

# One Week National Workshop on QGIS

(19<sup>th</sup>-25<sup>th</sup> August 2017)

## Concept Note

The socio-economic development of any country is based on their natural resources such as land, water and forest. With increasing population and the aggravated rate of resource utilization for various purposes our natural resource base is shrinking continuously day by day and the management of natural resources has become essential for sustainable future. Remote Sensing (RS) and Geographical Information System (GIS) techniques have become an important tool and technique for managing and monitoring natural resources. In the last few years, with the developments in the field of information technology, Remote Sensing and GIS has become exciting and glamorous tools with rapidly expanding opportunities. One of the basic reasons for its wider application is our concern to know more and more about our environment and the day to day natural and manmade events going on in the environment. Nowadays GIS is finding its place in business and commercial world and is the most effective means of advertising and marketing, sales, and the logistics of where to locate a business. In the fast changing world and costly technology, it is necessary for teaching institutes to use cost effective software's. But the high cost of the technology for acquiring geographical data has been the limiting factor which did not allow expansion of its use in India except in the projects which are financed by some funding agencies. Moreover, its use for individual research by teachers and students in absence of license, access to these technologies is highly restricted and maintenance cost is exorbitantly high. To keep the cost of studies lower and make the technology accessible to the target group there is a need to shift from propriety operating systems and software's to open source software. **UBUNTU** as an operating system and **Libreoffice and QGIS** as software's offer an option to switch over to save the cost and to increase the accessibility. The use of UBUNTU and QGIS allow access to large number of users (teaching faculties and researchers), who were deprived of the technology till now. This will not only lead to application of GIS and Remote Sensing technology in different fields of academia but also increase the temporal and spatial coverage of research work. The most important aspect is that it will allow students to use data provided by Indian satellites, which they were not able to use till now. Within this backdrop, the proposed

workshop will enable the participants to work on QGIS which is open source GIS software and can be installed in any GIS laboratory where not only teachers but students may learn its applications and start using it in a big way. The only cost to be managed will be of computers and laptops which is very commonly used by researchers and faculty members in educational institutions at personal level. This free access to QGIS will enable participants to understand, analyze and highlight the changes and challenges in land, people and resources in a more meaningful manner.

## **Aim and objectives of the workshop**

**Aim of this workshop is**

*“To develop professional skill in the participants to work on QGIS software”*

**Learning objectives of the workshop are following:**

- The participants will be familiar with the importance of spatial technology in day to day life.
- They will appreciate the role of remote sensing and GIS in managing urban affairs like planning and governance.
- They will develop the skills on different steps of working on QGIS like registering the map, digitizing the map, entering the data and attaching data to prepare the thematic map of their interest.
- On the basis of the exposure the participants will prepare a project work of their interest.

## **Outline of the Workshop**

**Day 1:** Registration of Participants, Inaugural session, Introduction of participants and expectation from the workshop, SWOT analysis, Introduction to Remote Sensing and GIS.

**Day 2:** Installation of QGIS, A brief overview of the Software followed by hands on practice and doubts clarification by Key Resource Person.

**Day 3:** Registration of map in QGIS, Digitization of map in QGIS followed by hands on practice and doubts clarification by Key Resource Person.

**Day 4:** Digitization in QGIS- Point, Line and Polygon, Data Entry and Data Attachment in QGIS, Preparation of Thematic Maps in QGIS with the help of Key Resource Person.

**Day 5:** Demonstration of works done in Varanasi through Remote Sensing and GIS

**Day 6 and 7:** Project work and online submission followed by valedictory session.

### **Participation criteria and deadline for application:**

Participation in the workshop is open for teachers and Research Scholars from natural sciences and social sciences. Seats are restricted to 40 and selection will be on first come first serve basis.

**Last date for receiving application is 10<sup>th</sup> July 2017 (5.00 pm).** Application form be sent on the email id [\*workshopmmvbhu@gmail.com\*](mailto:workshopmmvbhu@gmail.com)

### **Registration Fees:**

Rs.2500 (Rs. Two thousand five hundred only) per participant. Payment is to be made through online payment/Cheque/Demand Draft towards the workshop. Details of the Bank Account will be mailed to the selected candidates.

### **Food and Accommodation:**

The participants will be served working lunch and two times tea and biscuits out of registration fees. However the participants will have to make their own arrangement for breakfast, dinner and accommodation. Organising Committee may assist in searching accommodation in campus hostel (subject to availability) if requested by the participants in his/her application form (*Please contact Dr. Shailendra Kumar, Asstt. Professor (History of Arts) MMV, BHU 09415256164*).

**Workshop Venue:** Conference Hall, Mahila Mahavidyalaya, Banaras Hindu University, Varanasi.