Kisan Shikshan Sanstha Walwa

KRANTISINH NANA PATIL COLLEGE WALWA

DEPARTMENT OF GEOGRAPHY

SYLLABUS FOR VALUE ADDED COURSE B.A. GEOGRAPHY

Course Name: - Value Added Course on Introduction to OGIS Software

Course Code: VA-001

Introduction:

In recent years, geographic information systems (GIS) and mapping techniques have become very important for understanding issues related to research and practice in development, education, conservation, policy and related areas. GIS is a highly sought-after methodology that development and conservation practice is increasingly putting to use.

In this course, we help practitioners, educators, researchers and others in basic mapping and GIS skills by using an open-source GIS- platform called Quantum GIS which is openly available.

Objectives:

- 1. To determine the basics of the QGIS techniques.
- 2. To prepare a map or plan for a region/area of the interest.
- 3. To develop methods in the QGIS.
- 4. To develop employability skills and competencies to serve the job requirements in the field of GIS.

Course Outcomes:

- 1. Understand the different GIS Software.
- 2. Knowledge about the layout or drawing of the study area.
- 3. Understand the recent trends in the GIS.
- 4. Understand the new GIS techniques used with QGIS.

Course Guidelines and other details:

Title of the Course: Value Added Course on Introduction to QGIS Software

Course Coordinator: Dr. Krishnat Rajaram Jadhav (Mob. 992121610235)

Year of Implementation: Course syllabus will be implemented from academic year 2020-21.

Programme Duration & Hours: The Course will be conducted at the time of 5th semester of B.A. programme of Geography.

Theory and Practical Lectures: Total 30 hours.

Intake: The maximum intake for the Course will be 20 students.

Examination: 100 Marks (50 marks for Practical (40 Marks Practical + 10 Marks for Oral) and 50Marks for Theory Examination 25 MCQ Questions each Question have 2 Marks)

Title of the Course: Value Added Course on Introduction to QGIS Software

Syllabus

1) Introduction to GIS

5 Hours

- 1.1 Geographical Information System (GIS)
- 1.2 Definition and components

2.0 GIS Data Structure:

5 Hours

- 2.1 Types (spatial and non-spatial),
- 2.2 Raster and Vector data

3.3 Practical of QGIS Software

20 Hours

- 3.1 Georeferencing
- 3.2 Digitization: Point, Line, Polygon
- 3.3 Map Layout Preparation

References:

- 1) Lo C. P., Albert K. W. Yeung, (2011): Concepts and Techniques of Geographic Information Systems, PHI Learning Private Limited, New Delhi-110001.
- 2) Bygoot, J: An Introduction to Mapwork and Practical Geography, University Tutorial, 23. London 1964.
- 3) Khan MD. Zulfequar Ahmad: Text Book of Practical Geography, Concept Publishing Company, New Delhi, 1998
- 4) Mishra, R.P. and Ramesh A.: Fundamentals of Cartography, Concept Publishing Company, New Delhi, 2000
- 5) Monkhouse F.J. and Wilkison, H.R.: Maps and Diagrams, Mathuen. London, 1971.
- 6) Negi., Dr. Balbir Singh: Practical Geography, Kedar Nath Ram Nath, Meerut, Delhi.
- 7) Raisz, E.: Principals of Cartography, McGraw Hill Book Com., Inc, New York, 1962.
- 8) Robinson, A.H. and Sale, S.D.: Elements of Cartography, John Witey and Sons, Inc, New York, 1969.