No. of Printed Pages: 3 MGYL-104(Set-I)

## POST GRADUATE DIPLOMA IN GEOINFORMATICS/M. SC. (GEOINFORMATICS) (PGDGI/MSCGI) Term-End Practical Examination December, 2024

MGYL-104(Set-I): GEOINFORMATICS

LABORATORY

Time: 3 Hours Maximum Marks: 30

Note: (i) All questions are compulsory. Marks are indicated against each question.

- (ii) Evaluation is done under 3 parameters(i.e. performance, result/output and viva-voce).
- (iii) The data to be used in the examination is provided by the centre in the computer allotted to you.

- (iv) The data to be used in the examination are in the folders named as A, B, C, ...., which are mentioned in the question paper as (A), (B), (C), ...., respectively.
- (v) Incomplete and illegible results/outputs will not be evaluated.
- 1. Perform the tasks mentioned here and submit the results/outputs:
  - (a) Perform layer stacking operation on the given dataset (B). Create a NDVI image from the dataset (B). Prepare a map showing the false colour composite and the NDVI (in pseudocolour, with low to high values represented in blue to red colours) with appropriate map elements. 2+2+4
  - (b) From the FCC created at 1(a), digitise at least two polygons of five landuse land cover classes and prepare a map showing the digitized features.
  - (c) Per form georeferencing of the given data (D).

- (d) Prepare visual image interpretation keys for the five landuse land cover classes that can be mapped in the standard false colour composite.
- (e) Perform complex attribute query operation on the given data (C) and generate a map showing the places with population greater than 1,50,000 in India.

(Hint: Population information is available in the field 'POP-Max'). 2+2

- (f) Extract contours of 150 m interval from the given data (A).
- 2. Viva-voce. 5