Instructions:
1. Answer each section in separate Answer Sheet.
2. Use of scientific Calculator is permitted.
3. All questions are compulsory.
4. Indicate clearly, the options you attempted along with its respective question number.
5. Use the last page of main supplementary for rough work.

SECTION - 1

Q-1. a) Draw a diagram for pure waterfall life cycle. Explain the different phases involved in   5
          waterfall life cycle.

      b) What is feasibility study? What are the contents we should contain in the feasibility   5
          report?

      c) [I] Select the following correct answer.   3

          1) Which model incurs more cost?

          a) RAD b)Prototyping c) Spiral d) All of these

          2) The first activity in software project planning is the determination of.

          a) Software Size b) Software Scope c) Software Prize d) All of the above

          3) Software configuration belongs to which of the following activities?

          a)Umbrella activity b) Economic activity c) None of these d)All of the above

          [II] Define Software Engineering.   2

                                        OR

      c) Explain Cohesion and Coupling.   5

Q-2. a) Explain all the phases involved in the implementation phase.   5

      b) Explain Software Engineering as a Layered Technology.   5
                                        OR

      a) What is data conversion? Why is it necessary?   5

      b) Explain Architecture style and pattern.   5

Q-3. a) Explain the verification and validation (V & V) process.   5

	b)	Explain the software requirement specification (SRS) document.	**5**

OR

	a)	Draw the context level, level 1 and level 2 DFD for the Safe Home security function.	**5**
	b)	Define the terms: a) Agile Methods b) Agile Process.	**5**

SECTION – 2

Q-4.	**a)**	What is a Process Framework? Discuss umbrella activities and its role in software Development life cycle (SDLC).	**5**
	b)	Explain ER Diagrams, Data dictionaries ,Attributes and Organization Of SRS.	**5**
	c)	What is regression testing? Differentiate between the regression and development testing?	**5**

OR

	c)	What is the configuration management Task? What is re engineering and reverse engineering?	**5**
Q-5.	**a)**	What is user acceptance testing? Explain different testing in user acceptance testing. Why is it necessary?	**5**
	b)	Write short note on software Maintenance .Explain Types of Maintenance.	**5**

OR

Q-5.	**a)**	Define White Box Testing?	**5**
	b)	Discuss COCOMO model with an illustrative example.	**5**
Q-6.	**a)**	Explain different categories of risks.	**5**
	b)	Explain Software Project Planning.	**5**

OR

Q-6.	**a)**	Explain CASE Tool.	**5**
	b)	Short note on Quality Management.	**5**

******BEST OF LUCK******

KADI SARVA VISHVA VIDHYALAYA

B.E. (I.T.) SEMESTER-V EXAMINATION (November 2014)

SUBJECT CODE: IT 504   SUBJECT NAME: **Software Engineering**

DATE: 20/11/2014   TIME: 10:30 to 01:30   TOTAL MARKS: 70

Instructions:

1. Answer each section in separate Answer Sheet.
2. Use of scientific Calculator is permitted.
3. All questions are compulsory.
4. Indicate clearly, the options you attempted along with its respective question number.
5. Use the last page of main supplementary for rough work.

SECTION-1

Q: 1

    (A) What is software? Describe the types of software   [5]

    (B) Explain "Software is developed or engineered; it is not manufactured".   [5]

    (C) Short note: Waterfall model   [5]

OR

    (C) Short note: Incremental model   [5]

Q: 2

    (A) Describe the various phases of RAD model and its Drawbacks   [5]

    (B) Compare and contrast waterfall model with spiral model   [5]

OR

    (A) Which are the types of Requirement? Explain Non-functional Requirement in brief.   [5]

    (B) Define and explain Requirement Specification and Requirement Validation.   [5]

Q: 3

    (A) Explain all the Characteristics of Good SRS.   [5]

    (B) Draw a use case diagram for library management system.   [5]

OR

    (A) Draw a sequence diagram for food ordering system in a restaurant.   [5]

    (B) Distinguish between Cohesion and Coupling with an example.   [5]

P.T.O.

SECTION-2

Q: 1

(A) What are the commonly used programming practices? [5]

(B) Explain the method of incremental development of code. [5]

(C) What do you mean by coding standards? Explain some coding standards. [5]

OR

(C) Write short note on – Unit testing. [5]

Q: 2

(A) Define following terms. [5]
    (1) Software testing
    (2) Information hiding
    (3) Functional Independence
    (4) Software
    (5) Software Quality

(B) Explain the significance of User Interface (UI) in a system.
Also explain the design model for UI [5]

OR

(A) Distinguish between black box and white box testing. [5]

(B) Explain with suitable example the boundary value analysis. [5]

Q: 3

(A) Enlist five CASE tools and explain their use. [5]

(B) Explain software engineering as a layered technology. [5]

OR

(A) Explain five-level of CMM(Capability Maturity Model) [5]

(B) What is feasibility study? Explain the need and outcome of feasibility study. [5]

-------------------------------ALL THE BEST----------------------------