Shri Jain P G College, Bikaner

श्री जैन (पी.जी.) कॉलेज, बीकानेर

BC-301

BCA (Part III) Examination, 2017

SOFTWARE ENGINEERING & VISUAL BASIC

Paper: BCA-301

Time allowed : Three hours

Maximum Marks : 50

Attempt any five questions in all, selecting at least one question from each Unit. All questions carry equal marks.

UNIT – I

1. What do you mean by prototyping Model ? Explain various characteristic features of waterfall model and spiral model.

OR

2. What do you mean by cohesion and coupling ? Explain COCOMO Model.

UNIT – II

3. What is Functional Testing ? What are the various testing strategies ?

<div align="center">OR</div>

4. How different testing can be compared ? Explain fault isolation and fault confirmation.

UNIT – III

5. What is IDE ? Discuss the features of visual basic IDE.

<div align="center">OR</div>

6. Explain controls in Visual basic.

UNIT – IV

7. Write short notes on

(i) Msg Box

(ii) Input Box

(iii) Image Box

(iv) Text Box Control

(v) Timer Control

<div align="center">OR</div>

8. What is document view architecture ? Explain SDI and MDI.

UNIT – V

9. What is recursive function ? What are the advantages of ADO? Define DAO.

<div align="center">OR</div>

10. Write short notes on

(i) ODBC

(ii) Debugging Technique

(iii) Data report

(iv) ADO

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BC - 351

BCA (Part-III) Examination, 2018

SOFTWARE ENGINEERING AND GUI PROGRAMMING

Paper-BCA-301

Time allowed : Three hours

Maximum Marks : 50

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Attempt any five questions in all, selecting at least one question from each Unit. All questions carry equal marks.

UNIT – I

1. What is software ? Explain its characteristics with software process model. [10]

2. (a) What is difference between linear sequential and prototype model ? [5]

   (b) Explain Necol's Quality factors. [5]

UNIT – II

3. What is debugging ? Explain various debugging technique used in software developing. [10]

4. What is Testing ? Explain functional and structural Testing Technique. [10]

BC-351   (1)   P.T.O.

UNIT – III

5. (a) What is Event ? Explain Event driven programming in detail. [5]

   (b) Explain collections and procedures. [5]

6. Explain various controls used by visual basic. [10]

UNIT – IV

7. Explain common dialogue controls in detail. [10]

8. Write short notes on : $[2^1/_2 \times 4 = 10]$

   (i) Picture Box

   (ii) Text Box

   (iii) Input Box

   (iv) Dynamic Link library

UNIT – V

9. What is ADO ? Explain advantage of ADO over DAO. [10]

10. (a) What is Data Reports ? How to write a Reports using crystal reports ? [6]

    (b) What do you mean by Data Aware Controls ? [4]

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BCA (Part-III) Examination, 2019

BCA-301

(Object Oriented Software Engineering)

Time allowed : Three hours
Maximum Marks : 50

Attempt any **five** questions in all, selecting at least one question from each Unit. **All** questions carry equal marks.

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UNIT – I

1. What is SRS ? Explain in detail.

2. What is software quality ? Also, explain McCall's Quality Factors with suitable example.

UNIT – II

3. Write short notes on following :
   (a) COCOMO model
   (b) Difference between cohesion and coupling.

4. Explain function oriented design in detail.

UNIT – III

5. Explain object oriented design concept in detail.

6. Write short notes on following :
   (a) Design Notation
   (b) Design Methodology

.   What is UML ? Also, explain UML Notations.

Write short notes on following :

(a)   Write difference between Generalization and Aggregation with suitable example.

(b)   Explain Association and Interfaces.

UNIT – V

What is debugging process ? Also write differences between Black box, white box and Beta testing.

Explain CASE tools and CBSE.

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B.C.A. (Part-III) Examination, 2020

BCA-301

(Software Engineering)

Time allowed : Three hours

Maximum Marks : 70

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SECTION – A
(Marks : 2 × 10 = 20)

Answer all **ten** questions (Answer limit 50 words). Each question carries 2 marks.

(अंक : 2 × 10 = 20)

खण्ड – अ

समस्त **दस** प्रश्नों के उत्तर दीजिए (उत्तर सीमा 50 शब्द) । प्रत्येक प्रश्न 2 अंक का है ।

SECTION – B
(Marks : 4 × 5 = 20)

Answer all **five** questions. Each question has internal choice (Answer limit 200 words). Each question carries 4 marks.

खण्ड – ब
(अंक : 4 × 5 = 20)

समस्त **पाँच** प्रश्नों के उत्तर दीजिए । प्रत्येक प्रश्न में विकल्प का चयन करें (उत्तर सीमा 200 शब्द) । प्रत्येक प्रश्न 4 अंक का है ।

SECTION – C
(Marks : 10 × 3 = 30)

Answer any **three** questions out of five (Answer limit 500 words). Each question carries 10 marks.

खण्ड – स
(अंक : 10 × 3 = 30)

पाँच में से किन्हीं तीन प्रश्नों के उत्तर दीजिए (उत्तर सीमा 500 शब्द) । प्रत्येक प्रश्न 10 अंक का है ।

SECTION – A

खण्ड – अ

Attempt **all** questions. Answer should not exceed 50 words in each question.

समस्त प्रश्नों के उत्तर दीजिए । प्रत्येक प्रश्न 50 शब्दों से अधिक का नहीं होना चाहिए ।

1. (i) Differentiate between Product and Process.

उत्पाद व प्रक्रिया में क्या अंतर है ?

(ii) List the characteristics of a good SRS.

एक अच्छे एस आर एस की विशेषताओं को सूचीबद्ध करें ।

(iii) What is Cocomo model ?

Cocomo मॉडल क्या है ?

(iv) Differentiate between verification and validation.

सत्यापन और मान्यता में क्या अंतर है ?

(v) Compare fault isolation and fault confirmation.

अलगाव गलती और पुष्टीकरण गलती के बीच तुलना करें ।

(vi) What are the advantages of object-oriented design ?

ऑब्जेक्ट ओरिएंटेड डिजाइन के लाभ क्या हैं ?

(vii) Distinguish between Alpha and Beta Testing.

अल्फा और बीटा परीक्षण में क्या अंतर है ?

(viii) What are the steps followed in testing process ?

परीक्षण प्रक्रिया में कौन-कौन से चरण हैं ?

(ix) What is UML ? Define with its notations.

यू.एम.एल. क्या है ? इसके अंकन के साथ समझाइए ।

(x) Define terms multiplicity and Interfaces in class diagram.

बहुलता और इंटरफेस को वर्ग आरेख के संदर्भ में परिभाषित करें ।

SECTION – B

खण्ड – ब

Attempt **all** questions. Answer should not exceed **200** words in each question.

समस्त प्रश्नों के उत्तर दीजिए । प्रत्येक प्रश्न 200 शब्दों से अधिक का नहीं होना चाहिए ।

2. What is the need of SRS ? Discuss different components of SRS.

एस.आर.एस. की क्या आवश्यकता है ? एस.आर.एस. के विभिन्न घटकों को समझाइए ।

OR/अथवा

Explain Linear Sequential software process model.

रैखिक अनुक्रमिक सॉफ्टवेयर प्रक्रिया मॉडल की व्याख्या करें ।

3. Explain coupling and cohesion methods used in software design.

सॉफ्टवेयर डिजाइन में उपयोग किए गए सामंजस्य और युग्मन पद्धति को समझाइए ।

OR/अथवा

What are the benefits of metrics in cost estimation ? Explain.

लागत अनुमान में मेट्रिक्स के क्या लाभ हैं ? समझाइए ।

4. Briefly explain the object oriented design concepts.

ऑब्जेक्ट ओरिएंटेड डिजाइन अवधारणाओं का संक्षेप में वर्णन कीजिए ।

OR/अथवा

What are different debugging processes ? Explain.

डिबगिंग प्रॉसेस की अलग-अलग प्रक्रिया क्या हैं ? समझाइये ।

5. Explain different levels of software testing.

सॉफ्टवेयर परीक्षण के विभिन्न स्तर की व्याख्या करें ।

OR/अथवा

List software testing fundamental with the difference between black box and white box testing.

सॉफ्टवेयर परीक्षण के मूल सिद्धांतों की सूची बनाएँ तथा ब्लैक बॉक्स व सफेद बॉक्स परीक्षण के बीच अंतर करें ।

6. Explain class diagram with its various contents.

वर्ग आरेख की उसके विभिन्न अंतर्वस्तु के साथ व्याख्या करें ।

OR/अथवा

What are the roles played by packages, modules and wrappers in UML ?

यू.एम.एल. में पैकेज, मॉड्यूल और रैपर द्वारा क्या भूमिका निभाई जाती हैं ?

SECTION – C
खण्ड – स

Attempt any **three** questions out of **five**. Answer should not exceed **500** words in each question.
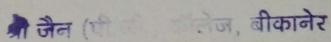
पाँच में से किन्हीं तीन प्रश्नों के उत्तर दीजिए । प्रत्येक प्रश्न 500 शब्दों से अधिक का नहीं होना चाहिए ।

7. What is the difference between prototyping model and spiral model ? Explain spiral model with its various activates in each phase.

प्रोटोटाइप मॉडल और सर्पिल मॉडल में क्या अंतर है ? प्रत्येक चरण में अपने विभिन्न संक्रियता के साथ सर्पिल मॉडल की व्याख्या कीजिए ।

8. What are different types of cocomo model ? Suppose a project was estimated to be 400 KLC. Calculate the effort and development time for each of the three model.

विभिन्न प्रकार के Cocomo मॉडल क्या हैं ? मान लीजिए कि एक परियोजना का अनुमान 400 KLC था । प्रत्येक तीन मॉडल के लिए प्रयास और विकास समय की गणना कीजिए ।

9. What is debugging ? What are different debugging approaches adopted ? Explain.

डिबगिंग क्या है ? अलग-अलग डिबगिंग स्वीकृतियाँ क्या हैं ? समझाइए ।

10. Explain type and components of CASE tools with its advantages.

इसके फायदे के साथ CASE टूल के प्रकार और घटकों की व्याख्या करें ।

11. What does association, aggregation and generalization in class diagram mean ? Explain each with example.

वर्ग आरेख में संघ, एकत्रीकरण और सामान्यीकरण का क्या अर्थ है ? प्रत्येक को उदाहरण के साथ समझाइए ।

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श्री जैन (ऐ ल . . . तेज, बीकानेर

BC-382

B.C.A. (Part-III) Examination, 2022

SOFTWARE ENGINEERING

Paper – BCA-301

Time : 3 Hours]　　　　　　　　　　[Maximum Marks : 70

Section–A　　　　　　　(Marks : 2 × 10 = 20)

Note :–　Answer all *ten* questions (Answer limit 50 words). Each question carries 2 marks.

Section–B　　　　　　　(Marks : 4 × 5 = 20)

Note :–　Answer all *five* questions. Each question has internal choice (Answer limit 200 words). Each question carries 4 marks.

Section–C　　　　　　　(Marks : 10 × 3 = 30)

Note :–　Answer any *three* questions out of five (Answer limit 500 words). Each question carries 10 marks.

Section–A

1.　(i)　What is Software ?

　　(ii)　What do you mean by McCall's Quality factors ?

　　(iii)　Explain Metrics.

　　(iv)　Describe Module Level concepts.

(v)   What is OOD ?

(vi)   Explain Fault Isolation.

(vii) What is Testing ?

(viii) What do you mean by CBSE ?

(ix)   Explain UML.

(x)   What is Interfaces ?

Section–B

2. Explain need of feasibility analysis.

Or

Explain linear sequential model.

3. Describe Designing Principles.

Or

Explain module level concepts of estimation.

4. Explain various types of coupling methods which are used in software design purpose.

Or

What is Cocomo Model ? Explain how to use it is software cost estimation.

5. Explain debugging process used in software testing phase.

Or

How we use Design Notation in Object Oriented Designing ?

6. Explain role of UML class diagram.

Or

What kind of UML notations ? Explain.

Section-C

7. Describe Software Requirement Analysis and Specification in detail.

8. Explain module level concepts of Cohesion and Coupling.

9. How to fixing fault isolation in Debugging process of Software ?

10. Describe structural testing and functional testing.

11. Write short notes on the following :

    (i)   Aggregation

    (ii)   Multiplicity

    (iii) Interfaces