

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -3 EXAMINATION- 2024

B.Tech-VIII Semester

COURSE CODE (CREDITS): 22B1WCE731 (3)

MAX. MARKS: 35

COURSE NAME: REMOTE SENSING AND GEOMATICS

COURSE INSTRUCTORS: AKASH BHARDWAJ

MAX. TIME: 2 Hours

Note: (a) All questions are compulsory.

(b) Marks are indicated against each question in square brackets.

(c) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q1. (a) Write short notes on shape file in GIS. (2 marks) [CO 2]

(b) What are photograph overlaps? Explain its types. (3 marks) [CO 2]

Q2. (a) Explain all modes in SAR used for capturing data. (3 marks) [CO 3]

(b) Define pitch and dropped lines in context with remote sensing. (2 marks) [CO 3]

Q3. (a) What is Tessellation? Explain Quad tree tessellation. (3 marks) [CO 1,3]

(b) Calculate range resolution in microwave remote sensing for pulse bandwidth 150 MHz. (3 marks) [CO 3]

Q4. (a) How dielectric constant properties of a material effect the backscatter in microwave remote sensing? Explain. (4 marks) [CO 3]

(b) Explain spectral reflectance curve for water. (3 marks) [CO 1,2]

Q5. (a) Write about the features of GPS – how it started and what essentials are needed to make it work. Explain the segments of GPS. (5 marks) [CO 3]

(b) Explain GIS and its components. What are the various applications of GIS? (4 marks) [CO 2]

(c) Define field in spatial data models. Explain its types with example. (3 marks) [CO 3]
