



**UNIVERSITY OF COLOMBO, SRI LANKA**

**UNIVERSITY OF COLOMBO SCHOOL OF COMPUTING**

**DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY  
Academic Year 2009/2010 – 2<sup>nd</sup> Year Examination – Semester 4**

***IT4303: Rapid Application Development  
PART 2 - Structured Question Paper***

**15<sup>th</sup> August, 2010  
(ONE HOUR)**

**To be completed by the candidate**

BIT Examination Index No: \_\_\_\_\_

**Important Instructions:**

- The duration of the paper is **1 (one) hour**.
- The medium of instruction and questions is English.
- This paper has **04 questions** and **09 pages**.
- **Answer all questions**
- **Write your answers** in English using the space provided **in this question paper**.
- Do not tear off any part of this answer book.
- Under no circumstances may this book, used or unused, be removed from the Examination Hall by a candidate.
- Note that questions appear on both sides of the paper.  
If a page is not printed, please inform the supervisor immediately.

**Questions Answered**

Indicate by a cross (x), (e.g.  x ) the numbers of the questions answered.

To be completed by the candidate by marking a cross (x).	Question numbers			
	1	2	3	4
To be completed by the examiners:				

1)

- a) One of the main **problems addressed by RAD** is long delay before customer gets to see any result which happens in conventional development methods. List down two (2) other problems.

[04 Marks]

**ANSWER IN THIS BOX**

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- b) One **good reason** that we use RAD is to coverage early towards a design acceptable to the customer and feasible for the developers. List down two (2) more.

[04 Marks]

**ANSWER IN THIS BOX**

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- c) Some software developers' use **RAD for bad reasons** as well. List down two (2) such reasons.

[04 Marks]

**ANSWER IN THIS BOX**

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- d) The RAD model does not suit all types of software development projects and there are certain projects well suited for RAD. Write down four (4) features of projects that make them **suited for RAD**.

[04 Marks]

**ANSWER IN THIS BOX**

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- e) The RAD model does not suit all types of software development projects and there are certain projects well suited for RAD. Write down four (4) features of projects that make them **unsuitable for RAD** tend to fail.

[04 Marks]

**ANSWER IN THIS BOX**

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- f) Briefly explain the **advantages of RAD** in comparison with conventional development methods.

[05 Marks]

**ANSWER IN THIS BOX**

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2)

- a) RAD uses iterative evolutionary prototyping, such as a JAD (Joint Application Development) Meeting. Briefly describe what a **JAD Meeting** is?

[05 Marks]

<b><u>ANSWER IN THIS BOX</u></b>
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- b) Ineffective communication and lack of trust are two main reasons for teams to fail? List down three (3) other reasons for **RAD team to fail**.

[04 Marks]

<b><u>ANSWER IN THIS BOX</u></b>
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- c) **Business Teams** are the most common team structure with, peer group headed by a technical lead and all team members have equal status and each has its own expertise and tech lead is an active tech contributor. Briefly describe three (3) other kinds of teams, that is suited for Rapid Development.

[06 Marks]

<b><u>ANSWER IN THIS BOX</u></b>
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- d) Building an effective development team can take a long time. Hence, **Long-Term Teambuilding** can be more effective for RAD. List down three (3) reasons to maintain long-term teams.

[06 Marks]

**ANSWER IN THIS BOX**


- e) To be fair and practical towards all team members is one of the good characteristic of a Team Leader. List down four (4) other good characteristics of a **RAD Team Leader**.

[04 Marks]

**ANSWER IN THIS BOX**


3)

- a) Good “system builds” always pass the smoke test at the end of the day. Write down two (2) other features of a **good build**?

[04 Marks]

**ANSWER IN THIS BOX**

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- b) The smoke test always minimizes integration risk as well as reduces the risk of low quality. What are the other **advantages of smoke tests**? List four (4) of them.

[04 Marks]

**ANSWER IN THIS BOX**

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- c) SCRUM is an agile method that distributes the responsibilities among the team members and decentralizes the way of working together. Sprint and backlog are two of **SCRUM basics**.

List down three (3) other characteristics.

[06 Marks]

**ANSWER IN THIS BOX**

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4)

- a) Assume that you have initiate new java project using NetBeans, named “MyLibrary”. Default NetBeans java project creates four (4) different folders including “Source Packages”. What are the other three (3) **folders**?

[06 Marks]

**ANSWER IN THIS BOX**

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- b) Write down the auto generated **Java code** for “Main.java” file which was generated in **part (a)**.

[07 Marks]

**ANSWER IN THIS BOX**

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- c) What is the most convenient way to **create JFrame** named “LibraryHome” under “mylibrary” package? Break down the task in to four (4) steps and list them.

[04 Marks]

**ANSWER IN THIS BOX**

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- d) How should this new java class “LibraryHome” **extends**? Write down the appropriate code segment.

[04 Marks]

**ANSWER IN THIS BOX**

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- e) Assume that the “Public Library” would like to purchase your library system. What is the most convenient way to **rename all instances** of text **MyLibrary** in “MyLibrary” package as “Public Library”?

[04 Marks]

**ANSWER IN THIS BOX**

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