Reg. No. :

## **Question Paper Code: 50746**

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

Fourth Semester

### Mechanical Engineering

#### 15UME406 – MACHINE DRAWING

(Regulation 2014)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A -  $(2 \times 20 = 40 \text{ Marks})$ 

- 1. (a) (i) Explain with simple sketch the full section and half section with a suitable example. (10)
  - (ii) Discuss in detail with suitable examples the situations where the revolved section and broken section is carried out. (10)

#### Or

- (b) (i) Describe in detail the different types of fits selection used in assembly. Cite and example. (10)
  - (ii) Explain in detail the geometric tolerance with suitable example and state the purpose of tolerance. (10)
- 2. (a) Sketch the Following threaded profile for a nominal diameter of 30 mm and pitch2.5 mm. State any four advantages of each. Assume suitable length of the bolt.
  - (i) ACME thread with hexagonal bolt and nut
  - (ii) V thread with square headed bolt and nut (20)

Or

(b) How the keys are classified? Demonstrate the different types of key. (20)

- 3. (a) The detailed part of the Universal Coupling is given in the figure 1 assemble the parts and draw the following views.
  - (i) Top Half sectional Front View
  - (ii) Side view





(60)

- (b) The details of the Tail stock are given in the figure -2. Assemble the parts and draw the following views.
  - (i) Full sectional Front View
  - (ii) Top View



(60)



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