

(Following Paper ID and Roll No. to be filled in your Answer Book)

**PAPER ID : 113604** Roll No.

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**B.Tech.**

(SEM. VI) THEORY EXAMINATION 2013-14

**SOFTWARE PROJECT MANAGEMENT**

*Time : 3 Hours*

*Total Marks : 100*

**Note :- Attempt all questions.**

1. Attempt any **four** of the following : **(4×5=20)**
  - (a) What is scope of project ? Explain with an example.
  - (b) List the various types of project plans. Explain one such plan.
  - (c) What is Project Management Life Cycle ? Explain.
  - (d) Describe the Putnam Model of software estimation.
  - (e) Explain the following with an example :
    - (i) Deliverable
    - (ii) Milestone.
  
2. Attempt any **two** of the following : **(2×10=20)**
  - (a) Define Work Breakdown Structure (WBS). Explain the various types of WBS.
  - (b) Explain the following :
    - (i) Total float, Free float and Independent float
    - (ii) PERT vs CPM
    - (iii) Scheduling resources.

(c) Following is the activity list of a software project :

Activity	Activity Description	Duration (Weeks)	Precedents
A	Hardware selection	6	
B	Software design	4	
C	Install hardware	3	A
D	Code and Test Software	4	B
E	File take-on	3	B
F	Write user manual	10	
G	User training	3	E, F
H	Install and test system	2	C,D

- (i) Construct the Project Network
- (ii) Find the Critical path
- (iii) Compute slack of each activity
- (iv) Indicate the earliest start time, latest start time, earliest finish time and latest finish time in the diagram.

3. Attempt any **two** of the following : **(2×10=20)**

- (a) Explain the Function Point Analysis in detail. Discuss also how Complexity Adjustment Factor (CAF) adjusts the Unadjusted value of Function Point (UFP).
- (b) Discuss the COCOMO hierarchy of estimation models in detail.
- (c) Describe the Earned Value Indicators in detail.

4. Attempt any **two** of the following : **(2×10=20)**

- (a) Describe the different types, levels and strategies of testing.
- (b) Explain the terms :
  - (i) Verification and Validation
  - (ii) Testing tools.
- (c) Explain about SEICMM. Describe in detail various maturity levels. Explain the capability required to satisfy them.

5. Attempt any **two** of the following : **(2×10=20)**

- (a) How is change control process handled in software projects.
- (b) What is risk management ? What are the various type of risks ? How are these managed ?
- (c) What are CASE tools ? Describe the CASE tools giving their utility.