JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION-2022

B.Tech-VII Semester (CS/IT/ECE/Civil/BT)

COURSE CODE (CREDITS): 22B1WCE731 (3)   MAX. MARKS: 35

COURSE NAME: REMOTE SENSING AND GEOMATICS

COURSE INSTRUCTORS: AKASH BHARDWAJ   MAX. TIME: 2 Hours

Note: All questions are compulsory. Marks are indicated against each question in square brackets.

Q1. (a) What are the various types of spatial operations in vector analysis? Explain syntax logical operators used in GIS with example.   [3 marks, CO 3]

(b) What is tessellation? Differentiate between continuous and discreet field with example.

[3 marks, CO 3]

Q2. Differentiate between supervised and unsupervised classification of image in GIS. What is GIS? Explain the various components of GIS.   [5 marks, CO 2]

Q3. Explain the segments of GPS. Write the factors which affect GPS. Explain any one.

[5 marks, CO 2]

Q4. (a) Define shadow and association in context with image interpretation.   [2 marks, CO 3]

(b) Differentiate between azimuth and range in SAR raw data. Why SAR is side looking? Explain.   [3 marks, CO 3]

Q5. Explain dropped lines and platform velocity errors in remote sensing. What is the significance of spectral signature? Explain it in context with water.   [5 marks, CO 1]

Q6. (a) What is radiometric enhancement? Explain ground control points with example.

[2 marks, CO 1]

(b) Write full form of BIL and FCC in digital image.   [2 marks, CO 1]

Q7. (a) Define multispectral photography. Draw a neat and clean figure showing fiducial marks and principal point in an image.   [2 marks, CO 1]

(b) Differentiate between imaging sensors and non imaging sensors.   [3 marks, CO 2]

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