# PART–A 16M

**INSTRUCTIONS :** Answer All Questions. First Question Carries Four Marks; Each Question of Remaining Carries Three Marks.

1. a) what is software ?

b) what is software engineering ?

c) software engineering principels have evolved year

d) SDLC Full form

2. Explain the Difference between software programs and software products?

3. Write a software life cycle model?

4. write a solution to the software Crisis?

5. Write a High Level Language programming?

**PART-B 3x8=24M**

**Instructions:**Answer all questions Eachquestion carries 8marks and may have sub questions

1. (a) write a control Flow-Based Design

(or)

(b)Explain the object oriented Design

## (a) classified waterfall Model

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(or)

(b)write a spiral Model

## 8 (a) Define a job responsibilities of a software project Manger?

(or)

(b) write a staffing level estimations ? Nordens work

# PART–A 16M

**Instructions:**AnswerAllQuestions.FirstQuestionCarriesFourMarks;EachQuestionofRemainingCarriesThreeMarks.

1. a)Thetoplineofthe rooftruss iscalled (**C06**)
   1. Thebottomedgeofroofsurfaceiscalled (**C06**)
   2. Thetopchord membersofarooftrussarecalled (**C06)**
   3. Theeconomicalspacingof rooftrusses workouttobe ofspan(**C06**)
2. Definecolumnandstruct?(**C04**)
3. Explainthetermsa)slendernessratiob)radiusofgyration(**C04**)
4. Explainthetermsa)Elasticmomentofresistanceb)Shapefactor(**C05)**
5. Howmuchliveloadontrussisconsideredindesignif theangleofslopeofroofis25 degrees(**C06**)

**PART-B 3x8=24M**

**Instructions:**AnswerallquestionsEachquestioncarries8marksandmayhavesubquestions

1. (a) Determine the design axially loaded capacity of the column ISHB 300 at 577 N/m ,if the length of the columnis3mand its both ends pinned (hinged).Take fy= 250N/mm2,fu = 410N/mm2,E= 2x10^5 N/mm2**((C04**)

(or)

(b) Design a steel column section to carry an axial load of 410 KN.The column is 4.2 m long and restrained againsttranslationand freeagainstrotation .Yieldstress ofsteelused is250Mpa

## (a) Determine the shape factor the ‘**I’** section of flange dimensions 140x16mm and web dimensions368x8.9mmand alsoexplain theconcept of webbucklingandweb cripplingwith neatsketches.(**C05)**

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(or)

(b) Design a simply supportedbeam of an effective span 6m carries a udl of 20 Kn/m including selfweight.If thecompression flange of the beam is laterally restrained .check the beam for shear and deflection .The grade of steel isFe 250

## (a) Design a single Angle struct connected to the gusset plate to carry 180kN factored load.The length ofthestruct betweenc/c intersection is3m.Yield stress ofsteel is 250Mpa.Usefilletwelds.**(C04)**

(or)

## (b)Designaslabbasewithrectangular baseplatehavingequal projectionsforacolumnsection constining