

1. In plane tabling inaccessible points may be located by the
 (A) Intersection method (B) Resection method
(C) Radiation method (D) Traversing method
2. In a planimeter, when the tracing point is moved along a circle without rotation of the wheel, then the circle is known as the
(A) Prime circle (B) Zero circle
(C) Ortho circle (D) Circum circle
3. The line joining points of equal elevation is known as a
(A) Horizontal line (B) Vertical line
 (C) Contour line (D) Level line
4. The operation of levelling from the finishing point to the starting point at the end of a day's work is known as
(A) Simple levelling (B) Longitudinal levelling
(C) Cross-sectional levelling (D) Check levelling
5. The line of collimation and axis of the telescope should
 (A) coincide (B) be parallel
(C) be perpendicular (D) be tangential
6. The benchmark established by the survey of India is known as the
(A) Temporary bench mark (B) Permanent bench mark
 (C) GTS bench mark (D) Arbitrary bench mark
7. In the trapezoidal formula, for calculating area, the line joining the top of the ordinates is assumed to be
(A) curved (B) straight
(C) circular (D) parabolic

13. Central Arid Zone Research Institute is located in
 (A) Jaipur (B) Jaisalmer
 (C) Jodhpur (D) Agra
14. The channels constructed across the slope for the purpose of intercepting surface runoff are called as
 (A) Diversion drains (B) Relief drains
 (C) Grassed waterway (D) Field drains
15. On a 3 percent land slope, calculate the horizontal spacing of bunds in medium rainfall zone
 (A) 90 m (B) 60 m
 (C) 30 m (D) 15 m
16. Which of the following combinations is/are correct?
 (i) Bench terrace with inward slope – Heavy rainfall areas
 (ii) Bench terrace with level top – Medium rainfall areas
 (iii) Bench terrace with outward slope – Low rainfall areas
 (A) (i) only (B) (ii) only
 (C) (iii) only (D) (i), (ii) and (iii)
17. The susceptibility or vulnerability of soil to erosion is termed as
 (A) Erosivity (B) Erodibility
 (C) EI_{30} index (D) Accretion
18. In EI_{30} method, the I_{30} refers to
 (A) maximum rainfall intensity of 30 minutes duration
 (B) rainfall depth of 30 mm
 (C) kinetic energy of 30 minutes rainfall
 (D) maximum infiltration rate for 30 minutes
19. Coshocton wheel is a
 (A) sediment sampler (B) flow measuring device
 (C) velocity measuring device (D) wind speed measuring device

20. Which of the following pairs are correctly matched?
- (i) Soil wetness – Relative water content of soil
 - (ii) Mass wetness – Soil water content
 - (iii) Volume wetness – Soil water content on volumetric basis
- (A) (i) and (ii) (B) (i) and (iii)
 (C) (ii) and (iii) (D) (i), (ii) and (iii)
21. 1 ha –m equals _____ cubic meter.
- (A) 1,000 (B) 10,000
 (C) 5,000 (D) 50,000
22. In general, the major components of water requirement of crops is
- (A) Pre-sowing irrigation
 (B) Evapotranspiration
 (C) Leaching requirement
 (D) Deep precolation from crop root zone
23. Which of the following is/are used to measure irrigation water?
- (i) Water meter
 - (ii) Current meter
 - (iii) Dethridge meter
- (A) (i) only (B) (i) and (ii) only
 (C) (i) and (iii) only (D) (i), (ii) and (iii)
24. Each side of cipoletti weir has a slope (H : V) of
- (A) 1 : 2 (B) 1 : 3
 (C) 1 : 4 (D) 1 : 5
25. The sheet of water which overflows a weir is called
- (A) jet (B) runoff
 (C) nappe (D) stream



26. In chlorine treatment of irrigation water, the quantity of bleaching powder added in the water source is.
- (A) 0.5 mg/lit (B) 1.0 mg/lit
 (C) 2.0 mg/lit (D) 3.0 mg/lit
27. Find out the depth of which 1 ha of rice field can be irrigated with a flow of 7.5 l/s in 8 hours.
- (A) 0.0216 cm (B) 21.6 cm
 (C) 2.16 cm (D) 4.32 cm
28. Efficiency of Airlift pumps is about _____ per cent.
- (A) 30 (B) 50
 (C) 70 (D) 80
29. Drainage coefficient is the depth of water drained off from a given area in
- (A) 1 hour (B) 1 day
 (C) 1 minute (D) 1 month
30. Match the following :

Property	Unit
(a) EC	1. (mmole/l) ^{1/2}
(b) SAR	2. ds/m
(c) RSC	3. per cent
(d) ESP	4. mc/l

	(a)	(b)	(c)	(d)
(A)	2	4	1	3
(B)	4	2	1	3
<input checked="" type="checkbox"/> (C)	2	1	4	3
(D)	4	2	3	1