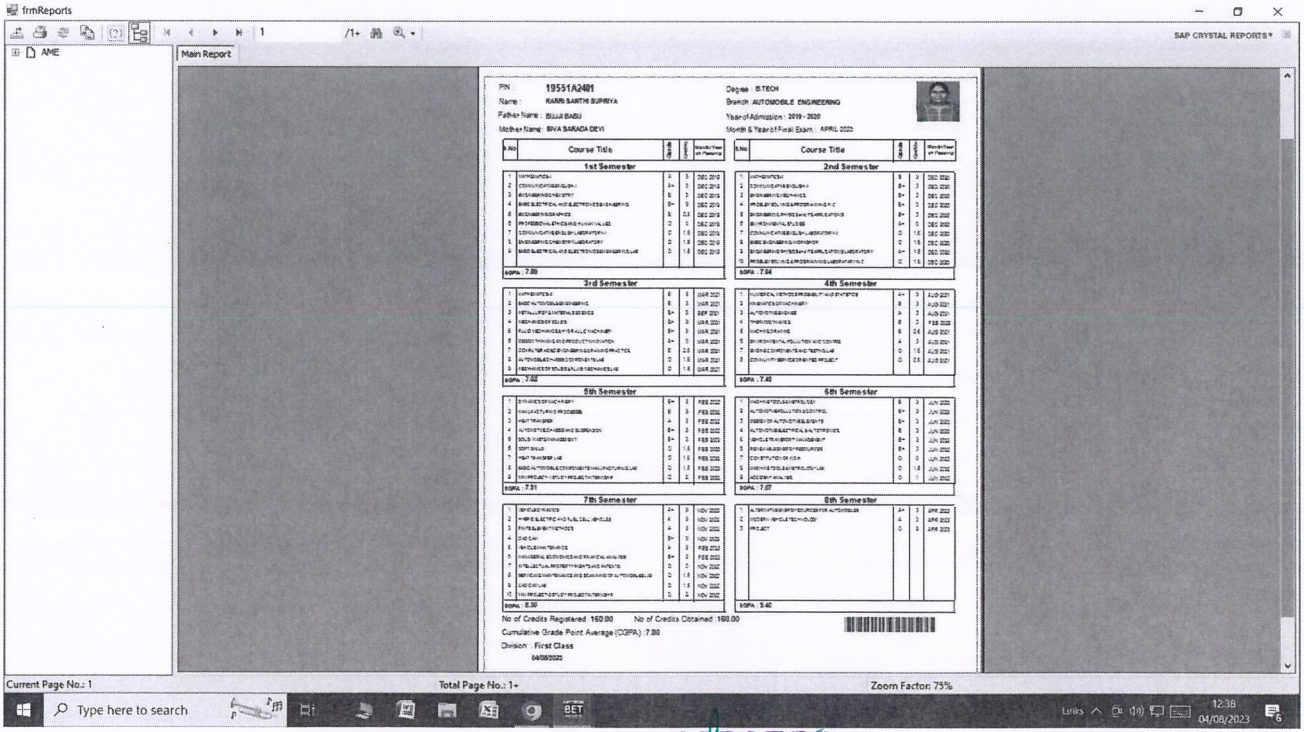
ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Certificate Print Page (Grade Sheet)



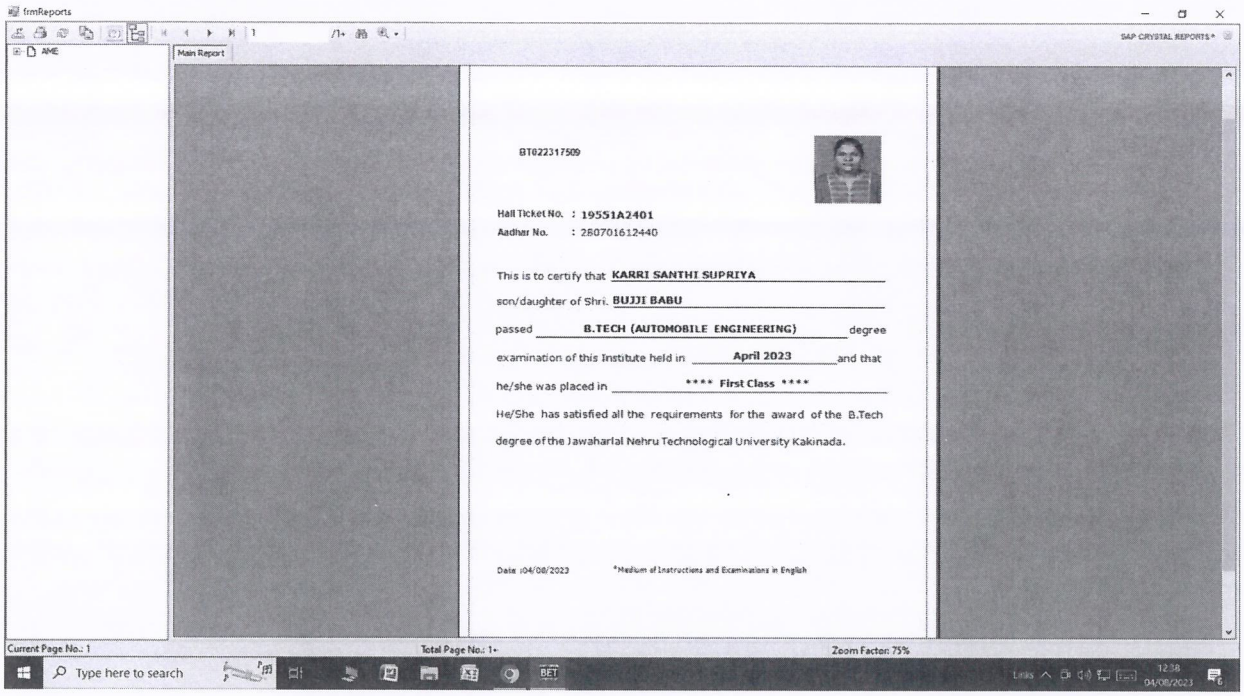
Certificate Print Page (CMM)



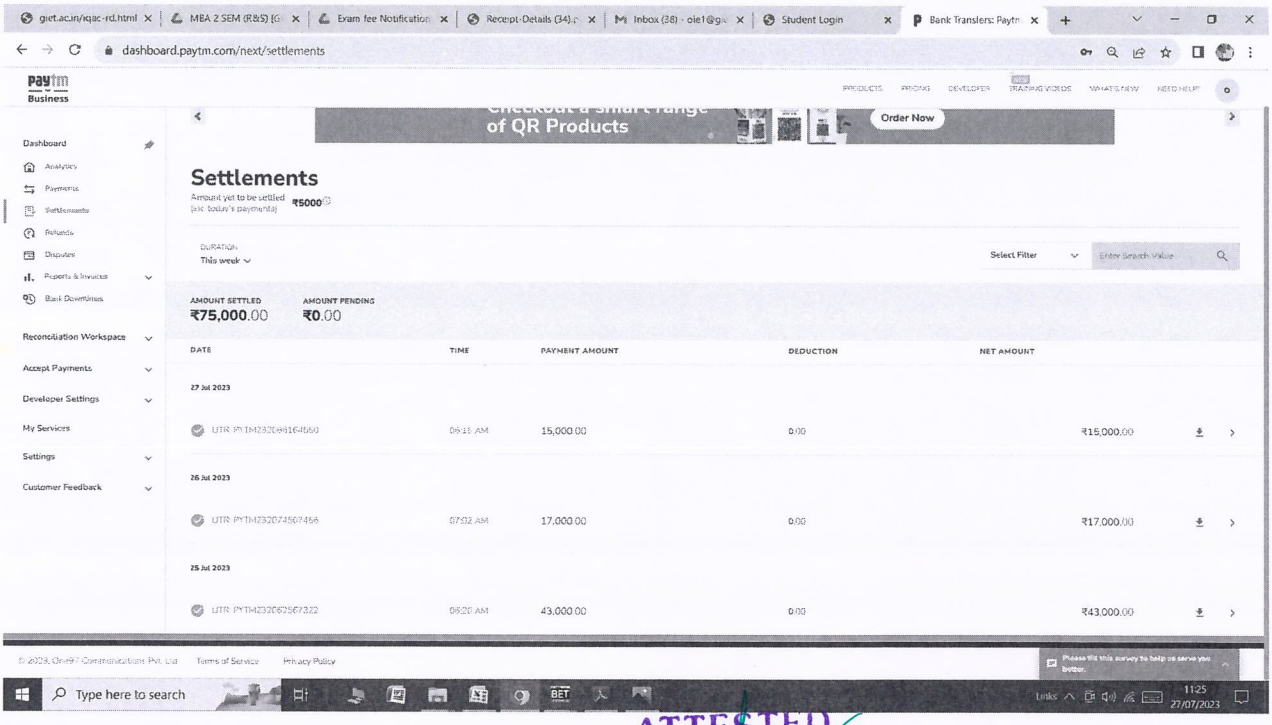
ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Certificate Print Page (PC)

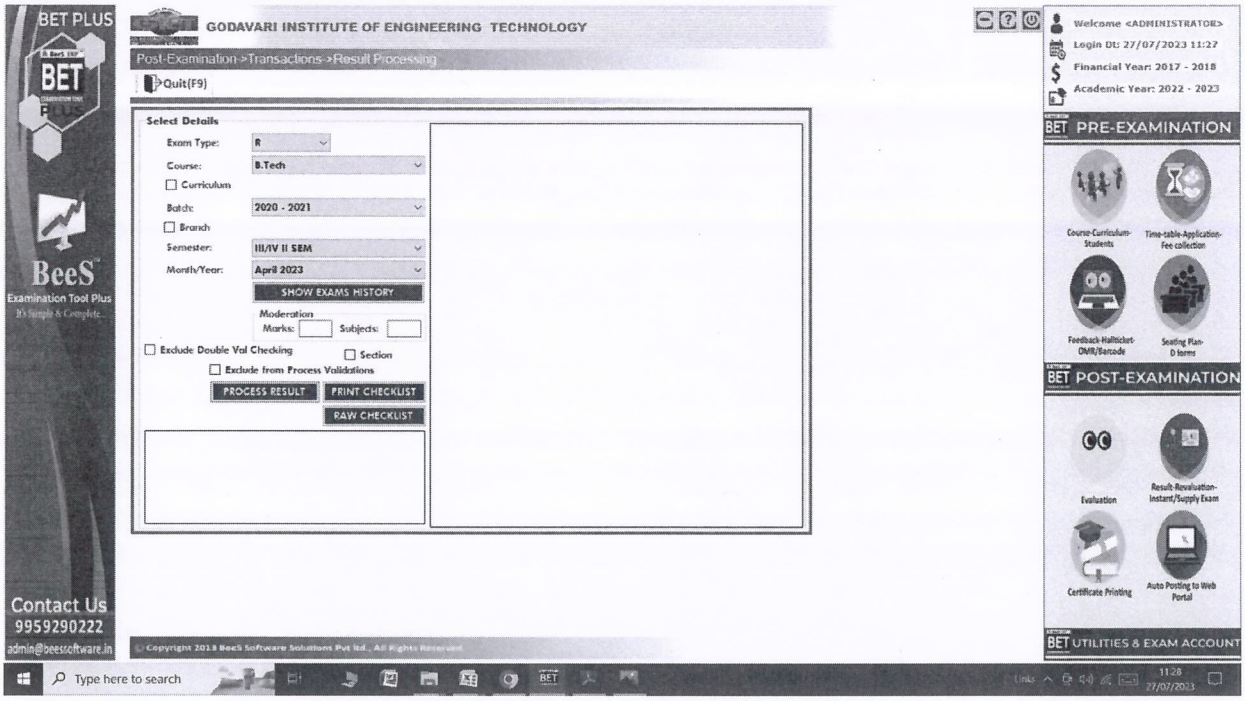


Online fee Payment Settlement from Paytm – Payment related issues for refund (if any)



ATTESTED
PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

Desktop Application Results Processing Application (Confidential)



ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY(A), RJY

B.TECH (CSE-AI&ML)- 3 SEM (S) (A.Y.2022-23) (GRBT-20), END EXAM QUESTION PAPER

DATABASE MANAGEMENT SYSTEMS

CODE NO. 201AI303; DATE: 28/06/2023: 02:00 pm to 05:00 pm

Duration:3Hrs Max.Marks:5*14=70

ANSWER ALL THE QUESTIONS

ALL QUESTIONS CARRY EQUAL MARKS

UNIT-1

1.1	a) List various categories of database users and discuss their interfaces to DBMS.	L1	CO1	7M
	b) Discuss the functionality of query evaluation engine.	L1	CO1	7M
	(OR)			
1.2	a) Explain the following: i)View of Data ii) Data Abstraction iii)Instances and Schemas	L2	CO1	6M
	b)Explain the different types data models.	L3	CO1	8M

UNIT-2

2.1	a) What is E-R model? Draw an E-R Diagram for any Banking enterprise system.	L3	CO3	7M
	b) Explain the types of attributes.	L2	CO3	7M
	(OR)			
2.2	a)Explain the additional features of ER Model.	L2	CO3	7M
	b)Explain the relationships and relationships sets.	L4	CO3	7M

UNIT-3

3.1	a) Explain about outer join operation in relational algebra.	L2	CO2	7M
	b) Explain about domain relational calculus with example.	L3	CO2	7M
	(OR)			
3.2	Explain the slection ,projection set difference and Cartesian product operations in relational algebra with example.	L4	CO2	14M

UNIT-4

4.1	What is normalization ?What are the conditions are required for a relation to be in 2NF,3NF and BCNF explain with examples.	L5	CO4	14M

P-T-D

ATTESTED

PRINCIPAL

Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

(OR)

4.2	a) Define a functional dependency. List and discuss the six inference rules for functional dependencies. Give relevant examples.	L2	CO4	7M
	b) What are the steps to be followed to convert a relation in 3NF to BCNF?.	L4	CO4	7M

UNIT-5

5.1	What is log? What is log tail? Explain the concept of checkpoint log record.	L2	CO5	14M

(OR)

5.2	Describe the different types of file organization? Explain using a sketch of each of them with their advantages and disadvantages.	L3	CO5	14M

ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A), RJY

B. Tech (AME)- 4 SEM(S) (A.Y. 2022-23), (GRBT-20), END EXAM QUESTION PAPER

AUTOMOBILE ENGINES

CODE No.201AM403; DATE: 21/12/2022: 02.00 pm to 05.00 pm

Duration: 3hrs Max. Marks: 5x14=70

ANSWER ALL THE QUESTIONS

ALL QUESTIONS CARRY EQUAL MARKS

UNIT-1

1.1	a) Discuss the time loss Factor and Heat loss Factor..	L2	CO1	7M
	b) Draw and Explain the Working of 4 Stroke Diesel engine.	L1	CO1	7M
	(OR)			
1.2	a) Explain the working of 2 stroke petrol Engine.	L2	CO1	7M
	b) Describe the parameters of four stroke and two stroke engines in tabular form.	L1	CO1	7M

UNIT-2

2.1	a) Write down the procedure for conducting performance test of an engine in detail.	L1	CO2	7M
	b) Explain the Various results of Performance test graphically.	L2	CO2	7M
	(OR)			
2.2	Describe the working of Supercharging and turbo charging.	L1	CO2	14M

UNIT-3

3.1	Draw and Explain the working of Solex carburetor with neat sketch.	L1	CO3	14M
	(OR)			
3.2	Sketch the PV diagram of CI Engine combustion process and explain.	L1	CO3	14M

UNIT-4

4.1	Describe the below: a) Fuel atomization. b) Droplet size distribution. c) Types of combustion chambers.	L3	CO4	14M
	(OR)			
4.2	a) Draw and explain multi fuel engines	L3	CO4	7M
	b) Describe Stratified charge engines.	L3	CO4	7M

UNIT-5

5.1	Explain how Co, Co_2, Nox, Soot, Smog, Hydrocarbons, particulate matters are formed in engine.	L3	CO5	14M
	(OR)			
5.2	Explain the Working of EGR with suitable Applications.	L4	CO5	14M

ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16, Chaitanya Knowledge City
RAJAHMUNDRY-533 296

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A), RJY

B. Tech (CIVIL)- 4 SEM(S) (A.Y. 2022-23), (GRBT-20), END EXAM QUESTION PAPER

HYDRAULICS AND HYDRAULIC MACHINERY

CODE No.201CE403; DATE: 21/12/2022: 02.00 pm to 05.00 pm

Duration : 3 Hrs

Max. Marks : 5 x 14 =70

Answer all the questions

All questions carry equal marks

UNIT-1

1-1 a) Derive the equation for Chezy's constant for a flow in a uniform cross section of a channel. L 6 CO1 7 M

b) A rectangular channel carries water at the rate of 400 liters/sec when bed slope is 1 in 2000. Find the most economical dimensions of the channel if C=50. L 3 CO1 7 M

(OR)

1-2 a) Derive the dynamic equation for a gradually varied flow in a channel. L 6 CO3 7 M

b) A rectangular channel of 3m wide carries the water at a rate of $2m^3/s$. When the depth of flow is 30cm, First decide whether the jump can occur or not? If it occurs, then find out

(i) Height of jump

(ii) Loss of energy during jump L 5 CO3 7 M

UNIT-2

2-1 a) Derive on the basis of dimensional analysis suitable parameters to present the thrust developed by a propeller. Assume that the thrust P depends upon the angular velocity w, speed of advance V, diameter D, dynamic viscosity μ, mass density ρ, elasticity of the fluid which can be denoted by the speed of sound in the medium C. L 6 CO2 7 M

b) A hydraulic turbine develops L28.6 KW at 240 rpm under a head of 16m. Find the scale ratio and speed of similar machine which will generate 661.5 KW at 25m of head. L 3 CO2 7 M

(OR)

2-2 a) Explain Reynold's Number, Mach Number and Froude's Number. Derive the expressions for any above two numbers. L 2 CO2 7 M

b) In the model test of a spillway the discharge and velocity of flow over the model were $2m^3/s$ and 1.5 m/s respectively. Calculate the velocity and discharge over the prototype which is 36 times the model size. L 3 CO2 7 M

UNIT-3

3-1 a) Obtain an expression for force exerted by a jet of water on a fixed vertical plate in the direction of jet. L 6 CO4 7 M

b) A jet of water of diameter 7.5 cm strikes a curved plate at its centre with a velocity of 20 m/s. The curved plate is moving with a velocity of 8 m/s in the direction of the jet. The jet is deflected through an angle of 165°. Assuming the plate smooth, find (i) Force exerted on the plate in the

P-T-O

ATTESTED

PRINCIPAL

Godavari Institute of Engineering & Tech.(A)

NH-16,Chaitanya Knowledge City

RAJAHMUNDRY-533 296

direction of jet, (ii) Power of the jet, and (iii) Efficiency of the jet. L 3 CO4 7 M

(OR)

3-2 a) What do you understand by Heads and Efficiencies of Turbines? Explain very clearly.

L 2 CO4 7 M

b) A jet of water 50 mm diameters and moving with a velocity of 26 m/s is impinging normally on a plate. Determine the pressure on the plate, when (i) it is fixed and (ii) it is moving with a velocity of 10m/s in the direction of the jet. L 3 CO4 7 M

UNIT-4

4-1 a) Obtain an expression for the work done per second by water on the runner of a Pelton wheel. Draw inlet and outlet velocity triangles for a Pelton Turbine and indicate the direction of various velocities. L 6 CO4 7 M

b) A Kaplan turbine runner is to be designed to develop 9100 kW. The net available head is 5.6 m. If the speed ratio=2.09, flow ratio=0.68, overall efficiency=86% and diameter of the boss is 1/3 diameter of the runner. Find the diameter of the runner, its speed and the specific speed of the turbine. L 3 CO5 7 M

(OR)

4-2 a) Define the term 'Governing of a turbine'. L 1 CO5 2 M

b) Define specific speed of a turbine and derive an expression for the same. State its significance in the study of hydraulic machines. L 6 CO5 5 M

c) A turbine develops 7357.5 kW S.P when running at 200 rpm. The head on the turbine is 40m. If the head on the turbine is reduced to 25m, determine the speed and power developed by the turbine. L 3 CO5 7 M

UNIT-5

5-1 a) Obtain an expression for the work done by impeller of a centrifugal pump on water per second per unit weight of water. L 6 CO4 7 M

b) Define the Static and Manometric heads of a centrifugal pump. L 2 CO5 2 M

c) A three stage centrifugal pump has impellers 40 cm in diameter and 2 cm wide at outlet. The vanes are curved back at the outlet at 45° and reduce the circumferential area by 10%. The manometric efficiency is 90% and the overall efficiency is 80%. Determine the head generated by the pump when running at 1000 rpm delivering 50 litres/sec. What should be the shaft horse power? L 3 CO5 5 M

(OR)

5-2 a) What is a reciprocating pump? Describe the principle and working of reciprocating pump with neat sketch. L 3 CO4 7 M

b) Define the terms Slip, percentage slip and negative slip. L 2 CO5 2 M

c) Explain in detail about the classification of hydropower plants L 2 CO5 5 M

ATTESTED

PRINCIPAL

Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A), RJY

B. Tech (CSE/CSE-CS)- 4 SEM(S)(A.Y. 2022-23), (GRBT-20)

END EXAM QUESTION PAPER: OPERATING SYSTEMS

CODE No.201CS403; DATE: 21/12/2022: 02.00 pm to 05.00 pm

Duration: 3 Hrs | Max. Marks: 5x14=70

ANSWER ALL THE QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

Q.No.	Question	Bloom's Taxonomy level	Course outcomes	Marks
	UNIT-1			
1.1	a) Explain Types of Operating Systems with their advantages and disadvantages	L1	CO1	7M
	b) Elaborate multiprogramming Operating System	L2	CO1	7M
	(OR)			
1.2	a) Draw and explain the Operating System architecture	L2	CO1	7M
	b) Discuss about operating system operations?	L2	CO1	7M
	UNIT-2			
2.1	a) What is a process? With the help of a diagram, explain the different process states	L2	CO2	7M
	b) Using FCFS algorithm, Find out average waiting Time and average completion time of below	L2	CO2	7M

Process	Burst time
P1	4
P2	5
P3	8
P4	3
P5	1

	(OR)			
2.2	a) Define CPU Scheduling? Explain important CPU scheduling Terminologies	L2	CO2	7M
	b) Explain about multi Thread programming models	L1	CO2	7M
	UNIT-3			
3.1	a) Explain about Principal of Concurrency with their advantages of concurrency	L2	CO3	7M
	b) Solve Dining-Philosophers Solution Using Monitors	L2	CO3	7M
	(OR)			

P.T.O

ATTESTED
PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

3.2	Consider a system that contains five processes P1, P2, P3, P4, P5 and the three resource types A, B and C. Following are the resources types: A has 10, B has 5 and the resource type C has 7 instances. Answer the following questions using the banker's Safety Algorithm:	L2	CO3	14M

Process	Allocation			Max			Available		
	A	B	C	A	B	C	A	B	C
P1	0	1	0	7	5	3	3	3	2
P2	2	0	0	3	2	2			
P3	3	0	2	9	0	2			
P4	2	1	1	2	2	2			
P5	0	0	2	4	3	3			

UNIT-4

4.1	a) Define memory and different types of memories	L2	CO4	7M
	b) Differentiate between paging and segmentation	L1	CO4	7M
	(OR)			
4.2	Consider the page reference string of size 12: 1, 2, 3, 4, 5, 1, 3, 1, 6, 3, 2, 3 with frame size 4 (i.e. maximum 4 pages in a frame). Find the number of page faults using (i) FIFO (ii) LRU	L1	CO4	14M

UNIT-5

5.1	a) Discuss the Files and Directories with An Example	L3	CO5	7M
	b) Explain Directory Structure with an neat diagram	L1	CO5	7M
	(OR)			
5.2	a) Describe the types of Disk Scheduling	L2	CO5	7M
	b) Consider a disk queue with requests for I/O to blocks on cylinders 98, 183, 41, 122, 14, 124, 65, 67. The head is initially at cylinder number 53 moving towards larger cylinder numbers on its servicing pass. The cylinders are numbered from 0 to 199. Find out the total head movement (in number of cylinders) incurred while servicing these requests using FCFS and SSTF	L2	CO5	7M

****

ATTESTED

PRINCIPAL

Godavari Institute of Engineering & Tech.(A)

NH-16,Chaitanya Knowledge City

RAJAHMUNDRY-533 296

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A), RJY

B. Tech (ECE)- 4 SEM(S) (A.Y. 2022-23), (GRBT-20), END EXAM QUESTION PAPER

RANDOM VARIABLE AND STOCHASTIC PROCESS

CODE No.201EC403; DATE: 21/12/2022: 02.00 pm to 05.00 pm

Duration: 3 Hrs

Max. Marks: 5 X 14=70

ANSWER ALL THE QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

	UNIT-1			
1.1	a) Define and explain following with example i) Equally likely events ii) Exhaustive events iii) Mutually exclusive events	L2	CO1	7 M
	b) Find the probability of getting a total of 5 or 11, when tossing a pair of fair dice.	L1	CO1	7 M
	(OR)			
1.2	a) Explain relative frequency definition and classical definition of probability?	L2	CO1	7 M
	b) Define probability density function and prove its properties.	L1	CO1	7 M
	UNIT-2			
2.1	a) Consider that a fair coin is tossed 3 times, Let X be a random variable, defined as X= number of tails appeared, find the expected value of X.	L1	CO2	7 M
	b) The random variable X has the discrete variable in the set {−1,−0.5, 0.7, 1.5, 3} the Corresponding probabilities are assumed to be {0.1, 0.2, 0.1, 0.4, 0.2}. Plot its distribution function and state is it a discrete or continuous distribution function.	L2	CO2	7 M
	(OR)			
2.2	a) Explain any 4 properties of Probability Distribution Function.	L2	CO2	7 M
	b). A random variable X has the following probability distribution: X: 0, 1, 2, 3, 4, 5, 6, 7, 8 P(x): a, 3a, 5a, 7a, 9a, 11a, 13a, 15a, 17a i) Determine the value of 'a' ii) ii) Find the distribution function F(x)	L3	CO2	7 M
	UNIT-3			
3.1	a) Explain briefly about time average and Ergodicity.	L2	CO3	7 M
	b) Show that the process $X(t)= A \cos(w_0 t+\theta)$ is wide sense stationery if it is assumed that A and w_0 are constants and θ is uniformly distributed random variable over theinterval $(0,2\pi)$.	L3	CO3	7 M
	(OR)			
3.2	a) Briefly introduce the concept of random process and categorize its classifications with examples.	L1	CO3	7 M

ATTESTED
PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City

P.T.O

	b) For a stationary random process X(t) with periodic components the Auto correlation function is $R_{XX}(\tau)=36+4/(1+5\tau^2)$. Find E[X(t)], E[$X_2$ (t)] and power in X(t).	L2	CO3	7 M
	UNIT-4			
4.1	a) State and prove the relation between auto correlation and power spectrum.	L1	CO4	7 M
	b) State and prove any 3 properties of cross power spectral density	L1	CO4	7 M
	(OR)			
4.2	a) Obtain the average power in the random process X(t) = A $\cos(\omega_o t+\theta)$ where A, ω_o are real constants and θ is a random variable uniformly distributed in the range $(0, 2\pi)$.	L4	CO4	7 M
	b) State and prove the properties of auto correlation function	L1	CO4	7 M
	UNIT-5			
5.1	a) Derive the relation between input PSD and output PSD of an LTI system	L4	CO5	7 M
	b) Show that mean square value of output response is independent of time t.	L3	CO5	7 M
	(OR)			
5.2	a) Derive the relation between input and output ACF of an LTI system with impulse response h(t).	L4	CO5	7 M
	b) Derive the expression for the Cross Spectral Density of the input Process X(t) and the output process Y(t) of an LTI system in terms of its Transfer function	L4	CO5	7 M

ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A), RJY

B. Tech (EEE)- 4 SEM(S) (A.Y. 2022-23), (GRBT-20), END EXAM QUESTION PAPER

POWER SYSTEMS-1

CODE No.201EE403; DATE: 21/12/2022: 02.00 pm to 05.00 pm

Duration : 3 Hrs **Max. Marks : 5 x 14 = 70**

ANSWER ALL THE QUESTIONS

ALL QUESTIONS CARRY EQUAL MARKS

UNIT-1

1.1 (a)	Draw the general layout of hydroelectric power plant and explain the function of each component.	L4	CO 1	10 M
(b)	Illustrate the factors for Selection of site in hydroelectric power plant.	L1	CO 1	4 M
	(OR)			
1.2 (a)	Explain the types of Boilers with its block diagrams.	L3	CO 1	7 M
(b)	Draw the block diagram and illustrate the operation of Economizer and Electrostatic precipitator in Thermal Power stations.	L4	CO 1	7 M
	UNIT-2			
2.1 (a)	Draw the layout of a Nuclear Power plant and explain its components.	L4	CO 2	7 M
(b)	Explain the operation of PWR with its block diagram.	L3	CO 2	7 M
	(OR)			
2.2 (a)	Illustrate Nuclear fission and Nuclear Chain reaction with examples.	L2	CO 2	7 M
(b)	Describe the factors for Selection of site Nuclear power plant.	L1	CO 2	7 M
	UNIT-3			
3.1	Draw and explain sub-station layout of 33/11 kV substation.	L4	CO 3	14 M
	(OR)			
3.2 (a)	Compare Air Insulated substation and Gas Insulated substation.	L2	CO 3	7 M
(b)	Draw and explain bus bar arrangements in Single Bus bar and sectionalized double bus bar system.	L3	CO 3	7 M
	UNIT-4			
4.1 (a)	Classify cables.	L4	CO 4	7 M
(b)	Derive an expression for Stress in insulation of a cable.	L3	CO 4	7 M
	(OR)			
4.2 (a)	Derive an expression for capacitance of 3-core cables.	L3	CO 4	7 M
(b)	In a string of 3 insulator units the capacitance of each unit is 'C', from each Conductor to ground is C/3, and from each connector to the line conductor is C/5. Calculate the voltage across each unit as a percentage of the line voltage to earth. To what value the capacitance between the connector of the unit and the line has to be increased by a guard ring to make the voltage across it equal to that across the next higher unit.	L4	CO4	7 M

P-T-O

ATTESTED

PRINCIPAL

Godavari Institute of Engineering & Tech.(A)

NH-16,Chaitanya Knowledge City

RAJAHMUNDRY-533 296

UNIT-5

5.1 (a)	Define Load curve, connected load, plant capacity factor and Plant use factor.	L2	CO5	4 M
(b)	Explain the effect of load factor and diversity factor on the cost of generation. A diesel station supplies the following loads to various consumers: Industrial consumer=1500 kW; commercial establishment =750 kW; Domestic power=100 kW; Domestic light = 450 kW. If the Maximum demand on the station is 2500 kW and the number of kWh generated per year is 45×10^5, determine : (i) Diversity factor and (ii) Annual load factor.	L4	CO5	10 M

(OR)

5.2 (a)	Define Tariff and explain various Tariff Methods.	L3	CO5	7 M
(b)	An electric supply company having a maximum load of 50 MW generates 18×10^7 units per annum and the supply consumers have an aggregate demand of 75 MW. The annual expenses including capital charges are : For fuel = Rs 90 lakhs; Fixed charges concerning generation = Rs 28 lakhs Fixed charges concerning transmission and distribution = Rs 32 lakhs Assuming 90% of the fuel cost is essential towards running charges and the loss in transmission and distribution as 15% of kWh generated, deduce a two part tariff to find the actual cost of supply to the consumers.	L4	CO5	7 M

ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A), RJY

B. Tech (MECH)- 4 SEM(S) (A.Y. 2022-23), (GRBT-20) END EXAM QUESTION PAPER

KINEMATICS OF MACHINERY

CODE No.201ME402; DATE:20/12/2022: 02.00 pm to 05.00 pm

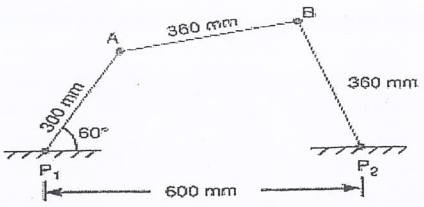
Duration: 3 Hrs | Max. Marks: 5 X 14=70

ANSWER ALL THE QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

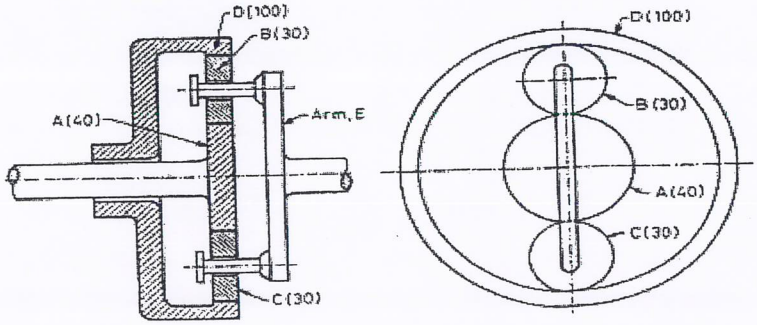
1.1	a) Describe what are the various types of kinematic chains and their inversions?	L2	C1	6 M
	b) Explain what is the ratio of times in Whitworth quick return motion mechanism with neat sketch?	L2	C1	8 M
	(OR)			
1.2	a) Define Grashof's law. State how is it helpful in classifying the four link mechanisms into different types.	L1	C1	6 M
	b) Discuss the various inversions of double slider crank mechanism and explain any two of them with neat sketches.	L2	C1	8 M
2.1	Derive the expression for ratio of the shaft velocities of Universal coupling or Hooke's joint with neat sketch.	L3	C2	14 M
	(OR)			
2.2	Sketch and explain the following exact straight line motion mechanisms made up of turning pairs a) Peaucellier's mechanism b) Hart's mechanism.	L2	C2	14 M
3.1	PQRS is a four bar chain with link PS fixed. The lengths of the links are PQ = 62.5 mm; QR = 175 mm; RS = 112.5 mm; and PS = 200 mm. The crank PQ rotates at 10 rad/s clockwise. Draw the velocity and acceleration diagram when angle QPS = 60° and Q and R lie on the same side of PS. Calculate the angular velocity and angular acceleration of links QR and RS.	L3	C3	14 M
	(OR)			
3.2	The dimensions and configuration of the four bar mechanism, shown in figure are as follows: P1A = 300 mm; P2B = 360 mm; AB = 360 mm, and P1P2 = 600 mm. The angle AP1P2 = 60°. The crank P1A has an angular velocity of 10 rad/s and an angular acceleration of 30 rad/s^2, both clockwise. Determine the angular velocities and angular accelerations of P2B, and AB and the velocity and acceleration of the joint B.	L3	C3	14 M

ATTESTED
PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

P-T-O



4.1	Explain with neat sketch Displacement, Velocity and Acceleration Diagrams when the follower moves with uniform acceleration and retardation. Also derive equations of follower for maximum velocity, accelerations during out & return stroke.	L2	C4	14 M
	(OR)			
4.2	A cam rotating clockwise at a uniform speed of 1000 r.p.m. is required to give a roller follower the motion defined below: 1. Follower to move outwards through 50 mm during 120° of cam rotation, 2. Follower to dwell for next 60° of cam rotation, 3. Follower to return to its starting position during next 90° of cam rotation, 4. Follower to dwell for the rest of the cam rotation. The minimum radius of the cam is 50 mm and the diameter of roller is 10 mm. The line of stroke of the follower is off-set by 20 mm from the axis of the cam shaft. If the displacement of the follower takes place with uniform and equal acceleration and retardation on both the outward and return strokes, analyse by drawing profile of the cam and find the maximum velocity and acceleration during out stroke and return stroke.	L4	C4	14 M
5.1	a) Define the 'Law of Gearing'. Derive the expression for the Law of Gearings.	L2	C5	7 M
	b) Two spur gear wheels with 18 and 26 teeth gear together. The addendum of each wheel is equal to one module, and pressure angle is 20 degrees. Determine the length of the arc of contact.	L3	C5	7 M
	(OR)			
5.2	Figure shows an epicyclic gear train. Two planet gears B and C having 30 teeth each are attached to the arm E and Gear A is having 40 teeth instead of 50, then analyse the number of revolutions made by the arm when: a) gear A makes one revolution Clockwise and D makes half a revolution anticlockwise and b) gear A makes one revolution clockwise and D is stationary.	L4	C5	14 M



ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16, Chaitanya Knowledge City
RAJAHMUNDRY-533 296

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A), RJY

B. Tech (MM)- 4 SEM(S) (A.Y. 2022-23), (GRBT-20) END EXAM QUESTION PAPER

MINERAL PROCESSING

CODE No.201MM401; DATE: 19/12/2022: 02.00 pm to 05.00 pm

ANSWER ALL THE QUESTIONS

ALL QUESTIONS CARRY EQUAL MARKS

DURATION: 3 Hrs

Max. Marks: 5 X 14 =70

UNIT-1

1.1 a)	Fractional shoveling & alternate shoveling, which one is the best suited from industry point of view	L1	CO1	7M
b)	Outline the importance of Channel sampling in mining & mineral industry	L3	CO1	7M
	OR			
1.2 a)	With suitable sketch, summarize the forces responsible for size reduction in grinding mills.	L2	CO2	7M
b)	Deduce the equation for co-efficient of friction for Rod Mill & find out the maximum particle size of feed when Roll Diameter: 1mm, Nip Angle: 31degree, distance between crushing surface is 12.5 mm	L6	CO3	7M
	UNIT-2			
2.1 a)	Differentiate between free & hindered settling process in hydrocyclone	L2	CO2	7M
b)	Hydraulic classifiers are based upon the principle of Free settling/ Hindered Settling/ combination of both, analyse	L4	CO2	7M
	OR			
2.2 a)	Differentiate between cone & gyratory crusher w.r.to shape of crushing chamber	L2	CO2	7M
b)	Differentiate between Tumbling & Stirred Mill	L2	CO3	7M
	UNIT-3			
3.1 a)	Summarize the significance of heavy media separation in mineral processing with suitable illustration	L5	CO3	7M
b)	Flotation is considered as the last stage in mineral processing, analyze	L4	CO4	7M
	OR			
3.2 a)	With neat sketch, define the process of coal washing in Baum Jig	L1	CO3	7M
b)	Discuss the effect of contact angle on flotation. With suitable examples, discuss the various types of collectors	L2	CO3	7M
	UNIT-4			
4.1 a)	Differentiate between induced roll and pickup type magnetic separator, suggesting the most versatile one for dry separation	L2	CO4	7M
b)	Elaborate the working principle of Drum type electrostatic separator	L1	CO3	7M
	OR			

ATTESTED

PRINCIPAL

Godavari Institute of Engineering & Tech.(A)

NH-16,Chaitanya Knowledge City

RAJAHMUNDRY-533 296

P.T.O

4.2 a)	Evaluate the efficiency of Electrostatic separator in beach sand beneficiation	L5	CO5	7M
b)	With neat sketch, summarize the working principle of Drum separator.	L2	CO5	7M
	UNIT-5			
5.1 a)	Design a process flowsheet for separation/ Processing of Galena and Chromite	L6	CO5	7M
b)	Liberation analysis is a pre-requisite for ore dressing/ beneficiation. Argue in support/ against.	L5	CO3	7M
	OR			
5.2 a)	Efficiency of Mineral processing circuit is dependent on the mutual relation between ore and gangue elements. Support the same with suitable examples.	L3	CO5	7M
b)	Define Enrichment ratio and methods to attain the same.	L1	CO3	7M

ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A), RJY

B. Tech (PET)- 4 SEM(S) (A.Y. 2022-23), (GRBT-20) END EXAM QUESTION PAPER

ELEMENTS OF MECHANICAL ENGINEERING

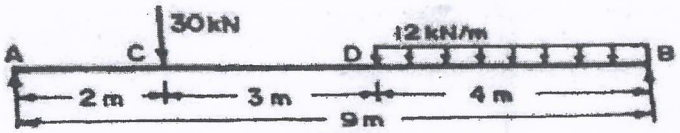
CODE No.201PT401; DATE: 19/12/2022: 02.00 pm to 05.00 pm

Duration: 3 Hrs | Max. Marks: 5 x 14 = 70

ANSWER ALL THE QUESTIONS
ALL QUESTIONS CARRY EQUAL MARKS

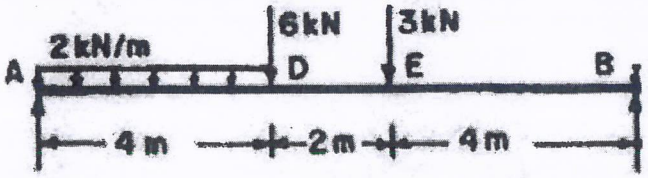
UNIT-1

1.1	a) List the different kinds of stresses. Draw the stress-strain diagram for MS material and explain the different points on it.	Remember	CO1	8M
	b) A steel wire of 10 mm diameter and length 150 m is used to lift a weight of 15 kN at its lowest end. Calculate the total elongation of the wire if the unit mass (or mass density) of the wire is 7.95 kg/m^3, and E - 2.04 x 10^5 (N/mm^2).	Apply	CO1	6M
	(OR)			
1.2	a) Derive the equations for linear and volumetric strains.	Apply	CO1	7M
	b) A mild steel rod of 25 mm diameter and 400 mm long is encased centrally inside a hollow copper tube of external diameter 35 mm and inside diameter 30 mm. The ends of the rod and tube are rigidly attached, and the composite bar is subjected to an axial pull of 40 kN. If E for steel and copper is 200 GN/m^2 and 100 GN/m^2 respectively, find the stress developed in the rod and the tube. Find also the extension of the rod.	Apply	CO1	7M
2.1	Draw the SF and BM diagrams for the beam shown in figure.	Apply	CO2	14M



(OR)

2.2	Draw the SF and BM diagrams for the beam shown in figure.	Apply	CO2	14M



3.1	A seamless spherical shell is of 1 m internal diameter and 5 mm thickness. It is filled with fluid under pressure until its volume increases by 40 cubic centimetres. Determine the fluid pressure, taking E = 2 x 10^5 N/mm2 and Poisson's ratio = 0.3.	Apply	CO3	14M
	(OR)			
3.2	Determine the maximum allowable internal pressure to which a cylinder with diameter of 200mm and external	Apply	CO3	14M

ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296

P.T.O

	diameter of 300mm may be subjected if the cylinder is to have a factor of safety of 3. Use maximum shear stress theory of failure. Yield point stress determined by actual test for the material is 300 N /mm^2. What will be the internal pressure if the maximum stress theory of failure is used?			
4.1	By using a sketch explain the working of Lancashire boiler.	Understand	CO4	14M
	(OR)			
4.2	a) How are IC engines classified?	Remember	CO4	4M
	b) Explain the working of 2-storke SI engine with a neat sketch	Understand	CO4	10M
5.1	a) Derive the ratio of driving tensions for flat belt drive	Understand	CO5	10M
	b) List the different types of gear trains.	Understand	CO5	4M
	(OR)			
5.2	Differentiate open belt drives and cross belt drives.	Understand	CO5	4M
5.2	b) With a suitable example explain the compound gear train with a neat sketch.	Understand	CO5	10M

ATTESTED

PRINCIPAL
Godavari Institute of Engineering & Tech.(A)
NH-16,Chaitanya Knowledge City
RAJAHMUNDRY-533 296