

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER-V EXAMINATION – WINTER 2015**

**Subject Code: 152204****Date: 05/12/2015****Subject Name: Advance Mine Surveying****Time: 10:30am to 1:00pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Explain different methods of Setting out of curves. **07**  
(b) Describe elements of Compound curves. **07**
- Q.2** (a) List out various types of curves with sketch and describe elements of Simple curves. **07**  
(b) Explain Correlation with their types. **07**
- OR**
- (b) Explain correlation for one or two vertical shaft. **07**
- Q.3** (a) Explain Correlation by magnetic needle. **07**  
(b) Write a short note on various precautions and accuracy taken in correlation. **07**
- OR**
- Q.3** (a) Describe various uses of Gyroscope. **07**  
(b) Explain Miner's dial with neat and clean sketch. **07**
- Q.4** (a) Explain Plannimeter with sketch and write their uses. **07**  
(b) Describe various legal requirements in Mine Plan in India. **07**
- OR**
- Q.4** (a) Write a short note on preparation and preservation of plan and section. **07**  
(b) How can we representation of geological and other features in mine plans and section? Explain it. **07**
- Q.5** (a) Write a short note on Photogrammetry. **07**  
(b) What is GIS? Explain in brief. **07**
- OR**
- Q.5** (a) Describe various application photogrammetry in mine. **07**  
(b) What is GPS? Explain in brief and how GPS is used in Mining. **07**

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