

# **Solapur University, Solapur.**

## **Skill Development Center**

Name of course:       **Certificate course in Quantum GIS**

### **Curriculum of Certificate Course in Quantum GIS:**

Medium of the Course                       : English  
Duration of the Certificate Course       : 6 Months  
Eligibility                                     : 12<sup>th</sup> Passed & Admitted to B.A./B.Sc./ M.A./M.Sc

Project to be submitted at the end of Course.

Examination Pattern                       : Annual Examination Pattern  
Theory Paper (Duration -2 hrs)         : 50 Marks  
Practical (Duration – 3hrs)             : 30 Marks

Oral and Project                           : 20 Marks

Theory & Practical Examination will be held at the end of academic year and certificate will be issued by the affiliating University.

## **Syllabus**

### **Unit I- Overview of QGIS**

Introduction to QGIS,  
Objectives of QGIS,  
Working with Projections using QGIS

### **Unit II- Georeferencing & Digitization**

Georeferencing of Toposheet /Map,  
Vectorization or digitization of Toposheet /Map- point, Line and polygon

### **Unit III- Map Preparation and Composition using QGIS**

Data processing,  
Map Preparation and composition,  
Symbolology in of QGIS,  
Data Exploration and  
Working with Tables(Join Tables)

### **Unit IV- Data Query**

Spatial Querying,  
Data Query (Attribute Querying),

### **Unit V- Working with Google Earth Using QGIS**

To introduce the Google Earth, Bing, Yahoo and Open street maps using Quantum GIS, Introduction of Bhuvan etc.

**Books :**

1. Basudeb Bhatta, (2011), Remote Sensing and GIS (Second Edition), Oxford University Press.
2. S.M. Rashid, (1993): Remote Sensing in Geography, Manak Publication, Pvt. Ltd. Delhi.
3. Online Resources

**Question Paper Nature  
Certificate course in Quantum GIS**

**Time: 2 hr**

**Total Marks: 50**

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- Q. 1. Choose the **most correct** alternative for the following and rewrite the sentence. 10  
1) -----  
a)                      b)                      c)                      d)
- 2)  
3)  
4)  
5)  
6)  
7)  
8)  
9)  
10)
- Q. 2. Answer **any five** of the followings. 10  
i)  
ii)  
iii)  
iv)  
v)  
vi)
- Q. 3. A) Answer **any two** of the followings. 08  
i)  
ii)  
iii)
- Q. 4. Answer **any two** of the following. 10  
i)  
ii)  
iii)
- Q. 5. Write short note/problem/solve/draw and discuss neat diagram **any two** of the following. 12  
i)  
ii)  
iii)