VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY,

BURLA LESSON PLAN

Subject: Surveying 1

Session: 2016-17

Semester: 4th

Theory/-Sessional

Branch/ Course: Civil Engineering/ B.Tech. Name of the Faculty Member: Akash Kumar Naik

| Period | Module/ Number | Topic to be covered | Remarks/ Sign. of Faculty Member |
|--------|-------------------|--|---|
| 1 | Module -I | Introduction to Surveying | |
| 2 | | Concept of Surveying- Definition of surveying, Classification, | |
| 3 | | Principle, Accuracy | |
| 4 | | Linear Measurement-methods of direct measurement instrument | |
| 5 | | Chaining on uneven slopping ground | |
| 6 | | Chaining on uneven slopping ground | |
| 7 | | Errors in Chaining, Corrections | |
| 8 | | Chain Surveying – Chain triangulation | |
| 9 | | Survey stn.,lines, | |
| 10 | | Locating ground features | |
| 11 | | field work, | |
| 12 | | Instruments for setting out basic problems in chaining | |
| 13 | | work, instruments for setting out basic problems in chaining | |
| 14 | | obstacles in chaining | |
| 15 | Module -II | Compass Surveying – Principles use of Prismatic Compass | |
| 16 | | Measurement of bearings, | |
| 17 | | Conversion of bearings | |
| 18 | | Local attraction, Correction of compass traverse. | |
| 19 | | Correction of compass traverse. | |
| 20 | | Plane Table Survey- Principles, | |
| 21 | | Advantages and disadvantages, Equipment | |
| 22 | | Accessories and their uses | |
| 23 | | Methods of plane table survey | |
| 24 | | Two point problems | |
| 25 | | Three point problems | |
| 26 | Module - III | Levelling- Types of levelling and their uses | |
| 27 | | Permanent adjustment | |
| 28 | | Curvature and refraction effects | |
| 29 | | Contouring-Characteristics and uses of contours. | |

| 30 | | Methods of contouring | |
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| 31 | | Theodolite Survey–Application in Height and distance measurements | |
| 32 | | Theodolite Survey–Application in Height and distance measurements | |
| 33 | | Permanent adjustment of transit theodolite | |
| 34 | | Methods of repetitions and reiterations. | |
| 35 | | Methods of repetitions and reiterations. | |
| 36 | Module - IV | Curve setting- simple circular curve by chain | |
| 37 | | simple circular curve by theodolite | |
| 38 | | Minor surveying instrument- Box sextant | |
| 39 | | planimeter working | |
| 40 | | Pentagraph working | |
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Signature of Faculty Member: Date:

Counter Signature of H.O.D.