Kandula Srinivasa Reddy Memorial College of Engineering (Autonomous)

Kadapa-516003. AP

(Approved by AICTE, Affiliated to JNTUA, Ananthapuramu, Accredited by NAAC)

(An ISO 9001-2008 Certified Institution)

Department of Electronics and Communication Engineering

Certification Course

On

"Applications of Remote Sensing and GIS"

Resource Person	:	Dr. P. Giri Prasad
Course Coordinators:		Sri. K. Guru Prasad
		Miss. S. Jabeen
Duration	:	07-04-2022 to 16-04-2022

K.S.R.M. COLLEGE OF ENGINEERING

(UGC - AUTONOMOUS)

Kadapa, Andhra Pradesh, India - 516003

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

An ISO 14001:2004 & 9001: 2015 Certified Institution

Lr./KSRMCE/ (Department of ECE)/2020-21

Date: 04-04-2022

To
The Principal
KSRM College of Engineering
Kadapa, AP.

Sub: KSRMCE - (Department of ECE) – Permission to conduct a certification course on "Applications of Remote Sensing and GIS" –Request– reg.

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Respected Sir,

With reference to the cited, the Department of ECE is planning to conduct a certification course on "Applications of Remote Sensing and GIS" for All the B. Tech VI SEM students from 07-04-2022 to 16-04-2022. In this regard, we kindly request you to grant us permission to conduct a certification course. This is submitted for your kind perusal.

Thanking you sir,

Yours Faithfully,

Coordinator(s)

Sri K. Guru Prasad

Miss S. Jabeen

Forwarded to the Principal sir
G. V

Cc:

To The Director for Information

To All Deans/IQAC/ All HODs

Permitted
V. S. Murthy
PRINCIPAL
K.S.R.M. COLLEGE OF ENGINEERING
KADAPA-516005, (A.P.)

K.S.R.M. COLLEGE OF ENGINEERING

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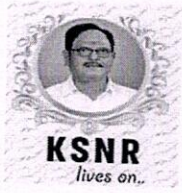


Date: 04-04-2022

Circular

All the B.Tech VI SEM students are hereby informed that the department of ECE is going to conduct certification course on "Applications of Remote Sensing and GIS" from 07-04-2022 to16-04-2022. Interested students may register their names with respective faculty member on or before 06-04-2021.

For any queries contact,

Coordinator

Miss S Jabeen, Assistant Professor, ECE Dept.
Sri K. Guru Prasad, Assistant Professor, ECE Dept.

HOD

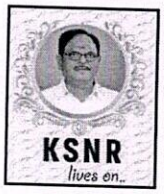
Professor & H.O.D.
Department of E.C.E.
K.S.R.M. College of Engineering
KADAPA - 516 003

Cc to:

The Management /Director / All Deans / All HODS/Staff / Students for information

The IQAC Cell for Documentation

K.S.R.M. COLLEGE OF ENGINEERING



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Department of Electronics & Communication Engineering
Certificate Course on Applications of remote sensing and GIS
Registration Form

S.No.	Roll.No.	Name of the Student	Branch	Sem	Signature
1	199Y1A0412	B. Sreenath	ECE	VI	Sreenath
2	199Y1A0413	B. venkata Harun kumar	ECE	VI	Tharun.
3	199Y1A0414	B. Sai DEEPAK	ECE	VI	DEEPAK.
4	199Y1A0417	C. jashwanth varma	ECE	VI	Jashwanth
5	199Y1A0418	C. Tejesh kumar Reddy	ECE	VI	Tejesh Reddy
6	199Y1A0419	C. STEPHEN KUMAR	ECE	VI	Stephen kumar.
7	199Y1A0424	C. ANKAIAH	ECE	VI	C. Ankaiah
8	199Y1A0425	C. Sai prakash Reddy	ECE	VI	Sai.
9	199Y1A0426	C. Neelapriya	ECE	VI	C. Neela
10	199Y1A0429	C. Neetha	ECE	VI	Neetha
11	199Y1A0433	D. Sai kumar	ECE	VI	Sai
12	199Y1A0434	D. Varshini	ECE	VI	Varshini
13	199Y1A0435	D. Anusha	ECE	VI	Anusha
14	199Y1A0437	D. Vikas Bharadwaj Reddy	ECE	VI	D. V Bharadwaj Reddy
15	199Y1A0445	G. VSS Mani madhavan	ECE	VI	D. Mani Madhavan
16	199Y1A0449	G. vishnu vardhan naidu	ECE	VI	G. Vishnu Vardhan naidu
17	199Y1A0450	G. Yeswanth	ECE	VI	G. Yeswanth
18	199Y1A0453	GUMMARAJU LAKSHMI SAI SUMANTH	ECE	VI	Sumanth
19	199Y1A0455	J. Anjali	ECE	VI	J. Anjali
20	199Y1A0457	K. Anusha	ECE	VI	Anusha
21	199Y1A0458	K S Gautami	ECE	VI	Gautami.
22	199Y1A0464	K. Manoj kumar	ECE	VI	K. Manoj kumar
23	199Y1A0472	K. Prathyusha	ECE	VI	K. Prathyusha

24	199Y1A04A0	M. gari pavani	ECE	VI	M.garipavani
25	199Y1A04A7	M. Venkata Subramanyam	ECE	VI	M. V. Sub
26	199Y1A04B1	N. Maneesha	ECE	VI	N. Maneesha
27	199Y1A04C0	P. Lineeswaramma	ECE	VI	P. Lineeswa
28	199Y1A04B3	P. BHUMIKA	ECE	VI	P. Bhu
29	199Y1A04C0	P. Sudha Koushik	ECE	VI	P. Sudha
30	199Y1A04C6	P. Naveena reddy	ECE	VI	Naveena
31	199Y1A04D7	S. FIROZ	ECE	VI	S. Firoz
32	199Y1A04D9	S. Javeed	ECE	VI	Javeed
33	199Y1A04E0	S. Jeelan	ECE	VI	S. Jeelan
34	199Y1A04B3	K. Lakshmanna	ECE	VI	K. Lakshmanna
35	199Y1A04B5	K. Jaswanth Reddy	ECE	VI	Jaswanth
36	199Y1A04B6	L. Rupesh baby	ECE	VI	L. Rupesh
37	199Y1A04B8	M. Venkata sainathreddy	ECE	VI	M. Venkata
38	199Y1A04E4	Shaik Mohammed Yaseen	ECE	VI	S. Mohammed
39	199Y1A04E6	Shaik MUSAB AHMED	ECE	VI	S. AHAMED
40	199Y1A04E9	SHAIK. yunoosh hussain	ECE	VI	S. YUNOOSH
41	199Y1A04F1	S. SAMEER AHAMED	ECE	VI	Sameer Ahamed
42	199Y1A04F2	S. Sarveswar Reddy	ECE	VI	S. Sarveswar
43	199Y1A04G8	U. ANOHYA BHAI	ECE	VI	U. Anohya
44	199Y1A04G9	V. Swetha	ECE	VI	Swetha
45	199Y1A04H0	V. Sarath Kumar yadav	ECE	VI	Sarath
46	199Y1A04H9	V. Yuva Raju	ECE	VI	Raju
47	199Y1A04J1	Y. Sundaramma	ECE	VI	Sundaramma
48	199Y1A04I4	Y. Sweshitha	ECE	VI	Sweshitha
49	199Y1A04J8	Y. Tharun kumar Reddy	ECE	VI	Y. Tharun
50	199Y1A04J0	M. BHARATH REDDY	ECE	VI	M. Bharath
51	209Y5A0407	K. Manjunatha	ECE	VI	Manju
52	209Y5A0408	K. Mohan Vamsi	ECE	VI	Mohan
53	209Y5A0412	M. Venkata Ramana	ECE	VI	Venkata Rama
54	199Y1A0460	K. sagar	ECE	VI	K. Sagar
55	199Y1A0461	K. Sai Bharath	ECE	VI	Bharath
56	199Y1A0463	K. Sreevidya	ECE	VI	K. Sreevidya
57	199Y1A04G6	T. Naveen Kumar	ECE	VI	Naveen
58	199Y1A04G7	T. Sivaji	ECE	VI	Siva

59	199Y1A04G7	T. Sivaji	ECE	VI	T. Sivaji
60	209Y5A0408	K. Mohan Vamsi	ECE	VI	Vamshi
61	209Y5A0410	L. Niharika	ECE	VI	L. Niharika
62	209Y5A0411	M. Sharanya	ECE	VI	M. Sharanya

Coordinator(s)

HOD

Professor & H.O.D.
Department of E.C.E.
K.S.R.M. College of Engineering
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REMOTE SENSING & GIS (Skill Course) 30 Hrs

Unit-I: Basic Principles of Remote Sensing: Introduction to remote sensing, Characteristics of electromagnetic spectrum; Energy sources and radiation principles; Sources and types of electromagnetic energy used in remote sensing; Energy interactions in the atmosphere; Energy interactions with earth surface features; Human eye and the camera.

Unit-II: Remote Sensing Types: Types of remote sensing with respect to wavelength regions; active and passive remote sensing, Sensor types characteristics: imaging systems, photographic sensors, characteristics of optical sensors; FOV, IFOV; Sensor resolution - spectral, spatial, radiometric and temporal, Spectrometer; Characteristic of optical detectors; imaging sensors, Thermal sensors and Microwave sensors.

Unit-III: Digital Image Processing Techniques: Image Display: Natural Color Composite, False Color Composite (FCC), Gray Scale images, Image Corrections, image enhancement, image transforms, Feature Selection, Classification, Change detection, Applications derived from LANDSAT-8 and SENTINEL-2 images.

Unit-IV: Supervised and Unsupervised Classification: Unsupervised Classification: K-means Clustering and ISODATA Clustering, supervised Classification: Minimum Distance to mean (MDM), Maximum Likelihood (ML), Support Vector Machines (SVM), Artificial Neural Networks(ANN).

Unit-V: Introduction to Geographic Information System (GIS): Data Types: Raster and Vector, Triangulated Irregular Network (TIN), Topology, Digital elevation model (DEM), Applications of GIS: Crop monitoring, water management, drought Assessment

Books and References:

1. Lillesand, T.M. and Kiefer, R.W., 1987. Remote sensing and Image Interpretation, John Wiley.
2. Jensen, J. R. Introductory digital image processing a remote sensing perspective, Prentice Hall series in geographic information science.
3. Schowengerdt, R. A., 2007. Remote Sensing: Models and Methods for Image Processing, Academic Press.
4. Campbell, J.B., 1996. Introduction to Remote Sensing, Taylor & Francis, London.

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Department of Electronics & Communication Engineering

Certificate Course on "Applications of Remote Sensing & GIS"

Schedule

S.No	Date	Time	Faculty	Topic
1.	07/04/2022	9 AM to 10.00 AM	Dr. P. Giriprasad	Inauguration
2.	07/04/2022	10.00 AM to 11.00 AM	Dr. P. Giriprasad	Unit-I: Basic Principles of Remote Sensing: Introduction to remote sensing
3.	07/04/2022	11.00 AM to 12.00 PM	Dr. P. Giriprasad	Characteristics of electromagnetic spectrum; Energy sources and radiation principles
4.	07/04/2022	2.00 PM to 3.00 PM	Dr. P. Giriprasad	Sources and types of electromagnetic energy used in remote sensing
5.	07/04/2022	3.00 PM to 4.00 PM	Dr. P. Giriprasad	Energy interactions in the atmosphere; Energy interactions with earth surface features
6.	08/04/2022	10.00 AM to 11.00 AM	Dr. P. Giriprasad	Human eye and the camera Unit-II: Types of remote sensing with respect to wavelength regions
7.	08/04/2022	11.00 AM to 12.00 PM	Dr. P. Giriprasad	Active and passive remote sensing, Sensor types characteristics
8.	08/04/2022	2.00 PM to 3.00 PM	Dr. P. Giriprasad	Imaging systems, Photographic sensors
9.	08/04/2022	3.00 PM to 4.00 PM	Dr. P. Giriprasad	characteristics of optical sensors, FOV, IFOV
10.	09/04/2022	10.00 AM to 11.00 AM	Dr. P. Giriprasad	Sensor resolution - spectral, spatial

11.	**09**/04/2022	11.00 AM to 12.00 PM	Dr. P. Giriprasad	Radiometric and temporal, Spectrometer
12.	**09**/04/2022	2.00 PM to 3.00 PM	Dr. P. Giriprasad	Characteristic of optical detectors; imaging sensors
13.	**09**/04/2022	3.00 PM to 4.00 PM	Dr. P. Giriprasad	Thermal sensors and Microwave sensors.
14.	**11**/04/2022	10.00 AM to 11.00 AM	Dr. P. Giriprasad	Unit-III: Digital Image Processing Techniques: Image Display: Natural Color Composite, False Color Composite
15.	**11**/04/2022	11.00 AM to 12.00 PM	Dr. P. Giriprasad	Gray Scale images, Image Corrections
16.	**11**/04/2022	2.00 PM to 3.00 PM	Dr. P. Giriprasad	Image enhancement, Image transforms
17.	**11**/04/2022	3.00 PM to 4.00 PM	Dr. P. Giriprasad	Feature Selection, Classification,
18.	**12**/04/2022	10.00 AM to 11.00 AM	Dr. P. Giriprasad	Change detection, Applications derived from LANDSAT-8, SENTINEL-2 images
19.	**12**/04/2022	11.00 AM to 12.00 PM	Dr. P. Giriprasad	Unit-IV: Supervised and Unsupervised Classification: Unsupervised Classification: K-means Clustering
20.	**12**/04/2022	1.00 PM to 2.00 PM	Dr. P. Giriprasad	ISODATA Clustering
21.	**12**/04/2022	2.00 PM to 3.00 PM	Dr. P. Giriprasad	Supervised Classification: Minimum Distance to mean (MDM)
22.	**12**/04/2022	3.00 PM to 4.00 PM	Dr. P. Giriprasad	Maximum Likelihood (ML), Support Vector Machines (SVM)
23.	**13**/04/2022	10.00 AM to 11.00 AM	Dr. P. Giriprasad	Artificial Neural Networks (ANN).
24.	**13**/04/2022	11.00 AM to 12.00 PM	Dr. P. Giriprasad	Unit-V: Introduction to Geographic Information System (GIS): Data Types: Raster, Vector
25.	**13**/04/2022	2.00 PM to 3:00 PM	Dr. P. Giriprasad	Triangulated Irregular Network (TIN), Topology
26.	**13**/04/2022	3.00 PM to 4.00 PM	Dr. P. Giriprasad	Digital elevation model (DEM), Applications of GIS: Crop monitoring
27.	**16**/04/2022	10.00 AM to 11.00 AM	Dr. P. Giriprasad	water management, drought Assessment
28.	**16**/04/2022	11.00 AM to 12.00 PM	Dr. P. Giriprasad	Valedictory

Coordinator

HOD

Professor & H.O.D.
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Department of Electronics & Communication Engineering

Certificate Course on "Applications of Remote Sensing & GIS"

Attendance Sheet

S.No.	Roll No.	Name of the Student	07/04/2022 FN	07/04/2022 AN	08/04/2022 FN	08/04/2022 AN	09/04/2022 FN	09/04/2022 AN	11/04/2022 FN	11/04/2022 AN	12/04/2022 FN	12/04/2022 AN	13/04/2022 FN	13/04/2022 AN	16/04/2022 FN
1	199Y1A0412	BARIVENKULA SREENATH	P	P	P	A	P	P	P	P	A	P	P	P	P
2	199Y1A0413	BINGIMALLA VENKATA THARUN KUMAR	P	P	P	A	P	P	A	P	P	P	P	P	P
3	199Y1A0414	BOKKASAM SAI DEEPAK	P	A	P	P	P	P	P	P	P	P	P	P	A
4	199Y1A0417	C JASHWANTH VARMA	P	P	P	P	P	P	P	P	P	P	P	P	P
5	199Y1A0418	CHAGANTI TEJESH KUMAR REDDY	P	P	A	P	P	P	P	A	P	P	P	P	P
6	199Y1A0419	CHALLA STEPHEN KUMAR	P	P	P	A	P	P	P	P	P	P	P	A	P
7	199Y1A0424	CHEPPALI ANKAIAH	P	A	P	A	P	P	A	P	P	P	P	P	P
8	199Y1A0425	CHERUVU SAI PRAKASH REDDY	P	P	P	P	P	P	P	P	P	P	A	P	P
9	199Y1A0426	CHILUMURU.GEETHA PRIYA (W)	P	A	P	P	P	P	P	P	P	A	P	P	P
10	199Y1A0429	CHINNIREDDY NEETHA (W)	P	P	A	P	P	P	A	P	P	P	P	P	P
11	199Y1A0433	DERANGULA SAI KUMAR	P	P	P	P	P	P	P	P	P	P	P	P	A
12	199Y1A0434	DESURI VARSHINI (W)	P	P	P	P	A	P	P	P	P	P	P	P	P
13	199Y1A0435	DEVALLA ANUSHA (W)	P	A	P	P	P	P	A	P	P	P	P	P	P
14	199Y1A0437	DINNEPU VIKAS BHARADWAJ REDDY	P	P	P	A	P	P	P	P	P	P	P	A	P
15	199Y1A0445	GANDOLLA VSS MANI MADHAVAN	P	P	A	P	P	P	P	P	P	A	P	P	P
16	199Y1A0449	GOPANA VISHNUVARDHAN NAIDU	P	P	P	P	A	P	P	P	A	P	P	P	P

17	199Y1A0450	GOTLA YESWANTH
18	199Y1A0453	GUMMARAJU LAKSHMI SAI SUMANTH
18	199Y1A0455	JAMPALA ANJALI (W)
20	199Y1A0457	K ANUSHA (W)
21	199Y1A0458	K S GOWTHAMI (W)
22	199Y1A0464	KAMBAM MANOJ KUMAR
23	199Y1A0472	KONDA PRATHYUSHA (W)
24	199Y1A04A0	MUGEPPA GARI PAVANI (W)
25	199Y1A04A7	MUTHYALA VENKATA SUBRAMANYAM
26	199Y1A04B1	NANDIPATI MANEESHA (W)
27	199Y1A04C0	PALLE LINGESWARAMMA (W)
28	199Y1A04B3	P BHUMIKA (W)
29	199Y1A04C4	PESALA SUDHA KOUSHIK
30	199Y1A04C6	POTHA NAVEENA REDDY (W)
31	199Y1A04D7	SHAIK FIROZ
32	199Y1A04D9	SHAIK JAVEED
33	199Y1A04E0	SHAIK JEELAN
34	199Y1A0483	KURUVA LAKSHMANNA
35	199Y1A0485	KUTEDDULA JASWANTH REDDY
36	199Y1A0486	LAKKIREDDYPALLI RUPESH BABU
37	199Y1A0488	MACHIREDDY VENKATA SAI NATH REDDY
38	199Y1A04E4	SHAIK MOHAMMED YASEEN
39	199Y1A04E6	SHAIK MUSAB AHAMED
40	199Y1A04E9	SHAIK YUNOOSH HUSSAIN
41	199Y1A04F1	SIKILIGIRI SAMEER AHAMMAD
42	199Y1A04F2	SINGAM SARVESWAR REDDY
43	199Y1A04G8	UDITHE ANUHYA BHAI (W)
44	199Y1A04G9	V SWETHA (W)
45	199Y1A04H0	VADAKUPPALA SARATH KUMAR YADAV
46	199Y1A04H4	VATTALURU YUVARAJU
47	199Y1A04I1	YANNAM SUNANDAMMA (W)
48	199Y1A04I4	YARRAMAREDDY SWESHITHA (W)
49	199Y1A04I8	YELESAM THARUN KUMAR REDDY
50	199Y1A04J0	MADHA BHARATH REDDY
51	209Y5A0405	GOLLA VIJAY KUMAR YADAV
52	209Y5A0407	KAMARTHI MANJUNATHA

53	209Y5A0408	KARNATI MOHAN VAMSI	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P
54	209Y5A0412	MEKALA VENKATA RAMANA	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
55	199Y1A0460	KAKARLA SAGAR	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P
56	199Y1A0461	KAKE SAIBHARATH	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P
57	199Y1A0463	KALUVALA SREEVIDYA (W)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
58	199Y1A04G6	TIRUPATHI NAVEEN KUMAR	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
59	199Y1A04G7	TOGURU SIVAJI	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P
60	209Y5A0408	KARNATI MOHAN VAMSI	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
61	209Y5A0410	LAKKIREDDY NIHARIKA (W)	P	A	P	P	P	P	P	P	A	P	P	P	P	P	P
62	209Y5A0411	MASULU SHARANYA (W)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Coordinator

HOD

Professor & HOD
Department of E.C.E.
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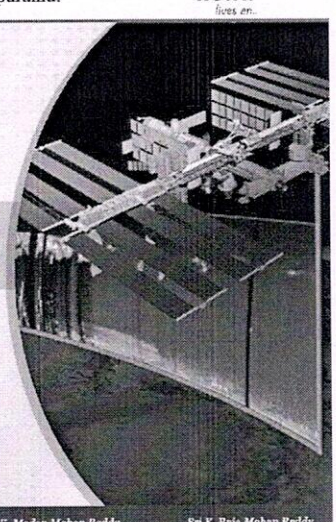
KSNR

DEPARTMENT OF ECE

Certification Course on
" Applications of Remote Sensing and GIS"



07-04-2022 to 16-04-2022
from 09:00AM to 04:00PM

SJ IOT Lab-(SJ215)

Coordinator
Sri K.Guru Prasad,
Asst.Professor, ECE

CO-Coordinator
Miss S.Jabeen,
Asst.Professor, ECE

Resource person :
Dr.P.Giri Prasad,
Asst.Professor, Dept of ECE

Dr. G. Hemalatha (HOD) | Dr. V.S.S. Murthy (Principal) | Dr. Kandula Chandra Obul Reddy (Managing Director) | Smt. K.Rajeswari (Correspondent Secretary, Tresurer) | Sri K. Madan Mohan Reddy (Vice - Chairman) | Sri K. Raja Mohan Reddy (Chairman)

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ACTIVITY REPORT

Certificate Course on

"Applications of Remote Sensing & GIS"

07th April, 2022

Target Group	:	**Faculty & Students**
Details of Participants	:	**62 Students**
Coordinator	:	**Sri. K. Guru Prasad,** Asst.Prof, ECE-Dept
Co-coordinator	:	**Miss S Jabeen,** Asst.Prof, ECE-Dept
Organizing Department	:	**E.C. E**
Venue	:	**SJ IOT Lab (SJ215)**
Resource Person	:	**Dr P Giri Prasad,** Asst.Prof, ECE-Dept.

Description:

The **certification course** started with the formal Inaugural function at 10:00AM in offline mode, Dr. G. Hemalatha (HOD. ECE). The event started with Welcome speech and a brief report was given by Dr. G. Hemalatha, HOD of ECE, followed by presidential address given by Dr. P Giri Prasad. The resource person started the introduction session on Remote Sensing & it's applications. In the subsequent sessions he explained about the Practical Applications in INCOIS (Regional Analysis of Indian Ocean). Temperature and Salinity Analysis, Zonal Current Analysis & hands on sessions with students.

Photo:

Fig: Certificate Course poster

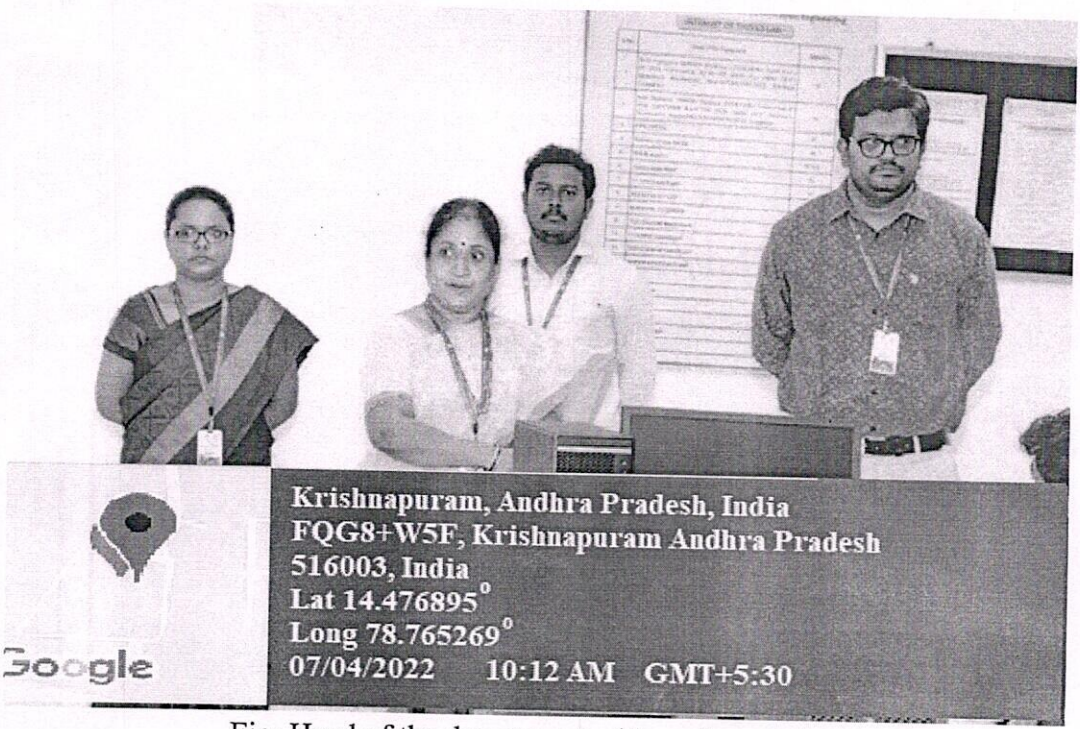


Fig: Head of the department address the session

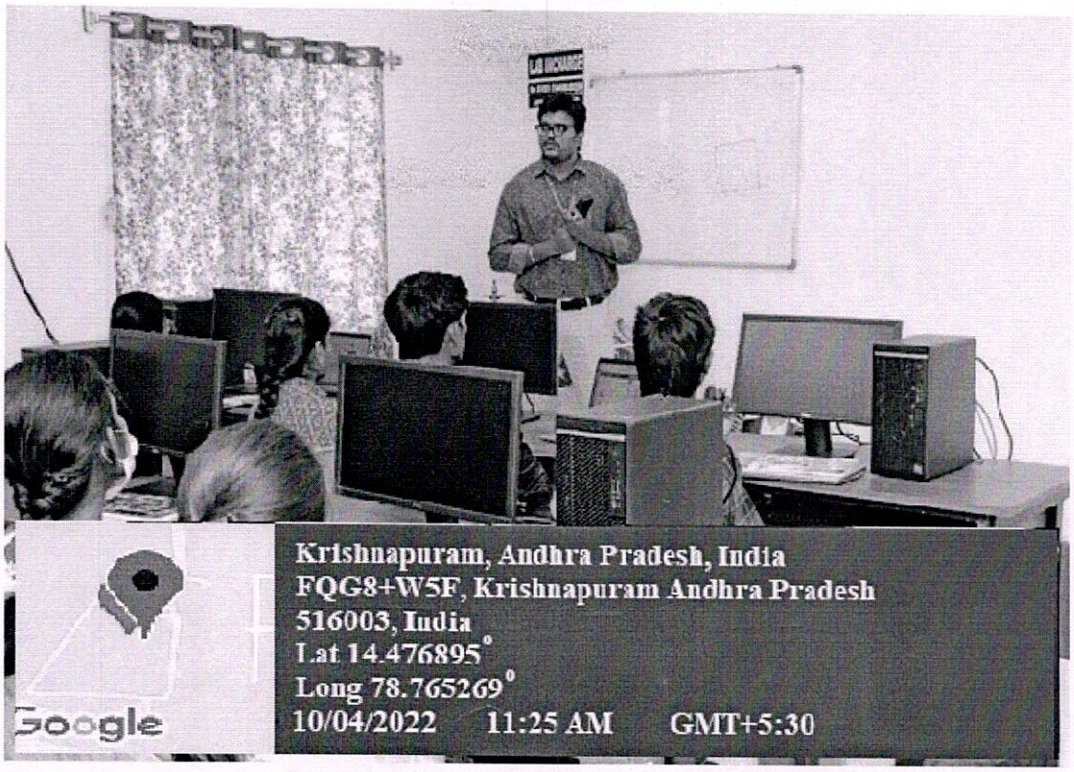
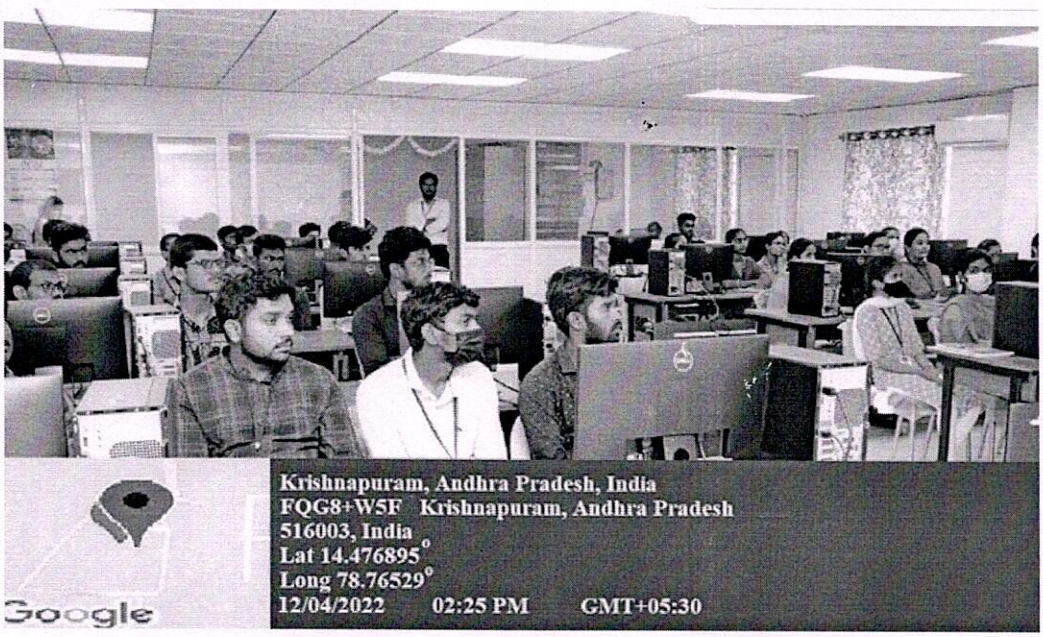


Fig: Dr P Giri Prasad address the session



Coordinator

Head of the department

Professor & H.O.D.
Department of E.C.E.
K.S.R.M. College of Engineering
KADAPA - 516 003

K. S. R. M. COLLEGE OF ENGINEERING
(AUTONOMOUS)

(APPROVED BY AICTE, ACCREDITED BY NAAC & UGC, AFFILIATED TO JNTUA, ANANTHAPURAMU)
(AN ISO 9001:2015 CERTIFIED INSTITUTION)
KADAPA – 516003, ANDHRA PRADESH, INDIA

CERTIFICATE OF PARTICIPATION

This certificate is presented to

L. NIHARIKA.

For an active participation in the ***certification course***

"Applications of Remote Sensing & GIS"

Organized by Department of E.C.E from 07/04/2022 to 16/04/2022.

G. H

Dr. G. Hemalatha
Head of the department

V. S. S. M

Prof. V. S. S. Murthy
Principal

K. S. R. M. COLLEGE OF ENGINEERING
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(AN ISO 9001:2015 CERTIFIED INSTITUTION)
KADAPA–516003, ANDHRA PRADESH, INDIA

CERTIFICATE OF PARTICIPATION

This certificate is presented to

B. SAI DEEPAK

For an active participation in the ***certification course***

"Applications of Remote Sensing & GIS"

Organized by Department of E.C.E from 07/04/2022 to 16/04/2022.

G. Hemalatha

Dr. G. Hemalatha
Head of the department

V. S. S. Murthy

Prof. V. S. S. Murthy
Principal

K. S. R. M. COLLEGE OF ENGINEERING
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KADAPA – 516003, ANDHRA PRADESH, INDIA

CERTIFICATE OF PARTICIPATION

This certificate is presented to

Shaik Jeelan

For an active participation in the ***certification course***

"Applications of Remote Sensing & GIS"

Organized by Department of E.C.E from 07/04/2022 to 16/04/2022.

G. H

Dr. G. Hemalatha
Head of the department

V. S. S. Murthy

Prof. V. S. S. Murthy
Principal

Feedback form on Certificate Course

Applications of Remote Sensing & GIS(07/04/2022 to 16/04/2022)

* Required

1. Roll Number *

_____

2. Name of the Student *

_____

3. B.Tech Semester *

Mark only one oval.

- ◯ I SEM
- ◯ II SEM
- ◯ III SEM
- ◯ IV SEM
- ◯ V SEM
- ◯ VI SEM
- ◯ VII SEM
- ◯ VIII SEM

4. Branch *

Mark only one oval.

- ◯ Civil Enginerring
- ◯ EEE
- ◯ ME
- ◯ ECE
- ◯ CSE
- ◯ AI&ML

5. Email ID *

_____

6. Is the course content meet your exceptation. *

Mark only one oval.

- ◯ Yes
- ◯ No

7. Is the lecture sequence well planned. *

Mark only one oval.

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly agree

8. The contents of the course is explained with examples. *

Mark only one oval.

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

9. Is the level of course high. *

Mark only one oval.

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

10. Is the course exposed you to the new knowledge and practice. *

Mark only one oval.

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

11. Is the lecture clear and easy to understand. *

Mark only one oval.

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly agree

12. Rate the value of the course increasing your skills. *

Mark only one oval.

- ◯ Strongly disagree
- ◯ Disagree
- ◯ Neutral
- ◯ Agree
- ◯ Strongly Agree

13. Any suggestions

R.M. COLLEGE OF ENGINEERING

(UGC - AUTONOMOUS)

Kadapa, Andhra Pradesh, India - 516003

by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

)artment of Electronics & Communication Engineering

Certification course - "Applications of Remote Sensing & GIS" - Feedback Form

S.No.	Email address	Name of the student	Year & Semester	Branch	Roll Num	course content met your expectat	lecture sequence well	contents of the course is explained with	Is the level of course high	course exposed you to the new knowled	lecturer clear and easy to	the value of course in	Any issues
1	199Y1A0412@ksrmce.ac.in	BARIVENKULA SREENATH	B.Tech VI sem	ECE	199Y1A0412	Yes	Yes	Agree	Agree	Strongly agree	4	5	Nothing
2	199Y1A0413@ksrmce.ac.in	BINGIMALLA VENKATA	B.Tech VI sem	ECE	199Y1A0413	Yes	Yes	Agree	Agree	Strongly agree	5	5	Nothing
3	199Y1A0414@ksrmce.ac.in	BOKKASAM SAI DEEPAK	B.Tech VI sem	ECE	199Y1A0414	Yes	Yes	Agree	Agree	Strongly agree	4	5	Good
4	199Y1A0417@ksrmce.ac.in	C JASHWANTH VARMA	B.Tech VI sem	ECE	199Y1A0417	Yes	Yes	Agree	Agree	Strongly agree	5	5	nothing
5	199Y1A0418@ksrmce.ac.in	CHAGANTI TEJESH KUMAR REDDY	B.Tech VI sem	ECE	199Y1A0418	Yes	Yes	Agree	Agree	Strongly agree	5	5	Good
6	199Y1A0419@ksrmce.ac.in	CHALLA STEPHEN KUMAR	B.Tech VI sem	ECE	199Y1A0419	Yes	Yes	Agree	Agree	Strongly agree	4	5	very good
7	199Y1A0424@ksrmce.ac.in	CHEPPALI ANKAIAH	B.Tech VI sem	ECE	199Y1A0424	Yes	Yes	Strongly agree	Agree	Strongly agree	4	3	Nothing
8	199Y1A0425@ksrmce.ac.in	CHERUVU SAI PRAKASH REDDY	B.Tech VI sem	ECE	199Y1A0425	Yes	Yes	agree	Agree	Strongly agree	4	4	no
9	199Y1A0426@ksrmce.ac.in	CHILUMURU.GEETHA PRIYA (W)	B.Tech VI sem	ECE	199Y1A0426	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Nothing

10	199Y1A0429@ksrmce.ac.in	CHINNIREDDY NEETHA (W)	B.Tech VI sem	ECE	199Y1A0429	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
11	199Y1A0433@ksrmce.ac.in	DERANGULA SAI KUMAR	B.Tech VI sem	ECE	199Y1A0433	Yes	Yes	Agree	Agree	Strongly agree	5	4	Good
12	199Y1A0434@ksrmce.ac.in	DESURI VARSHINI (W)	B.Tech VI sem	ECE	199Y1A0434	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
13	199Y1A0435@ksrmce.ac.in	DEVALLA ANUSHA (W)	B.Tech VI sem	ECE	199Y1A0435	Yes	Yes	agree	Agree	Strongly agree	3	5	Good
14	199Y1A0437@ksrmce.ac.in	DINNEPU VIKAS BHARADWAJ REDDY	B.Tech VI sem	ECE	199Y1A0437	Yes	Yes	agree	Agree	Strongly agree	5	4	very good
15	199Y1A0445@ksrmce.ac.in	GANDOLLA VSS MANI	B.Tech VI sem	ECE	199Y1A0445	Yes	Yes	agree	Agree	Strongly agree	4	4	very good
16	199Y1A0449@ksrmce.ac.in	GOPANA VISHNUVARDHAN	B.Tech VI sem	ECE	199Y1A0449	Yes	Yes	agree	Agree	Strongly agree	5	4	very good
17	199Y1A0450@ksrmce.ac.in	GOTLA YESWANTH	B.Tech VI sem	ECE	199Y1A0450	Yes	Yes	agree	Agree	Strongly agree	3	5	no
18	199Y1A0453@ksrmce.ac.in	GUMMARAJU LAKSHMI SAI SUBHANTH	B.Tech VI sem	ECE	199Y1A0453	Yes	Yes	agree	Agree	Strongly agree	4	5	nithing
19	199Y1A0455@ksrmce.ac.in	JAMPALA ANJALI (W)	B.Tech VI sem	ECE	199Y1A0455	Yes	Yes	Strongly agree	Agree	Strongly agree	4	5	Good
20	199Y1A0457@ksrmce.ac.in	K ANUSHA (W)	B.Tech VI sem	ECE	199Y1A0457	Yes	Yes	Strongly agree	Agree	Strongly agree	4	4	Good
21	199Y1A0458@ksrmce.ac.in	K S GOWTHAMI (W)	B.Tech VI sem	ECE	199Y1A0458	Yes	Yes	Strongly agree	Agree	Strongly agree	4	3	Good
22	199Y1A0464@ksrmce.ac.in	KAMBAM MANOJ KUMAR	B.Tech VI sem	ECE	199Y1A0464	Yes	Yes	agree	Agree	Strongly agree	4	4	Good
23	199Y1A0472 @ksrmce.ac.in	KONDA PRATHYUSHA (W)	B.Tech VI sem	ECE	199Y1A0472	Yes	Yes	agree	Agree	Strongly agree	5	4	Good
24	199Y1A04A0@ksrmce.ac.in	MUGEPPA GARI PAVANI (W)	B.Tech VI sem	ECE	199Y1A04A0	Yes	Yes	Strongly agree	Agree	Strongly agree	5	4	Good
25	199Y1A04A7@ksrmce.ac.in	MUTHYALA VENKATA	B.Tech VI sem	ECE	199Y1A04A7	Yes	Yes	agree	Agree	Strongly agree	5	5	Good

26	199Y1A04B1@ksrmce.ac.in	NANDIPATI MANEESHA (W)	B.Tech VI sem	ECE	199Y1A04B1	Yes	Yes	agree	Agree	Strongly agree	5	5	Nothing
27	199Y1A04C0@ksrmce.ac.in	PALLE LINGESWARAMMA (W)	B.Tech VI sem	ECE	199Y1A04C0	Yes	Yes	agree	Agree	Strongly agree	5	5	no
28	199Y1A04B3@ksrmce.ac.in	P BHUMIKA (W)	B.Tech VI sem	ECE	199Y1A04B3	Yes	Yes	agree	Agree	Strongly agree	3	4	no
29	199Y1A04C4@ksrmce.ac.in	PESALA SUDHA KOUSHIK	B.Tech VI sem	ECE	199Y1A04C4	Yes	Yes	Strongly agree	Agree	Strongly agree	3	4	no
30	199Y1A04C6@ksrmce.ac.in	POTHA NAVEENA REDDY (W)	B.Tech VI sem	ECE	199Y1A04C6	Yes	Yes	Strongly agree	Agree	Strongly agree		5	no
31	199Y1A04D7@ksrmce.ac.in	SHAIK FIROZ	B.Tech VI sem	ECE	199Y1A04D7	Yes	Yes	Strongly agree	Agree	Strongly agree	5	4	nothing
32	199Y1A04D9@ksrmce.ac.in	SHAIK JAVEED	B.Tech VI sem	ECE	199Y1A04D9	Yes	Yes	agree	Agree	Strongly agree	5	5	Nothing
33	199Y1A04E0@ksrmce.ac.in	SHAIK JEELAN	B.Tech VI sem	ECE	199Y1A04E0	Yes	Yes	agree	Agree	Strongly agree	5	4	no
34	199Y1A0483@ksrmce.ac.in	KURUVA LAKSHMANNA	B.Tech VI sem	ECE	199Y1A0483	Yes	Yes	agree	Agree	Strongly agree	5	4	Nothing
35	199Y1A0485@ksrmce.ac.in	KUTEDDULA JASWANTH REDDY	B.Tech VI sem	ECE	199Y1A0485	Yes	Yes	agree	Agree	Strongly agree	5	4	Good
36	199Y1A0486@ksrmce.ac.in	LAKKIREDDYPALLI RUPESH BABU	B.Tech VI sem	ECE	199Y1A0486	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
37	199Y1A0488@ksrmce.ac.in	MACHIREDDY VENKATA SAI	B.Tech VI sem	ECE	199Y1A0488	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
38	199Y1A04E4@ksrmce.ac.in	SHAIK MOHAMMED YASEEN	B.Tech VI sem	ECE	199Y1A04E4	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
39	199Y1A04E6@ksrmce.ac.in	SHAIK MUSAB AHAMED	B.Tech VI sem	ECE	199Y1A04E6	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
40	199Y1A04E9@ksrmce.ac.in	SHAIK YUNOOSH HUSSAIN	B.Tech VI sem	ECE	199Y1A04E9	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good

41	199Y1A04F1@ksrmce.ac.in	SIKILIGIRI SAMEER AHAMMAD	B.Tech VI sem	ECE	199Y1A04F1	Yes	Yes	agree	Agree	Strongly agree	4	4	Good
42	199Y1A04F2@ksrmce.ac.in	SINGAM SARVESWAR REDDY	B.Tech VI sem	ECE	199Y1A04F2	Yes	Yes	agree	Agree	Strongly agree	4	5	Good
43	199Y1A04G8@ksrmce.ac.in	UDITHE ANUHYA BHAI (W)	B.Tech VI sem	ECE	199Y1A04G8	Yes	Yes	agree	Agree	Strongly agree	4	5	Good
44	199Y1A04G9@ksrmce.ac.in	V SWETHA (W)	B.Tech VI sem	ECE	199Y1A04G9	Yes	Yes	agree	Agree	Strongly agree	3	5	Good
45	199Y1A04H0@ksrmce.ac.in	VADAKUPPALA SARATH KUMAR	B.Tech VI sem	ECE	199Y1A04H0	Yes	Yes	agree	Agree	Strongly agree	3	5	Nothing
46	199Y1A04H4@ksrmce.ac.in	VATTALURU YUVARAJU	B.Tech VI sem	ECE	199Y1A04H4	Yes	Yes	Strongly agree	Agree	Strongly agree	2	5	Nothing
47	199Y1A04I1@ksrmce.ac.in	YANNAM SUNANDAMMA (W)	B.Tech VI sem	ECE	199Y1A04I1	Yes	Yes	agree	Agree	Strongly agree	2	5	very good
48	199Y1A04I4@ksrmce.ac.in	YARRAMAREDDY SWESHITHA (W)	B.Tech VI sem	ECE	199Y1A04I4	Yes	Yes	agree	Agree	Strongly agree	4	5	very good
49	199Y1A04I8@ksrmce.ac.in	YELESAM THARUN KUMAR REDDY	B.Tech VI sem	ECE	199Y1A04I8	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	very good
50	199Y1A04J0@ksrmce.ac.in	MADHA BHARATH REDDY	B.Tech VI sem	ECE	199Y1A04J0	Yes	Yes	Strongly agree	Agree	Strongly agree	4	5	nothing
51	209Y5A0405@ksrmce.ac.in	GOLLA VIJAY KUMAR YADAV	B.Tech VI sem	ECE	209Y5A0405	Yes	Yes	agree	Agree	Strongly agree	4	5	Good
52	209Y5A0407@ksrmce.ac.in	KAMARTHI MANJUNATHA	B.Tech VI sem	ECE	209Y5A0407	Yes	Yes	agree	Agree	Strongly agree	4	5	Good
53	209Y5A0408@ksrmce.ac.in	KARNATI MOHAN VAMSI	B.Tech VI sem	ECE	209Y5A0408	Yes	Yes	agree	Agree	Strongly agree	4	5	nothing
54	209Y5A0412@ksrmce.ac.in	MEKALA VENKATA RAMANA	B.Tech VI sem	ECE	209Y5A0412	Yes	Yes	agree	Agree	Strongly agree	4	5	nothing
55	199Y1A0460@ksrmce.ac.in	KAKARLA SAGAR	B.Tech VI sem	ECE	199Y1A0460	Yes	Yes	agree	Agree	Strongly agree	4	5	nothing

56	199Y1A0461@ksrmce.ac.in	KAKE SAIBHARATH	B.Tech VI sem	ECE	199Y1A0461	Yes	Yes	agree	Agree	Strongly agree	4	5	Good
57	199Y1A0463@ksrmce.ac.in	KALUVALA SREEVIDYA (W)	B.Tech VI sem	ECE	199Y1A0463	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
58	199Y1A04G6@ksrmce.ac.in	TIRUPATHI NAVEEN KUMAR	B.Tech VI sem	ECE	199Y1A04G6	Yes	Yes	agree	Agree	Strongly agree	5	5	very good
59	199Y1A04G7@ksrmce.ac.in	TOGURU SIVAJI	B.Tech VI sem	ECE	199Y1A04G7	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	very good
60	209Y5A0408@ksrmce.ac.in	KARNATI MOHAN VAMSI	B.Tech VI sem	ECE	209Y5A0408	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	nothing
61	209Y5A0410@ksrmce.ac.in	LAKKIREDDY NIHARIKA (W)	B.Tech VI sem	ECE	209Y5A0410	Yes	Yes	agree	Agree	Strongly agree	5	5	no
62	209Y5A0411@ksrmce.ac.in	MASULU SHARANYA (W)	B.Tech VI sem	ECE	209Y5A0411	Yes	Yes	agree	Agree	Strongly agree	5	5	Nothing

Coordinator

HOD

Professor & H.O.D.
Department of E.C.E.
K.S.R.M. College of Engineering
KADAPA - 516 003

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

VALUE ADDED/CERTIFICATE COURSE ON

"Applications of Remote Sensing & GIS"

07/04/2022 to 16/04/2022

AWARD LIST

S.No	Roll Number	Name of the Student	Marks Obtained
1.	199Y1A0412	Barivenkula Sreenath	18
2.	199Y1A0413	Bingimalla Venkata Tharun Kumar	19
3.	199Y1A0414	Bokkasam Sai Deepak	10
4.	199Y1A0417	C Jashwanth Varma	16
5.	199Y1A0418	Chaganti Tejesh Kumar Reddy	20
6.	199Y1A0419	Challa Stephen Kumar	18
7.	199Y1A0424	Cheppali Ankaiah	12
8.	199Y1A0425	Cheruvu Sai Prakash Reddy	17
9.	199Y1A0426	Chilumuru.Geetha Priya (W)	15
10.	199Y1A0429	Chinnireddy Neetha (W)	15
11.	199Y1A0433	Derangula Sai Kumar	16
12.	199Y1A0434	Desuri Varshini (W)	18
13.	199Y1A0435	Devalla Anusha (W)	17
14.	199Y1A0437	Dinnepu Vikas Bharadwaj Reddy	15
15.	199Y1A0445	Gandolla Vss Mani Madhavan	12
16.	199Y1A0449	Gopana Vishnuvardhan Naidu	16
17.	199Y1A0450	Gotla Yeswanth	15
18.	199Y1A0453	Gummaraju Lakshmi Sai Sumanth	18
19.	199Y1A0455	Jampala Anjali (W)	19
20.	199Y1A0457	K Anusha (W)	18
21.	199Y1A0458	K S Gowthami (W)	19
22.	199Y1A0464	Kambam Manoj Kumar	16
23.	199Y1A0472	Konda Prathyusha (W)	18
24.	199Y1A04A0	Mugeppa Gari Pavani (W)	15
25.	199Y1A04A7	Muthyala Venkata Subramanyam	14
26.	199Y1A04B1	Nandipati Maneesha (W)	16
27.	199Y1A04C0	Palle Lingeswaramma (W)	15
28.	199Y1A04B3	P Bhumika (W)	15
29.	199Y1A04C4	Pesala Sudha Koushik	19
30.	199Y1A04C6	Potha Naveena Reddy (W)	19

31.	199Y1A04D7	Shaik Firoz	17
32.	199Y1A04D9	Shaik Javeed	16
33.	199Y1A04E0	Shaik Jeelan	18
34.	199Y1A0483	Kuruva Lakshmanna	16
35.	199Y1A0485	Kuteddula Jaswanth Reddy	15
36.	199Y1A0486	Lakkireddypalli Rupesh Babu	14
37.	199Y1A0488	Machireddy Venkata Sai Nath Reddy	18
38.	199Y1A04E4	Shaik Mohammed Yaseen	16
39.	199Y1A04E6	Shaik Musab Ahamed	16
40.	199Y1A04E9	Shaik Yunoosh Hussain	15
41.	199Y1A04F1	Sikiligiri Sameer Ahammad	15
42.	199Y1A04F2	Singam Sarveswar Reddy	15
43.	199Y1A04G8	Udithe Anuhya Bhai (W)	16
44.	199Y1A04G9	V Swetha (W)	17
45.	199Y1A04H0	Vadakuppala Sarath Kumar Yadav	16
46.	199Y1A04H4	Vattaluru Yuvaraju	18
47.	199Y1A04I1	Yannam Sunandamma (W)	19
48.	199Y1A04I4	Yarramareddy Sweshitha (W)	20
49.	199Y1A04I8	Yelesam Tharun Kumar Reddy	15
50.	199Y1A04J0	Madha Bharath Reddy	16
51.	209Y5A0405	Golla Vijay Kumar Yadav	19
52.	209Y5A0407	Kamarthi Manjunatha	18
53.	209Y5A0408	Karnati Mohan Vamsi	16
54.	209Y5A0412	Mekala Venkata Ramana	16
55.	199Y1A0460	Kakarla Sagar	15
56.	199Y1A0461	Kake Saibharath	18
57.	199Y1A0463	Kaluvala Sreevidya (W)	19
58.	199Y1A04G6	Tirupathi Naveen Kumar	17
59.	199Y1A04G7	Toguru Sivaji	12
60.	209Y5A0408	Karnati Mohan Vamsi	16
61.	209Y5A0410	Lakkireddy Niharika (W)	17
62.	209Y5A0411	Masulu Sharanya (W)	18

Coordinator

HOD

Professor & H.O.D.
Department of E.C.E.
K.S.R.M. College of Engineering
KADAPA - 516 003

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

VALUE ADDED /CERTIFICATE COURSE ON

"Applications of Remote Sensing & GIS"

07/04/2022 to 16/04/2022

ASSESSMENT TEST

Roll Number: _____ **Name of the Student:** _____

Time: 20 Min **(Objective Questions)** **Max.Marks: 20**

Note: Answer the following Questions and each question carries **one** mark.

1. Remote sensing techniques make use of the properties of _____ emitted, reflected or diffracted by the sensed objects: [ ]
   a) Electric waves b) Sound waves c) Electromagnetic waves d) Wind waves
2. The altitudinal distance of a geostationary satellite from the earth is about: [ ]
   a) 26,000 km b) 30,000 km c) 36,000 km d) 44,000 km
3. Which one of the following statements is correct? [ ]
   a) During the day, earth reflects solar radiation
   b) During the day, earth reflects both solar radiations the emission from its surface
   c) During the night, earth emits radiation from its surface
   d) All of these
4. Pick up the correct statement from the following: [ ]
   a) In remote sensing technique, the observation place, is called a platform
   b) Platforms may be either stationary or mobile
   c) Spatial resolution of the imaging system becomes poorer with increase of platform height
   d) All of these
5. GIS applications are _____ tools. [ ]
   a) Mobile b) Computer c) Machinery d) None of the above
6. GIS represents a location in _____ dimensional coordinates. [ ]
   a) 2 b) 3 c) 4 d) 5
7. GIS was coined in the year _____. [ ]
   a) 1986 b) 1968 c) 1982 d) 1990
8. The process of capturing satellite image is called _____. [ ]
   a) Orthophoto b) Ortho photograph c) Ortho image d) All the above

9. What is the first step of geoprocessing? [ ]
a) Processes b) Management c) Analyses information d) All the above

10. Earths location can be recorded in terms of _____ parameters. [ ]
a) Date b) Time c) Calendar d) Both a and b

11. Which one of the following helps to identify the objects on the earth surface? [ ]
a) Atmospheric window b) Signature c) Radiometric error d) None of these

12. For interpolation of satellite data used for monitoring dynamic changes that occurs on the earth surface, the most suitable orbit for the satellite is: [ ]
a) Circular orbit b) Sun-synchronous orbit c) Near polar orbit d) None of these

13. Which of the following surveys provided high accuracy with GPS derived positions? [ ]
a) Land b) Water c) Farm Areas d) None of above

14. According to the Snell's law if an electromagnetic wave is incident in a medium (refractive index n_1) on another medium (refractive index m_2): [ ]
a) The angle of incidence is equal to the angle of refraction
b) The angle of refraction (θr) is given by $\sin \theta_2 = (n_1/n_2) \sin \theta_i$
c) Both (a) and (b)
d) Neither (a) nor (b)

15. What is the function of airborne imagery? [ ]
a) Takes photographs from aircraft b) Observes aircraft c) Monitors data d) All the above

16. The code based GPS receivers are generally used for: [ ]
a) Vehicle tracking b) Land navigation c) Trans movement d) All of these

17. _____ is technology and science of obtaining reliable information regarding environment and physical objects. [ ]
a) Photo grammetry b) Image interpretation c) Both a and b d) None of the above

18. The arrangement of terrain features which provides attributes: the shape, size and texture of objects, is called: [ ]
a) Spectral variation b) Spatial variation c) Temporal variation d) None of the above

19. Leaf reflectance depends primarily on: [ ]
a) The pigments b) Internal cell structure c) Equivalent water content d) All of these

20. A bitmap image is represented as _____ grid. [ ]
a) Circular b) Rectangular c) Square d) All the above

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

VALUE ADDED /CERTIFICATE COURSE ON

"Applications of Remote Sensing & GIS"

07/04/2022 to 16/04/2022

ASSESSMENT TEST

19/20

Roll Number: 199Y1A04C4 **Name of the Student:** P. Sudha Koushik

Time: 20 Min **(Objective Questions)** **Max.Marks: 20**

Note: Answer the following Questions and each question carries **one** mark.

1. Remote sensing techniques make use of the properties of _____ emitted, reflected or diffracted by the sensed objects: [C]
   a) Electric waves b) Sound waves c) Electromagnetic waves d) Wind waves
2. The altitudinal distance of a geostationary satellite from the earth is about: [C]
   a) 26,000 km b) 30,000 km c) 36,000 km d) 44,000 km
3. Which one of the following statements is correct? [D]
   a) During the day, earth reflects solar radiation
   b) During the day, earth reflects both solar radiations the emission from its surface
   c) During the night, earth emits radiation from its surface
   d) All of these
4. Pick up the correct statement from the following: [D]
   a) In remote sensing technique, the observation place, is called a platform
   b) Platforms may be either stationary or mobile
   c) Spatial resolution of the imaging system becomes poorer with increase of platform height
   d) All of these
5. GIS applications are _____ tools. [B]
   a) Mobile b) Computer c) Machinery d) None of the above
6. GIS represents a location in _____ dimensional coordinates. [B]
   a) 2 b) 3 c) 4 d) 5
7. GIS was coined in the year _____. [B]
   a) 1986 b) 1968 c) 1982 d) 1990
8. The process of capturing satellite image is called _____. [C]
   a) Orthophoto b) Ortho photograph c) Ortho image d) All the above

9. What is the first step of geoprocessing? [A]
a) Processes b) Management c) Analyses information d) All the above

10. Earths location can be recorded in terms of _____ parameters. [D]
a) Date b) Time c) Calendar d) Both a and b

11. Which one of the following helps to identify the objects on the earth surface? [B]
a) Atmospheric window b) Signature c) Radiometric error d) None of these

12. For interpolation of satellite data used for monitoring dynamic changes that occurs on the earth surface, the most suitable orbit for the satellite is: [B]
a) Circular orbit b) Sun-synchronous orbit c) Near polar orbit d) None of these

13. Which of the following surveys provided high accuracy with GPS derived positions? [A]
a) Land b) Water c) Farm Areas d) None of above

14. According to the Snell's law if an electromagnetic wave is incident in a medium (refractive index n_1) on another medium (refractive index m_2): [B]
a) The angle of incidence is equal to the angle of refraction
b) The angle of refraction (θr) is given by $\sin \theta_2 = (n_1/n_2) \sin \theta_i$
c) Both (a) and (b)
d) Neither (a) nor (b)

15. What is the function of airborne imagery? [A]
a) Takes photographs from aircraft b) Observes aircraft c) Monitors data d) All the above

16. The code based GPS receivers are generally used for: [D]
a) Vehicle tracking b) Land navigation c) Trans movement d) All of these

17. _____ is technology and science of obtaining reliable information regarding environment and physical objects. [A]
a) Photo grammetry b) Image interpretation c) Both a and b d) None of the above

18. The arrangement of terrain features which provides attributes: the shape, size and texture of objects, is called: [B]
a) Spectral variation b) Spatial variation c) Temporal variation d) None of the above

19. Leaf reflectance depends primarily on: [D]
a) The pigments b) Internal cell structure c) Equivalent water content d) All of these

20. A bitmap image is represented as _____ grid. [B]
a) Circular b) Rectangular c) Square d) All the above

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

VALUE ADDED /CERTIFICATE COURSE ON

"Applications of Remote Sensing & GIS"

07/04/2022 to 16/04/2022

ASSESSMENT TEST

18/20

Roll Number: 209Y5A0411 **Name of the Student:** M. Sharanya

Time: 20 Min **(Objective Questions)** **Max.Marks: 20**

Note: Answer the following Questions and each question carries **one** mark.

1. Remote sensing techniques make use of the properties of _____ emitted, reflected or diffracted by the sensed objects: [C]
   a) Electric waves b) Sound waves c) Electromagnetic waves d) Wind waves
2. The altitudinal distance of a geostationary satellite from the earth is about: [B]
   a) 26,000 km b) 30,000 km c) 36,000 km d) 44,000 km
3. Which one of the following statements is correct? [d]
   a) During the day, earth reflects solar radiation
   b) During the day, earth reflects both solar radiations the emission from its surface
   c) During the night, earth emits radiation from its surface
   d) All of these
4. Pick up the correct statement from the following: [d]
   a) In remote sensing technique, the observation place, is called a platform
   b) Platforms may be either stationary or mobile
   c) Spatial resolution of the imaging system becomes poorer with increase of platform height
   d) All of these
5. GIS applications are _____ tools. [b]
   a) Mobile b) Computer c) Machinery d) None of the above
6. GIS represents a location in _____ dimensional coordinates. [b]
   a) 2 b) 3 c) 4 d) 5
7. GIS was coined in the year _____. [b]
   a) 1986 b) 1968 c) 1982 d) 1990
8. The process of capturing satellite image is called _____. [d]
   a) Orthophoto b) Ortho photograph c) Ortho image d) All the above

9. What is the first step of geoprocessing? [a]
a) Processes b) Management c) Analyses information d) All the above

10. Earths location can be recorded in terms of _____ parameters. [d]
a) Date b) Time c) Calendar d) Both a and b

11. Which one of the following helps to identify the objects on the earth surface? [b]
a) Atmospheric window b) Signature c) Radiometric error d) None of these

12. For interpolation of satellite data used for monitoring dynamic changes that occurs on the earth surface, the most suitable orbit for the satellite is: [b]
a) Circular orbit b) Sun-synchronous orbit c) Near polar orbit d) None of these

13. Which of the following surveys provided high accuracy with GPS derived positions? [a]
a) Land b) Water c) Farm Areas d) None of above

14. According to the Snell's law if an electromagnetic wave is incident in a medium (refractive index n_1) on another medium (refractive index m_2): [b]
a) The angle of incidence is equal to the angle of refraction
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c) Both (a) and (b)
d) Neither (a) nor (b)

15. What is the function of airborne imagery? [a]
a) Takes photographs from aircraft b) Observes aircraft c) Monitors data d) All the above

16. The code based GPS receivers are generally used for: [c]
a) Vehicle tracking b) Land navigation c) Trans movement d) All of these

17. _____ is technology and science of obtaining reliable information regarding environment and physical objects. [a]
a) Photo grammetry b) Image interpretation c) Both a and b d) None of the above

18. The arrangement of terrain features which provides attributes: the shape, size and texture of objects, is called: [b]
a) Spectral variation b) Spatial variation c) Temporal variation d) None of the above

19. Leaf reflectance depends primarily on: [d]
a) The pigments b) Internal cell structure c) Equivalent water content d) All of these

20. A bitmap image is represented as _____ grid. [b]
a) Circular b) Rectangular c) Square d) All the above

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

VALUE ADDED /CERTIFICATE COURSE ON

"Applications of Remote Sensing & GIS"

07/04/2022 to 16/04/2022

ASSESSMENT TEST

10/20

Roll Number: 19Q41A04L4 **Name of the Student:** B. Saideepak.

Time: 20 Min **(Objective Questions)** **Max.Marks: 20**

Note: Answer the following Questions and each question carries **one** mark.

1. Remote sensing techniques make use of the properties of _____ emitted, reflected or diffracted by the sensed objects: [C]
   a) Electric waves b) Sound waves c) Electromagnetic waves d) Wind waves
2. The altitudinal distance of a geostationary satellite from the earth is about: [b]
   a) 26,000 km b) 30,000 km c) 36,000 km d) 44,000 km
3. Which one of the following statements is correct? [d]
   a) During the day, earth reflects solar radiation
   b) During the day, earth reflects both solar radiations the emission from its surface
   c) During the night, earth emits radiation from its surface
   d) All of these
4. Pick up the correct statement from the following: [b]
   a) In remote sensing technique, the observation place, is called a platform
   b) Platforms may be either stationary or mobile
   c) Spatial resolution of the imaging system becomes poorer with increase of platform height
   d) All of these
5. GIS applications are _____ tools. [A]
   a) Mobile b) Computer c) Machinery d) None of the above
6. GIS represents a location in _____ dimensional coordinates. [b]
   a) 2 b) 3 c) 4 d) 5
7. GIS was coined in the year _____. [b]
   a) 1986 b) 1968 c) 1982 d) 1990
8. The process of capturing satellite image is called _____. [B]
   a) Orthophoto b) Ortho photograph c) Ortho image d) All the above

9. What is the first step of geoprocessing? [ ]
a) Processes b) Management c) Analyses information d) All the above

10. Earths location can be recorded in terms of _____ parameters. [ ]
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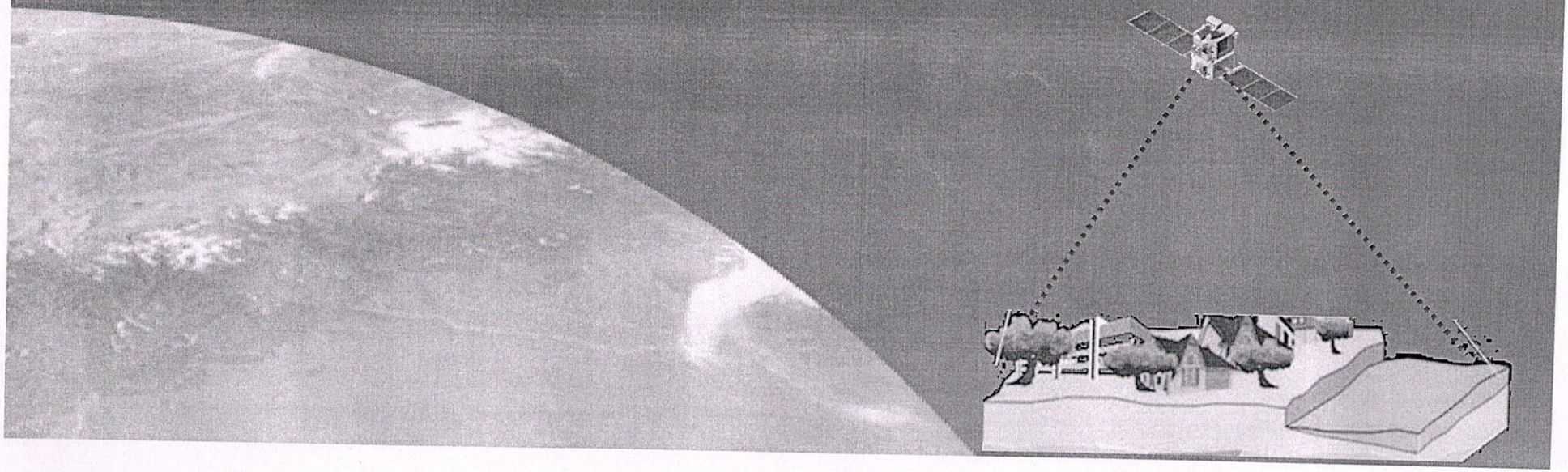
Applications of RS & GIS

Presented by

Dr. P. Giriprasad

Department of ECE

KSRM COLLEGE OF ENGINEERING, KADAPA



Remote sensing is…

the practice of deriving information about the Earth's land and water surfaces using images **acquired from an overhead perspective**, by employing **electromagnetic radiation** in one or more regions of the electromagnetic spectrum, **reflected or emitted** from the Earth's surface.

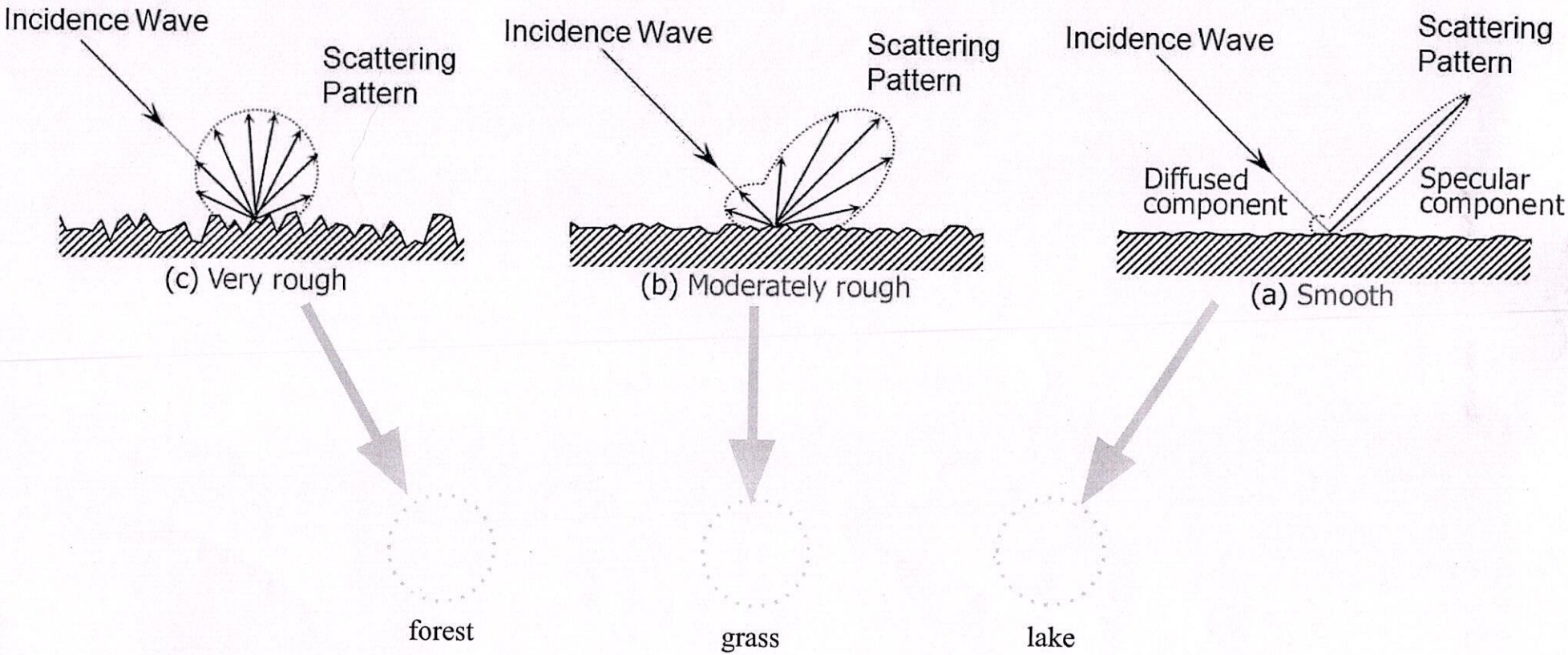
Campbell and Wynne
Introduction to Remote Sensing
p.6, 5th ed. (2011)

Mapping Vegetation with Synthetic Aperture Radar:

Thomas Ballatore, Ph.D., GISP
Director, Lake Basin Action Network
Faculty Aide, Center for Geographic Analysis, Harvard

ABCD-GIS Seminar Series
07 December 2016
K450 CGIS Knafel

Surface scatter (Reflection) mechanism



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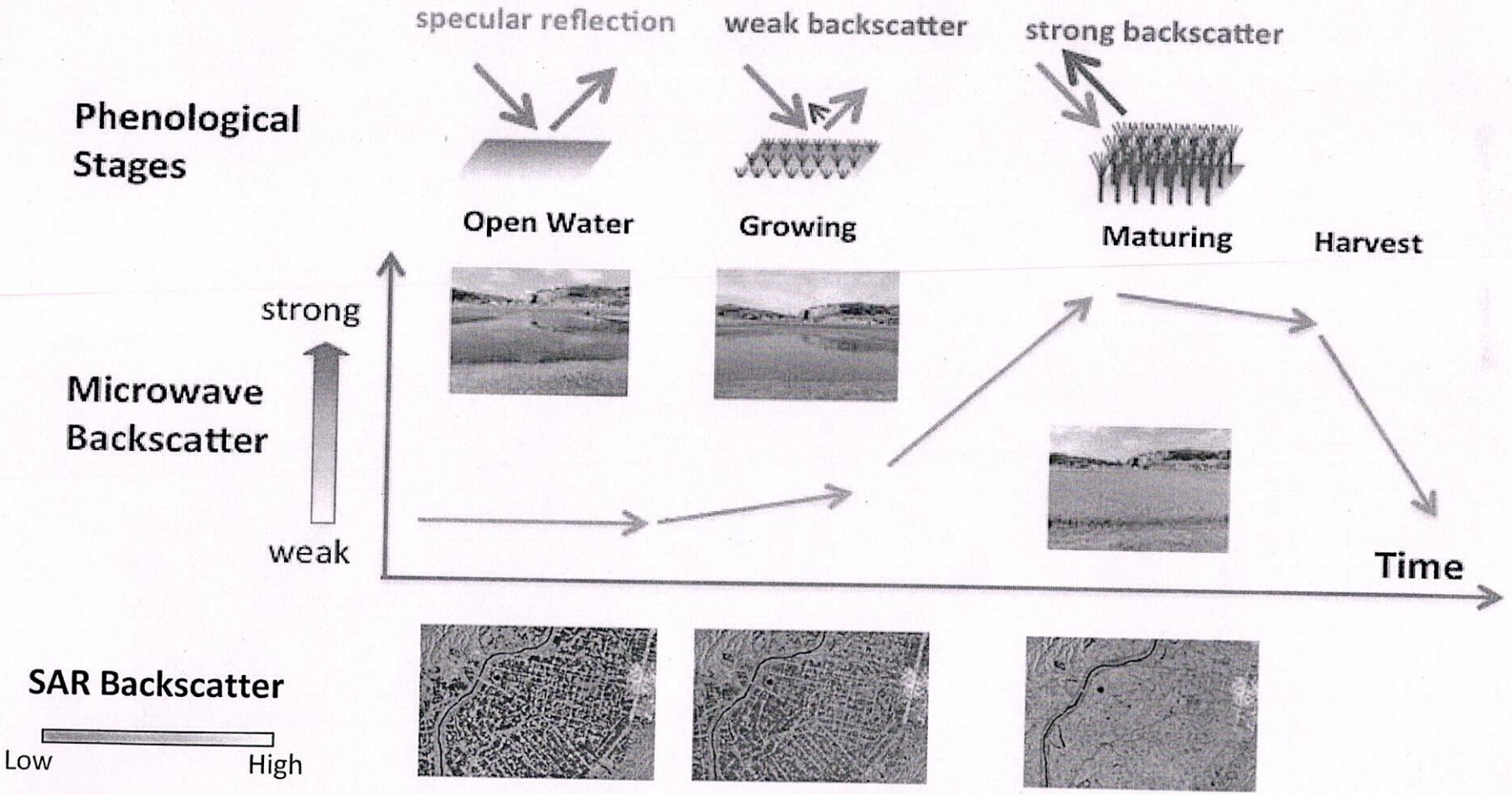
Seasonal change

Seasonal changes in microwave backscatter provide useful information to detect paddy field area.



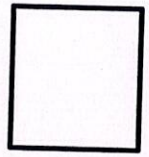
What is GIS ?

"A computer - assisted system for the capture, storage retrieval, analysis and display of spatial data, within a particular Organization". ***(Clarke, 1986)***

A GIS is a computer-based system that provides the following four sets of capabilities to handle geo-referenced data:

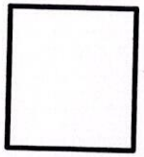
- ✓ **Input**
- ✓ **data management (data storage and retrieval)**
- ✓ **manipulation and analysis**
- ✓ **Output.**

(Aronoff, 1989)



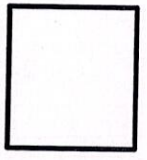
GIS Terminology:

- Geographical Information System
- Geographical Information Science
- Geoinformatics
- Geomatics
- Spatial information system
- Geospatial systems
- Geospatial information engineering
- Land information system

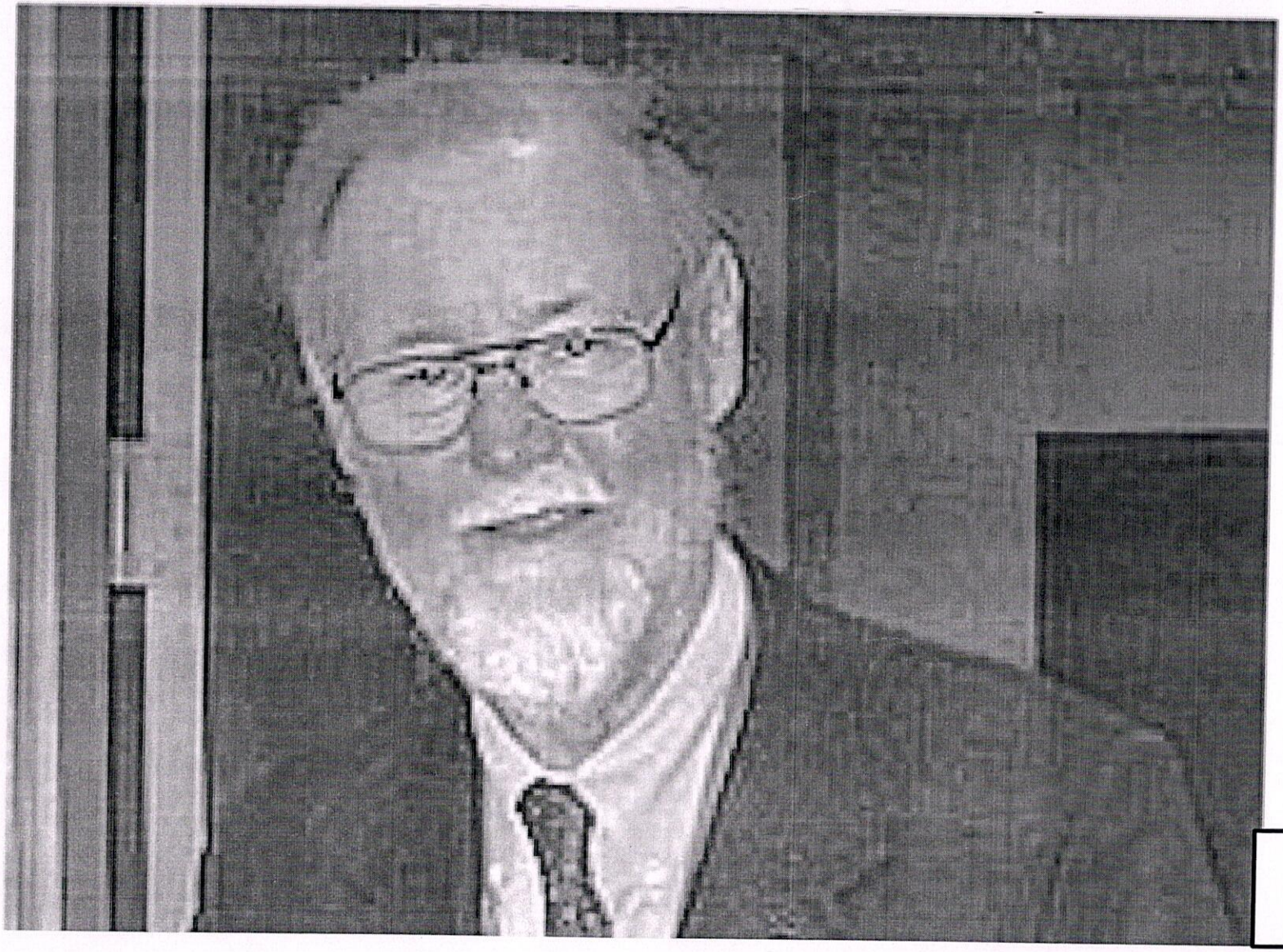


Types of GIS:

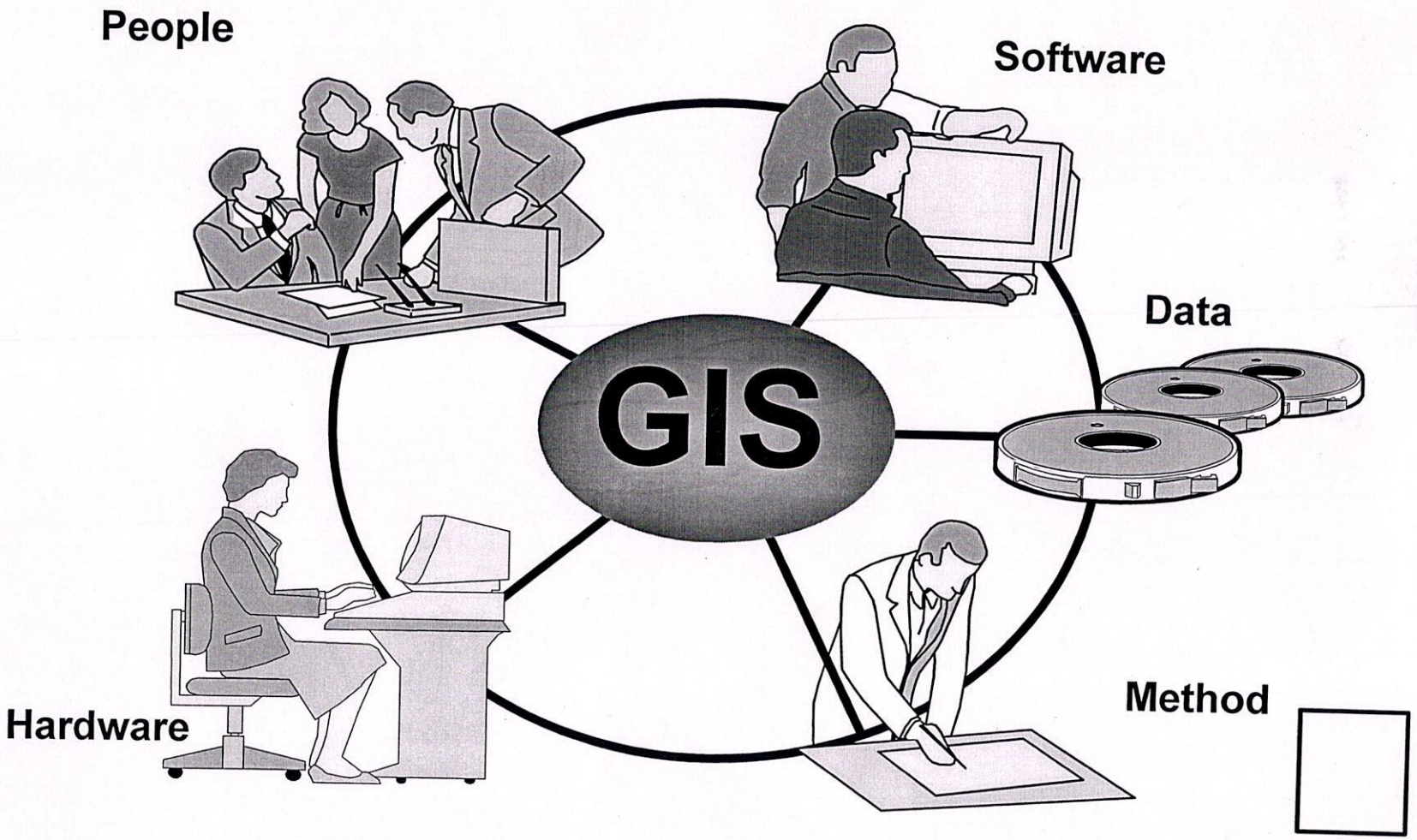
- ✓ Desktop GIS
- ✓ Professional GIS
- ✓ Enterprise GIS
- ✓ Mobile GIS
- ✓ Internet GIS
- ✓ Embedded GIS
- ✓ 4 D GIS
- ✓ Multimedia GIS



Father of GIS – *Rojar Tomlinson*



Elements of GIS:

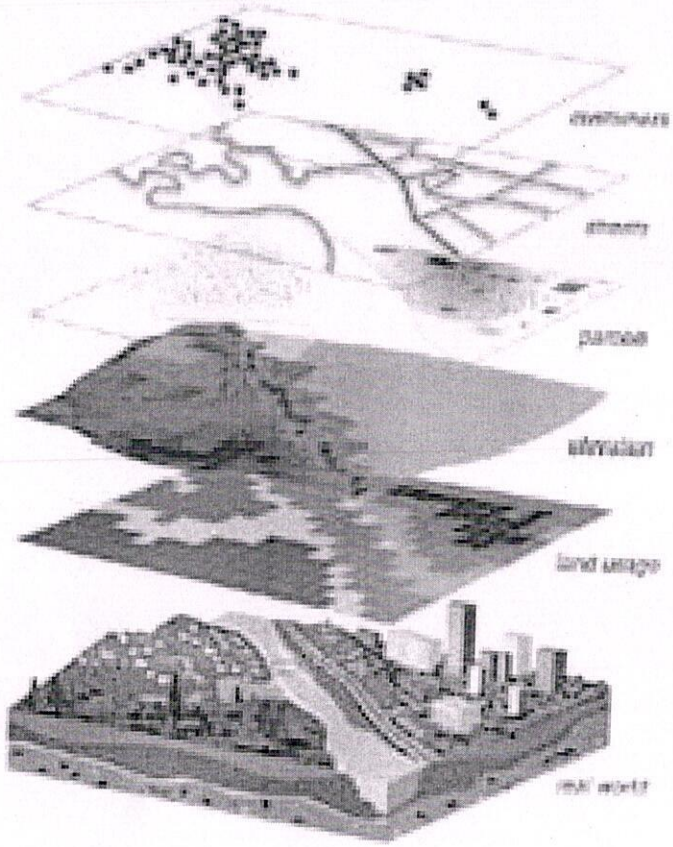


What GIS can do?

What GIS can do	Real world Problems
Identification	*Where ?*
Locate	*What is there?*
Trends	*What if ?*
Patterns	*What has changed ?*
Optimum path	*What relations exists between ?*
Models	*What is the best route?*

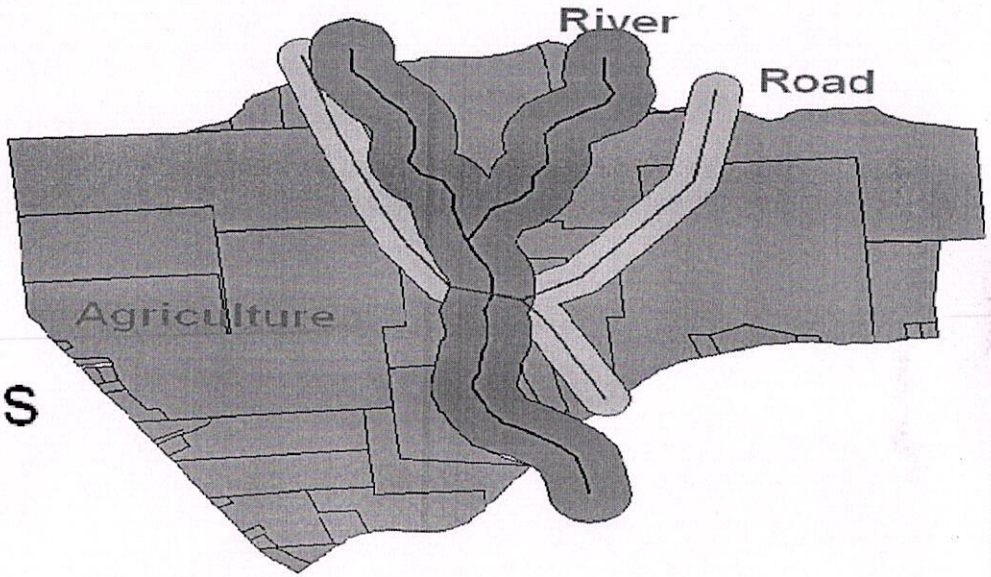
What Analysis GIS can do ?

- ✓ Simple Query
- ✓ Spatial Querying
- ✓ Single Layer Operation
- ✓ Multiple- Layer Operations
- ✓ Spatial Modeling
- ✓ Surface Analysis
- ✓ Network Analysis
- ✓ Point Pattern Analysis
- ✓ Grid Analysis



GIS Tasks

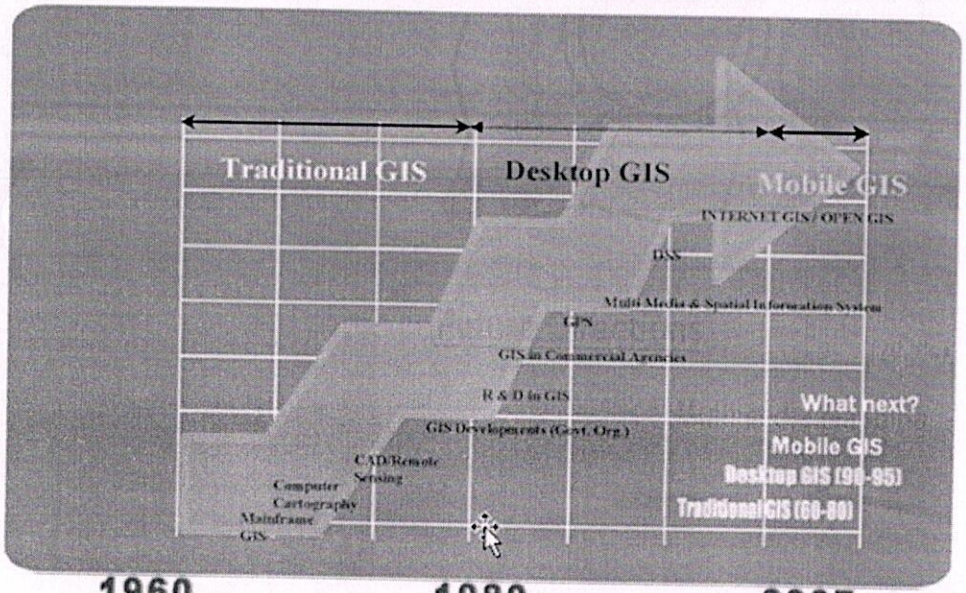
- Input
- Manipulation
- Management
- Query and analysis
- Visualization

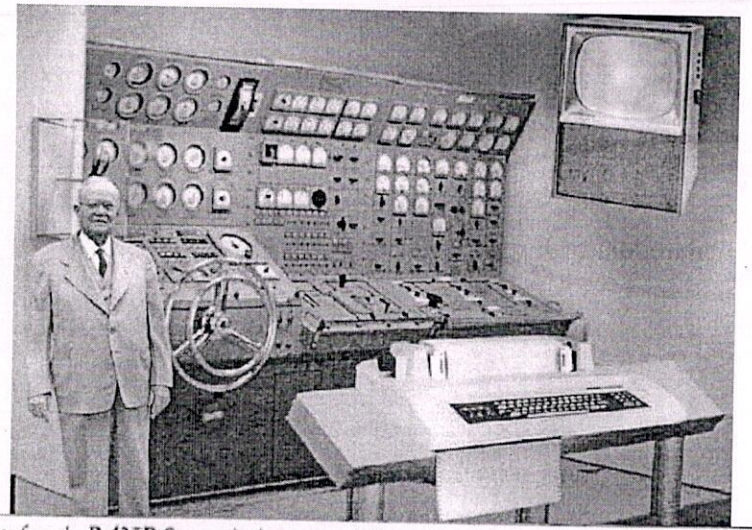


Why GIS ?

- ✓ Facilities faster process of operation.
- ✓Provides many real world problems with option of many scenarios.
- ✓Decision making tool with support of organized data.
- ✓Integrating technology.
- ✓Dynamic map display and interactive query
- ✓GIS is a powerful tool for handling spatial data.
- ✓In GIS, data are maintained in digital format.
- ✓In GIS, data are in more compact form then that of paper maps, tables etc.
- ✓Large quantities and types of data can be maintained retrieved at greater speed.
- ✓It has the ability to manipulate the spatial data and corresponding attributes information and to integrate different types of data in a single platform.

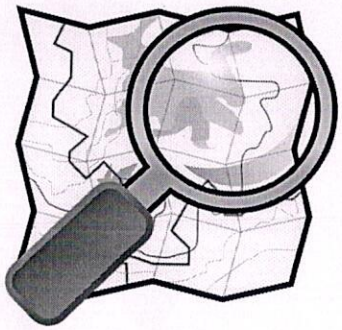
Trends in GIS

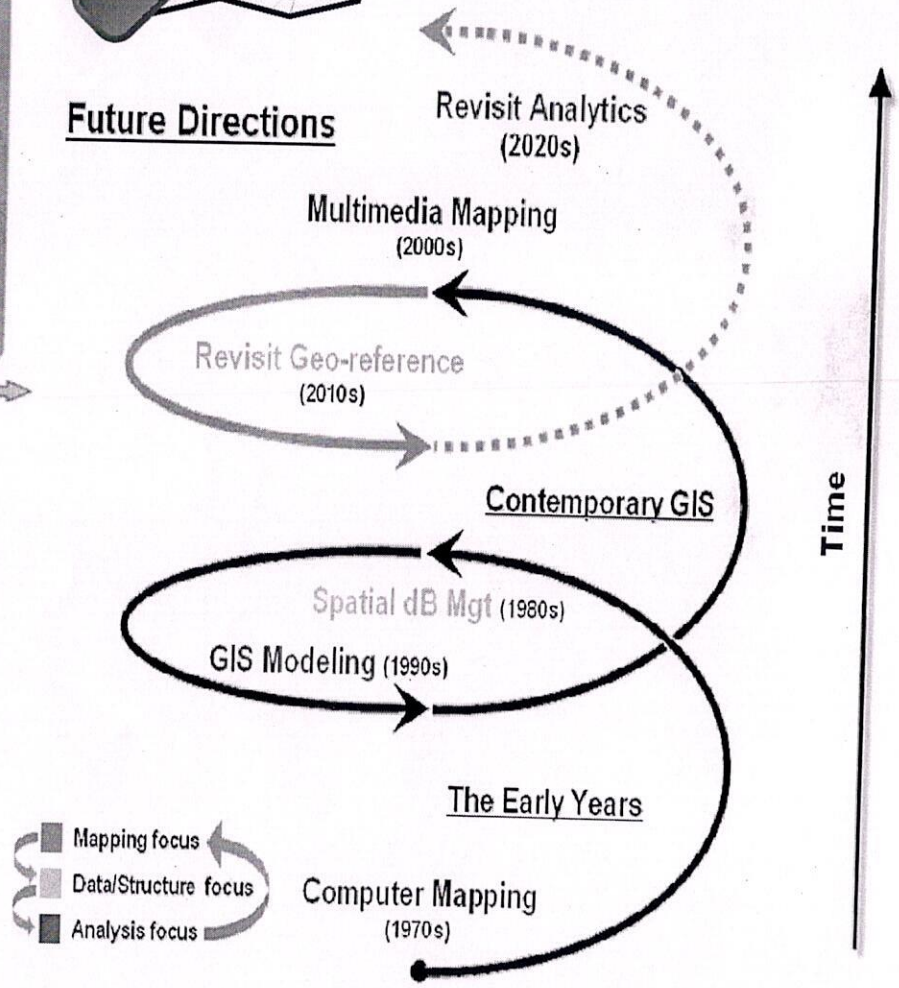




Scientists from the RAND Corporation have created this model to illustrate how a "home computer" could look like in the year 2004. However the needed technology will not be economically feasible for the average home. Also the scientists readily admit that the computer will require not yet invented technology to actually work, but 50 years from now scientific progress is expected to solve these problems. With teletype interface and the Fortran language, the computer will be easy to use.

Popular Mechanics, 1954





GIS Software

The most popular GIS software packages are:

- ESRI (ArcGIS, ArcView 3.0)
- MapInfo
- IDRISI
- Manifold
- Inter Graph Geo Media
- Small World
- GRASS
- MS MapPoint
- ERDAS Imagine
- ILWIS
- ER Mapper
- JTMaps (India)
- ENVI

Technologies that support GIS

- Remote Sensing
- Photogrammetry
- GPS (Global Positioning System)
- Digital cartography
- CAD
- Surveying, Mapping