# **Course name: Recent Trends in Geoinformatics Part-I**

Course code: GIS-507/DGIS-507

# **Unit schedule**

## **Block 1: Cloud computing**

# Unit1: cloud computing basics (saas, paas, laas) like arc GIS cloud

- 1.1 Objectives
- **1.2** Introduction
- 1.3 Cloud computing basics (saas, paas, laas) like arc GIS cloud
- 1.4Summary
- **1.5**Glossary
- **1.6**Answer to check your progress
- 1.7References
- **1.8**Terminal questions

## Unit 2 Create a geo explorer web map

- **2.1** Objectives
- **2.2** Introduction
- 2.3 Create a geo explorer web map
- 2.4 Summary
- **2.5** Glossary
- **2.6** Answer to check your progress
- **2.7** References
- **2.8** Terminal questions

## Unit3: Cloud based databases and web editing

- **3.1** Objectives
- **3.2** Introduction
- 3.3 Cloud based databases and web editing
- **3.4** Summary
- **3.5** Glossary
- **3.6** Answer to check your progress
- **3.7** References
- **3.8** Terminal questions

#### Block 2: 3D GIS

#### **Unit4:3D GIS technology**

- **4.1**Objectives
- **4.2**Introduction
- **4.3**3D GIS technology
- 4.4Summary

- 4.5Glossary
- **4.6**Answer to check your progress
- **4.7**References
- 4.8Terminal questions

# **Unit5: Modeling in 3d GIS**

- **5.1**Objectives
- **5.2**Introduction
- **5.3**Modeling in 3d GIS
- **5.4**Summary
- **5.5**Glossary
- **5.6**Answer to check your progress
- **5.7**References
- **5.8**Terminal questions

#### **Unit6: Future vision of 3d GIS**

- **6.1**Objectives
- **6.2**Introduction
- **6.3**Future vision of 3d GIS
- **6.4**Summary
- **6.5**Glossary
- **6.6** Answer to check your progress
- **6.7R**eferences
- **6.8**Terminal questions

#### **Block 3: RS based geodetics surveys**

## **Unit 7-Concept of Geodesy**

- 7.10bjectives
- 7.2Introduction
- 7.3Concept of geodesy
- 7.4Summary
- 7.5Glossary
- 7.6Answer to check your progress
- 7.7References
- 7.8Terminal questions

## Unit 8 – Near field and far field geodetic surveys

- 8.10bjectives
- 8.2Introduction
- 8.3Near field and far field geodetic surveys
- 8.4Summary

- 8.5Glossary
- 8.6Answer to check your progress
- 8.7References
- 8.8Terminal questions

## Unit 9 - Optical theodolites and measurement of angles

- 9.10bjectives
- 9.2Introduction
- 9.3Optical theodolites, measurement of angles
- 9.4Summary
- 9.5Glossary
- 9.6Answer to check your progress
- 9.7References
- 9.8Terminal questions

#### Unit 10 - Direct and reverse geodetic problem, theodolite moves and horizontal picture

- 10.1 Objectives
- 10.2 Introduction
- 10.3 Direct and reverse geodetic problem, theodolitic moves & horizontal picture
- 10.4 Summary
- 10.5 Glossary
- 10.6 Answer to check your progress
- 10.7 References
- 10.8 Terminal questions

#### Block 4: GPS based RS surveys application potential of GPS

#### Unit 11 – Fundamentals of global positioning system

- 11.1 Objectives
- 11.2 Introduction
- 11.3 Fundamentals of global positioning system
- 11.4 Summary
- 11.5 Glossary
- 11.6 Answer to check your progress
- 11.7 References
- 11.8 Terminal questions

#### Unit 12 - Components / segments of global positioning system

- 12.1 Objectives
- 12.2 Introduction
- 12.3 Components / segments of global positioning system

- 12.4 Summary
- 12.5 Glossary
- 12.6 Answer to check your progress
- 12.7 References
- 12.8 Terminal questions

# **Unit 13 - Coordinate system**

- 13.1 Objectives
- 13.2 Introduction
- 13.3 Coordinate system
- 13.4 Summary
- 13.5 Glossary
- 13.6 Answer to check your progress
- 13.7 References
- 13.8 Terminal questions