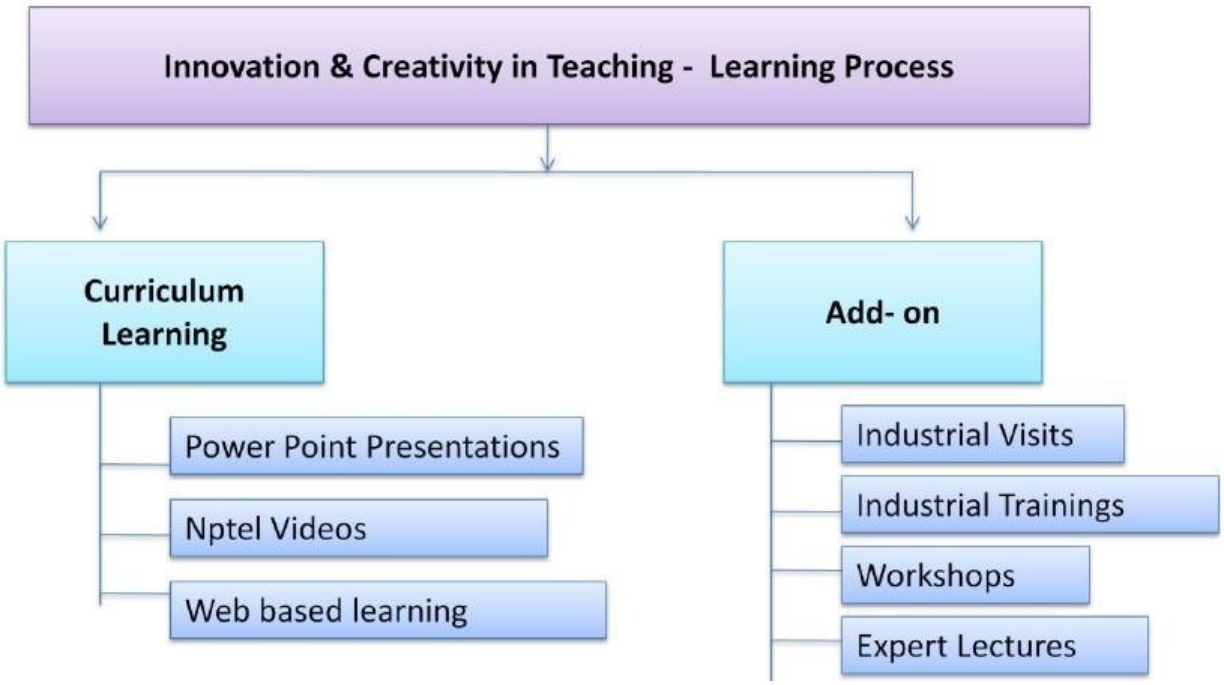
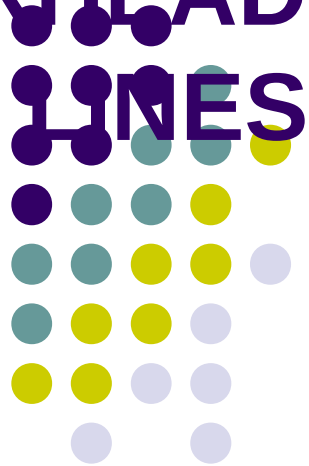
2.3.4 Innovation and Creativity in teaching- learning



EE 301-POWER GENERATION,TRANSMISSION&PROTECTION

MODULE 3

MECHANICAL DESIGN OF OVERHEAD LINES



Fareeda A Kareem,
Assoc Prof,KMEA ,Edathala

COURSE PLAN

Introduction of Overhead transmission and underground transmission

Conductors -types of conductors -copper, Aluminium and ACSR conductors -Volume of conductor required for various systems of transmission-Choice of transmission voltage, conductor size -Kelvin's law.

Mechanical Characteristics of transmission lines – configuration-Types of Towers. Calculation of sag and tension-supports at equal and unequal heights -effect of wind and ice-sag template

Insulators -Different types -Voltage distribution, grading and string efficiency of suspension insulators. Corona -disruptive critical voltage -visual critical voltage -power loss due to corona -Factors affecting corona - interference on communication lines.

Overhead line underground cable

Components

- Supports
- Conductors
- Cross arms and clamps
- Insulators
- Guys and strays
- Lightning arrestors
- Fuses and isolating switches
- Vee guards
- Guard wires
- Phase plates
- Bird guards
- Danger plates
- Barbed wire
- Mischallaneous items

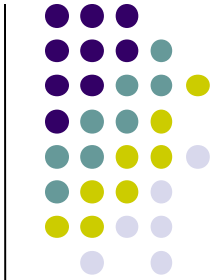
Line supports

- Give the support to the conductors

Requirements

- 1)High mechanical strength to withstand the weight of conductors and wind load etc.
- 2)Light in weight without the loss of mechanical strength.
- 3)Cheaper in cost
- 4)Low maintenance cost
- 5)Longer life
- 6)Good looking
- 7)Easy accessibility for painting & erection of line conductors.

Types



1) Wooden poles

- Cheapest, easily available and have insulating properties.
- Used for distribution in rural areas.
- Double pole structures of A or H type is commonly used.
- Use is limited to low pressures and short spans.
- Tendency to route below the ground level ,causing foundation failure ,in order to prevent this portion of the pole below the ground level is impregnated with preservative compounds like CREOSOTE OIL.
- Comparatively smaller life.
- Less mechanical strength.
- Periodical inspection is required.

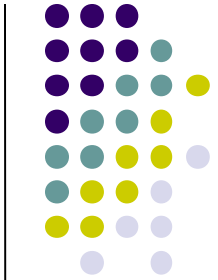
2)Steel Poles

- Possesses greater mechanical strength
- Permit use of longer spans
- Higher cost
- Longer life (can be improved by regular painting)
- Used for distribution purposes in the cities

3 types

- Tubular poles
- Rail poles
- Rolled steel joists

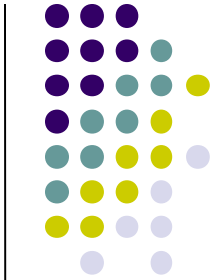
3)Reinforced Concrete Poles



- RCC poles,used for low voltage and high voltage distribution upto 11 kV
- Greater mechanical strength,longer life,permits longer spans
- Giving good look
- Require little maintenance
- Good insulating properties
- Very popular

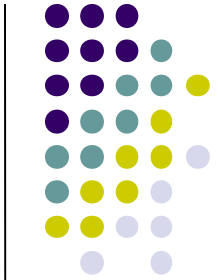
Wooden, steel, RCC poles are used for distribution purposes at low voltage up to 11 kV

4)Lattice steel towers



- Employed for long distance transmission at high voltage
- Greater mechanical strength
- Longer life
- Permitting longer spans

Conductor materials

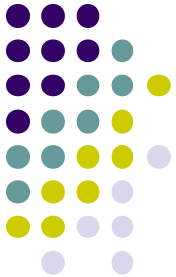


- Carry electric power from sending end station to receiving end station

Characteristics

- high electrical conductivity
- high tensile strength
- low specific gravity in order to give low weight per unit volume
- low cost in order to be used over long distances
- easy availability
- should not be brittle

Common materials used



1)Stranded hard drawn copper

- high electrical conductivity
- high tensile strength
- high current density
- durable, having high scrap value
- long life
- higher cost & non availability

2)Aluminum

- cheapest in cost & lighter in weight
- poor conductivity & tensile strength
- low melting point, can't withstand short circuit

TYPES

- Aluminum Conductor Steel Reinforced (ACSR)
- All Aluminum Conductor (AAC); It is used in construction that requires good conductivity and short spans.
- All Aluminum Alloy Conductor (AAAC) :It is stronger than ACSR, and lighter, but more expensive. It is used for long spans in corrosive environments.

3)Steel Cored Aluminum (ACSR)

- high tensile strength, lighter in weight
- produces small sag , longer spans can be used
- reduced corona losses, reduced cost
- saving in maintenance cost

4)Galvanised steel

- for longer spans or for short lines exposed to normally high stresses.
- used for supplying in rural areas & operating at voltages about 11kV
- Not suitable for EHT lines

6)Copper clad steel

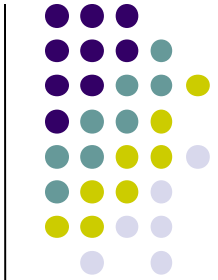
- Welding a copper coating on steel wire
- large tensile strength
- for longer spans

7)Phosphor bronze

- Phosphor bronze added to cadmium copper
- useful for long spans and when harmful gases like Ammonia is present in the atmosphere.

The most common type of transmission conductor is ACSR. ACSR consists of one or more layers of aluminum strands surrounding a core of 1, 7, 19, or 37 galvanized steel strands

Conductor configurations and spacing

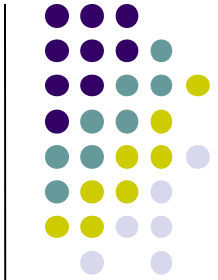


- Horizontal, vertical & triangular configurations
- Spacing =√S +V/150 m

  S =sag in meters

  V =line voltage in kV

Span length



- With wooden poles :-(40-50)m
- With steel tubular poles :-(50-80)m
- With RCC poles :-(80-200)m
- With steel towers:-(200-400)m&above

Vibration & Dampers

- There will be vibrations in an overhead line in the vertical plane.That may be due to

  - normal swinging in the wind

  - high frequency vibrations/resonant vibrations(20-50mm,5-100Hz)

  - low frequency vibrations/galloping/dancing(6m,1Hz)

- Simple swinging is harmless provided the clearance is sufficiently large.
- Low frequency vibrations occur during storms or with a strong wind.The conductors are said to dance.There is no method for preventing these vibrations.

- Danger can be reduced if horizontal conductor configuration is used.
- The conductors are protected by dampers for preventing resonant vibrations
- Damper means two weights attached to apiece of stranded cables,clamped to the conductor.Energy of vibration is absorbed by the stranded cable.

Cross arms

- To keep the conductors at a safe distance from each other and from the poles
- Also used for to support the insulators
- Types are MS-Channel,U-shaped,V-shaped, Zig-zag

Insulators

- For supporting the conductors
- May be pin, strain ,suspension type

Guys and stays

- Cables to resist lateral forces

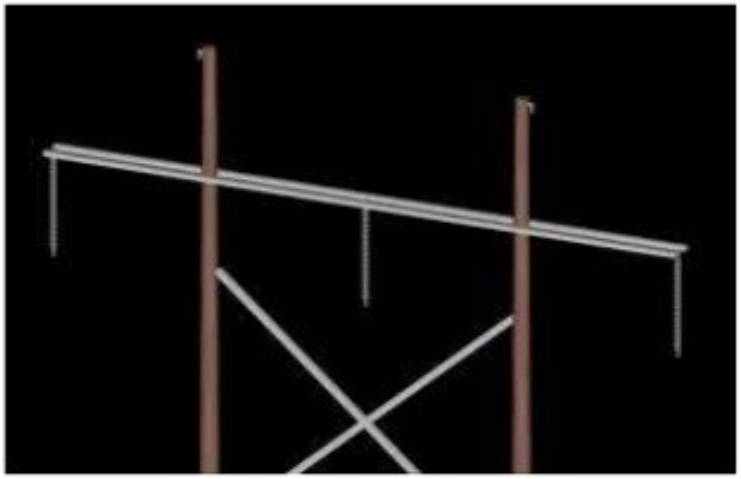
Lightning arrestors

- To discharge excessive voltage on the line to earth, due to lightening

Fuses & Isolating switches

- To isolate different parts

2. CROSS ARM AND CLAMP

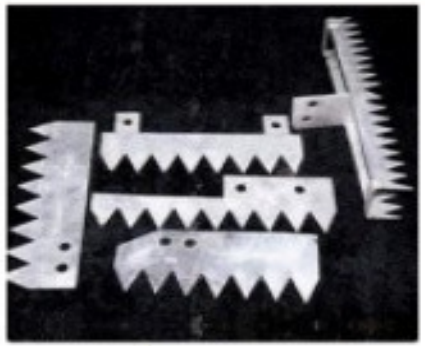


9. GUARD WIRE

When a power line, telephone or telegraph line crossing, and then find the line that connects the top and bottom of the Earth Wire is used to guard.

10. BIRD GUARDS

It is created on the side of the saw teeth as long ebonite basest plate, which is a cross - is prevented in the presence of arm insulator. The birds of hokier cross - in the arm and conductor Flash - Over in the out .



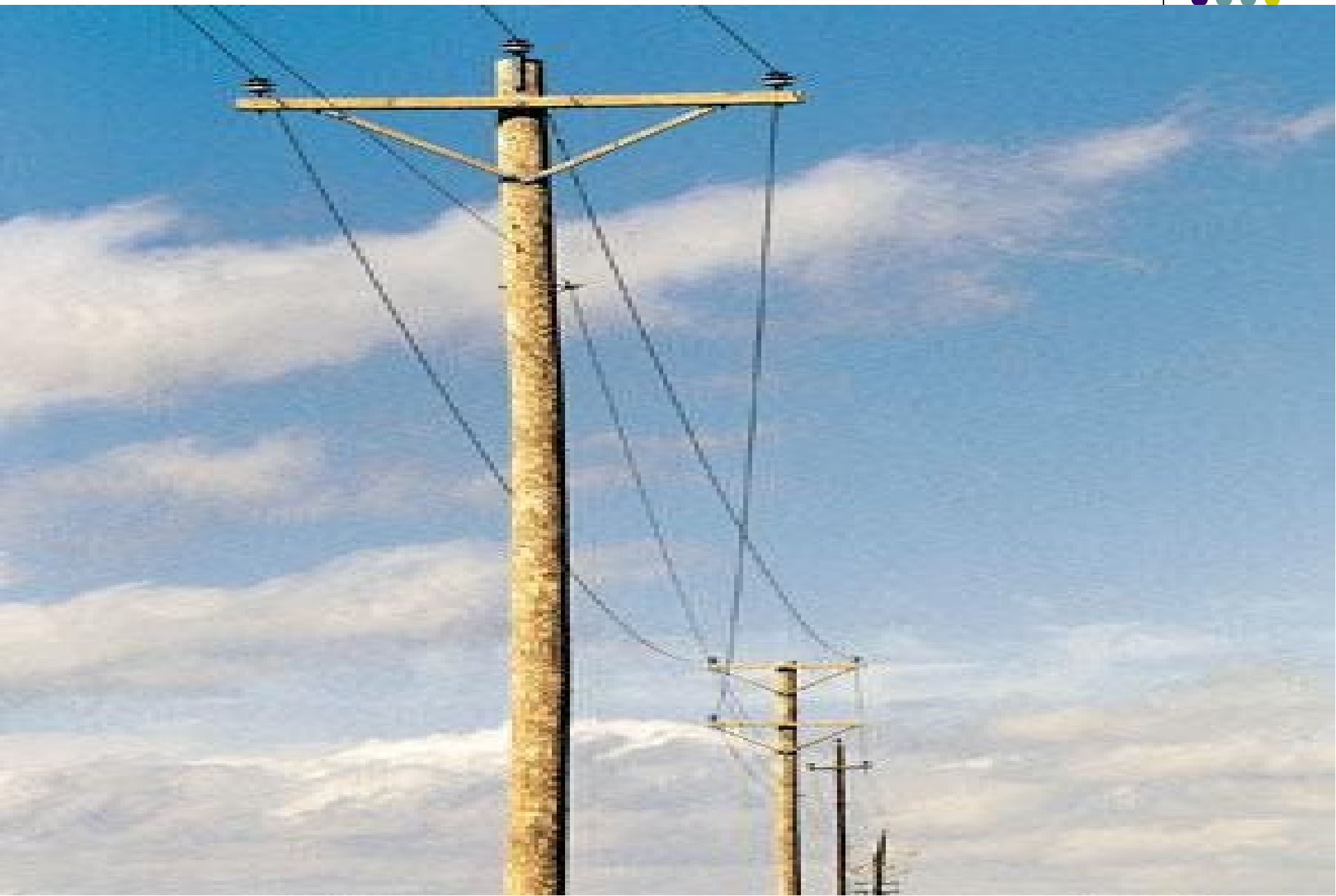
- **Vee-guards**
  - Provided under the bare overhead line running across the public streets to make the line safe if it should break

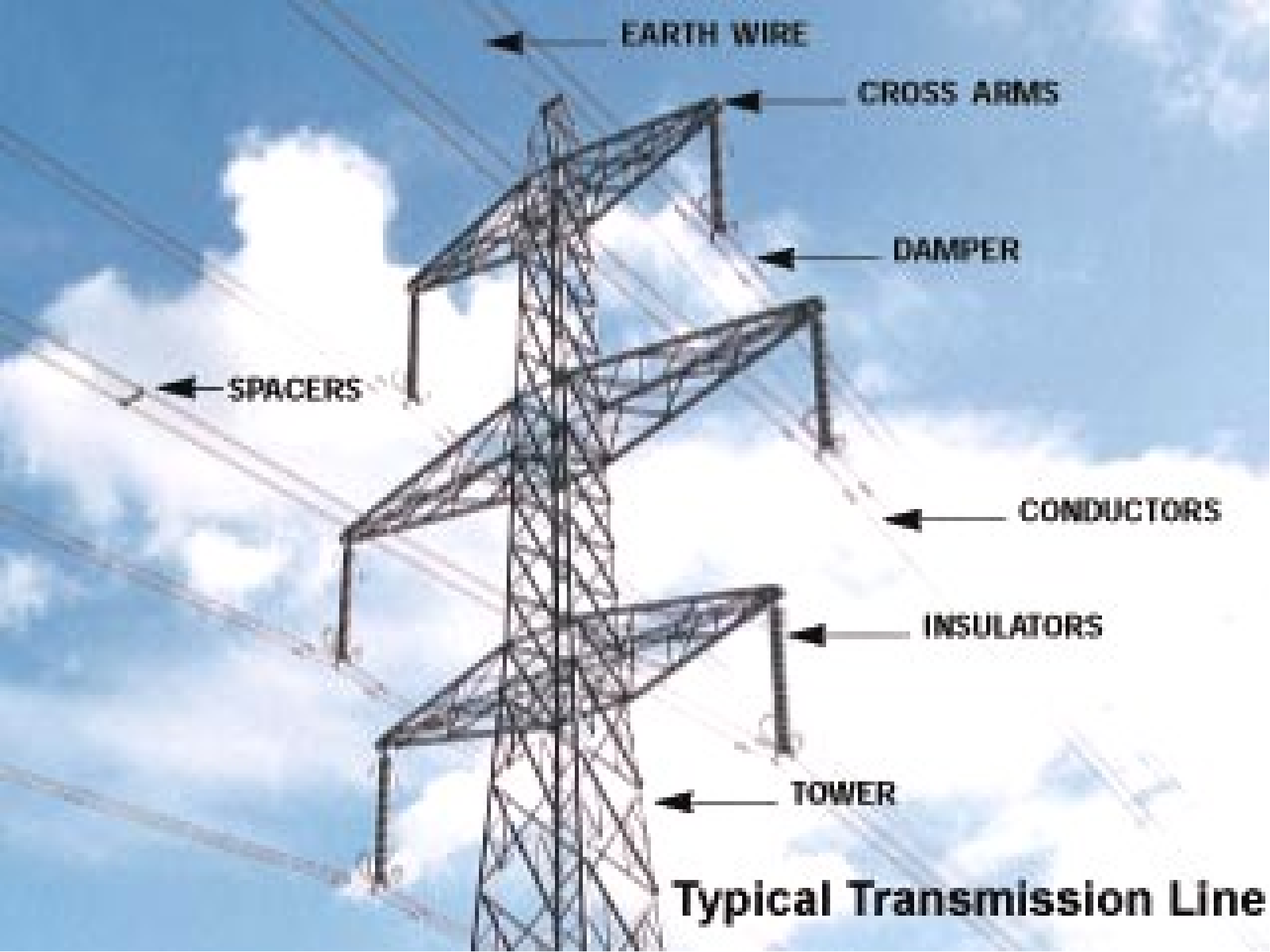
- **Guard wires**
  - Provided above or below the power lines while crossing telegraph and telephone lines

- **Phase plates**
- **Bird guards**
- **Danger plates** – provided at a height 2.5m from the ground as a warning measure

- **Barbed wires –** to prevent climbing by unauthorized persons
- **Mischallaneous** items-vibration dampers, beads for jumpers etc…

Wooden pole





Typical Transmission Line

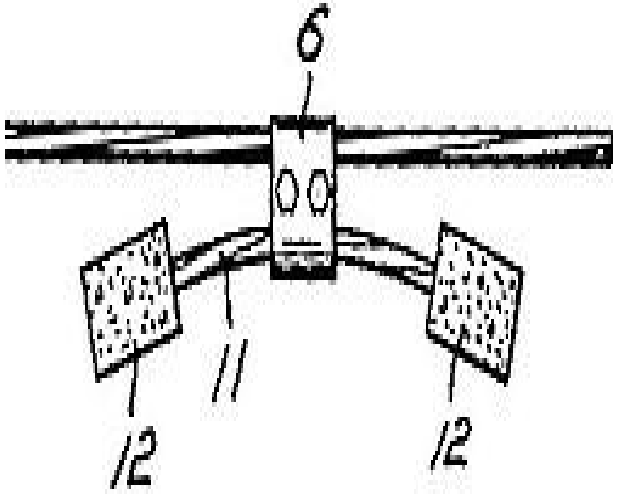
Concrete pole

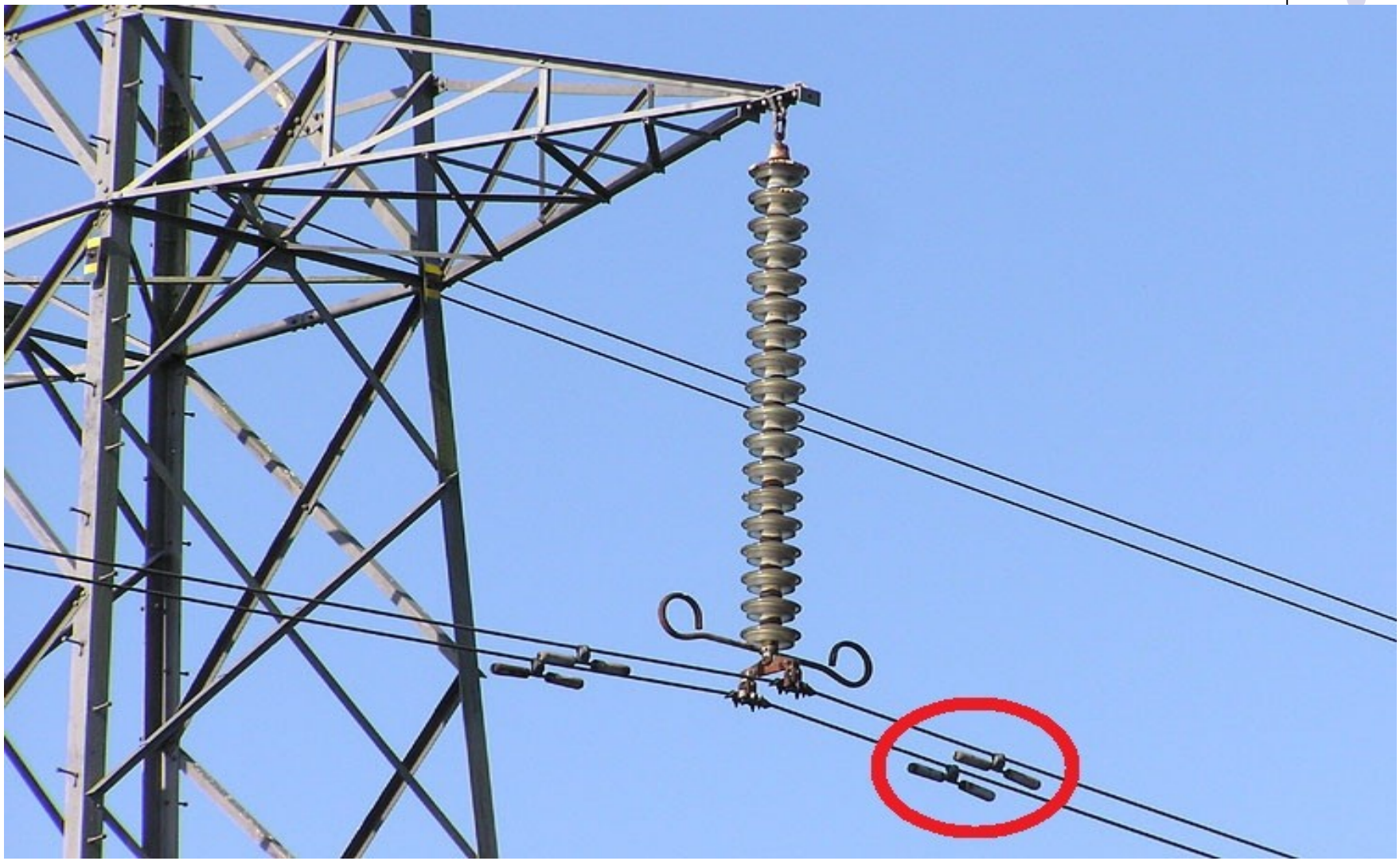
Steel pole &tower

Single circuit steel tower

Double circuit steel tower

Vibration damper





Clearance from ground

- for low, medium & high voltage lines (up to 11kV) =13ft /15ft
- for high voltage lines =17ft

Clearance from buildings

- for low & medium voltage lines =8ft vertical distance &4ft horizontal distance
- For high voltage &EHT lines = 12ft(upto &including 33kV), 6ft horizontal distance

Maximum interval between the supports

- for low & medium voltage lines the distance does not exceed 220ft(67.05m)

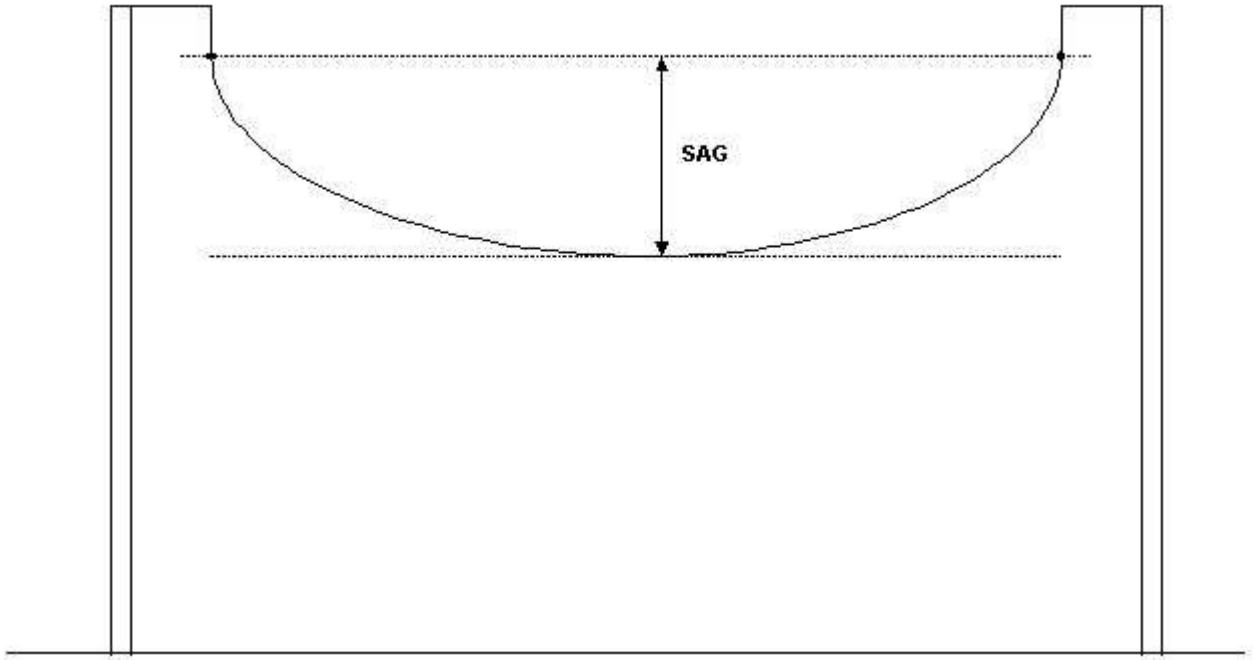
Sag and Tension

-The difference in level between points of supports and lowest point on the conductor is called sag.

- Conductor is acted by the forces such as weight of the conductor,wind pressure and tension etc…
- The tension ion the conductor is expected to be less than 50% of its ultimate tensile strength.
- When the conductor is suspended between 2 supports at the same level it takes the shape of a catenary.
- If the sag is very small compared with the span ,sag-span curve will be a parabola.

- Tension on the conductor acts tangentially.Tension To at the lowest point O act horizontally.This horizontal component is constant throughout the length of the wire.
- Tension at the supports is approximately is equal to the horizontal tension acting at any point on the wire.
- Tension in the conductor depends on diameter of the conductor, length of the conductor between the supports, material,sag,wind pressure & temperature.

SAG



Factors affecting sag

- Weight of the conductor- heavier the conductor greater the sag
- Length of the span – sag is proportional to square of span length
- Working tensile strength

  $$= \frac{\text{ultimate stress} \times \text{area of cross section}}{\text{factor of safety}}$$

  sag is inversely proportional to Working tensile strength of the conductor
- Temperature – sag increases with rise in temperature

Calculation of sag

- A sag is so adjusted that tension in the conductor is within the safe limits
- The tension is due to conductor weight, effects of wind, ice loading and temperature variations
- Keeping the tension less than 50% of its ultimate tensile strength ie minimum factor of safety in the conductor tension is **2**

Cases

- 1)When supports are at equal levels

_If l=length of the span,

w =weight per unit length of the conductor,

T = tension in the conductor

$$T \times y = wx \times x/2$$

- $\longrightarrow \quad y = \frac{wx^2}{2T}$

This is the maximum value of sag at either the supports A or B

$$x = l/2, y = S$$

$$S = \frac{w(l/2)2}{2T} = \frac{wl^2}{8T}$$

- If l =span length

  h = difference in levels between 2 supports

  x1 =distance of support at lower level from O

  x2 = distance of support at higher level from O

  T = tension in the conductor

  w = weight per unit length of the conductor

$$y = \frac{wx1^2}{2T}$$

At A $x = x1, y = S1$ $\Longrightarrow$ $S1 = \frac{wx1^2}{2T}$

& $S2 = \frac{wx2^2}{2T}$

TALK ON TECHNICAL ASPECTS OF CIAL.

The talk covers the technical aspects of the International and domestic terminals of Cochin International Airport Limited. CIAL has three terminals. With the commissioning of Terminal 3, Cochin Airport became India's 4th largest airport after Delhi, Mumbai and Kolkata with a very large built up area for commercial operations. It was a highly informative talk done by Mr. A.C.K Nair, Director of CIAL .

AN INDUSTRIAL VISIT TO UDUPI POWER PLANT.

The sixth semester students went for an Industrial Visit organized by the Electrical & Electronics Engineering Department to Udupi Power Plant on 12-03-2018. Udupi Power Corporation Limited is a 2 X 600 MW imported coal based power project in the Udupi District of Karnataka.

TALK ON ELECTRICAL ENGINEERING TODAY AND TOMORROW BY THE RESOURCE PERSON Er.SHAJI JACOB , CHARTERED ENGINEER AND ENERGY CONSULTANT, HELD ON 27/11/2018

TALK ON AUTOMATION

Graphene automation private. Ltd.(GAPL) is a company managed by professionals in Electrical, Instrumentation, Automation and Control Engineering. The session conduced on 21/2/2019 included talks on electrical automation solutions, process control, automation etc.

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Department of Electronics and Instrumentation Engineering

ISOI
INSTRUMENT SOCIETY OF INDIA

TECHNICAL TALK ON:

"Recent Trends in Instrumentation & Automation"

13th March 2019
02.00 PM

At
Conferrence
Hall

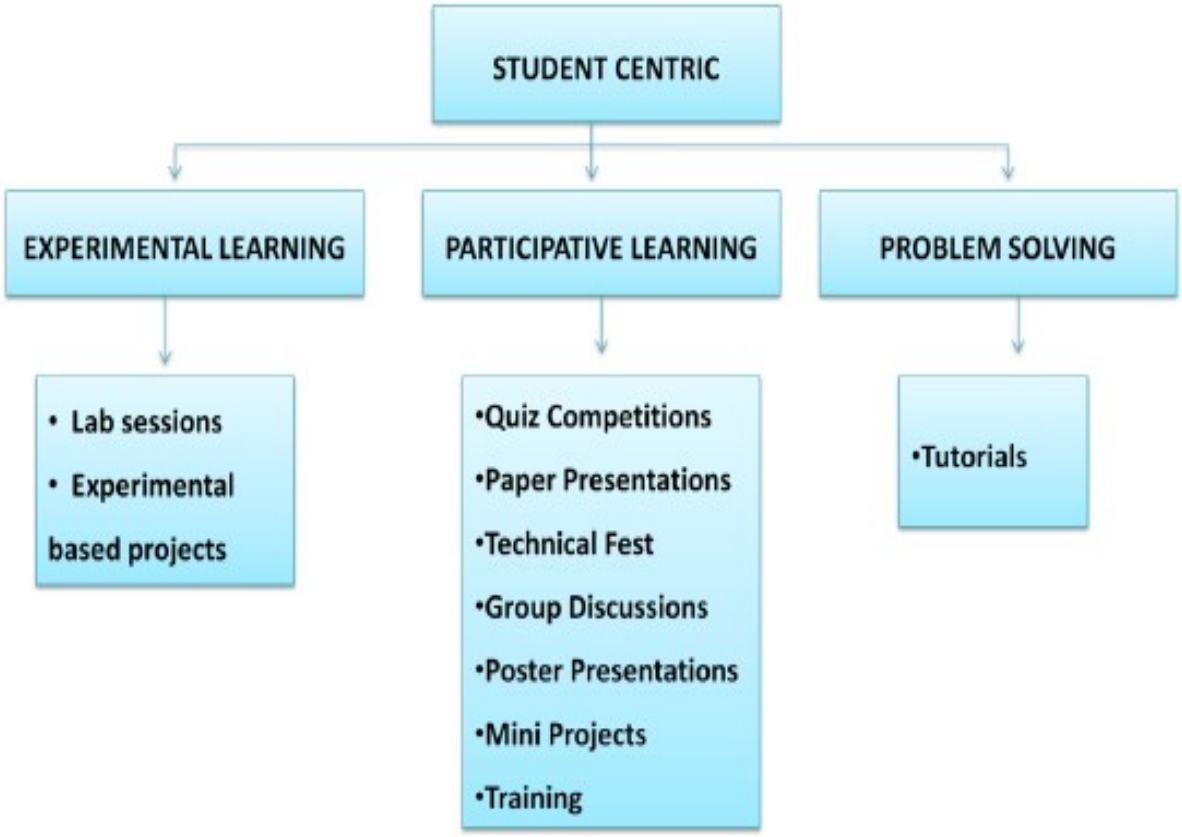
WE CARE WE RULE
UNITED INSTRUMENTATION ENGINEERING

by Smt.MANJUSHA S

(AGM (I) FEDO INSTRUMENTATION)

Organised by: **Electronics and Instrumentation Students Association (EISA)**

2.3.1. Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences



Roll No: NPTEL19CE01S41290021

To
KS NAGIYA SONU
KIZHAKKAMBILLY (H) V.K.C (PO) THEVAKKAL
ALUVA EAST
ERNAKULAM
KERALA
682021
PH. NO :8921216321

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully completed the course
<40	No Certificate

No. of credits recommended by NPTEL:3

NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

KS NAGIYA SONU

for successfully completing the course

Soil Mechanics / Geotechnical Engineering I

with a consolidated score of **47** %

Online Assignments	16.75/25	Proctored Exam	30/75

Total number of candidates certified in this course: **988**

A. Goswami

Prof. Adrijit Goswami
Dean, Continuing Education & NPTEL Coordinator
IIT Kharagpur

Jan-Apr 2019
(12 week course)

Indian Institute of Technology Kharagpur

Roll No: NPTEL19CE17S21220152

To
RAMZEENA MAJEED
NJARAKKATTIL HOUSE
EDATHALA P.O
KUZHIVELIPADY
ERNAKULAM
KERALA
683561
PH. NO :9744923391

Score	Type of Certificate
>=90	Elite+Gold
75-89	Elite+Silver
>=60	Elite
40-59	Successfully completed the course
<40	No Certificate

No. of credits recommended by NPTEL:1

NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

RAMZEENA MAJEED

for successfully completing the course

Advanced Topics in the Science and Technology of Concrete

with a consolidated score of **53** %

Online Assignments	19.42/25	Proctored Exam	33.93/75

Total number of candidates certified in this course: **460**

Prof. A. Ramesh
Chairman
Centre for Continuing Education, IITM

Jan-Feb 2019
(4 week course)

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Indian Institute of Technology Madras

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Academic Calendar - July 2018 – June 2019 - 1/3

(B.Tech, B.Arch, BHMCT, M.Tech, M.Arch, M.Planning, MCA and Evening B.Tech & M.Tech)

Please see separate Academic Calendar for MBA

(Bold Numbers in Class indicates Instructional days)

Jul-18				Aug-18				Sep-18				Oct-18			
Days	Date	Description	Class	Days	Date	Description	Class	Days	Date	Description	Class	Days	Date	Description	Class
Sun	1			Wed	1	**Commencement of Class &Registration**	**1**	Sat	1			Mon	1	Publish Test 1 Marks	**34**
Mon	2			Thu	2		**2**	Sun	2	Sreekrishna Jayanthi		Tue	2	Gandhi Jayanthi	
Tue	3			Fri	3		**3**	Mon	3		**16**	Wed	3		**35**
Wed	4			Sat	4			Tue	4		**17**	Thu	4		**36**
Thu	5			Sun	5			Wed	5		**18**	Fri	5		**37**
Fri	6			Mon	6		4	Thu	6		**19**	Sat	6		
Sat	7			Tue	7	Sem tr.,Course-Sel, Reg&Mapping Ends	**5**	Fri	7		**20**	Sun	7		
Sun	8			Wed	8		**6**	Sat	8			Mon	8		**38**
Mon	9			Thu	9	Course Committee/ Class Committee	**7**	Sun	9			Tue	9		**39**
Tue	10			Fri	10		**8**	Mon	10		**21**	Wed	10		**40**
Wed	11			Sat	11	Karkadaka Vavu		Tue	11		**22**	Thu	11		**41**
Thu	12			Sun	12			Wed	12		**23**	Fri	12		**42**
Fri	13			Mon	13		**9**	Thu	13		**24**	Sat	13		
Sat	14			Tue	14		**10**	Fri	14	Exam Registr. Ends	**25**	Sun	14		
Sun	15			Wed	15	Independence Day		Sat	15			Mon	15		**43**
Mon	16			Thu	16		**11**	Sun	16			Tue	16		**44**
Tue	17			Fri	17		**12**	Mon	17	Publish Attendance	**26**	Wed	17		**45**
Wed	18			Sat	18			Tue	18		**27**	Thu	18	Mahanavami	
Thu	19			Sun	19			Wed	19	Test 1 to be Completed	**28**	Fri	19	Vijayadhashami	
Fri	20			Mon	20		**13**	Thu	20	Muharam		Sat	20		
Sat	21			Tue	21	Onam Vacation Starts		Fri	21	SN Guru Samadhi		Sun	21		
Sun	22			Wed	22	Bakrid		Sat	22			Mon	22		**46**
Mon	23			Thu	23			Sun	23			Tue	23		**47**
Tue	24			Fri	24	Ist Onam		Mon	24		**29**	Wed	24		**48**
Wed	25			Sat	25	Thiru Onam		Tue	25		**30**	Thu	25		**49**
Thu	26			Sun	26	3rd Onam		Wed	26		**31**	Fri	26		**50**
Fri	27			Mon	27	SN Guru Jayanthi		Thu	27		**32**	Sat	27	Sports meet (Coll. lev) To be completed	
Sat	28			Tue	28	Ayyankali Jayanthi		Fri	28		**33**	Sun	28		
Sun	29			Wed	29	Onam Vacation Ends		Sat	29			Mon	29		**51**
Mon	30			Thu	30	**Re-opening**	**14**	Sun	30			Tue	30		**52**
Tue	31			Fri	31		**15**					Wed	31	Publish Attendance	**53**

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Academic Calendar - July 2018 – June 2019 - 2/3

(B.Tech, B.Arch, BHMCT, M.Tech, M.Arch, M.Planning, MCA and Evening B.Tech & M.Tech)

Please see separate Academic Calendar for MBA

(Bold Numbers in Class indicates Instructional days)

Nov-18				Dec-18				Jan-19				Feb-19			
Days	Date	Description	Class	Days	Date	Description	Class	Days	Date	Description	Class	Days	Date	Description	Class
Thu	1		**54**	Sat	1			Tue	1	Exam S1S2, S5	*9*	Fri	1		**15**
Fri	2	Test 2 to be Completed	**55**	Sun	2			Wed	2	Mannam Jayanthi		Sat	2		
Sat	3			Mon	3			Thu	3	Exam S3, S7	*10*	Sun	3		
Sun	4			Tue	4			Fri	4	Exam S1S2, S5	*11*	Mon	4		**16**
Mon	5		**56**	Wed	5	Forward IA Marks & Attendance to Uty.		Sat	5			Tue	5		**17**
Tue	6	Deepavali		Thu	6			Sun	6			Wed	6		**18**
Wed	7		**57**	Fri	7			Mon	7	Exam S3S4, S7	*12*	Thu	7		**19**
Thu	8		**58**	Sat	8			Tue	8	Exam S1S2, S4S5	*13*	Fri	8	Tech Fest : Ketcon&Tekon2019	**20**
Fri	9		**59**	Sun	9			Wed	9	Exam S1S2, S3S4	*14*	Sat	9	Tech Fest : Ketcon&Tekon2019	
Sat	10			Mon	10			Thu	10	Exam S1S2, S3S4	*15*	Sun	10	Tech Fest : Ketcon&Tekon2019	
Sun	11			Tue	11	Reg. Exam Begins Exam S1S2, S5	*1*	Fri	11	Exam S1S2, S3S4	*16*	Mon	11		**21**
Mon	12		**60**	Wed	12	Exam S3, S7	*2*	Sat	12			Tue	12		**22**
Tue	13	Publish Test 2 Marks	**61**	Thu	13	Exam S1S2, S5	*3*	Sun	13			Wed	13		**23**
Wed	14	(Tuesday's TT)	**62**	Fri	14	Exam S3, S7	*4*	Mon	14	**Commencement of Class &Registration**	**1**	Thu	14		**24**
Thu	15		**63**	Sat	15			Tue	15	Exam (s)S2, S4	**2**	Fri	15		**25**
Fri	16	Last date for (B.Arch) evaluation of Jury/ Practicals(PG)	**64**	Sun	16			Wed	16	Exam (s)S2, S4	**3**	Sat	16		
Sat	17	Sports meet(Zonl. lev) To be completed		Mon	17	Exam S1S2, S5	*5*	Thu	17	Exam (s)S2, S4	**4**	Sun	17		
Sun	18			Tue	18	Exam S3, S7	*6*	Fri	18	Exam (s)S2, S4	**5**	Mon	18	Publish Attendance	**26**
Mon	19		**65**	Wed	19	Exam S1S2, S5	*7*	Sat	19	Exam (s)S2, S4		Tue	19		**27**
Tue	20	Milad-i-Sherif		Thu	20	Exam S3, S7	*8*	Sun	20			Wed	20	Test 1 to be Completed	**28**
Wed	21		**66**	Fri	21			Mon	21	Sem tr.,Course-Sel, Reg&Mapping Ends	**6**	Thu	21		**29**
Thu	22	(Tuesday's TT)	**67**	Sat	22	X mas vacation begins		Tue	22		**7**	Fri	22		**30**
Fri	23	Evaluation of Project preliminary(B.Tech)	**68**	Sun	23			Wed	23	Course Committee/ Class Committee	**8**	Sat	23		
Sat	24			Mon	24			Thu	24		**9**	Sun	24		
Sun	25			Tue	25	Christmas		Fri	25		**10**	Mon	25		**31**
Mon	26	Course Committee/ Class Committee	**69**	Wed	26			Sat	26	Republic Day		Tue	26		**32**
Tue	27		**70**	Thu	27			Sun	27			Wed	27		**33**
Wed	28	Last date for uploading (B.Arch) Jury/ Practical marks (PG)	**71**	Fri	28			Mon	28		**11**	Thu	28	Exam Registration Ends	**34**
Thu	29	Classes Ends	**72**	Sat	29			Tue	29		**12**				
Fri	30	Make up class 1, Publish IA Marks & Attend for UG	**73**	Sun	30			Wed	30		**13**				
				Mon	31	**Re-opening**		Thu	31		**14**				

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Academic Calendar-July 2018 – June 2019 - 3/3

(B.Tech, B.Arch, BHMCT, M.Tech, M.Arch, M.Planning, MCA and Evening B.Tech & M.Tech)

Please see separate Academic Calendar for MBA

(Bold Numbers in Class indicates Instructional days)

Mar-19				Apr-19				May-19				Jun-19			
Days	Date	Description	Class	Days	Date	Description	Class	Days	Date	Description	Class	Days	Date	Description	Class
Fri	1		**35**	Mon	1		**55**	Wed	1	May Day		Sat	1		
Sat	2			Tue	2		**56**	Thu	2	Exam S7(S) Commencment of Summer Course (S1-S4)		Sun	2		
Sun	3			Wed	3	Test 2 to be Completed	**57**	Fri	3	Exam S7(S)		Mon	3	Last date for uploading of Viva-Voce(UG)	
Mon	4	Maha Shivratri		Thu	4		**58**	Sat	4			Tue	4		
Tue	5	Publish Test 1 Marks	**36**	Fri	5		**59**	Sun	5			Wed	5	Idul Fitr	
Wed	6		**37**	Sat	6			Mon	6	Exam S7(S) Forward IA Marks & Attendance to Uty.		Thu	6		
Thu	7		**38**	Sun	7			Tue	7	Exam S7(S)		Fri	7		
Fri	8		**39**	Mon	8		**60**	Wed	8	Exam S7(S)		Sat	8		
Sat	9			Tue	9		**61**	Thu	9	Exam S7(S)		Sun	9		
Sun	10			Wed	10		**62**	Fri	10	Summer course eligibility uploading		Mon	10		
Mon	11		**40**	Thu	11		**63**	Sat	11			Tue	11		
Tue	12		**41**	Fri	12		**64**	Sun	12			Wed	12	Viva-Voce Begins (PG)	
Wed	13		**42**	Sat	13	Arts Fest (Coll. lev) To be completed		Mon	13	Last date for submission project report in the college (PG)		Thu	13		
Thu	14		**43**	Sun	14	Dr Ambedkar Jayanthi		Tue	14	Exam S8 Begins		Fri	14		
Fri	15	Last date for forwarding list of Ext Exmrs to Uty by Cluster Conv. (PG)	**44**	Mon	15	Vishu		Wed	15	Exam S1S2 Begins		Sat	15		
Sat	16			Tue	16	Publish Test 2 Marks	**65**	Thu	16			Sun	16		
Sun	17			Wed	17	Last date for (B.Arch) evaluation of Jury/ Practicals(PG)	**66**	Fri	17			Mon	17	Exam S4 Begins	
Mon	18		**45**	Thu	18	Maundy Thursday		Sat	18			Tue	18	Exam S5 Begins	
Tue	19		**46**	Fri	19	Good Friday		Sun	19			Wed	19		
Wed	20		**47**	Sat	20			Mon	20			Thu	20		
Thu	21		**48**	Sun	21	Easter		Tue	21			Fri	21		
Fri	22		**49**	Mon	22		**67**	Wed	22			Sat	22		
Sat	23			Tue	23	Last date for Project Evaluation Internal (S8 BTech)	**68**	Thu	23			Sun	23		
Sun	24			Wed	24	Course Committee/ Class Committee	**69**	Fri	24	Exam S6 Begins		Mon	24		
Mon	25		**50**	Thu	25		**70**	Sat	25			Tue	25	Viva-Voce Ends (PG)	
Tue	26	Publish Attendance	**51**	Fri	26	Last date for uploading Jury/ Practical marks	**71**	Sun	26			Wed	26	Last date for uploading of Viva-Voce(PG)	
Wed	27		**52**	Sat	27	Last date for Project Evaluation by Dept. Committe (PG)		Mon	27	Last date for submission project report to Uty. (PG)		Thu	27		
Thu	28		**53**	Sun	28			Tue	28	Project Eval & Viva-Voce Begins (UG)		Fri	28	Exam S3 Begins	
Fri	29		**54**	Mon	29	Classes Ends	**72**	Wed	29			Sat	29		
Sat	30			Tue	30	Make up class 1, Publish IA Marks & Attend for UG & PG	**73**	Thu	30			Sun	30		
Sun	31							Fri	31	Project Eval & Viva-Voce Ends (UG)			31		

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Academic Calendar- July 2018– June 2019

(B.Tech, B.Arch, BHMCT, M.Tech, M.Arch, M.Planning, MCA and Evening B.Tech & M.Tech)

Please see separate Academic Calendar for MBA

Sl. No.	Events	Important Dates
	ODD SEMESTER (2018-2019)	
1	Commencement of ODD Semester Classes (B.Tech, B.Arch,BHMCT, M.Tech, M.Arch, M.Plann, MCA, PhD.....)	Aug 1, 2018
2	Semester Transfer, Course Selection, Course Registration, Course Mapping	Aug 1 - 7, 2018
3	Exam Registration to be completed	Aug 1 - Sep14, 2018
4	Course Committee/Class Committee Meeting	Aug 9, 2018
5	Onam Vacation	Aug 21 - 29, 2018
6	Publication of Attendance	Sept 17, 2018
7	Test 1 to be completed	Sept 19, 2018
8	Publication of Test 1 Result	Oct 1, 2018
9	College level Sports meet to be completed	Oct 27, 2018
10	Publication of Attendance	Oct 31, 2018
11	Test 2 to be completed	Nov 2, 2018
12	Publication of Test 2 Result	Nov 13, 2018
13	Last date for evaluation of Jury(B.Arch)/Practicals(M.Tech,M.Arch,M.Planning ,MCA)	Nov 16, 2018
14	Zonal level Sports meet to be completed	Nov 17, 2018
15	Evaluation of Project preliminary(B.Tech) to be completed	Nov 23, 2018
16	Course Committee/Class Committee Meeting	Nov 26, 2018
17	Last date for uploading of marks of Jury/Practicals	Nov 28, 2018
18	Classes (ODD Semester)Ends	Nov 29, 2018
19	Publication of IA Marks & Attendance	Nov 30, 2018
20	Final Submission of IA Marks & Attendance by Colleges to University.	Dec 5, 2018
21	End Semester Examination UG & PG (S1, S3, S5, S7 Reg & S2, S4 suppl) (Time Table will be published later)	Dec 11 - Jan 19, 2019
22	Christhmas Vacation	Dec 22 - 30, 2018
23	Commencement of EVEN Semester Classes (B.Tech, B.Arch, M.Tech, M.Arch, M.planning, MCA, PhD.....)	Jan 14, 2019
	EVEN SEMESTER (2018-2019)	
1	Commencement of EVEN Semester Classes (B.Tech, B.Arch, BHMCT,M.Tech, M.Arch, M.plann, MCA, PhD.....)	Jan 14, 2019
2	Semester transfer, Course selection, Course Registration, Course Mapping	Jan 14 - 21, 2019
3	Exam Registration to be completed	Jan14 - Feb 28, 2019
4	Tech Fest:KETCON & TEKON 2019	Feb 8-10, 2019
5	Course Committee/Class Committee Meeting	Jan 23, 2019
6	Publication of Attendance	Feb 18, 2019
7	Test 1 to be completed	Feb 20, 2019
8	Publication of Test 1 Result	Mar 5, 2019
9	Last date for forwarding the list of the external examiner to the University by the cluster conveners (PG)	Mar 15, 2019
10	Publication of Attendance	Mar 26, 2019
11	Test 2 to be completed	Apr 3, 2019
12	College level Arts Fest To be completed	Apr 13, 2019
13	Publication of Test 2 Result	Apr 16, 2019
14	Last date for evaluation of Jury(B.Arch)/Practicals(M.Tech,M.Arch,M.Planning ,MCA)	Apr 17, 2019
15	Evaluation of Project (S8 B.Tech) to be completed	Apr 23, 2019
16	Course Committee/Class Committee Meeting	Apr 24, 2019
17	Last date for uploading of marks of Jury/Practicals	Apr 26, 2019
18	Last date for Project Evaluation by Dept. Committe (PG)	Apr 27, 2019
19	Classes (ODD Semester)Ends	Apr 29, 2019
20	Publication of IA Marks & Attendance	Apr 30, 2019
21	Commencement of Summer Course for S1 S2 S3 & S4	May 2, 2019
22	Supplimentary Examination for S7	May 2 - May 9, 2019
23	Final Submission of IA Marks & Attendance by Colleges to University.	May 6, 2019
24	Uploading of Summer Course Eligibility	May 10, 2019
25	Last date for submission of project report in the college (M.Tech/M.Arch/ M.Planning)	May 13, 2019
26	End Semester Examination UG & PG (S1, S2, S3, S4, S5, S6, S8 (R & S) (Time Table will be published later)	May 14, 2019 onwards
27	Last date for M.Tech/M.Arch/M.Planning/MCA Project report to the university by the principal	May 27, 2019
28	Project Eval & Viva-Voce (UG)	May 28 - 31, 2019
29	Last Date for Uploading Viva Voce Marks (UG)	Jun 3,2019
30	Project Eval & Viva-Voce (PG)	Jun 12 - 25, 2019
31	Last Date for Uploading Viva Voce Marks (PG)	Jun 26,2019
32	Registration and Classes of B.Tech, B.Arch,BHMCT, M.Tech, M.Arch, Mplan, MCA, PhD..... Programmes for the ODD Semester (2019-2020) will be commence from July 15, 2019.	

KMEA ENGINEERING COLLEGE
KERALA TECHNOLOGICAL UNIVERSITY
Academic Calendar August 2018 to December 2018 - S1/S3/S5/S7 B.Tech

August 2018				September 2018				October 2018				November 2018				December 2018			
Day	Date	Event	Workg Day	Day	Date	Event	Workg Day	Day	Date	Event	Workg Day	Day	Date	Event	Workg Day	Day	Date	Event	Workg Day
WED	1	Commencement of Class & Registration	1	SAT	1		18	MON	1		39	THU	1		62	SAT	1		
THU	2		2	SUN	2			TUE	2	Gandhi Jayanthi		FRI	2		63	SUN	2		
FRI	3		3	MON	3	Reopening	19	WED	3	Assgn 2 week ends	40	SAT	3		64	MON	3		
SAT	4		4	TUE	4		20	THU	4		41	SUN	4			TUE	4		
SUN	5			WED	5		21	FRI	5	Module 3 to be completed	42	MON	5	Series test 2 starts	65	WED	5	Forward Internal Marks & Attendance to Uty.	
MON	6		5	THU	6		22	SAT	6		43	TUE	6	Deepavali		THU	6		
TUE	7	Semester Course-Selection, Registration & Mapping	6	FRI	7		23	SUN	7			WED	7		66	FRI	7		
WED	8		7	SAT	8			MON	8		44	THU	8		67	SAT	8	Second saturday	
THU	9	Course Committee/Class Committee Meeting	8	SUN	9			TUE	9		45	FRI	9	Series test 2 ends	68	SUN	9		
FRI	10		9	MON	10		24	WED	10		46	SAT	10	Second saturday		MON	10		
SAT	11	Second saturday/ KarkidaVavu		TUE	11		25	THU	11		47	SUN	11			TUE	11	University Exam Begins Exam S1S2, S5	
SUN	12			WED	12		26	FRI	12		48	MON	12	Upload Series Test 2 Marks	69	WED	12	Exam S3,S7	
MON	13	Module 1 to be completed	10	THU	13		27	SAT	13	Open House		TUE	13	Last date for lab sessions to be completed	70	THU	13	Exam S1S2,S5	
TUE	14		11	FRI	14	Exam Registr. Ends/Publish Attendance	28	SUN	14			WED	14		71	FRI	14	Exam S3,S7	
WED	15	Independence Day		SAT	15	Module 2 to be completed/Assignment 1 ends	29	MON	15	Assgn 3 week starts	49	THU	15		72	SAT	15		
THU	16		12	SUN	16			TUE	16	Module 4 to be completed	50	FRI	16		73	SUN	16		
FRI	17		13	MON	17	Series test 1 Starts	30	WED	17		51	SAT	17	Module 6 to be completed	74	MON	17	Exam S1S2,S5	
SAT	18		14	TUE	18		31	THU	18	Mahanavami		SUN	18			TUE	18	Exam S3,S7	
SUN	19			WED	19	Upload Assgn 1 marks	32	FRI	19	Vijayadasami		MON	19	Revision Starts/Module Test Starts	75	WED	19	Exam S1S2,S5	
MON	20		15	THU	20	Muharram		SAT	20		52	TUE	20	Milad-i-Sherif		THU	20	Exam S3,S7	
TUE	21			FRI	21	Sree Narayana Guru Samadhi		SUN	21			WED	21		76	FRI	21	Exams continue after vacation	
WED	22			SAT	22			MON	22		53	THU	22		77	SAT	22		
THU	23			SUN	23			TUE	23		54	FRI	23		78	SUN	23		
FRI	24			MON	24	Series test 1 Ends	33	WED	24	Assgn 3 week ends	55	SAT				MON	24		
SAT	25	ONAM VACATION		TUE	25		34	THU	25		56	SUN				TUE	25		
SUN	26			WED	26		35	FRI	26		57	MON	26	Course/Class Committee Meeting/Module test ends	79	WED	26	Christmas Vacation	
MON	27			THU	27	Assgn 2 week starts	36	SAT	27	Sports meet	58	TUE	27		80	THU	27		
TUE	28			FRI	28	Upload Series Test 1 Marks	37	SUN	28			WED	28		81	FRI	28		
WED	29			SAT	29	Publish Attendance	38	MON	29		59	THU	29		82	SAT	29		
THU	30		16	SUN	30			TUE	30	Upload Assgn 3 marks	60	FRI	30	Publish Internal Marks & Attendance		SUN	30		
FRI	31		17					WED	31	Publish Attendance/Module 5 to be completed	61					MON	31		
																		PRINCIPAL	

KTU Academic Calendar

01/19				02/19				03/19					
Day	Date	Event	WD	Day	Date	Event	WD	Day	Date	Event	WD	Day	Date
TUE	1			FRI	1		5	FRI	1	Publish Attendance	25	MON	1
WED	2	Mannam Jayanthi		SAT	2			SAT	2	Test 1 to be completed		TUE	2
THU	3			SUN	3			SUN	3			WED	3
FRI	4			MON	4	Placement training -s6	6	MON	4	Maha Shivaratri		THU	4
SAT	5			TUE	5	Placement training -s6	7	TUE	5		26	FRI	5
SUN	6			WED	6	Provide questions for Assignment1/Placement training -s6	8	WED	6		27	SAT	6
MON	7			THU	7	End of Module 1 S6&S8	9	THU	7		28	SUN	7
TUE	8			FRI	8	End of Module 1 S2&S4	10	FRI	8	Publish test 1 marks	29	MON	8
WED	9			SAT	9	Second Saturday		SAT	9	Women cell activity		TUE	9
THU	10			SUN	10			SUN	10			WED	10
FRI	11			MON	11		11	MON	11	End of Module 3 S6&S8	30	THU	11
SAT	12	Second saturday		TUE	12	Course sel,reg &mapping ends	12	TUE	12	Entry of Test 1 marks in AMS	31	FRI	12
SUN	13			WED	13	Last Date for Submission of Assignment 1	13	WED	13	Exam Registration endS	32	SAT	13
MON	14			THU	14		14	THU	14		33	SUN	14
TUE	15			FRI	15	Techfest:Ketcon&Tekon 2019/Entry of Assignment 1 marks in AMS	15	FRI	15	Publish Attendance	34	MON	15
WED	16			SAT	16	Techfest:Ketcon&Tekon 2019/Publish Attendance		SAT	16	Openhouse of S2/S4/S6/S8		TUE	16
THU	17			SUN	17	Techfest:Ketcon&Tekon 2019		SUN	17			WED	17
FRI	18			MON	18		16	MON	18	Provide questions for Assignment 2	35	THU	18
SAT	19	PTA General Body Meeting		TUE	19	End of Module 2 S6&S8	17	TUE	19	End of Module 3 S2&S4	36	FRI	19
SUN	20			WED	20	Student's Feedback starts	18	WED	20		37	SAT	20
MON	21			THU	21		19	THU	21		38	SUN	21
TUE	22			FRI	22	End of Module 2 S2&S4	20	FRI	22	End of Module 4 S6&S8	39	MON	22
WED	23			SAT	23	Fourth Saturday		SAT	23	Fourth Saturday		TUE	23
THU	24			SUN	24			SUN	24			WED	24
FRI	25			MON	25	Test1 starts	21	MON	25		40	THU	25
SAT	26	Republic Day		TUE	26	Exam registration begins	22	TUE	26		41	FRI	26
SUN	27			WED	27		23	WED	27	Last date for Submission of Assignment 2	42	SAT	27
MON	28	Commencement of classes &registration	1	THU	28	Student's Feedback ends	24	THU	28		43	SUN	28
TUE	29	Course sel , reg &mapping begins	2					FRI	29	Entry of Assignment 2 marks in AMS	44	MON	29
WED	30	Course /Class committee	3					SAT	30	Publish Attendance		TUE	30

THU	**31**		**4**					**SUN**	**31**				

Jan2019- June 2019 (Even Semester)

04/19		05/19				06/19				07/19		
Event	WD	Day	Date	Event	WD	Day	Date	Event	WD	Day	Date	Event
Provide Questions for Assignment 3/Publish Attendance	45	WED	1	May Day		SAT	1			MON	1	
End of Module4 S2&S4	46	THU	2	Publish Attendance	64	SUN	2			TUE	2	
End of Module 5 S6&S8	47	FRI	3		65	MON	3			WED	3	
	48	SAT	4			TUE	4			THU	4	
Test 2 starts/End of Lab sessions	49	SUN	5			WED	5	Idul-Fitr		FRI	5	
		MON	6		66	THU	6	Summer course eligibility uploading		SAT	6	
		TUE	7	Publish IA marks for UG	67	FRI	7	Last date for forwarding IA marks &attendance to Uty of S2/S4 UG		SUN	7	
	50	WED	8	Last date for S8 project evaluation (Internal) /Practical exams	68	SAT	8	Second Saturday		MON	8	Exam S3 UG begins
	51	THU	9		69	SUN	9			TUE	9	
	52	FRI	10		70	MON	10	Project evaluation &viva-voce begins		WED	10	
	53	SAT	11			TUE	11			THU	11	
Test 2 to be completed	54	SUN	12			WED	12			FRI	12	
		MON	13		73	THU	13	Exam S1S2 UG begins		SAT	13	Second Saturday
Dr.Ambedkar Jayanti		TUE	14	End of Module 6 S2&S4 /Classes end /Publish attendance	74	FRI	14	Exam S7 UG begins		SUN	14	
Vishu		WED	15			SAT	15			MON	15	
Last Date for Submission of Assignment 3/ Publish Attendance	55	THU	16	Start date for forwarding IA marks &attendance to Uty of S6/S8 UG		SUN	16			TUE	16	
	56	FRI	17	Commencement of Summer course (S1-S4)		MON	17	Project Evaluation &Viva _voce ends		WED	17	
Maundy Thursday		SAT	18			TUE	18			THU	18	
Good Friday		SUN	19			WED	19			FRI	19	
		MON	20	Last date for uploading Jury/practical marks		THU	20	Last date for uploading Viva-voce		SAT	20	
Easter		TUE	21			FRI	21			SUN	21	
Entry of Assignment 3&Test2 marks in AMS	57	WED	22	Last date for forwarding IA marks &attendance to Uty of S6&S8 UG		SAT	22	Fourth Saturday		MON	22	
	58	THU	23			SUN	23			TUE	23	
Course /Class committee	59	FRI	24			MON	24			WED	24	
	60	SAT	25	Fourth Saturday		TUE	25			THU	25	
	61	SUN	26			WED	26			FRI	26	
Fourth Saturday		MON	27	Exam S6 UG begins		THU	27	Exam S4 UG begins		SAT	27	Fourth Saturday
		TUE	28	Exam S8 UG begins		FRI	28	Exam S5UG begins		SUN	28	
End of Module 5 S2&S4 / End of Module 6 S6&S8	62	WED	29			SAT	29			MON	29	
Revision starts	63	THU	30	Start date for forwarding IA marks &attendance to Uty of S2/S4 UG		SUN	30				30	

			31									


WD

COURSE DIARY- THEORY

KMEA ENGINEERING COLLEGE, ERNAKULAM

Kerala. PIN: 683561

Website: http://kmeacollege.ac.in/

GENERAL INSTRUCTIONS

- Student performance should be evaluated solely on an academic basis.
- Student's evaluation should be fair, consistent, transparent and accountable.
- Evaluation of students' performance should be disclosed to the students.

1. Keep the Course Diary up to date by clearly indicating the subject coverage and students attendance on the relevant pages.
2. Paste the syllabus in the relevant page.
3. Write / paste the Course plan in the relevant page.
4. Events in a semester such as Series Test days, Cultural / Celebration days, days for extra / co-curricular activities etc. may be indicated in the Year Calendar.
5. Assignment details may be written in the Course Diary or may be filed in the Course File.
   (i)Minimum 3 no. of assignments should be given.
   (ii)Different sets of questions may be given in an assignment (at least three) to a class.
   (iii)Assignments may be in the form of written - closed / open book, individual / group, home assignment, or in the form of oral presentation, quiz, seminar etc.
6. Follow KTU regulations for computing sessional marks.
7. Show complete split up of sessional marks. Final sessional mark for each student should be equal to the sum of marks awarded for Assignments (10) and Series Tests (40).
8. All the entries in the course diary must be, legibly written without overwriting and free of errors.
9. Do not count marks of class tests along with the series test for computing sessional mark.
10. The staff member will be responsible for the safe custody of the Course Diary and (s)he should return it to the HOD at the end of semester or earlier if (s)he leaves the department or discontinue the subject.

PRINCIPAL

SCHEDULE OF WORK

Days	1	2	3	4	5	6	7
Mon						S4 CS COA	
Tue	S4 CS COA		S4 CS COA				
Wed							
Thu			S4 CS COA				S4 CS COA
Fri							
Sat							

Internal Auditor: Suvega S (20/3/19)

External Auditor:

SYLLABUS

Course code	Course Name	L-T-P -Credits	Year of Introduction
CS202	Computer Organization and Architecture	3-1-0-4	2016

Pre-requisite: CS203 Switching theory and logic design

Course Objectives

1. To impart an understanding of the internal organization and operations of a computer.
2. To introduce the concepts of processor logic design and control logic design.

Syllabus

Fundamental building blocks and functional units of a computer. Execution phases of an instruction. Arithmetic Algorithms. Design of the processing unit – how arithmetic and logic operations are performed. Design of the control unit – hardwired and microprogrammed control. I/O organisation – interrupts, DMA, different interface standards. Memory Subsystem – different types.

Expected outcome

Students will be able to:

1. identify the basic structure and functional units of a digital computer.
2. analyze the effect of addressing modes on the execution time of a program.
3. design processing unit using the concepts of ALU and control logic design.
4. identify the pros and cons of different types of control logic design in processors.
5. select appropriate interfacing standards for I/O devices.
6. identify the roles of various functional units of a computer in instruction execution.

Text Books:

1. Hamacher C., Z. Vranesic and S. Zaky, *Computer Organization* ,5/e, McGraw Hill, 2011.
2. Mano M. M., Digital Logic & Computer Design, 4/e, Pearson Education, 2013.

References:

1. Mano M. M., Digital Logic & Computer Design, 4/e, Pearson Education, 2013.
2. Patterson D.A. and J. L. Hennessey, Computer Organization and Design, 5/e, Morgan Kauffmann Publishers, 2013.
3. William Stallings, Computer Organization and Architecture: Designing for Performance, Pearson, 9/e, 2013.
4. Chaudhuri P., Computer Organization and Design, 2/e, Prentice Hall, 2008.
5. Rajaraman V. and T. Radhakrishnan, Computer Organization and Architecture, Prentice Hall, 2011.
6. Messmer H. P., The Indispensable PC Hardware Book, 4/e, Addison-Wesley, 2001

Course Plan

Module	Contents	Hours (51)	Sem.ExamMarks
I	**Basic Structure of computers**–functional units – basic operational concepts –bus structures – software. Memory locations and addresses – memory operations – instructions and instruction sequencing – addressing modes – ARM Example (programs not required). Basic I/O operations – stacks subroutine calls.	6	15%

COURSE PLAN

Staff : VEENA K VISWAM

Paper : CS202 COMPUTER ORGANIZATION AND ARCHITECTURE (S4-CS)

KEC/CCE/F002-01

Sl No	Topic Name	Date	Hour	Module
1	Basic structure of computers – Functional units	28/01/2019	Hour6	1
2	Basic operational concepts	29/01/2019	Hour1	1
3	Bus Structures, Software	29/01/2019	Hour3	1
4	Memory locations and addresses, Memory operations	31/01/2019	Hour3	1
5	Instructions and Instruction sequencing	31/01/2019	Hour7	1
6	Addressing Modes	04/02/2019	Hour6	1
7	ARM Example	05/02/2019	Hour1	1
8	ARM Example- Discussion (T)	05/02/2019	Hour3	1
9	Basic I/O Operations	07/02/2019	Hour3	1
10	Stacks, Subroutines calls	07/02/2019	Hour7	1
11	Basic processing unit - Fundamental concepts	11/02/2019	Hour6	2
12	Instruction cycle - Execution of a complete instruction	12/02/2019	Hour1	2
13	Instruction cycle - Execution of a complete instruction (T)	12/02/2019	Hour3	2
14	Multiple bus organization - sequencing of control signals	14/02/2019	Hour3	2
15	Arithmetic algorithms	14/02/2019	Hour7	2
16	Algorithms for multiplication and dicision of binary no's	18/02/2019	Hour6	2
17	Array multiplier	19/02/2019	Hour1	2
18	Array multiplier (T)	19/02/2019	Hour3	2
19	Booths multiplication algorithm	21/02/2019	Hour3	2
20	Restoring and non restoring division	21/02/2019	Hour7	2
21	Algorithms for floating point, Multipli and division	05/03/2019	Hour1	2
22	Algorithms (T)	05/03/2019	Hour3	2
23	I/O Organaisation - Introduction	07/03/2019	Hour3	3
24	Accessing of I/O devices	07/03/2019	Hour7	3
25	Interrupts	11/03/2019	Hour6	3
26	Direct Memory Access	12/03/2019	Hour1	3
27	Direct Memory Access (T)	12/03/2019	Hour3	3
28	Buses	14/03/2019	Hour3	3
29	Interface Circuits	14/03/2019	Hour7	3
30	Standard I/O interfaces - PCI	18/03/2019	Hour6	3

YEAR CALENDAR

No	Date	Event	Remarks
1	28-01-2019	Commencement of Even Semester Classes	Conducted Effectively
2	25-01-2019 to 31-01-2019	NSS Camp	Conducted Effectively
3	04-02-2019 to 06-02-2019	CGPU Training for S6 students	Conducted Effectively
4	16-02-2019	First Years Day	Conducted Effectively
5	25-02-2019 to 02-03-2019	Series Test I	Conducted Effectively
6	11-03-2019	Eve of Excellence	Conducted Effectively
7	22-03-2019	Alumni Technical Talk to Students	Conducted Effectively
8	27-03-2019	Entpresso Meet	Conducted Effectively
9	25-03-2019 to 30-03-2019	AHAS - Gala of Tournaments	Conducted Effectively
10	24-04-2019 to 26-04-2019	Series Test II	Conducted Effectively
11	29-04-2019 to 07-05-2019	Final Tests for practical courses	Conducted Effectively
12	03-05-2019 04-05-2019	Kapricious-19 (Techno Managerial Cultural Fest)	Conducted Effectively

Branch/Class: S4 CSE

Subject: Computer Organization and Architecture (CS 202)

Faculty: Veena K Vasudevan.

DETAILS OF ASSIGNMENTS/TUTORIALS/MINIPROJECTS

No	Date of Submission	Date of Return after Evaluation	Description
1	12-02-2019	14-02-2019	1. Big Endian & Little Endian 2. Conditional Codes 3. One address, Two address, Three address instructions.
2	26-03-2019	28-03-2019	1. Exceptions
3	13-05-2019	14-05-2019	1. Flash Memory

Branch/Class: S4 CSE

Subject: Computer Organization and Architecture

Faculty: Veena K. Visavam

SUBJECT COVERAGE

No	Date & Day	Hr	Topics Covered	Mode of Instruction
			MODULE 1	
1	28-01-19	6	Basic Structure of Computers - Functional units	ppt, Board & Chalk
2	29-01-19	1	Basic operational Concepts	ppt, Board & Chalk
3	29-01-19	3	Basic Operational Concepts	ppt, Board & Chalk
4	30-01-19	6	Bus Structures, Software	ppt, Board & Chalk
5	31-01-19	7	Memory locations and addresses	ppt, Board & Chalk
6	04-02-19	6	Memory Operations	ppt, Board & Chalk
7	05-02-19	1	Instructions and Instruction sequencing	ppt, Board & Chalk
8	05-02-19	3	Instruction sequencing, Addressing modes	ppt, Board & Chalk
9	05-02-19	4	Addressing Modes	ppt, Board & Chalk
10	07-02-19	3	ARM Example	ppt, Board & Chalk
11	07-02-19	7	Tutorial - University Questions	ppt, Board & Chalk
12	08-02-19	3	Basic I/O Operations	ppt, Board & Chalk
13	11-02-19	5	Stack	ppt, Board & Chalk
14	11-02-19	6	Subroutines Calls	ppt, Board & Chalk
			MODULE - II	
15	12-02-19	3	Basic processing unit - Fundamental Concepts	ppt, Board & Chalk

Branch/Class: S4 CSE

Subject: Computer Organization and Architecture (CS 202)

Faculty: Veena M Vishnu

DETAILS OF ATTENDANCE

Roll No	Name of the student	Period →	6	1	3	6	3	7	6	1	3	4	3	7	3	5	6	3	4	6
		Date	23/01	24/01	29/01	30/01	31/01	3/01	01/02	05/02	05/02	05/02	07/02	08/02	08/02	11/02	11/02	13/02	13/02	12/02
1	AADIL HAKEEM		x	x	x	x	x	x	A	A	A	A	A	A	x	A	x	x	x	x
2	AFIYA MOHAMMED RAFI		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
3	ALLU V.A.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
4	AMAAN SHAH S.R.		x	x	x	x	x	x	A	x	x	x	x	x	x	x	x	x	x	x
5	ANN MARIYA FRANCIS		x	x	x	x	x	x	A	A	A	A	A	A	x	A	A	x	x	x
6	ARUNYA V.		x	x	x	x	x	x	A	A	A	A	x	x	x	x	x	x	x	x
7	ASHIYA SUNIL		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
8	BEEMA RAFEEK		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
9	CHELSEA ROSE ANTONY		x	x	x	x	x	x	x	x	x	x	A	A	x	x	x	x	x	x
11	GAYATHRI VINOD		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
12	GODWIN PAUL		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
13	GOLDU BENNY		x	x	x	x	x	x	x	x	x	x	A	A	x	x	x	x	x	x
14	HAMNA ASHRAF K.		A	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
15	JINSA JAMAL		x	x	x	A	x	x	x	x	x	x	x	x	x	x	x	x	x	x
16	JUNAID M. FAISAL		x	x	x	x	x	x	x	x	x	x	x	x	x	A	x	x	x	x
18	LILLY DHANEESHA T.S.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
19	MARIAM BEEVI P.A.		x	x	x	A	x	x	x	A	A	A	x	x	x	x	x	x	x	x
20	MOHAMMED ANAS K.Y.		x	x	x	x	x	x	A	A	A	A	x	x	x	A	x	x	x	x
21	MOHAMMED JASEEL K.		x	x	x	x	x	x	A	A	A	A	x	x	x	A	A	x	x	x
22	MOHAMMED NABEEL M.A		x	x	x	x	x	x	A	A	A	A	x	x	A	x	x	x	x	x
23	MUHAMMED YASEEN E.A.		x	x	x	x	x	x	x	x	x	x	x	x	A	A	A	x	x	x
24	MUHAMMED YAZEEN A.N.		x	x	x	x	x	x	A	A	A	A	A	A	x	A	x	x	x	x
25	NAFIHA SUBHAN K.N.		x	x	x	x	x	x	x	x	x	x	x	x	x	A	A	x	x	x
26	NAGEENA M.N.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	A	A	A
27	NAHID NAVAS		x	x	x	x	x	x	A	x	x	x	x	x	x	A	A	A	A	x
28	NEHA IBRAHIM		x	A	A	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
29	NITHIN BIJU		x	A	A	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
30	R.M. RABIYA		x	A	A	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
31	RAHUL RAJ.		x	x	A	x	x	x	x	x	x	x	x	x	A	A	A	A	x	x
32	REEMA K. ABDUL KAREEM		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
33	RINSHAD K.M.		x	x	x	x	x	x	x	x	x	x	x	x	A	x	A	A	A	x
34	RISWANA K.S.		x	x	x	x	x	x	A	x	x	x	x	x	x	x	x	x	x	x
35	RIYA ROY		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
36	SAFRIN K.S.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
37	SHABANA NAYAZ		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
38	SHEFAS A.S.		x	x	A	x	x	x	x	x	x	x	x	x	x	x	x	x	x	A
39	SUNDAYYA YOUSPH		x	A	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
40	TELWIN REBELLO		x	x	x	x	x	x	A	A	A	A	x	x	x	x	x	x	x	x

Branch/Class: S4 CSE

Subject: Computer Organization and Architecture (CS 20

Faculty: Veena K Viswam

DETAILS OF ATTENDANCE

Roll No	Name of the student	Period →	6	1	3	6	3	7	6	1	3	4	3	7	3	5	6	3	4	6
		Date	28/01	29/01	29/01	30/01	31/01	31/01	04/02	05/02	05/02	05/02	07/02	07/02	08/02	11/02	11/02	12/02	12/02	13/02
41	THEJUS MOHANAN		x	x	x	x	x	x	x	x	x	x	x	x	A	A	A	A	A	A
42	SHILPA K.V.		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
45	HILAL AZIZ KOLAPARAMBIL			x	x	x	x	x	A	x	x	x	x	x	A	x	x	x	x	x

Branch/Class: S4 CSE

Subject: Computer Organization and Architecture (CS 202)

Faculty: Veena K. Viswam

MARKS AWARDED FOR ASSIGNMENTS

Roll No	Name of the students	Grades or Marks awarded						Total marks awarded for Assignments A(10)
		A1	A2	A3	A4	A5	A6	
1	AADIL HAKEEM	10	10	10				10
2	AFIYA MOHAMMED RAFI	10	10	10				10
3	ALLU V.A.	10	10	10				10
4	AMAAN SHAH S.R.	10	10	10				10
5	ANN MARIYA FRANCIS	10	10	10				10
6	ARUNYA V.	10	10	10				10
7	ASHIYA SUNIL	10	10	10				10
8	BEEMA RAFEEK	10	10	10				10
9	CHELSEA ROSE ANTONY	10	10	10				10
11	GAYATHRI VINOD	10	10	10				10
12	GODWIN PAUL	10	10	10				10
13	GOLDU BENNY	10	10	10				10
14	HAMNA ASHRAF K.	10	10	10				10
15	JINSA JAMAL	10	10	10				10
16	JUNAID M. FAISAL	10	10	10				10
18	LILLY DHANEESHA T.S.	10	10	10				10
19	MARIYAM BEEVI P.A.	10	10	10				10
20	MOHAMMED ANAS K.Y.	10	10	10				10
21	MOHAMMED JASEEL K.	10	10	10				10
22	MUHAMMED NADEEM M.A.	10	10	10				10
23	MUHAMMED YASEEN E.A.	10	10	10				10
24	MUHAMMED YASEEN A.N.	10	10	10				10
25	NAFIHA SIBHAN K.N.	10	10	10				10
26	NAGEENA M.N.	10	10	10				10
27	NAHID NAVAS	10	10	10				10
28	NEHA IBRAHIM	10	10	10				10
29	NITHIN BIJU	10	10	10				10
30	R.M. RABIYA	10	10	10				10
31	RAHUL RAJ	10	10	10				10
32	REEMA K. ABDUL KAREEM	10	10	10				10
33	RINSHAD K.M.	10	10	10				10
34	RISHANA K.S.	10	10	10				10
35	RIYA ROY	10	10	10				10
36	SAFRIN K.S.	10	10	10				10
37	SHABANA NAVAZ	10	10	10				10

Branch/Class: S4 CSE

Subject: Computer Organization and Architecture (CS202)

Faculty: Veena K Nayam

MARKS AWARDED FOR ASSIGNMENTS

Roll No	Name of the students	Grades or Marks awarded						Total marks awarded for Assignments A(10)
		A1	A2	A3	A4	A5	A6	
38	SHEFAS A.S.	10	9	10				9.67
39	SUMAYYA YOUSPH	10	10	10				10
40	TELJIN REBEKO	9	10	10				9.67
A1	THEJUS MOHANAN	10	10	10				10
44	SHILPA K.V.	10	10	10				10
A5	HILAL AZIZ KOLAPARAMBIL	10	10	10				10

Branch

MARKS AWARDED FOR TESTS

Roll No	Name of the students	Grades or Marks awarded						Total marks awarded for Tests T(40)
		T1	T2	T3	T4	T5	T6	
1	AADIL HAKEEM	30	18					19·2
2	AFIYA MOHAMMED RAFI	40	38					31·2
3	ALLU V.A.	38	36					29·6
4	AMAAN SHAH S.R.	42	23					26
5	ANN MARIYA FRANCIS	35	23					23·2
6	ARCINYA V.	30	27					22·8
7	ASHIYA SUNIL	49	50					39·6
8	BEEMA RAFEEK	43	42					34
9	CHELSEA ROSE ANTONY	42	40					32·8
11	GAYATHRI VINOD	35	34					27·6
12	GODWIN PAUL	35	23					23·2
13	GOLDU BENNY	31	36					26·8
14	HAMNA ASHRAF K.	35	29					25·6
15	JINSA JAMAL	46	46					36·8
16	JUNAID M. FAISAL	32	30					24·8
18	LILLY DHANEESHA T.S.	36	37					29·2
19	MARIYAM BEEVI P.A.	29	31					24
20	MOHAMMED ANAS K.Y.	34	36					28
21	MOHAMMED JASEEL K.	A	47					18·8
22	MUHAMMED NADEEM M.A.	38	31					27·6
23	MUHAMMED YASEEN E.A.	19	30					19·6
24	MUHAMMED YAZEEN A.N.	34	30					25·6
25	NAFIHA SUBHAN K.N.	32	30					24·8
26	NAGEENA M.N.	34	33					26·8
27	NAHID NAVAS	34	29					25·2
28	NEHA IBRAHIM	30	18					19·2
29	NITHIN BIJU	34	24					23·2
30	R.M. RABIYA	42	48					34
31	RAHUL RAJ	28	25					21·2
32	REEMA K. ABDUL KAREEM	30	35					26
33	RINSHAD K.M.	29	29					23·2
34	RISHANA K.S.	47	08					22
35	RIYA ROY	32	35					26·8
36	SAFRIN K.S.	36	34					28
37	SHABANA NAYAZ	36	36					28·8

Branch/Class: S4 CSE

Subject: Computer Organization and Architecture CCS

Faculty: Veena K Vasudevan

MARKS AWARDED FOR TESTS

Roll No	Name of the students	Grades or Marks awarded						Total marks awarded for Tests T(40)
		T1	T2	T3	T4	T5	T6	
38	SHEFAS A.S.	37	28					26
39	SUMAYYA YOUSPH	36	19					22
40	TELWIN REBELLO	21	A					8.4
41	THEJUS MOHANAN	23	27					20
44	SHILPA K.V.	45	37					32.8
45	HILAL AZIZ KOLAPARAMBIL	A	A					–

Branch/Class: S4 CSE

Subject: Computer Organization and Architecture

Faculty: Veena K. Viswam

SPLIT UP FOR INTERNAL MARKS

Max.Marks :50

Roll No	Name of the students	Marks Awarded for Assignments A(10)	Marks Awarded for Tests T(40)	Total Internal marks Awarded A+T (50)	Final Modification	Remarks Attendance %
1	AADIL HAKEEM	10	19.2	29.2	29	82
2	AFIYA MOHAMMED RAFI	10	31.2	41.2	41	91
3	ALLU V.A.	10	29.6	39.6	40	100
4	AMAAN SHAH S.R.	10	26	36	36	88
5	ANN MARIYA FRANCIS	10	23.2	33.2	33	84
6	ARUNYA V.	10	22.8	32.8	33	84
7	ASHIYA SUNIL	10	39.6	49.6	50	94
8	BEEMA RAFEEK	10	34	44	44	97
9	CHELSEA ROSE ANTONY	10	32.8	42.8	43	91
11	GAYATHRI VINOD	10	27.6	37.6	38	92
12	GODWIN PAUL	10	23.2	33.2	33	92
13	GOLDU BENNY	10	26.8	36.8	37	86
14	HAMNA ASHRAF K.	10	25.6	35.6	36	91
15	JINSA JAMAL	10	36.8	46.8	47	87
16	JUNAID M. FAISAL	10	24.8	34.8	35	87
18	LILLY DHANEESHA T.S.	10	29.2	39.2	39	83
19	MARIYAM BEEVI P.A.	10	24	34	34	92
20	MOHAMMED ANAS K.Y.	10	28	38	38	78
21	MOHAMMED JASEEL K.	10	18.8	28.8	29	78
22	MUHAMMED NADEEM M.A.	10	27.6	37.6	38	83
23	MUHAMMED YASEEN E.A.	10	19.6	29.6	30	90
24	MUHAMMED YAZEEN A.N.	10	25.6	35.6	36	79
25	NAFIHA SUBHAN K.N.	10	24.8	34.8	35	90
26	NAGEENA M.N.	10	26.8	36.8	37	87
27	NAHID NAVAS	10	25.2	35.2	35	83
28	NEHA IBRAHIM	10	19.2	29.2	29	88
29	NITHIN BIJU	10	23.2	33.2	33	84
30	R.M. RABIYA	10	34	44	44	92
31	RAHUL RAJ	10	21.2	31.2	31	78
32	REEMA K. ABDUL KAREEM	10	26	36	36	97
33	RINSHAD K.M.	10	23.2	33.2	33	84
34	RISWANA K.S.	10	22	32	32	82
35	RIYA ROY	10	26.8	36.8	37	95
36	SAFRIN K.S	10	28	38	38	95
37	SHABANA NAVAZ	10	28.8	38.8	39	100
38	SHEFAS A.S.	9.67	26	35.67	36	77

Branch/Class: S4 CSE

Subject: Computer Organization and Architec

Faculty: Veena K Viswan .

SPLIT UP FOR INTERNAL MARKS

Max.Marks :50

Roll No	Name of the students	Marks Awarded for Assignments A(10)	Marks Awarded for Tests T(40)	Total Internal marks Awarded A+T (50)	Final Modifica-tion	Remarks Attendance %
39	SUMAYYA YOUSPH	10	22	32	32	87
40	TELAIN REBELLO	9.67	8.4	18.07	18	69
41	THEJUS MOHANAN	10	20	30	30	81
44	SHILPA K.Y	10	32.8	42.8	43	94

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PROGRAM OUTCOME(PO)

PO 1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO 2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO 3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO 4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO 5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO 6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO 7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO 8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO 9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO 10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO 12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in ndependent and life-long learning in the broadest context of technological change.

CS202 Computer Organization and Architecture

CS202.1. Identify the basic structure and functional units of a digital computer.

CS202.2. Analyze the effect of addressing modes on the execution time of a program.

CS202.3. Design processing unit using the concepts of ALU and control logic design.

CS202.4. Identify the pros and cons of different types of control logic design in processors.

CS202.5. Select appropriate interfacing standards for I/O devices.

CS202.6. Identify the roles of various functional units of a computer in instruction execution.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	1										2
CO2	1	3	2									
CO3	1			3							2	
CO4	3	2			2							
CO5		2			1						3	
CO6	2		3	2								2

KMEA ENGINEERING COLLEGE,EDATHALA

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

TIMETABLE KTU S2/S4/S6/S8 (w.e.f 28/01/2019) ()

Form No. KEC/CCE/F003-00

CLASS	MONDAY							
	1	2	3	4		5	6	7
	8.30 To 9.30	9.30 To 10.30	10.40 To 11.35	11.35 To 12.30		1.30 To 2.20	2.20 To 3.10	3.20 To 4.10
S2 CS	M2	EM	C	Micro PJCT	LUNCH BREAK	CHE	CS/ME WS	
	SKA	BBN	SNM	BJY,SNM		SMS	AVP,SNM/ME1, ME2	
S4 CS	LS	FOSS/ DS LAB				OOP	COA	M4
	RRD	MJY,SKY/MIL,AAS				SUB	VKV	BTA
S6 CS	DAA	CN	CD	POM		CD	NLP/WT	SE
	MJY	SJS	AVP	MYR		AVP	SKN/ENA	VDH
S8 CS	DIS	CGPU				EMD	DM	AI/CNS
	JBM	VDH				SKY	SJS	SUB/MJY

CLASS	TUESDAY							
	1	2	3	4		5	6	7
	8.30 To 9.30	9.30 To 10.30	10.40 To 11.35	11.35 To 12.30		1.30 To 2.20	2.20 To 3.10	3.20 To 4.10
S2 CS	CHE	C	M2	DE	LUNCH BREAK	EM	CHE LAB	
	SMS	SNM	SKA	JJL		BBN	SMS,FBT	
S4 CS	COA	PDD	COA	OOP		LS	OS	OOP
	VKV	VDH	VKV	SUB		RRD	SKY	SUB
S6 CS	CD	POM	CN	DAA		SE	DAA	NPTEL
	AVP	MYR	SJS	MJY		VDH	MJY	MJY
S8 CS	DM	AI/CNS	EMD	DIS		PROJECT		
	SJS	SUB/MJY	SKY	JBM		JJL/AVP		

CLASS	WEDNESDAY							
	1	2	3	4		5	6	7
	8.30 To 9.30	9.30 To 10.30	10.40 To 11.35	11.35 To 12.30		1.30 To 2.20	2.20 To 3.10	3.20 To 4.10
S2 CS	C	CHE	M2	DE	LUNCH BREAK	BME	EM	LL
	SNM	SMS	SKA	JJL		MDF	BBN	DNA
S4 CS	OOP	PDD	M4	M4		NPTEL	LS	OS
	SUB	VDH	BTA	BTA		VDH	RRD	SKY
S6 CS	CN	NW PROG/MP LAB				DAA	POM	NLP/WT
	SJS	SJS,SKN/SUB,ENA				MJY	MYR	SKN/ENA
S8 CS	EMD	DIS	CODING LAB			EMD	DM	AI/CNS
	SKY	JBM	VDH			SKY	SJS	SUB/MJY

CLASS	THURSDAY							
	1	2	3	4		5	6	7
	8.30 To 9.30	9.30 To 10.30	10.40 To 11.35	11.35 To 12.30		1.30 To 2.20	2.20 To 3.10	3.20 To 4.10
S2 CS	EM	BME	CS/ME WS		LUNCH BREAK	CHE	BME	M2
	BBN	MDF	AVP,SNM/ME1,ME2			SMS	MDF	SKA
S4 CS	PDD	LS	COA	M4		PDD	OS	COA
	VDH	RRD	VKV	BTA		VDH	SKY	VKV
S6 CS	NLP/WT	CD	SE	DAA		NW PROG/MP LAB		
	SKN/ENA	AVP	VDH	MJY		SJS,SKN/SUB,ENA		
S8 CS	EMD	AI/CNS	DM	DIS		PROJECT		
	SKY	SUB/MJY	SJS	JBM		JJL		

CLASS	FRIDAY							
	1	2	3	4		5	6	7
	8.30 To 9.25	9.25 To 10.20	10.25 To 11.20	11.20 To 12.15		1.45 To 2.35	2.35 To 3.25	3.25 To 4.10
S2 CS	BME	M2	EM	DE/LH	LUNCH BREAK	CHE	DE	C
	MDF	SKA	BBN	JJL		SMS	JJL	SNM
S4 CS	M4	OS	OOP	OS		FOSS/DS LAB		
	BTA	SKY	SUB	SKY		MJY,SKY/MIL,AAS		
S6 CS	SE	Comprehensive	CD	NLP/WT		SE	POM	CN
	VDH	JJL	AVP	SKN/ENA		VDH	MYR	SJS
S8 CS	AI/CNS	DIS	DM	Communication		Journal		
	SUB/MJY	JBM	SJS	RES		AVP		

PRINCIPAL

Faculty	MONDAY							TUESDAY							WEDNESDAY								THURSDAY							FRIDAY							Theory
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
	8.30 To 9.30	9.30 To 10.30	10.40 To 11.35	11.35 To 12.30	1.30 To 2.20	2.20 To 3.10	3.20 To 4.10	8.30 To 9.30	9.30 To 10.30	BREAK 10.40 To 11.35	11.35 To 12.30	1.30 To 2.20	2.20 To 3.10	3.20 To 4.10	8.30 To 9.30	9.30 To 10.30	BREAK 10.40 To 11.35	11.35 To 12.30	1.30 To 2.20	2.20 To 3.10	3.20 To 4.10	8.30 To 9.30	9.30 To 10.30	10.40 To 11.35	11.35 To 12.30	1.30 To 2.20	2.20 To 3.10	3.20 To 4.10	8.30 To 9.25	9.25 To 10.20	10.25 To 11.20	11.20 To 12.15	1.45 To 2.35	2.35 To 3.25	3.25 To 4.10	
Selin M (SNM)			C	Micro PJCT		CS W/S			C		CP		CP			C		CP					CP		CS W/S			CP							C	9
			S2CS	S2CS		S2CS			S2CS		S4EI		S4EI			S2CS		S4EI					S4EI		S2CS			S4EI							S2CS	
Sheena Kurian K (SKN)			DIS			NLP			DIS							DIS	NW PROG LAB				NLP	NLP			DIS	NW PROG LAB			DIS		NLP				9
			S8EC, EI			S6CS			S8EC, EI							S8EC,EI	S6CS				S6CS	S6CS			S8EC,EI	S6CS			S8EC,EI		S6CS				
Sumi Bose (SUB)					OOP		AI		AI			OOP		OOP	OOP	MP LAB					AI		AI			MP LAB		AI		OOP					10
					S4CS		S8CS		S8CS			S4CS		S4CS	S4CS	S6CS					S8CS		S8CS			S6CS		S8CS		S4CS					
Veena K Viswam (VKV)						COA		COA		COA														COA			COA								5
						S4CS		S4CS		S4CS														S4CS			S4CS								
Soumya Joseph (SJS)		CN				DM		DM		CN					CN	NW PROG LAB				DM				DM		NW PROG LAB				DM				CN	9
		S6CS				S8CS		S8CS		S6CS					S6CS	S6CS				S8CS				S8CS		S6CS				S8CS				S6CS	
Abeera V P (AVP)			CD		CD	CS W/S		CD				PROJECT											CD	CS W/S					CD		Journal				5
			S6CS		S6CS	S2CS		S6CS				S8CS											S6CS	S2CS					S6CS		S8CS				
Maria Joy (MJY)	DAA	FOSS LAB					CNS		CNS		DAA		DAA	NPTEL					DAA		CNS		CNS		DAA			CNS			FOSS LAB				11
	S6CS	S4CS					S8CS		S8CS		S6CS		S6CS	S6CS					S6CS		S8CS		S8CS		S6CS			S8CS			S4CS				
Jisha Jamal (JJL)	CP					CP			CP		DE	PROJECT				CP		DE						CP		PROJECT			Comprehensive		DE/LH		DE		10
	S6CE A					S6CE A			S6CE A		S2CS	S8CS				S6CE A		S2CS						S6CE A		S8CS			S6CS		S2CS		S2CS		
Vidhya Hari (VDH)		CGPU					SE		PDD			SE				PDD	CODING LAB		NPTEL			PDD		SE		PDD		SE				SE			10
		S8CS					S6CS		S4CS			S6CS				S4CS	S8CS		S4CS			S4CS		S6CS		S4CS		S6CS				S6CS			
Shinu Koyakutty (SKY)		FOSS LAB			EMD					EMD			OS		EMD				EMD		OS	EMD					OS			OS		OS	FOSS LAB		10
		S4CS			S8CS					S8CS			S4CS		S8CS				S8CS		S4CS	S8CS					S4CS			S4CS		S4CS			
Elia Nibia (ENA)	CP		CP			WT					CP					MP LAB			CP		WT	WT				MP LAB				WT			CP	9
	S6CE B		S6CE B			S6CS					S6CE B					S6CS			S6CE B		S6CS	S6CS				S6CS				S6CS			S6CE B	
Jaseena T A		FOSS LAB					LL									NW PROG LAB					LL					NW PROG LAB									0
		S4CS					S2 EE,MEA									S6CS					S2CS					S6CS										
Roopa K												PROJECT					LL									PROJECT						FOSS LAB			0
												S8CS					S2CE B									S8CS						S4CS			
Mohammed Anas		CACE LAB										CACE LAB							CACE LAB				CACE LAB												0
		S6 CE A										S6 CE B							S6 CE A				S6 CE B												
New Staff				LL		CS W/S								LL			CODING LAB							CS W/S			LL								0
				S2 EC,EI		S2CS								S2 CEA			S8CS							S2CS			S2ME B								

PRINCIPAL

Practical	**Total**
5	**14**
6	**15**
6	**16**
0	**5**
6	**15**
10	**15**
6	**17**
6	**16**
5	**15**
6	16
6	15
11	**11**
11	**11**
12	**12**
9	**9**

KMEA ENGINEERING COLLEGE, EDATHALA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SUBJECT ALLOTMENT

SL NO.	NAME	SUBJECT1	SUBJECT2	LAB1	Work Load
1	Rekha Lakshmanan	Digital Image Processing(S7) – 2 modules – 1hr			
2	SELIN M	Data Structures (S3)- 4hrs	Data Communication (S5)- 3hrs	DS Lab (S3)- 6hrs Placement(S1)- 1hr	4+3+6+1 = 14
3	SHEENA KURIAN K	Machine Learning (S7)- 4hrs	Soft Computing (S5)- 3hrs	Placement(S7)- 2hrs	4+3+2=9
4	VIDYA HARI	Computer Programming and Numerical Methods (S5ME A) - 4hrs	Computer Programming and Numerical Methods (S5ME B)- 4hrs	Software Development Lab (S5)-6 hrs	4+4+6=14
5	ARIFA AZEEZ	Theory of Computation (S5)- 4hrs	Distributed Computing (S7)- 3hrs	Main Project (S7)- 3 +3 hrs	4+3+6=13
6	SUMI BOSE	Life skill(S1)- 4hrs	Computer Graphics (S7)- 4hrs	SS Lab (S5)- 6hrs	4+4+6=14
7	VEENA K VISWAM	Microprocessor and Microcontroller (S5CS)- 3hrs	Microprocessor and Microcontroller	Seminar(S7)- 3hrs Micro Project(S1)- 2hrs	14
8	SOUMYA JOSEPH	Principles of Programming Paradigms (S7) – 3hrs	System Software (S5) – 3hrs	SS Lab (S5)- 3hrs Library (S1)- 1hr	3+3+6+1 = 13
9	ABEERA V P	Switching Theory and Logic Design (S3) – 4hrs	Logic for Computer Science (S5) – 3hrs	Compiler Lab(S7)- 3hrs NPTEL- 1 hr	4+3+3+1 = 11
10	MARIA JOY	Graph Theory and Combinatorics (S5) – 4 hrs	Cryptography (S7) – 4hrs	Compiler Lab(S7)- 6hrs	4+4+6=14
11	ELIA NIBIA	Digital Image Processing(S7) – 4 modules – 3hrs	Computer Programming (S3EEE) – 4hrs	Software Development Lab (S5)-6 hrs Programming Lab (S3EEE) – 3hrs	3+4+6+3 = 16
12	KARTHIKA M T	Computer System Architecture (S7) – 4hrs	Discrete Structures (S3) – 4hrs	DS Lab (S3)- 6hrs	4+4+3=14
13	AJMAL E B			Design Project (S5) – 2hrs Placement (S5) – 1hr	3
			LAB STAFF		
1	Jesseena T A	SS Lab (S5)- 6hrs	Project Lab (S7)- 6hrs		12
3	Roopa	Software Development Lab (S5)- 6hrs	Compiler Lab (S7)-6hrs		12
4	Sreedevi	DS Lab- 6hrs	Micro project(2) NPTEL- 1hr		9