

R09

Code No: 56096

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, May - 2019

MINE SURVEYING-II

(Mining Engineering)

Time: 3 hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

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1. An observation with a percentage theodolite gave staff readings to 1.052m and 2.052 m for angles of elevation of 5% and 6% respectively. On sighting the graduation corresponding to the height of the instrument axis above the ground, the vertical angle was 5.25%. Compute the horizontal distance and the elevation of the staff station if the instrument station has an elevation of 942.552m. [15]
2. Explain the method of setting out a curve when the Point of Intersection is inaccessible with the help of a neat sketch. [15]
3. What is Photogrammetric surveying? Explain the procedure of conducting photogrammetric surveying. [15]
4. An angle was measured by different persons and the following are the values:

Angle	Number of measurements
$65^{\circ}30'10''$	2
$65^{\circ}29'50''$	3
$65^{\circ}30'00''$	3
$65^{\circ}30'20''$	4
$65^{\circ}30'10''$	3

- Find the most probable value of the angle. [15]
5. Explain the method of Weissbach Triangle method of transferring base line from surface to underground. [15]
 6. State the principle of Remote Sensing. List out the drawbacks in remote sensing. [15]
 7. Explain the working of a Total Station. What are its advantages over the other instruments? [15]
 8. What are the various types of Plans to be maintained as per The Coal Mines Regulations, 1957? [15]

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