



www.gnithyd.ac.in

# GURU NANAK INSTITUTE OF TECHNOLOGY

**City Office:** B2, 2<sup>nd</sup> Flr, Above Bata, Vikrampuri Colony, Karkhana Road, Secunderabad-50009, Telangana, India.  
Ph: +91-40-6632 3294, 6517 6117, Fax: +91-40-2789 2633

**Campus:** Ibrahimpatnam, R.R. District, Hyderabad-501506, Telangana, India. Ph: (0/95) 8414-20 21 20/21

Date: 24.01.2019

## CIRCULAR

**Technical Training for III B. Tech students are starting from 4<sup>th</sup> Feb, 2019 onwards. All HODs and Placements coordinators have to manage the trainings and ensure 95% attendance all through the sessions.**

**All Mentors need to send the compiled feedback report to Dr.B.Vijaya Kumar, HOD at [hodme.gnit@gniindia.org](mailto:hodme.gnit@gniindia.org) daily. Mentors are advised to take care of PNR (Students not participating in training).**

**Agenda:**

**Introduction to ANSYS.**

  
HOD-ME



Accredited by  
National Board of Accreditation  
(CSE, ECE, ME)



Approved by  
AICTE - New Delhi



Affiliated to  
JNTU - Hyderabad

Hyderabad's First  
campus to become  
  
GOLD PARTNER



www.gnithyd.ac.in


# GURU NANAK INSTITUTE OF TECHNOLOGY

**City Office:** B2, 2<sup>nd</sup> Flr, Above Bata, Vikrampuri Colony, Karkhana Road, Secunderabad-50009, Telangana, India.  
Ph: +91-40-6632 3294, 6517 6117, Fax: +91-40-2789 2633

**Campus:** Ibrahimpatnam, R.R. District, Hyderabad-501506, Telangana, India. Ph: (0/95) 8414-20 21 20/21

## SYLLABUS FOR ANSYS

SNO.	TOPIC COVERED	DURATION (Hours)
1	INTRODUCTION TO FEA AND ANSYS	3
2	BASIC SOLID MODELING	3
3	ADVANCED SOLID MODELING	3
4	FINITE ELEMENT MODELING (FEM) – I	3
5	FINITE ELEMENT MODELING (FEM) – II	3
6	SOLUTION AND POSTPROCESSOR	3
7	STATIC STRUCTURAL ANALYSIS	3
8	ADVANCED STRUCTURAL ANALYSIS (DYNAMIC AND NONLINEAR)	3
9	ADVANCED STRUCTURAL ANALYSIS	3
10	THERMAL ANALYSIS	3
11	GENERATING THE REPORT OF ANALYSIS	3

  
HOD-ME



Accredited by  
National Board of Accreditation  
(CSE, ECE, ME)



Approved by  
AICTE - New Delhi



Affiliated to  
JNTU - Hyderabad

Hyderabad's First  
campus to become  
  
GOLD PARTNER



## GURU NANAK INSTITUTE OF TECHNOLOGY

City Office: B2, 2<sup>nd</sup> Flr, Above Bata, Vikrampuri Colony, Karkhana Road, Secunderabad-50009, Telangana, India.  
Ph: +91-40-6632 3294, 6517 6117, Fax: +91-40-2789 2633

www.gnithyd.ac.in Campus: Ibrahimpatnam, R.R. District, Hyderabad-501506, Telangana, India. Ph: (0/95) 8414-20 21 20/21

### ANSYS Technical Training student list

Sl.No.	Roll No.	Name of the student	Year
1	16831A0335	DEVIREDDY VIKAS REDDY	III
2	16831A0336	DIDDI RISHIKESH	III
3	16831A0337	DIDDI SINDHUJA	III
4	16831A0338	DONKANTI SURYA	III
5	16831A0339	DONTHA PHANINDHAR	III
6	16831A0341	EDHOLLA NARESH	III
7	16831A0342	ELAGANDULA PAVAN KUMAR	III
8	16831A0343	ELLANDULA TEJA	III
9	16831A0344	E SAI KRISHNA BHARADWAJ	III
10	16831A0345	GADAM DHEERAJ YADAV	III
11	16831A0346	GAJELLI SAI PRANEETH	III
12	16831A0347	GAJJE RAHUL	III
13	16831A0348	GALI BHARGAVI	III
14	16831A0349	GAMPA SHRUTHI	III
15	16831A0350	G SHASHIKANTH	III
16	16831A0352	GATTADI VENU MADHAV	III
17	16831A0353	GOGULA SAI REDDY	III
18	16831A0354	G SAI HITHESWAR REDDY	III
19	16831A0355	GOSHIKA PRAVALIKA	III
20	16831A0356	GUDA REVANTH KUMAR	III
21	16831A0357	G SAI MARUTHI SRIDHAR	III
22	16831A0358	GULAM ABDUL KADIR	III
23	16831A0359	GUNDELLI AMITH	III
24	17835A0301	ALLADI VIJAY KUMAR	III
25	17835A0304	ASKA MUKHUL VAMSHI	III
26	17835A0305	BALABADRA SAIKUMAR	III
27	17835A0308	GAJAVELLI SRIDHAR	III
28	17835A0309	GHANTA SRIKANTH	III
29	17835A0310	GOLLA GANESH	III
30	16831A0361	GUNDLA SAI PRIYA	III

  
HOD-ME



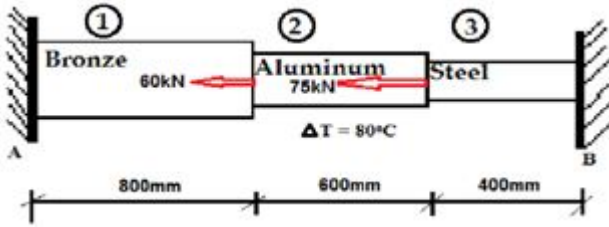
## Technical Training Exam on ANSYS Printing Technology

(A.Y-2018-19)

Answer All the Questions

2x10=20 Marks

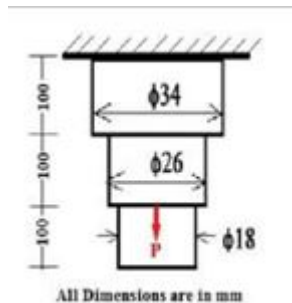
1. Analyse the given composite bar model by discretizing the whole into SIX Elements and find out the following using the Analysis Software ANSYS 15.0



Particulars	Bronze	Aluminium	Steel
Cross-section	3000mm <sup>2</sup>	2500mm <sup>2</sup>	1200mm <sup>2</sup>
Area 'A'			
Moduli 'E'	83GPa	70GPa	200GPa
Co-efficient of Thermal Expansion 'α'	18.9 X 10 <sup>-6</sup> /°C	23 X 10 <sup>-6</sup> /°C	11.7 X 10 <sup>-6</sup> /°C

- Deflection at all the nodes
- Stresses in the Elements
- Reaction forces

2. Find the nodal displacements, element stresses and reaction force for the given bar having various diameters in cross section as shown in *figure*. Discretize the bar in to SIX equal elements only. Modulus E = 200GPa. Load applied on the bar P = 40kN.



*[Signature]*  
HOD-ME



## GURU NANAK INSTITUTE OF TECHNOLOGY

City Office: B2, 2<sup>nd</sup> Flr, Above Bata, Vikrampuri Colony, Karkhana Road, Secunderabad-50009, Telangana, India.  
Ph: +91-40-6632 3294, 6517 6117; Fax: +91-40-2789 2633  
www.gnithyd.ac.in Campus: Ibrahimpatnam, R.R. District, Hyderabad-501506, Telangana, India. Ph: (0/95) 8414-20 21 20/21

### Department of Mechanical Engineering

#### ANSYS Technical Training student Marks list 2015-16

Sl.No.	Roll No.	Name of the student	Marks	Pass/Fail
1	13831A0372	NIRAV S.PATEL	18	
2	13831A0373	NUNAVATH RAMESH	17	
3	13831A0374	P ALEN THOMAS	14	
4	13831A0377	PENDURU ADITHYA	15	
5	13831A0378	PERAKA MANOJ	16	
6	13831A0379	PERIKETI HARISH KUMAR	14	
7	13831A0380	PILLALAMARRI PALLAVI	18	
8	13831A0384	PRATURI KAVYA AAHLADA	15	
9	13831A0385	PUTTI BHARATH KUMAR	16	
10	13831A0386	RAMIREDDY BHARATH KUMAR REDDY	15	
11	13831A0388	RANGU SRAVAN KUMAR	7	FAIL
12	13831A0389	RIKKALA SANTHOSH	14	
13	13831A0390	RUPIREDDY VASANTHI	16	
14	13831A0391	S S ASHRITH	18	
15	13831A0392	SANDENAMENA DURGESHMANI	18	
16	13831A0393	SANTOSH.M	6	FAIL
17	13831A0394	SHAHBAZ AKBAR	16	
18	13831A0396	SHERI SHRAVAN REDDY	16	
19	13831A0397	SHUBHANKAR	7	FAIL
20	13831A0398	SIDDHARTH GIRI	14	
21	13831A0399	SINGIREDDY VINOD KUMAR	15	
22	13831A03A0	SIRISANI VINEETH REDDY	15	
23	13831A03A2	SOHAIL SHAKIL SHEIKH	15	
24	13831A03A4	SYED MUZEEB	15	
25	13831A03A5	THOUDABOINA GOUTHAM	7	FAIL
26	13831A03A6	TIRUMALA DHARANTEJA	15	
27	13831A03A7	P S UMASRI	15	
28	13831A03A8	UPPULETI VINAY	14	
29	13831A03A9	VADDE NAVEEN	15	
30	13831A03B0	VALLAMPATLA HARIHAR AKHIL	15	
31	13831A03B2	YAGGOLI UDAY KUMAR	14	
32	13831A03B3	YENDAPALLY REHAN	14	
33	14835A0301	BALGU RAJU	14	
34	14835A0302	CHAKRALA MOUNIKA	15	
35	14835A0303	G . RAJU GOUD	16	
36	14835A0304	G MANOHAR NAIDU	14	
37	14835A0305	GODA ABHILASH REDDY	18	
38	14835A0306	GOPAGANI MUKESH	15	
39	14835A0307	HANMANDLA SHRAVAN KUMAR	16	
40	14835A0308	JOGU SURESH	15	
41	14835A0309	KUSUMA PRASHANTH	7	FAIL
42	14835A0310	LANKA V S KIRAN TEJA	14	
43	14835A0312	MIRALA NARESH	16	
44	14835A0313	NARIGIRI PRAVEEN KUMAR	18	
45	14835A0314	PERASANI SAI ARAVIND	18	
46	14835A0315	SIVANGI TARAKESH	6	FAIL
47	14835A0316	THAVIDABOINA MOHAN	16	
48	14835A0317	THOTA SRIKANTH	16	
49	14835A0318	VAGGU VAMSHI	7	FAIL
50	14835A0319	VAIKUNTAM RAVI KUMAR	18	

*[Signature]*  
2015-2016



Approved by  
AICTE - New Delhi



Affiliated to  
JNTU - Hyderabad

Hyderabad's First  
campus to become  
 Microsoft  
GOLD PARTNER



www.gnithyd.ac.in

# GURU NANAK INSTITUTE OF TECHNOLOGY

**City Office:** B2, 2<sup>nd</sup> Flr, Above Bata, Vikrampuri Colony, Karkhana Road, Secunderabad-50009, Telangana, India.  
Ph: +91-40-6632 3294, 6517 6117, Fax: +91-40-2789 2633

**Campus:** Ibrahimpatnam, R.R. District, Hyderabad-501506, Telangana, India. Ph: (0/95) 8414-20 21 20/21

## Department of Mechanical Engineering

### ANSYS COURSE Summery

1. The Geometry preparation training course is for users who want to create and modify geometry in preparation for CFD or FEA analysis. The training will be focused in either ANSYS Design Modeler or ANSYS Space Claim.
2. The ANSYS Meshing training course will give you the tools for generating good quality meshes for Fluent and CFX. The trainee will choose which tool should be used: ANSYS Meshing, Fluent Meshing or ICEM CFD
3. This course will show how to set up a range of simulation types in the ANSYS Fluent or ANSYS CFX solver, as well as how to post process the results by using our CFD Post Tool.
4. This course will show how to set up a range of simulation types in ANSYS Mechanical, as well as how to post process and evaluate your results.
5. To acquire advance knowledge to perform explicit simulations with ANSYS Explicit STR, ANSYS AUTODYN or ANSYS LS-DYNA
6. This is an introductory to intermediate level training for using ANSYS HFSS for all applications, like RF/microwave, antennas or planar problems. Participants will get understanding of HFSS modeling, solution process and post-processing features, which can be used for other advanced applications. The course will also cover advanced topics like dynamic link between EM and circuit, impedance matching, overview of HFSS 3D layout interface and speeding-up HFSS simulation using HPC.
7. Provide the needed tools for the complete simulation of a pressure Vessel from scratch. Several types of analysis and boundary conditions will be discussed, by using pressure vessels examples.
8. To acquire advance knowledge for performing mechanical simulation in Fixed Offshore Structures.

  
HOD-ME



Accredited by  
National Board of Accreditation  
(CSE, ECE, ME)



Approved by  
AICTE - New Delhi



Affiliated to  
JNTU - Hyderabad

Hyderabad's First  
campus to become  
  
Microsoft  
GOLD PARTNER





# CANTER CADD

B.N.Reddy Nagar, Hyderabad- 500070

## *Certificate Of Course Completion*

This certificate is presented to PERAKA.MANOJ Of GNIT, who has successfully completed Technical Training course on "Ansys" held from 06.10.2015 to 16.10.2015 and found the student performance to be excellent.



Mr. G.V.Ravi Teja  
CEO of Canter CADD