



Work sheet(Unit wise Objective)

UNIT – II: Leveling, Contouring, Areas and Volumes

Part – A: Multiple Choice Questions (20 MCQs)

1. Which instrument is primarily used for levelling?
A) Theodolite B) Dumpy Level C) Compass D) Plane Table
Answer: B
2. The staff used in levelling is generally made of
A) Steel B) Aluminum/Wood C) Copper D) Plastic
Answer: B
3. Temporary adjustments of a level include
A) Centering B) Levelling up C) Focusing D) All of the above
Answer: D
4. Which method is used to determine the Reduced Level (RL)?
A) Radiation Method B) Height of Instrument Method C) Offset Method D) Ranging Method
Answer: B
5. Which method of booking is commonly used in levelling?
A) Rise and Fall Method B) Height of Instrument Method C) Both A and B D) None of these
Answer: C
6. The difference between Back Sight and Fore Sight gives
A) Rise or Fall B) Area C) Bearing D) Declination
Answer: A
7. Curvature correction is always
A) Positive B) Negative C) Zero D) Constant
Answer: B
8. Atmospheric refraction causes the staff reading to
A) Increase B) Decrease C) Remain same D) Double
Answer: B
9. Contours are lines joining points of equal
A) Distance B) Elevation C) Area D) Bearing
Answer: B
10. The vertical distance between two contour lines is called
A) Contour Interval B) Horizontal Interval C) Gradient D) Offset
Answer: A
11. Contour lines never
A) Meet B) Intersect C) Close D) Curve
Answer: B
12. Closely spaced contour lines indicate
A) Gentle slope B) Steep slope C) Flat ground D) Valley
Answer: B
13. Which method is commonly used for contour surveying?
A) Direct Method B) Indirect Method C) Both A and B D) None of these
Answer: C
14. The area of an irregular boundary is commonly determined using the
A) Planimeter B) Chain C) Compass D) Clinometer
Answer: A
15. Simpson's rule is used for calculating
A) Bearings B) Areas C) Angles D) Levels
Answer: B
16. The Trapezoidal Rule is mainly used to calculate
A) Area B) Volume C) Bearing D) Dip
Answer: A

17. The volume of earthwork is generally expressed in
A) Square metres B) Cubic metres C) Litres D) Hectares
Answer: B
18. Borrow pits are excavated to obtain
A) Water B) Earth for embankment C) Stone D) Sand only
Answer: B
19. Reservoir capacity is measured in terms of
A) Area B) Volume C) Length D) Elevation
Answer: B
20. Cross-sectional method is commonly used for computing
A) Bearings B) Earthwork Volume C) Magnetic Declination D) Dip
Answer: B

Part – B: Fill in the Blanks (Answers Beside the Questions)

1. The instrument used for levelling is the _____ (**Dumpy Level**).
2. A levelling staff is used to measure _____ (**Staff Readings**).
3. Temporary adjustments include centering, levelling, and _____ (**Focusing**).
4. The first staff reading taken is called _____ (**Back Sight**).
5. The last staff reading before shifting the instrument is called _____ (**Fore Sight**).
6. Reduced Level is abbreviated as _____ (**RL**).
7. The Height of Instrument method is also called the _____ (**Collimation Method**).
8. Curvature correction is always _____ (**Negative**).
9. Refraction correction is always _____ (**Positive**).
10. Contours join points of equal _____ (**Elevation**).
11. The vertical distance between contour lines is called the _____ (**Contour Interval**).
12. Widely spaced contours indicate a _____ (**Gentle**) slope.
13. Closely spaced contours indicate a _____ (**Steep**) slope.
14. The direct method of contouring is the most _____ (**Accurate**).
15. An instrument used to determine irregular areas is a _____ (**Planimeter**).
16. Simpson's Rule gives more _____ (**Accurate**) results than the trapezoidal rule.
17. Earthwork quantities are measured in _____ (**Cubic Metres**).
18. Borrow pits are used to obtain _____ (**Earth**) for embankments.
19. The capacity of a reservoir is expressed in _____ (**Cubic Metres**).
20. The average end area method is used for calculating _____ (**Earthwork Volume**).