Student Exam No: _____

GANPAT UNIVERSITY
M. TECH. SEM. – II INFORMATION TECHNOLOGY
REGULAR EXAMINATION MAY / JUNE - 2012
3IT204: SOFTWARE ENGINEERING

TIME:-3 HOURS **[TOTAL MARKS: 70**

Instructions:

1. Figures to the right indicate full marks.
2. Each section should be written in a separate answer book.
3. Be precise and to the point in your answer.

SECTION – I

Q – 1	(A)	What is Difference between RAD and Spiral Process Model? Discuss about Prototype process model in brief.	[6]
	(B)	What is software engineering Practice? Discuss it in brief.	[4]
	(C)	What is the difference between Software Engineering and Computer Science?	[2]

OR

Q – 1	(A)	Discuss about Following Term with reference to Unified Process. 1. Inception 2. Production 3. Transition	[6]
	(B)	Explain about any four principles of communication practices.	[4]
	(C)	What is the Pareto Principle applies to Software Testing?	[2]
Q– 2	(A)	Discuss about system engineering hierarchy with reference to system engineering.	[4]
	(B)	Explain about analysis rules of Thumb.	[4]
	(C)	Write a short note on Domain Analysis.	[3]

OR

Q – 2	(A)	Discuss about structure chart with example.	[4]
	(B)	Size of organic type soft. Product has been estimated to be 28000 lines of source code and average salary of software engineers is Rs. 12000 per month. Determine the effort required to develop the soft. Product, the nominal development time and cost required to develop the product.	[4]
	(C)	Discuss about different types of class relationships.	[3]
Q – 3	(A)	Draw the CLD and DFD (up to level-2) for Distance Education University. The enrollment process works as follows: **1.** Student send application form containing their personal details and their desire course. **2.** Uni. Check that course is available and students desire qualification. **3.** If the course is available the student is enrolled in the course and Uni. Send the confirmation letter to the student. **4.** If the course is not available then rejection letter is sent to the student.	[8]
	(B)	Draw the Use case Diagram for any social networking web site.	[4]

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SECTION – II

Q – 4 (A) Discuss about following with respect to code review. [6]
1. Code walk through 2. Code inspection

(B) Discuss about translating the analysis model to design model with suitable diagram. [4]

(C) What is difference between validation and verification? [2]

OR

Q – 4 (A) What is Cohesion? Explain it in brief. [6]

(B) Explain about Representative Coding Standards. [4]

(C) What is difference between style and pattern of architecture? [2]

Q – 5 (A) Explain about Software Requirement Specification with Example. [4]

(B) Discuss about PERT chart with Example. [4]

(C) What is Architecture? Discuss it in Brief. [3]

OR

Q – 5 (A) What are the characteristics of good SRS? [4]

(B) Explain about halstead's software science analytical technique. [4]

(C) How the architecture is different than Design? [3]

Q – 6 (A) Consider the following C program: [6]

```
main()
{
   int a,b,c,sum;
   scanf("%d %d %d",&a,&b,&c);
   sum=a+b+c;
   printf("sum=%d",sum);
}
```

Find out the unique operators, operands, length and volume of the program.

(B) Discuss about Following UML Diagram using Example. [6]
1. Activity Diagram
2. Sequence Diagram
3. collaboration Diagram

END OF PAPER

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