

**Ganpat University**  
**B. Tech. SEM - VIII Mechanical Engineering**  
**CBCS Regular Examination April - June 2015**  
**2ME805/1 Value Engineering**

**TIME:- 3 HOUR**

**TOTAL MARKS:- 70**

**INSTRUCTION:-**

- i. Answer to the two sections must be written in separate answer books.
- ii. Figures to the right indicate full marks of the questions.
- iii. Draw neat sketch wherever necessary.
- iv. Assume suitable data if necessary.

**Section - I**

**Q - 1 Answer the following question. [12]**

- (A) Enlist various types of values and explain each of them with the help of example.
- (B) Explain VE methodology and techniques with the help of block diagram.

**OR**

**Q - 1 Answer the following question. [12]**

- (A) What are the reasons for unnecessary cost? Explain in details.
- (B) Explain the seven most significant factors responsible for savings action with neat sketch.

**Q. 2 Answer the following question. [11]**

- (A) Write a case study on "Value engineering at metro rail- A case study".

**OR**

**Q. 2 Answer the following question. [11]**

- (A) Write a case study on VE that can be implemented to a product for its optimization.

**Q. 3 Answer the following question. [12]**

- (A) Write a short note on life cycle of a product.
- (B) With the help of diagram explain when to apply value engineering?
- (C) Define value engineering and states its objectives.

**SECTION - II**

**Q -4 Answer the following question. [12]**

- (A) Explain the roles of VE during system development and demonstration.
- (B) Discuss the each activity that occurs during the development phase.

**OR**

**Q -4 Answer the following question. [12]**

- (A) Enlist briefly each phase of value engineering job plan.
- (B) Differentiate between value engineering and value analysis.

**Q -5 Answer the following question.** [11]

(A) Write a case study on "Application of value engineering methodology in construction".

OR

**Q -5 Answer the following question.** [11]

(A) Write a case study on "Improving furniture product through value engineering by Function Analysis Systems Technique (FAST)".

**Q -6 Answer the following question.** [12]

(A) Explain how to leader established VE capability in an organization.

(B) R-TOC

(C) TRIZ

END OF PAPER