

GOVERNMENT COLLEGE

VIDYANAGAR, KASARAGOD, KERALA, 671123

www.gck.ac.in

ADD ON COURSE ON BASIC GEOINFORMATICS AND Q-GIS





04994 256027

principalgcksd@gmail.com

www.gck.ac.in

Add on Course on

BASIC GEOINFORMATICS AND Q-GIS

<u>(2018-19)</u>

Duration: 30 hours Number of participant: 25

List of the students enrolled

SI No	Name of the student	Department
1	SRIHARI P	3 rd B Sc GEOLOGY
2	SHARATH RAJ E M	3 rd B Sc GEOLOGY
3	VARSHA VIJAYAN	3 rd B Sc GEOLOGY
4	ANUSREE K P	3 rd B Sc GEOLOGY
5	GOUTHAM R	3 rd B Sc GEOLOGY
6	JYOTHISH PREM P K	3 rd B Sc GEOLOGY
7	ASWANI K P	3 rd B Sc GEOLOGY
8	ASHITHA SOMARAJ NAIR	3 rd B Sc GEOLOGY
9	NIVEDITHA P	3 rd B Sc GEOLOGY
10	MALAVIKA B R	3 rd B Sc GEOLOGY
11	VRINDA P	3 rd B Sc GEOLOGY
12	JEESHNA NAGARAJAN	3 rd B Sc GEOLOGY
13	AKSH JOSHVA	3 rd B Sc GEOLOGY
14	ANASWAR V	3 rd B Sc GEOLOGY
15	ABHIJAN M K	3 rd B Sc GEOLOGY
17	JAYESH KUMAR B	3 rd B Sc GEOLOGY
18	NEETHU N	3 rd B Sc GEOLOGY
19	SHARANYA R K	3 rd B Sc GEOLOGY
20	ARCHANA KRISHNAN N	3 rd B Sc GEOLOGY
21	SRUTHI MAYYA	3 rd B Sc GEOLOGY
22	VINAY	3 rd B Sc GEOLOGY
23	VIPIN RAJ	3 rd B Sc GEOLOGY
NT COL	ARYA B K	3 rd B Sc GEOLOGY
25	SHATH NIDA	3 rd B Sc GEOLOGY

M A

Name and Signature of the Principal Dr.Ananthapadmanabha.A.L

EVERYMENT COLLEGE

ARAGOD



Curriculum

Objective: The add on course in Geoinformatics will be offered to the final year B.Sc. and M.Sc. Geology students to equip them to acquire a technical skill in using various spatial data analysis tools. Geoinformatics is an edge cutting technology in the field of spatial data analysis which has ample job opportunities in different sectors. At the end of the course an examination will be conducted. Marks obtained by the candidates in both practical and theory examinations will be considered for the final result. To pass the examination the candidate must secure at least 40% of aggregate marks both in theory and practical examinations. Certificate will be issued by the Department to the candidate who has been declared at the examination.

Course outcome :

- Enhance the employability in the field of geo informatics
- Skill development for the online GIS service

Module I

GIS – Basic concept and terminology. Spatial and non- spatial data. Vector and raster data. Concept of Datum and Different coordinate systems. Components of GIS – hardware and software. Proprietary and open source GIS (5 hrs)

Module II

Vector data collection and creating vector data files. Geo referencing. Attribute table creation and editing. Symbology and labeling. Spatial data input and editing.

(4 hrs)

Module - III

Spatial Analysis – Geo-statistical analysis - Proximity analysis (buffering) - Overlay analysis – density analysis -

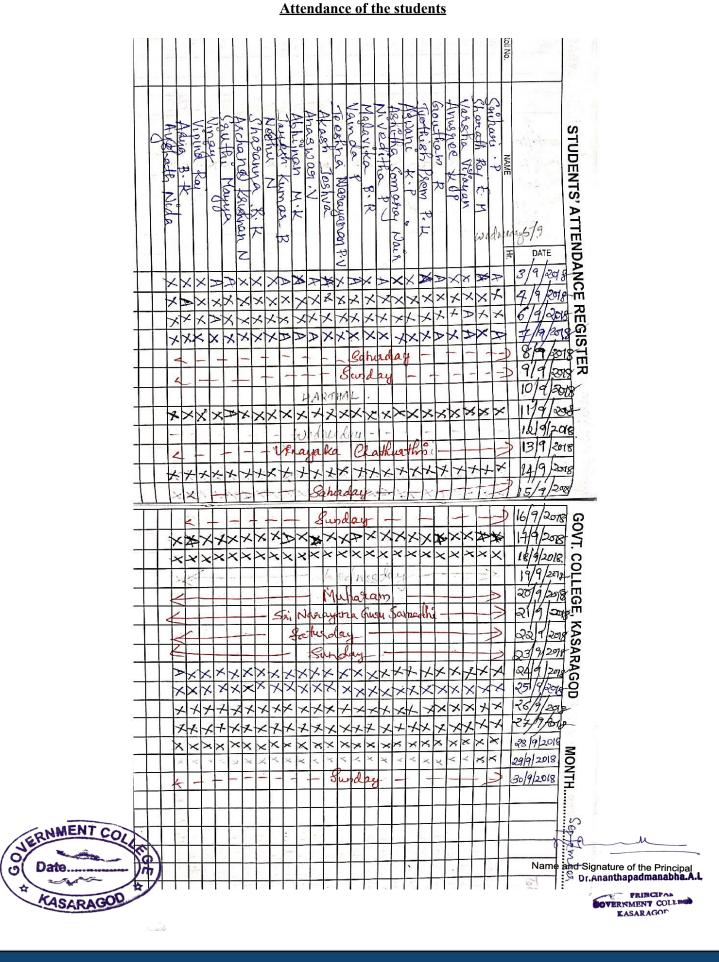
Network analysis - Multi-criteria analysis - Site suitability analysis - Nearest neighbor analysis -Thiessen polygons - Surface mapping - Interpolation (including TIN) - Digital elevation model (DEM) - Terrain reclassification – Slope, aspect, angle of incidence. - Visibility (view shed) analysis. (8 hrs)

Module IV

tware

Hand MENTICOP on use of various spatial analysis tools in Open source and commercial GIS







Supporting Document 1.2

Government College Kasaragod

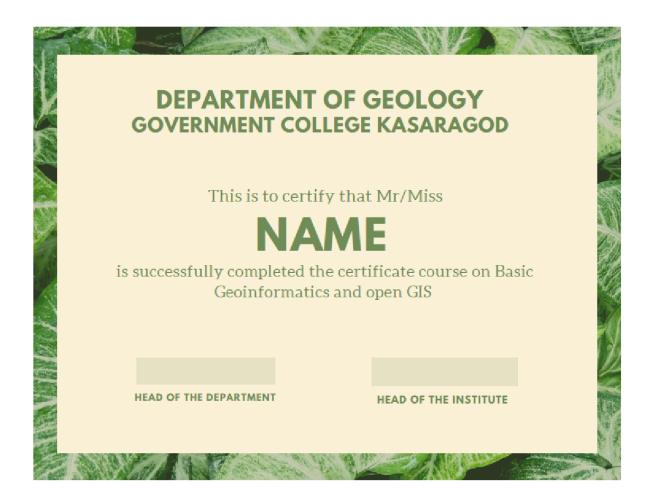
$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array} \\ \end{array} \\ \end{array} \\ \end{array} \\$
$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array} \\ \end{array} \\ \end{array}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array} \\ \end{array} \\ \end{array} \\$
$ \begin{array}{c} \begin{array}{c} & & & & & & & & & & & & & & & & & & &$
$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array} \\ \end{array} \\ \end{array}$
$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $
$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $
$\begin{array}{c} & & & & & & & & & & & & & & & & & & &$
$\begin{array}{c c} & & & & & & & & & & & & & & & & & & &$
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{c c c c c c c c c c c c c c c c c c c $
MARE I
MARE Image: State of the state
NAME F. 12 24 2 2 1 1 2 2 3 4 2 2 2 3 3 3
$ = 1 \\ 3 \\ 4 \\ 5 \\ 6 \\ 4 \\ 5 \\ 6 \\ 4 \\ 5 \\ 6 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7 \\ 7$
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
10/10 10







Model Certificate:





8 Λ

Name and Signature of the Principal Dr.Ananthapadmanabha.A.L

EOVERNMENT COLLEGE