JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2026

B.Tech-VII Semester

COURSE CODE (CREDITS): 22B1WCE731 (3) MAX. MARKS: 15

COURSE NAME: Remote Sensing and Geomatics

COURSE INSTRUCTOR: Akash Bhardwaj MAX. TIME: 1 Hour

Note: (a) All questions are compulsory.

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

(c) Use of calculator is not allowed.

Q.No	Question	CO	Marks
Q1	Explain the principle of detection and discrimination of objects in remote sensing.	1	2
Q2	Explain principal point and conjugate principal points. Also discuss how principal point and conjugate principal points are related in an aerial photograph. Support your answer with a neat sketch.	1	3
Q3	A sensor has high spatial resolution but low spectral resolution. Explain what this means and discuss one situation where such a sensor may be useful.	1	2
Q4	A forest monitoring project requires repeated observations over a large region and discrimination of different vegetation conditions. What sensor characteristics would you prioritize and why? Justify your answer.	2	2
Q5	What is meant by forward overlap and side overlap in aerial photography? Explain their importance in stereo photogrammetry using a suitable diagram.	2	3
Q6	Explain Mie scattering with suitable example.	1	1
Q7	An urban study requires frequent observations at nearly the same local solar time. Which type of satellite orbit would be most appropriate? Justify your answer.	2	2

JUIT EXAM DEC-2025

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