

Course outline

How does an NPTEL online course work?

Week Zero: Assignment Zero

Week 01

Week 02

Week 03

Week 04

week 05

week 06

week 07

week 08

week 09

● How to assess quality of a DEM?

● Integration of DEMs with satellite data

● Demonstration through GIS software

● Common derivatives of DEMs - Slope and aspect-01

● Common derivatives of DEMs - Slope and aspect-02

○ Quiz : Assignment 9

● Solution for week 09

Week 10

week 11

week 12

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Assignment 9

The due date for submitting this assignment has passed.

Due on 2021-03-24, 23:59 IST.

As per our records you have not submitted this assignment.

1) A DEM is a raster representation of a surface?

1 point

- Discrete
 Continuous
 Triangulated
 Quadtree

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 Continuous

2) Hillshading may be created using a DEM to simulate?

1 point

- Slope
 Aspect
 Watershed
 Relief

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 Relief

3) Grid (DEM) cell values can be:

1 point

- Only integer numbers
 Only real (floating) numbers
 Only positive integer numbers
 Both positive and negative integer or real (floating) numbers

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 Both positive and negative integer or real (floating) numbers

4) DEMs are commonly built using data collected using remote sensing techniques, but they may also be built from land surveying:

1 point

- False
 True

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 True

5) DEMs are used often in geographic information systems, and are the most common basis for digitally produced:

1 point

- Relief maps
 Pollution maps
 Population maps
 None of the above

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 Relief maps

6) Most of the terrain data providers (e.g. USGS, ERSDAC, CGIAR, ISRO-NRSA) use the term?

1 point

- DSM
 DTM
 DEM
 DES

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 DEM

7) All datasets which are captured with satellites, airplanes or other flying platforms are originally:

1 point

- DTMs
 DEMs
 DSMs
 None of the above

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 DSMs

8) DEMs can be generated through number of ways, however most preferred method of generating DEMs is:

1 point

- Contours
 Remote sensing based
 Aerial photographs
 None of the above

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 Remote sensing based

9) Spatial interpolation is the observation that points close together in space are more likely to have Values than points far apart:

1 point

- Different
 Inverse
 Similar
 None of the above

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 Similar

10) Spatial Interpolation techniques:

1 point

- Turns raw data into useful information by adding greater informative content and value
 Reveals patterns, trends, and anomalies that might otherwise be missed
 Provides a check on human intuition
 All of the above

 No, the answer is incorrect.
 Score: 0

 Accepted Answers:
 All of the above