

01. If the forebearing of a line AB is  $35^\circ$  and that of line BC  $15^\circ$  then the included angle between the lines is

- a.  $20^\circ$
- b.  $50^\circ$
- c.  $160^\circ$
- d.  $230^\circ$

02. In the quadrantal bearing system, a whole circle bearing of  $290^\circ 30'$  can be expressed as

- a. W  $23^\circ 30'$  N
- b. N  $66^\circ 30'$  W
- c. S  $113^\circ 30'$  N
- d. N  $23^\circ 30'$  W

03. The prismatic compass and surveyor's compass

- a. Give whole circle bearing (WCB) of a line and quadrantal bearing (QB) of a line respectively
- b. Both give QB of a line and WCB of a line
- c. Both give QB of a line
- d. Both give WCB of a line

04. The horizontal angle between the true meridian and magnetic meridian at a place is called

- a. Azimuth
- b. Declination
- c. Local attraction
- d. Magnetic bearing

05. A negative declination shows that the magnetic meridian is to the

- a. Eastern side of the true meridian
- b. Western side of the true meridian
- c. Southern side of the true meridian
- d. None of the above

06. If the magnetic bearing of the sun at a place at noon in southern hemisphere is  $167^\circ$ , the magnetic declination at that place is

- a.  $77^\circ$  N
- b.  $23^\circ$  S
- c.  $13^\circ$  E
- d.  $13^\circ$  W

07. The graduations in prismatic compass

- i) are inverted
- ii) are upright
- iii) run clockwise having 0 at south
- iv) run clockwise having 0 at north the correct answer is

- a. (i) and (iii)
- b. (i) and (iv)
- c. (ii) and (iii)
- d. (ii) and (iv)

08. A gate cap is fitted with a

- a. Cross staff
- b. Level
- c. Chain
- d. Prismatic compass

09. The following bearing were observed while traversing with a compass:

Line	F.B	B.B
AB	$104^\circ 30'$	$284^\circ 30'$
BC	$48^\circ 15'$	$226^\circ 0'$
CD	$290^\circ 30'$	$115^\circ 15'$
DA	$180^\circ 15'$	$357^\circ 15'$

Which stations were affected by local attraction ?

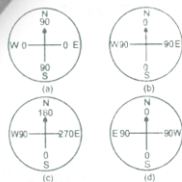
- a. A and B
- b. B and C
- c. C and D
- d. A and D

10. The temporary adjustment of a prismatic compass are

- i) Centering
  - ii) Leveling
  - iii) Focusing the prism
- the correct order is

- a. (i), (iii), (ii)
- b. (i), (ii), (iii)
- c. (ii), (iii), (i)
- d. (iii), (i), (ii)

54. Which of the figures shown in fig.2.3 represents the correct graduation in a surveyor's compass ?



12. Theodolite is an instrument used for

- a. Tightening the capstan-headed nuts of level tube
- b. Measurement of horizontal angles only
- c. Measurement of vertical angle only
- d. Measurement of both horizontal and vertical angles

13. The process of turning the telescope about the vertical axis in horizontal plane is known as

- a. Transiting
- b. Reversing
- c. Plunging
- d. swinging

14. Size of a theodolite is specified by

- a. The length of telescope
- b. The diameter of vertical circle
- c. The diameter of lower plate
- d. The diameter of upper plate

15. Which of the following is not the function of leveling head

- a. To support the main part of the instruments
- b. To attach the theodolite to the tripod
- c. To provide a means for leveling the theodolite
- d. None of the above

16. If the lower clamp screw is tightened and upper clamp screw is loosened, the theodolite may be rotated

- a. On its outer spindle with a relative motion between the vernire and graduated scale of lower plate
- b. On its outer spindle without a relative motion between the vernire and graduated scale of lower plate
- c. On its inner spindle with a relative motion between the vernire and graduated scale of lower plate
- d. On its inner spindle without a relative motion between the vernier and the graduated scale of lower plate

17. A telescope is said to be inverted if its.

- a. Vertical circle is to its right and the bubble of the telescope is down
- b. Vertical circle is to its right and the bubble of the telescope is up
- c. Vertical circle is to its left and the bubble of the telescope is down
- d. Vertical circle is to its left and the bubble of the telescope is up

18. The cross hairs in the surveying telescope are placed

- a. Midway between eye piece and objective lens
- b. Much closer to the eye-piece than to the objective lens
- c. Much closer to the objective lens than to the eye piece
- d. Anywhere between eye-piece and objective lens

19. For which of the following permanent adjustments of theodolite, the spire test is used

- a. Adjustment of plate levels
- b. Adjustment of line of sight
- c. Adjustment of horizontal axis
- d. Adjustment of altitude bubble and vertical index frame

20. The adjustment of horizontal cross hair is required particularly when the instrument is used for

- a. Leveling
- b. Prolonging a straight line
- c. Measurement of horizontal angles
- d. All of the above

