CodeNo:115EM

JAWAHARLALNEHRUTECHNOLOGICALUNIVERSITYHYDERABAD
B.TechIIIYearISemesterExaminations,February/March-2016 SOFTWARE ENGINEERING
(CommontoCSE,IT)

Time:3hours **Max.Marks:75**

Note: ThisquestionpapercontainstwopartsA andB.
PartAiscompulsorywhichcarries 25marks.Answerallquestions inPartA.
PartBconsistsof5Units.Answeranyonefullquestion fromeachunit.
Each question carries 10 marks and may have a, b, c as sub questions.

Part-A **(25Marks)**

1.	a)	Distinguishbetweensoftwareprocessandproject.	[2]
	b)	Discussaboutchangingnatureof software.	[3]
	c)	Whatis meant bysystemrequirements?	[2]
	d)	Explain aboutcontextmodels.	[3]
	e)	Writebriefnotesondata design.	[2]
	f)	Writeaboutinterfacedesignevaluation.	[3]
	g)	Whatis meant bydebugging?	[2]
	h)	Whatis meantbysoftwaremeasurement?	[3]
	i)	Whatismeantbysoftware reliability?	[2]
	j)	Discussthereactiverisk strategy.	[3]

Part-B **(50Marks)**

2.	Stateand explainvarioussoftware myths.	[10]
	OR	
3.	Explainaboutspecializedprocessmodels.	[10]
4.	Explainclearlyaboutsoftwarerequirements document.	[10]
	OR	
5.	Stateandexplainvariousaspectsinrequirementsvalidationprocess.	[10]

6.	Discussaboutmappingdataflow intosoftware architecture.	[10]
	OR	
7.	Explainaboutconductingcomponentlevel design.	[10]
8.	Discussaboutmetricsfordesignmodelandsourcecode.	[10]
	OR	
9.	Explainclearlyaboutmetricsforsoftware quality.	[10]
10.	Explainaboutformaltechnicalreviews.	[10]
	OR	
11.	Explainaboutriskprojectionandriskmanagement.	[10]

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CodeNo:115EM

JAWAHARLALNEHRUTECHNOLOGICALUNIVERSITYHYDERABAD

B.TechIIIYearISemesterExaminations,March -2017 SOFTWARE ENGINEERING

(CommontoCSE,IT)

Time:3hours **Max.Marks:75**

Note: Thisquestion papercontains two partsAand B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consistsof5Units.Answeranyonefullquestionfromeachunit.Each questioncarries 10 marks and may have a, b, c as sub questions.

PART-A

(25Marks)

	Whatarethemerits ofincremental model?	[2]
b)	Whatarethefundamentalactivitiesofasoftware process?	[3]
c)	DifferentiateERDandDRD.	[2]
d)	Whatarenonfunctional requirements?	[3]
e)	Definedesign process.	[2]
f)	Listtheprinciplesofasoftwaredesign.	[3]
g)	Distinguishbetweenverificationandvalidation.	[2]
h)	Writeaboutdriversandstubs.	[3]
i)	Giveanoteon the variousestimation techniques.	[2]
j)	Definemaintenance.Whatarethetypesofsoftwaremaintenance?	[3]

PART-B

(50Marks)

2.a)	DefinethetermSoftware.Describeitsvarious characteristics.	
b)	Elaborateonthechangingnatureofsoftware indetail.	[5+5]
	OR	
1.a)	Explainsoftwaredevelopmentlifecycle. DiscussvariousactivitiesduringSDLC.	
b)	Whatarevarious mythsabout software?	[5+5]
2.	Givean overviewofvarioussystemmodels.	[10]
	OR	
5.a)	Discussabout principalrequirementsengineeringactivitiesandtheirrelationships.	
b)	Explainhowasoftwarerequirementsdocumentisstructured.	[5+5]
6.a)	Distinguishbetweencouplingand cohesion? Howdotheyeffect softwaredesign?	
b)	ForaCasestudyof yourchoiceshowthearchitecturalandcomponent design.	[5+5]
	OR	
7.	Listandexplaindifferentkindsofarchitecturestylesand patterns.	[10]

CodeNo:115EM **R13**

JAWAHARLALNEHRUTECHNOLOGICALUNIVERSITYHYDERABAD

B.TechIIIYearISemesterExaminations,November-2015 SOFTWARE ENGINEERING

(CommontoCSE,IT)

Time:3hours **Max.Marks:75**

Note: This questionpapercontainstwo partsA andB.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consistsof5Units.Answeranyonefullquestionfromeachunit.Eachquestioncarries 10 marks and may have a, b, c as sub questions.

PART-A **(25Marks)**

Whatisanagileprocess? Explain. [2]

b) WhatisthedifferencebetweenaUP PhaseandaUP Workflow? [3]

c) Whatistheintent ofrequirements validation? [2]

d) Whatarethecharacteristics ofgoodSRS document? [3]

e) Differentiatebetweencouplingandcohesion. [2]

f) Howdoweassessthequalityofsoftwaredesign? [3]

g) WhatisCyclomaticcomplexity?Whatisitspurpose? [2]

h) Whatarethemetricsusedforsoftwaremaintenance? [3]

i) Whatissoftwarereliability?Define. [2]

j) Canaprogrambecorrect andstillnotexhibitgoodquality?Explain. [3]

PART-B **(50Marks)**

2.a) Whatisthepurposeofprocessassessment?WhyhasSPICE beendeveloped as a standard process assessment?

b) ExplainSpiralmodelwithaneatsketch.Whatcanyousayaboutthe softwarethatisbeingdevelopedormaintainedas the youmove outwardalong spiral process flow? [5+5]

OR

3.a) Whatarethefive generic processframeworkactivities?Explain.

b) ExplaindifferentlevelsofCapabilityMaturitymodelandlisttheKPA'sof eachlevel. [5+5]

4.a) Whatisthegoalofrequirementsanalysis phase? Givereasonswhythe requirements analysis phase is a difficult one.

b) Brieflyexplainthe modelsused forstructuredanalysis. [5+5]

OR

5.a) Differentiatebetweenfunctionalandnon-functional requirementswith suitable examples.

b) "DataModelingcanbeviewedasasubsetofOOA."Commentonthisstatement and justifyyourcomments. [5+5]

CodeNo:115EM

JAWAHARLALNEHRUTECHNOLOGICALUNIVERSITYHYDERABAD
B.TechIIIYearISemesterExaminations,November/December-2018
SOFTWARE ENGINEERING
(CommontoCSE,IT)

Time:3hours **Max.Marks:75**

Note: Thisquestion papercontains twopartsAand B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consistsof5Units.Answeranyonefullquestionfromeachunit.Eachquestioncarries 10 marks and may have a, b, c as sub questions.

PART-A

(25Marks)

Whatarethemeritsofincrementalmodel? [2]
b) Listthetaskregionsinthespiral model. [3]
c) Whatis feasibilitystudy? [2]
d) What are the differences between functional requirements and non-functional requirements? [3]
e) Listtheguidelinesfordatadesign. [2]
f) Namethecommonlyusedarchitecturalstyles. [3]
g) Writeashortnoteonblack box testing. [2]
h) Howtocomputethecyclomatic complexity? [3]
i) Differentiatebetweenreactiveriskandproactiveriskstrategies. [2]
j) Whatissoftwarereliabilityandhowthisparameterhelpsinmanagingsoftware quality? [3]

PART-B

(50Marks)

2.a) Whatislegacysoftware?Explainbrieflyitsimpactinsoftwareengineering.
b) Explainthefollowing:
i) Waterfallmodel
ii) SpiralModel. [5+5]

OR

3.a) Giveanoverview ofunifiedprocess model.
b) WritedetailednotesonCMMI. [5+5]

4.a) Describefivedesirablecharacteristicsofagoodsoftwarerequirementspecification document.
b) DrawthecompleteDFDatleastupto2-levelsforalibrarymanagement system.[5+5]

OR

5.a) CompareISOandSEI-CMMmodels.
b) Who should be involved in a requirement review? Draw a process model showing how a requirements review might be organized. [5+5]

CodeNo:115EM

JAWAHARLAL NEHRUTECHNOLOGICALUNIVERSITY HYDERABAD
B.TechIIIYearISemesterExaminations,November/December-2016
SOFTWAREENGINEERING
(CommontoCSE, IT)

Time:3hours **Max.Marks:75**

Note: ThisquestionpapercontainstwopartsAandB.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consistsof5Units.Answeranyonefullquestionfromeachunit.Eachquestioncarries 10 marks and may have a, b, c as sub questions.

PART-A **(25Marks)**

Whatislegacysoftware?Explain. [2]
b) Whataretheadvantagesofunifiedprocess? [3]
c) Writethepurposeofcontextmodel. [2]
d) Whatisthesignificanceoffeasibilitystudy? [3]
e) Whatistheuseofinterfaceanalysis?Explain. [2]
f) Whatdoyoumeanbysoftwaredesignquality? Explain. [3]
g) Differentiatebetweenverificationandvalidation. [2]
h) Whatisregressiontesting?Giveexample. [3]
i) Definesoftwarereliability. [2]
j) Whatistheimportanceofsoftwarereviews? [3]

PART-B **(50Marks)**

2.a) Discussaboutthechangingnatureofsoftware
b) Explainspiralmodelwithitsmeritsanddemerits. [5+5]

OR

3.a) Discussinbriefaboutdifferentsoftwaremythsandtheirconsequences.
b) ExplainCMMImodelwithaneatsketch. [5+5]

2.a) Differentiatebetweenfunctionalandnon-functionalrequirements.
b) Listandexplaintheobjectmodelsinbrief. [5+5]

OR

5.a) Whataretheactivitiesofrequirementselicitationandanalysis?Explain.
b) Discussaboutdifferentstructuredmethodsusedinsoftwaredevelopment. [5+5]

6.a) Explaintheprocessofmappingdataflowintosoftwarearchitecture.
b) Listthegoldenrulesofuserinterfacedesign. [5+5]

OR

7.a) Discussaboutpatternbasedsoftwaredesignindetail.
b) Defineandexplainaboutdifferenttypesofcohesion. [5+5]

CodeNo:125EM

JAWAHARLALNEHRUTECHNOLOGICALUNIVERSITYHYDERABAD
B.TechIIIYearISemesterExaminations,May-2018
SOFTWARE ENGINEERING
(CommontoCSE,IT)

Time:3 hours **Max.Marks:75**

Note: Thisquestion papercontains twopartsAand B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consistsof5Units.Answeranyonefullquestionfromeachunit.Each questioncarries 10 marks and may have a, b, c as sub questions.

PART-A

(25Marks)

	WhatisSoftwareDevelopment LifeCycle?	[2]
b)	Mentionsomeofthefactors tobeconsideredduringSystemmodelling.	[3]
c)	Whatis meantbyRequirementmanagement?	[2]
d)	Differentiatebetweendataflowdiagramandstatetransition diagram.	[3]
e)	Listtheprinciples ofasoftware design**.**	[2]
f)	Whatarethequalityparameters consideredforeffectivemodulardesign?	[3]
g)	Whatis theroleofcyclomaticcomplexityinsoftwareresting?	[2]
h)	Defineblackboxtesting strategy?	[3]
i)	Distinguishbetweenreactiveandproactiveriskmanagement.	[2]
j)	Writeshort noteonRMMM.	[3]

PART-B

(50Marks)

2.a)	Whataretheadvantagesoflayeredtechnology?	
b)	GiveCMMIlevelsandexplain.	[5+5]
	OR	
3.a)	Howdoessystemengineeringdifferfromsoftwareengineering? Alsowritebriefnotes on computer based system and system engineering hierarchy.	
b)	ExplainindetailEvolutionaryprocess model.	[5+5]
4.a)	Whyistraceabilityanimportantaspectofrequirementmanagement? Whycontext system models are useful for requirements validation?	
b)	Explainaboutthecardinalityand modalitywith suitableexample.	[5+5]
	OR	
3.	Giveanoverviewofvariousstepsinrequirementsengineeringprocess.	[10]
6.a)	Writeaboutarchitecturalstylesandpatterns.	
b)	Explaininterfaceanalysisandinterfacedesignsteps.	[5+5]
	OR	
7.a)	Howacomponentisdesigned basedonfunction?Explain.	
b)	Whatarethegoldenrulesforuserinterfacedesign?Explain.	[5+5]

CodeNo:125EM **R15**

JAWAHARLALNEHRUTECHNOLOGICALUNIVERSITYHYDERABAD
B.TechIIIYearISemesterExaminations,May/June-2019 SOFTWARE ENGINEERING
(CommontoCSE,IT)

Time:3hours **Max.Marks:75**

Note: Thisquestion papercontainstwopartsAand B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consistsof5Units.Answeranyonefullquestionfromeachunit.Each questioncarries 10 marks and may have a, b, c as sub questions.

PART-A

(25Marks)

1.	a)	Definesoftwareengineering.	[2]
	b)	Listevolutionaryprocessmodels.	[3]
	c)	Differentiatebetweenuserrequirementandsystemrequirement.	[2]
	d)	Listthevarioustypesoffeasibilitystudies.	[3]
	e)	Whatarethegoals ofthedesign process?	[2]
	f)	Definesoftwarearchitecture.	[3]
	g)	Whatismeant bysmoke testing?	[2]
	h)	Listthemetrics forsourcecode.	[3]
	i)	Givethedifferentcategories of risks.	[2]
	j)	Whatis meantbysoftwarereview?	[3]

PART-B

(50Marks)

2. Discuss managers myths about software development and their effect on the practitionersperformanceaswellasonoveralloutcome. [10]

OR

3. What is software process? What is need of software process improvement? Discuss capabilitymaturity models. [10]

4. "The functional requirements specification of a system should be both complete and consistent".Substantiatethisstatementwithrelevant examples. [10]

OR

5. a) Drawacontext levelmodelforaweb-basedfood-orderingsystem suchas"Swiggy".
   b) Discussthemaincharacteristicsofdatamodelforrequirementengineering. [5+5]

6. How to translate the analysis model into the design model? Explain with an example scenario. [10]

OR

7. a) Explainhowtomapdata flowintoasoftwarearchitecture?
   b) Explainthedesign ofclassbasedcomponents. [5+5]

R15

CodeNo:125EM

JAWAHARLAL NEHRUTECHNOLOGICALUNIVERSITY HYDERABAD
B.TechIIIYearISemesterExaminations,November/December-2017
SOFTWAREENGINEERING
(CommontoCSE, IT)

Time:3hours **Max.Marks:75**

Note: ThisquestionpapercontainstwopartsAand B.
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consistsof5Units.Answeranyonefullquestionfromeachunit.Eachquestioncarries 10 marks and may have a, b, c as sub questions.

PART-A

(25Marks)

DistinguishbetweenSoftwareproductsandSoftwareservices. [2]
b) ExplainSoftwareCrisis. [3]
c) DefineanInterface. [2]
d) Explainaboutdatamodels. [3]
e) WhatarethegoldenrulesforUserInterfaceDesign? [2]
f) ExplaintheDesignconceptcoupling. [3]
g) DefineTesting. [2]
h) ListthemetricsforDesignmodel. [3]
i) DefineRiskRefinement. [2]
j) DefineSoftwarereliabilty. [3]

PART-B

(50Marks)

2.a) WhatisaLegacySoftware? Explain.
b) ExplaintheSoftwareProcessFramework. [5+5]

OR

3.a) Explainthevarioussoftwaremyths.
b) Explaintheworkingofspecializedprocessmodels. [5+5]

4. a) ExplainthestructureofSoftwareRequirementsdocument.
b) Whatarethefeasibilitystudiesforrequirementsengineeringprocess? [5+5]

OR

5. Explainthefollowingsystemmodels:
a) ObjectModels
b) Structuredmethods. [5+5]