Q.31 Explain Prismatic Compass with diagram.

Q.32 Give the classification of survey based upon nature of field.

Q.33 What is Planimeter?

Q.34 What is the objects of surveying?

Q.35 Show contour to represent the following with sketches:-
   a)   Valley   b)   Hill
   c)   Vertical Cliff

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions.   (2x10=20)

Q.36 What is Local Attraction? How it is detected? Give its causes.

Q.37 The following are the observed FB of the line in WCB, find out BB of the line:
   a)   FB of line AB=142°15'
   b)   FB of line BC = 38°00'
   c)   FB of line CD = 313°45'
   d)   FB of line DE = 242°30'

Q.38 Write short notes on:
   a)   Plain Alidade   b)   Metric chain

3rd Sem / Arch
Subject:- Surveying / Surveying- I

Time : 3Hrs.   M.M. : 100

SECTION-A

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

Q.1   Ranging rods have length either_____ or _____
   a)   2m, 3m   b)   5m, 6m
   c)   1m, 4m   d)   2m, 6m

Q.2   In a metric chain each meter length is divided into_____ Links.
   a)   8   b)   9
   c)   5   d)   4

Q.3   The box of the compass is made up of_____
   a)   Brass   b)   Iron
   c)   Steel   d)   Copper

Q.4   The size of the plane table is_____
   a)   600 mm x 700 mm   b)   750 mm x 900 mm
   c)   450 mm x 600 mm   d)   300 mm x 450 mm

Q.5   The accuracy of EDM devices are _____
   a)   1 in 10000   b)   1 in 100000
   c)   1 in 10   d)   1 in 100

Q.6   Which shaped lines indicate the presence of a ridge?
   a)   V-shaped   b)   L-shaped
   c)   U-shaped   d)   S-shaped

Q.7 Fore bearing and back bearing differs by degrees.
   a) 180   b) 90
   c) 75   d) 50

Q.8 Contours can be found in a _____ map.
   a) Political   b) Topographical
   c) Physical   d) Thematic

Q.9 How many types of a compass are used in surveying?
   a) 3   b) 2
   c) 4   d) 1

Q.10 Length of a link of Gunter's chain is _____
   a) 0.66 ft   b) 0.45 ft
   c) 0.50 ft   d) 0.70 ft

SECTION-B

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

Q.11 A metallic tape is made of _____ (cloth/steel)

Q.12 TST is _____.(Total station Theodolite/tatal space thodolite)

Q.13 For a well-conditioned triangle, no angle should be less than _____ (30°/60°)

Q.14 FB and BB should differ by _____.(180°/90°)

Q.15 A short offset does not have length greater than _____ meters.(15/20)

Q.16 The box of the compass is made of _____. (brass /alloy)

Q.17 The fiducial edge of alidade should be _____. (Straight/curve)

Q.18 20m chain is divided into _____ equal parts. (100/50)

Q.19 The least count of telescopic levelling staff is _____. (5mm /10mm)

Q.20 Fore sight is _____ reading of the setting of level. (first/last)

SECTION-C

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

Q.21 Compare Prismatic compass and surveyor compass.

Q.22 List the advantages and disadvantages of chain surveying.

Q.23 Explain the Radiation method in Plane Table Surveying.

Q.24 List advantages of Plane Table Surveying.

Q.25 Define :
   a) Fore Sight   b) Back sight
   c) Intermediate Sight   d) Bench mark
   e) Change point

Q.26 The length of the line measured with 20m chain was found to be 402m.The true length of line was 400m. Find the lengthy of chain used.

Q.27 Write the characteristics of Coutours.

Q.28 Define:
   a) arrow   b) pegs
   c) plumb bob   d) ranging rod
   e) contour map

Q.29 Differentiate between plane and geodetic surveying

Q.30 Explain GIS.