

APJ ABDULKALAM TECHNOLOGICAL UNIVERSITY

08 PALAKKAD CLUSTER

Q.P.CODE:-TD2181

(Pages 2)



Name:

Reg No:

SECOND SEMESTER DEGREE EXAMINATION APRIL 2018

CIVIL (Transportation Engineering)

08CE6214 GIS AND ITS APPLICATIONS IN TRANSPORTATION ENGINEERING

Time: 3 hours

Max. marks: 60

Answer all six questions. Part 'a' of each question is compulsory.

Answer either part 'b' or part 'c' of each question

Module 1

1.a Which are the different applications of GIS **3**

Answer b or c

b. Which are the differences between vector data and raster data **6**

c. Explain the different types of Cylindrical projections with neat sketches **6**

Module 2

2.a Which are the different topology rules **3**

Answer b or c

b. Write a note on different types of Raster data models **6**

c. Explain Vector data model. **6**

Module 3

3.a What do you mean by the terms accuracy, precision, and uncertainty? **3**

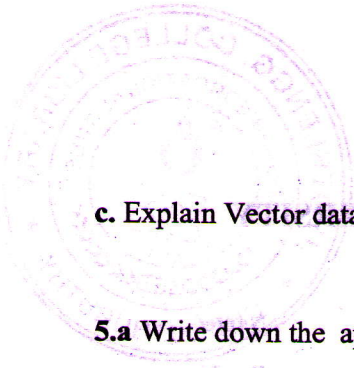
b. Which are the various sources of errors, and how to assessment of GIS data quality **6**

c. Explain different resampling methods **6**

Module 4

4.a What do you mean by the terms (i) Slivers (ii) Pattern analysis **3**

b. Explain spatial data and attribute data queries in GIS **6**



c. Explain Vector data analysis 6

Module 5

5.a Write down the applications of GIS in location of transport terminals and roadside facilities 4

b. Explain applications of Aerial and Satellite imageries in transportation engineering 8

c. Explain Intelligent information system for road accessibility study 8

Module 6

6.a Which are the different application of GIS in utility management 4

b. Explain GIS based Highway alignment, GIS based road network planning 8

c. Explain GIS applications in environment impact assessment and environment monitoring 8