5th Sem. / Comp IT

Subject : Software Engg.

Time : 3 Hrs. HSBTEonline.com M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

Q.1 a) Write down the full form of COCOMO.

b) What is software engineering.

c) Define structured coding techniques.

d) What is the need of documentation.

e) Why software maintenance is required.

f) What are the features of good software.

g) What is software maintenance process.

h) Write down the objectives of testing.

i) Write about data structure oriented design.

j) Differentiate between white box and black box testing.

k) What do you mean by proto type.

l) What is meant by project size.

m) What is the need of creating a SRS document.

n) Define the term planning.

o) Define Halstead software science.

p) What do you mean by design errors.

q) Write down the disadvantages of using prototyping approach.

r) Write down the advantages of using COCOMO for estimating cost?

SECTION-B

Note: Short answer type questions. Attempt any ten parts 10x4=40

Q.2 i) Briefly explain about requirement analysis and specifications.

ii) Explain about object oriented design.

iii) Explain about software coding and its requirements.

iv) Write short notes on :

a) Unit testing.

b) Integration testing.

v) What causes Bad SRS document.

vi) Differentiate between program and software product.

vii) Explain about code walk through.

viii) Discuss about various issues related to software coding and testing.

ix) Briefly discuss about system testing.

x) Differentiate between cohesion and coupling.

xi) State the classification of coupling.

xii) Compare object oriented and function oriented design.

xiii) What are the benefits of testing.

xiv) Explain in detail about 1S0 9000.

xv) Write short notes on

a) Lines of code b) Function point

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.3 Explain briefly about the various software life cycle models? Write about verification and validation.

Q.4 What are the various techniques for project estimation? Explain about each briefly.

Q.5 Explain about black box testing techniques.

Q.6 Write short note on :

a) Mcafe complexity.

b) White box testing.

Q.7 What is configuration management. Why it is required?

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5th Sem / Computer Engineering
Subject : Software Engineering

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 Which type of approach is used in function oriented approach of software design?

a) Top down b) Bottom up
c) Both d) None

Q.2 How Black Box testing is done

a) with internal knowledge of product
b) without internal knowledge of Product

Q.3 In which type of maintenance the system adopt new environment ?

a) Perfective b) Corrective
c) Adaptive d) Preventive

Q.4 In which type of maintenance the system correct the errors and bugs of project?

a) Perfective b) corrective
c) Adaptive d) Preventive

Q.5 In which type of maintenance the system can be perfect according to the customer requirement

a) Perfective b) corrective
c) Adaptive d) Preventive

Q.6 Which type of approach is used in expert cost estimation technique?

a) Top down b) Bottom up
c) Both d) None

Q.7 Which type of approach is used in work breakdown Structures for cost estimation?

a) Top down b) Bottom up
c) None

Q.8 In which language compiler translates the program written in High level language?

a) Machine language b) Low level language
c) Assembly language d) None

Q.9 In which language instructions are written in binary code?

a) Low level b) High Level
c) Assembly d) None

Q.10 At which stage feasibility study is done in a software development project.

a) First b) forth
c) Last d) fifth

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 HIPO stands for_____

Q.12 Internal details of product are required in_____Box testing (white/black)

Q.13 LOC stands for_____

Q.14 Cocomo stands for_____

Q.15 What are two types of feasibility study?

Q.16 Write name of any four software life cycle model.

Q.17 Write name of two types of maintenance.

Q.18 Define Planning?

Q.19 Define management?

Q.20 What are different types of design notation?

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Write difference between Program and Software product.

Q.22 Write the advantages of water fall model.

Q.23 What are various type of maintenance?

Q.24 What do you understand by the term life cycle model of Software development.

Q.25 Explain unit and integration testing.

Q.26 Write objectives of project planning.

Q.27 Explain qualities of good Software engineer.

Q.28 Explain responsibilities of software project manager.

Q.29 Explain various components and features and advantages of SRS.

Q.30 What is Requirement analyses?

Q.31 What is difference between top down and bottom up approach?

Q.32 Explain features of good software design.

Q.33 Explain difference between verification and validation.

Q.34 Explain unit testing.

Q.35 Explain disadvantages of black box testing.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Explain Halstead's software science Project Estimation technique.

Q.37 Explain various phases of water fall model in detail.

Q.38 Explain about prototype model in detail with its advantages and disadvantages.

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5th Sem. /Trade-Computer Engg.

Subject : SOFTWARE ENGINEERING

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.1 System are created to solve---------- (problem/software). (CO1)

Q.2 Requirement engineering is the process of understanding the customers..... (CO4)

Q.3 Why we use decision table? (CO5)

Q.4 What is User Manual? (CO1)

Q.5 Explain the term beta testing? (CO6)

Q.6 What does level 0 DFD represent? (CO5)

Q.7 Software design of a project act as .....between problem domain and solution domain (bridge/gap/) (CO2)

Q.8 Input, processing and output are the common components of every system. (T/F) (CO3)

Q.9 Explain the term test plan? (CO4)

Q.10 Describe the full form of SCM? (CO6)

SECTION-B

Note: Very Short answer type questions. Attempt any ten questions out of twelve questions(10x2=20)

Q.11 What is software engineering? (CO1)

Q.12 Explain the use of decision table? (CO5)

Q.13 When we do regression testing? (CO6)

Q.14 What is system software? (CO1)

Q.15 List out some design constraint ? (CO5)

Q.16 Explain the term prototype? (CO4)

Q.17 Define data dictionaries? (CO5)

Q.18 What is the difference between program and software? (CO1)

Q.19 Why we use object oriented design? (CO5)

Q.20 Explain umbrella activities of software process? (CO4)

Q.21 List some benefit of modular design? (CO5)

Q.22 What is ERD? (CO5)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x5=40)

Q.23 Name some basic components of SRS ? (CO4)

Q.24 What is a decision table? Explain it in detail ? (CO5)

Q.25 Differentiate between the open system and close system. (CO1)

Q.26 What is system testing? Explain various type of system testing. (CO6)

Q.27 What is software configuration management in detail? (CO6)

Q.28 List principle of a software design? (CO5)

Q.29 Explain Spiral model? (CO2)

Q.30 What are Gantt chart? How they are helpful as well? (CO1)

Q.31 Explain the Project Size Estimation technique? (CO3)

Q.32 What is planning? Explain various activities involved during project planning? (CO3)

SECTION-D

Note: Long answer type questions. Attempt any three questions out of four question. (3x10=30)

Q.33 Write short note on software failure, Black box testing White Box testing and Stress testing? (CO6)

Q.34 Explain Waterfall model in detail with its limitations and benefits? (CO2)

Q.35 What are the characteristics and feature of Good software design? (CO5)

Q.36 Briefly explain the process of Requirement Analysis? What are the activities involved in it ? (CO4)

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5th Sem. / Computer, I.T.

Subject : Software Engineering

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Objective type questions. All questions are compulsory (10x1=10)

Q.1 Define software.

Q.2 LOC stands for _____.

Q.3 Define integrity.

Q.4 CMM stands for _____.

Q.5 How do we define software quality.

Q.6 Why software maintenance is required.

Q.7 Define a test case.

Q.8 Write down the full form of COCOMO.

Q.9 Define testing.

Q.10 Write the use of software metrics.

SECTION-B

Note: Very short answer type questions. Attempt any ten questions out of twelve questions. 10x2=20

Q.11 What is problem analysis.

Q.12 Name any two life cycle models.

Q.13 List two non functional requirements of software.

Q.14 Differentiate between black box and white box testing.

Q.15 Name two black boxing testing method.

Q.16 What do you mean by project size.

Q.17 Define a software product.

Q.18 Write the use of unit testing.

Q.19 Define integration testing.

Q.20 Mention two contents of SRS document.

Q.21 Discuss the use of prototype.

Q.22 Define cohesion.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. 8x5=40

Q.23 Write down the disadvantages of waterfall model.

Q.24 Differentiate between walk through and inspection of any software product.

Q.25 What is DFD. Briefly explain various aspects of DFD.

Q.26 Differentiate between verification and validation in brief.

Q.27 Write short note on ISO 9000 standard.

Q.28 Describe bottom up approach in brief.

Q.29 Explain major quality factors.

Q.30 Write down the various benefits of testing.

Q.31 Write a short note on CMM.

Q.32 Differentiate between cohesion and coupling.

SECTION-D

Note: Long answer type questions. Attempt any three questions out of four questions. 3x10=30

Q.33 What do you understand by white box testing. Explain various types of white box testing techniques in detail.

Q.34 Explain spiral model in detail. Mention its advantages and disadvantages.

Q.35 Explain object oriented design.

Q.36 What is configuration management. Why is it required.

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5th Sem. / Comp IT

Subject : Software Engg.

Time : 3 Hrs. M.M. : 100

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a) Lines of code b) Function point

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Note: Long answer type questions. Attempt any three questions. 3x10=30

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5th Sem. / Computer Engg.

Subject : Software Engg.

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

Q.1 a) What do you mean by software program?

b) What do mean by project size?

c) What is the requirement of software engineering?

d) What is problem analysis?

e) List any two characteristics of good coding.

f) Define cyclomatic complexity.

g) Define testing.

h) What do you mean by project size?

i) What is documentation?

j) Write any two limitations of waterfall model.

k) Define cohesion.

l) What is black box testing?

m) Define CMM?

n) Define validation.

o) What is prototype?

p) What term six sigma?

q) Why SRS document is created.

r) Define integration testing.

SECTION-B

Note: Short answer type questions. Attempt any ten parts 10x4=40

Q.2 i) Define term software engineering? What are its various features?

ii) What are the functional and non-functional requirements of software?

iii) Explain top down approach used in integration testing.

iv) list various advantages of using COCOMO model.

v) Differentiate between black box and white box testing.

vi) What are various limitations of classic waterfall model?

vii) Explain code walk through.

viii) Explain halstead's software science.

ix) What do mean by coupling what are its various types?

x) What are various characteristics of good coding?

xi) Explain control flow based design.

xii) Explain function point metrics.

xiii) List various responsibilities of project manager.

xiv) Write short note on ISO 9000 standard.

xv) Explain the concept of configuration management.

SECTION-C

Note: Long answer type questions. Attempt any three questions. 3x10=30

Q.3 Explain prototyping model in details. List also its various advantages and disadvantages.

Q.4 What is project estimation. Explain how COCOMO model helps in project estimation.

Q.5 Explain various metrics used in project size estimation.

Q.6 What do mean by system design? Explain functional oriented design approach in detail.

Q.7 Write short note any two :-

(a) White box testing.

(b) Mcafe Complexity