

- Q.28 Explain the Radiation method of Plane Table Surveying with diagram.
- Q.29 Give comparison between Collimation method and Rise and Fall method of reduction level.
- Q.30 Define levelling staff and explain the different types of levelling staff.
- Q.31 Write the short note on-
- Planimeter
  - Geographic Information System (GIS)
- Q.32 True bearing and Magnetic bearing of a line AB are  $247^{\circ}$  and  $249^{\circ}$  respectively. Find the Magnetic Declination.
- Q.33 Draw the conventional symbol for the following object-
- North line
  - Open well
  - Wall with gate
  - Temple
  - Building (pukka)
  - Railway line (double)
- Q.34 Draw the conversion table of whole circle of bearing into Reduced bearing.
- Q.35 Give the construction and uses of Ranging Rod.

#### SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Give comparison between Prismatic compass and Surveyor's Compass
- Q.37 Draw Contour to represent the following-
- Pond
  - Hill
  - Valley
  - Vertical cliff
  - Ridge
- Q.38 What is local attraction? How it is detected ? Write the sources of Local attraction.

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### 3rd Sem / Branch : Architectural Assistantship

#### Subject:- Surveying

Time : 3Hrs.

M.M. : 100

#### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Which shaped lines indicate the presence of a ridge ?
- V-shaped
  - L-shaped
  - U-shaped
  - S-shaped
- Q.2 \_\_\_\_\_ bearing is measured in the direction of survey.
- Back
  - Side
  - Fore
  - None of these
- Q.3 Which type of tape is commonly used for measuring offset?
- Linen tape
  - Steel tape
  - Metallic tape
  - Invar tap
- Q.4 Which branch of surveying is used to find the elevation of given points with respect to given or assured datum ?
- Plane Table Surveying
  - Contouring
  - Levelling
  - Traversing
- Q.5 Which of the following is not required for chain surveying ?
- Pegs
  - Arrows
  - Dumpy Level
  - 20m chain

- Q.6 Which of the following is not the method of Plane table surveying?  
 a) Intersection                      b) Resection  
 c) Trisection                         d) Radiation
- Q.7 Determining points of strategic importance is called \_\_\_\_\_  
 a) Traverse Surveying  
 b) City Surveying  
 c) Military Surveying  
 d) Topographic Surveying
- Q.8 Plainmeter is used for measuring \_\_\_\_\_ areas  
 a) Regular                              b) Irregular  
 c) Curved                                d) None of these
- Q.9 Theodolite is used to measure \_\_\_\_\_  
 a) Horizontal angles                b) Vertical angles  
 c) Both a & b                         d) None of these
- Q.10 Which tool is used for levelling?  
 a) Plumps bob                         b) Spirit Level  
 c) Alidade                               d) None of these

### SECTION-B

**Note:** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 The curvature of Earth is ignored in \_\_\_\_\_ Surveying. (Plane/Geodetic)
- Q.12 Length of One link is \_\_\_\_\_ cm. (10/20)
- Q.13 Handles of chain are made up of \_\_\_\_\_ (Brass / Nickel)
- Q.14 W.C.B. are measured with \_\_\_\_\_ compass. (Prismatic / Surveyor)
- Q.15 F.B. and B.B. should differ by \_\_\_\_\_. (180°/270°)
- Q.16 Contours can be found in a \_\_\_\_\_ map (Topographical / Political)

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- Q.17 There are \_\_\_\_\_ methods of contouring. (2/4)
- Q.18 The datum adopted for India is mean sea level at \_\_\_\_\_ (Karachi / Mumbai)
- Q.19 The fiducial edge of alidade should be \_\_\_\_\_ (stright/ Curved)
- Q.20 GPS is \_\_\_\_\_ (Global Positioning system / Global political survey)

### SECTION-C

**Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Convert the following reduced bearing in whole circle bearing.  
 a) N31°E                                      b) S42°15'W  
 c) N22°30'W                                d) S27°45'E
- Q.22 Define levelling. What is the purpose of levelling? Write the principle of levelling.
- Q.23 List the six advantages of plane Table Surveying.
- Q.24 Define the following:-  
 a) True Meridian                         b) Magnetic Meridian  
 c) Magnetic Dip
- Q.25 Define surveying. What are the object of surveying? Write the principles of surveying.
- Q.26 Define the following:-  
 a) Gunter's Chain                        b) Engineer's Chain  
 c) Revenue Chain
- Q.27 The length of a surveying line measured with 20m chain was found to be 520m. Find the true length of line if the chain used was 10cm too long.

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