Code: 13CS2204

# B.TECH. DEGREE EXAMINATION, MAY 2018

## II B.Tech. II Semester

# SOFTWARE ENGINEERING (Computer Science & Engineering)

Time: 3 hours

Max. Marks:60

Answer FIVE Questions, Choosing ONE Question from each section All Questions carry equal marks

## SECTION - I

- 1 (a) Explain briefly Prescriptive and Waterfall models. Explain the advantages and disadvantages of these models.
  - (b) Compare Incremental Model with Concurrent Development Model.
- 2 (a) Explain briefly personal and team process models. What are the advantages and limitations of these models.
  - (b) What are the main features of Rational Unified Process (RUP) model? Compare and contrast RUP with spiral model.

### SECTION - II

- 3 (a) Explain about Eliciting Requirements.
  - (b) Write briefly about Building the Analysis Model.
- 4 (a) What is meant by requirement process? Discuss
  - (b) Write a short note on validation of requirements.

#### SECTION - III

- 5 (a) Discuss Design Model in Software Engineering.
  - (b) Write a short note on Pattern Based Software Design.
- 6 (a) In an object-oriented implementation, mostly classes are coded. Then during design, what is the role of dynamic modeling using UML?
  - (b) Explain design concepts in software engineering?

#### SECTION - IV

- 7 (a) Outline about Designing Class Based Components.
  - (b) Summarize briefly about Designing Conventional Components.
- 8 (a) What is the relationship between an architecture and module-level design?
  - (b) What is meant by sequence diagram? Explain with example.

#### SECTION - V

- 9 (a) Discuss briefly about Validation Testing and Object-oriented testing methods.
- What are the different levels of testing and the goals of the different levels? Explain.
  - (b) Explain about white box testing? What is the quality or reliability of software after testing is completed?

Code: 13ME2202

## B.TECH. DEGREE EXAMINATION, MAY 2018

#### II B.Tech. II Semester

## MACHINE DRAWING

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 60

Any dimensions not clear or not given may be suitably Assumed or scaled from the drawing

#### SECTION - I

- 1 (a) Draw 2 views of a hexagonal bolt of 30mm diameter and 100 mm long (thread length = 50 mm) and show all other dimensions using proportions.
  - (b) Draw the front view and top view of a castle nut.
- 2 (a) Draw the profile of ISO metric thread and mention proportions in terms of pitch.
  - (b) Draw the sectional front view of a Gib head key in a shaft & hub.

#### SECTION - II

- Draw the front view and side view of a flanged coupling to connect two shafts of 30 mm diameter each and show all other dimensions obtained from proportions.
- Draw FV and TV of a double riveted double strap butt joint (zig-zag type) to connect two plates of 9 mm thick and also find diameter of rivet, pitch, margin, row pitch, diagonal pitch and length of joint.

## SECTION - III

Assemble the parts of a stuffing box shown in Fig.1 below and draw the Full sectional front view and top view. Table 1 below gives the details of the parts.

# Table.1

Part No.	Name of Part	Quantity	Material
1	Gland	1	C.I.
2	Gland bush	1	Brass
3	Stuffing box	1	C.I.
4	Neck bush	1	Brass
5	Studs and nuts	3	C-30

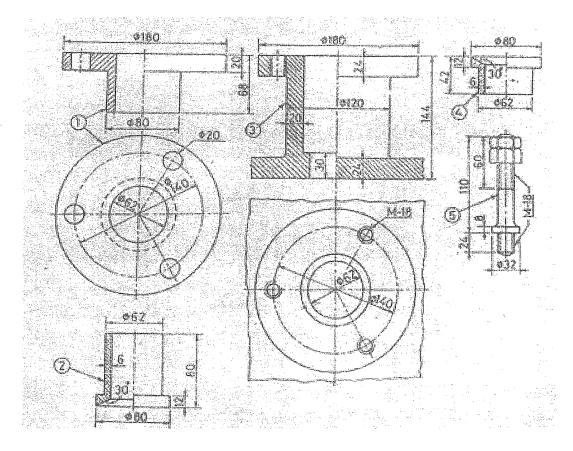


Fig.1. Stuffing Box details

Part No.	Name of Part	Quantity	Material
1	Straps(in two parts)	1	C.I.
2	Sheave	1	C.I.
3	Shim	2	Brass
4	Bolts and nuts	2	C-30

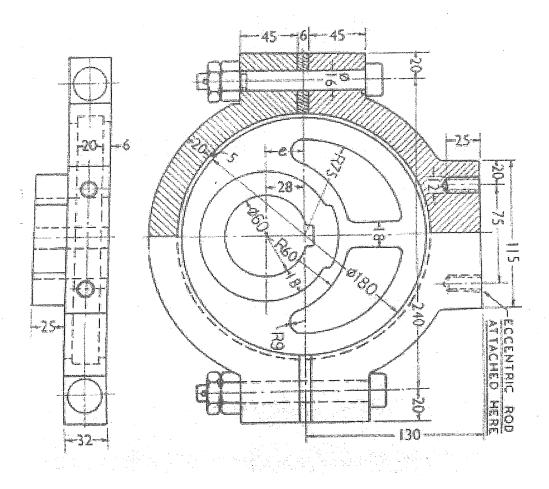


Fig.2. Eccentric assembly

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