ME -112 B.E. (All Branches) I Year I Semester Examination, December 2015 Choice Based Credit System (CBCS) ME -112 Concepts in Engineering Design dec 2015

Time :Three Hours www.rgpvonline.com Maximum Marks: 60

Note: Attempt any five questions. All questions carry equal marks. Assume suitable data if necessary.

- 1. a) Describe four challenges of Design? What is the importance of Engineering Design process?
- b) Comment on the importance of Animation and film Design in our daily life as an individual and as a citizen of India.
- 2. a) What is a problem-solving methodology? Describe its various steps.
- b) What is design paradox? Discuss the various considerations of a good design.
- 3. a) Discuss about various social issues involved in any design process in Indian context.
- b) Describe total life cycle of a product. How products can achieve its performance requirements?
- 4. a) What is the smallest functional designed object you have heard of? The largest?
- b) In a bicycle, give an example of a standard part a special purpose part a special purpose subassembly, a standard module and a component
- 5. a) What is the initial process of the design? Describe its activities. Suggest the techniques or the mechanisms which comes in your mind those can bring the improvement in the performance of a Bullock Cart used In our villages.
- b) Briefly explain what is an Embodiment Design?
- 6. a)What is product design cycle? In your opinion which areas should be given importance in Engineering design
- i) Materials
- ii) Technology and
- iii) Marketing.
- b) In what ways the customer feedback is important in improving the design of an existing product or in launching a new product? Explain with the help an example. www.rgpvonline.com
- 7. a) Explain what do you mean by user-centric design?
- b) Explain with help of a free hand sketch any IT based design or any Graphic design that can reduce the daunting and repetitive task of grocery shopping easy.
