III.

# [EPGEO403A]:

**CBCS CURRICULUM** 

Marks: 30 (ESE: 20 Viva + 5Attd. + 5 Record) + 70 (ESE Pr: 6Hrs)=100

Instruction to Question Setter:

End Semester Practical Examination (ESE Pr):

**GE/DC PRACTICAL** 

The questions in practical examination will be of equal to 70 marks and will be so framed that the students are able to answer them within the stipulated time. 20 marks will be awarded on the performance in viva voce whereas 10 marks will be awarded on cumulative assessment which is further subdivided as 5 marks for Practical record and 5 marks for Attendance.

Note:

(Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).

#### SOIL GEOGRAPHY & HYDROLOGY PRACTICAL A.

#### **Practical: 60Hrs**

Unit 1:

Land capability, Agricultural Efficiency, Cropping Intensity. Crop Combination.

Unit 2:

Study of Soil P<sub>H</sub> Value, Nitrogen Content, Phosphorous and Construction of Soil Profiles.

Unit 3:

Stream Ordering, Drainage Density, Drainage Texture, Thalweg, Channel Profiles, Hypsometric Curve, Area-height Diagram.

Unit: 4

Water Budget, Rainfall Dispersion Diagram, Ergo graph, Climatograph.

(Credits: Practical-05)

Pass Marks =45

Session 2018-20 Onwards

# OR

# **GE/DC PRACTICAL** [EPGEO403B]:

Marks: 30 (ESE: 20 Viva + 5Attd. + 5 Record) + 70 (ESE Pr: 6Hrs)=100

Pass Marks =45

(Credits: Practical-05)

#### Instruction to Question Setter:

End Semester Practical Examination (ESE Pr):

The questions in practical examination will be of equal to 70 marks and will be so framed that the students are able to answer them within the stipulated time. 20 marks will be awarded on the performance in viva voce whereas 10 marks will be awarded on cumulative assessment which is further subdivided as 5 marks for Practical record and 5 marks for Attendance.

Note:

(Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks ).

# B. URBAN GEOG. & REG. PLANNING PRACTICAL

**Practical: 60Hrs** 

### Unit 1:

Spherical Diagram, Isopleth, Volumetric or Sten de Geer's method, Traffic Flow Diagram.

### **Unit 2:**

Distribution Maps: Uninhibited village in Jharkhand, Industrial Concentration Map, Regional Pattern of Urbanisation, Regional Pattern of Agricultural Labourers in Jharkhand.

#### Unit:

Delimitation of Planning Regions, Proposing Growth Foci.

# Unit 4:

Planning of Satellite Town, Planning of Garden Town, Planning Resource Association Regions.

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# OR GE/DC PRACTICAL [EPGEO403C]:

(Credits: Practical-05)

Marks: 30 (ESE: 20 Viva + 5Attd. + 5 Record) + 70 (ESE Pr: 6Hrs)=100

Pass Marks =45

# Instruction to Question Setter:

# End Semester Practical Examination (ESE Pr):

The questions in practical examination will be of equal to 70 marks and will be so framed that the students are able to answer them within the stipulated time. 20 marks will be awarded on the performance in viva voce whereas 10 marks will be awarded on cumulative assessment which is further subdivided as 5 marks for Practical record and 5 marks for Attendance.

Note:

(Attendance Upto75%, 1mark; 75<Attd.<80, 2 marks; 80<Attd.<85, 3 marks; 85<Attd.<90, 4 marks; 90<Attd, 5 marks).

# C. REMOTE SENSING & GIS/GPS PRACTICAL

### **Practical: 60Hrs**

# Unit 1:

Image analysis: Principles of visual image interpretation, recognition elements and interpretation keys for visual interpretation (Shape, size, colour, tone, texture, association), Interpretation of Satellite Image (Landsat, LISS III, LISS IV, Cartosat etc.)

# Unit 2:

Photographs Identification of Spatial Data: point, line and Polygon Features, Representation of Spatial Features: Raster and Vector Data Model, Data Structure, Overlay analysis, Change Analysis and Buffer Analysis.

# Unit 3:

Introduction GIS Software, Geo-referencing and Projection Spatial data entry, editing, query building and executing, Topology creation and linking spatial and non spatial data, Spatial data visualization and output Map Generation.

# Unit 4:

Introduction to GPS, Finding latitude, longitude and altitude, Tracking in GPS, Routing in GPS.

# **References:**

- Peter A. Burrough and Rachael A. McDonnell (1998) Principles of Geographic Information systems, Oxford University Press, New York.
- Aronoff S. (1989) Geographic Information System, A Management Perspective, WDL Publications, Ottawa, Canada
- □ Ian Heywood, Sarah Cornelius, Steve Carver (2003), An Introduction to Geographic Information System, Pearson Education Ltd., India.
- Chrisman N.R. (1997) Exploring Geographic Information System, Wiley, New York.
- www.gisdevelopment.net/tutorials/human008.html
- www.gisloungue.com/remotesening.html