SOFTWARE MANAGEMENT (SEMESTERS - 4 & 6)

CS/MBA/SEM-(4 FT & 6 PT)/SM-404/09

| 1. | Signature of Invigilator | | | | llec Ŝ | h | h | * | |
|----|------------------------------|------|------|------|-----------|---|---|---|--|
| 2. | Reg. No. | | | | | | | | |
| | Roll No. of the Candidate | | | | | | | | |
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CS/MBA/SEM-(4 FT & 6 PT)/SM-404/09 ENGINEERING & MANAGEMENT EXAMINATIONS, APRIL – 2009 SOFTWARE MANAGEMENT (SEMESTERS - 4 & 6)

Time: 3 Hours [Full Marks: 70

INSTRUCTIONS TO THE CANDIDATES:

- 1. This Booklet is a Question-cum-Answer Booklet. The Booklet consists of **32 pages**. The questions of this concerned subject commence from Page No. 3.
- 2. a) In **Group A**, Questions are of Multiple Choice type. You have to write the correct choice in the box provided **against each question**.
 - b) For **Groups B** & **C** you have to answer the questions in the space provided marked 'Answer Sheet'. Questions of **Group B** are Short answer type. Questions of **Group C** are Long answer type. Write on both sides of the paper.
- 3. **Fill in your Roll No. in the box** provided as in your Admit Card before answering the questions.
- 4. Read the instructions given inside carefully before answering.
- 5. You should not forget to write the corresponding question numbers while answering.
- 6. Do not write your name or put any special mark in the booklet that may disclose your identity, which will render you liable to disqualification. Any candidate found copying will be subject to Disciplinary Action under the relevant rules.
- 7. Use of Mobile Phone and Programmable Calculator is totally prohibited in the examination hall.
- 8. You should return the booklet to the invigilator at the end of the examination and should not take any page of this booklet with you outside the examination hall, **which will lead to disqualification**.
- 9. Rough work, if necessary is to be done in this booklet only and cross it through.

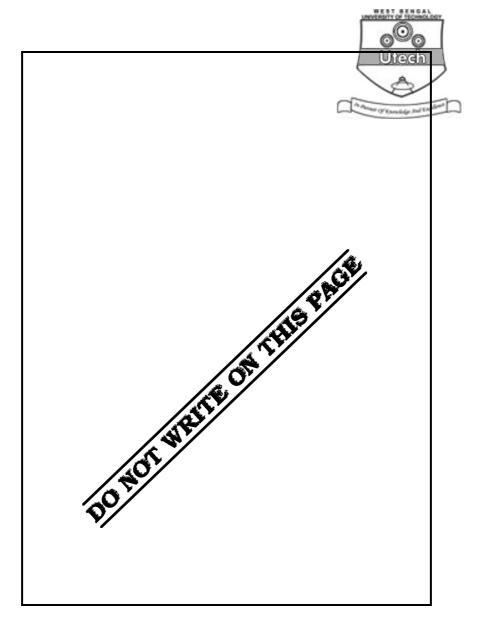
No additional sheets are to be used and no loose paper will be provided

| FOR OFFICE USE / EVALUATION ONLY Marks Obtained | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|---|---------------------|--|--|--|--|---|--|--|-------|------------|
| Group – A | | | | | | | | Group – B Group – C | | | | | | | | | |
| Guestion | | | | | | | | | | | | | | | | Total | Examiner's |
| Number | | | | | | | | | | | | | | | | Marks | Signature |
| Marks | | | | | | | | | | | | | | | | | |
| Obtained | | | | | | | | | | | | | | | | | |
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Head-Examiner/Co-Ordinator/Scrutineer

4467 (28/04)







ENGINEERING & MANAGEMENT EXAMINATIONS, APRIL - 2009

SOFTWARE MANAGEME

SEMESTERS - 4 & 6

Time: 3 Hours [Full Marks: 70

GROUP - A

| | | | (Multiple Choice | Туре | Questions) | | | | | | | | | |
|----|------|--|-------------------------------|----------|-----------------------|--|--|--|--|--|--|--|--|--|
| 1. | Cho | 10 × 1 = 10 | | | | | | | | | | | | |
| | i) | i) System development model which includes all other models is | | | | | | | | | | | | |
| | | a) | prototype | b) | RAD | | | | | | | | | |
| | | c) | spiral | d) | evolutionary. | | | | | | | | | |
| | ii) | The | requirement analysis is not | | | | | | | | | | | |
| | | a) | an attempt to improve an exis | sting sy | vstem | | | | | | | | | |
| | | b) | establishing a computer netw | ork | | | | | | | | | | |
| | | c) | an effort in which requiremen | ts of a | system are understood | | | | | | | | | |
| | | d) | an interdisciplinary approach | to pro | blem solving. | | | | | | | | | |
| | iii) | Crit | S | | | | | | | | | | | |
| | | a) | longest path | b) | deterministic path | | | | | | | | | |
| | | c) | problematic path | d) | shortest path. | | | | | | | | | |
| | iv) | The | second phase of CMM level is | | | | | | | | | | | |
| | | a) | defined | b) | managed | | | | | | | | | |
| | | c) | repeatable | d) | none of these. | | | | | | | | | |

| CS/MBA/ | SEM-(4 | FT & 6 PT)/SM-404/09 | | | |
|---------|------------|---------------------------------|--------------|------------------------------|------------|
| v) | Spi | ral model is called | 4 model. | | |
| | a) | final | b) | finished Utech | |
| | c) | meta | d) | build and fix. | |
| vi) | An call | | nd no res | sources in project network d | liagram is |
| | a) | dumb activity | b) | dummy activity | |
| | c) | no activity | d) | none of these. | |
| vii |) Wh | ich of the following helps IT p | project to s | ucceed ? | |
| | a) | Executive support | b) | Reliable estimates | |
| | c) | User involvement | d) | All of these. | |
| vii | i) CO | COMO stands for | | | |
| | a) | Customer Cost Model | b) | Consumer Cost Model | |
| | c) | Constructive Cost Model | d) | Caizer Costing Model. | |
| ix) | Fur | nction point software metric d | loes not in | clude | |
| | a) | number of user input | b) | number of user output | |
| | c) | number of files | d) | number of access path. | |
| x) | Pro | curement process of software | managem | ent includes | |
| | a) | biding process | b) | negotiation process | |
| | c) | order placement | d) | all of these. | |



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|------|-------|------------------------------------|----------|---------------------------------------|----|
| xi) | Whi | ch of the following is not a softw | tric? | | |
| | a) | Design metric | b) | Project metric | |
| | c) | Product metric | d) | Standard metric. | |
| xii) | Whice | ch of the following is not genera | lly cons | sidered a player in the software proc | es |
| | a) | Customers | b) | End-users | |
| | c) | Project managers | d) | Sales people. | |

GROUP – B (Short Answer Type Questions)

Answer any three of the following.

 $3 \times 5 = 15$

- 2. What do you understand by quantitative and quantitative risk analysis?
- 3. What are the various quality management techniques that project manager can use for software project management? Explain some of these techniques.
- 4. Why do you think communication management is very vital for project manager?
- 5. Discuss how win-win spiral model is useful in software development.
- 6. Discuss HALSTEAD's software model for determining effort and time estimation of software development.
- 7. Explain A-O-A network diagram.



GROUP - C

(Long Answer Type Questions)

Answer any three of the following.



 $3 \times 15 = 45$

- 8. a) Describe fourth generation technique mentioning its advantages.

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- b) Briefly describe various stages of SDLC. What are the various types of maintenance of SDLC? 7+2
- 9. a) What do you understand by scope creeping? Write its importance in scope management.
 - b) Explain project charter.

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c) Explain WBS with an example.

- 5
- 10. a) Consider a software project with 5 tasks T_1 T_5 . Durations are 15, 10, 12, 25 and 10 respectively . T_2 and T_4 can start when T_1 is completed. T_3 can start when T_2 is completed. T_5 can start when both T_3 and T_4 are completed. Draw the project network diagram and lists the task that are on the critical path.
 - b) 'Human Resource Management is important function for software management.' Explain. Highlight some of the steps you would take as software PM to reduce attrition rate from your project group. 4 + 4
- 11. a) Compare various COCOMO models. What are the disadvantages of Putnam model . 3+2
 - b) What are different cost estimating techniques?

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c) Suppose you are developing a software product in the organic mode. You have estimated the size of the product to be about 1,00,000 lines of code. Compute the nominal effort and the development time. You can make use of the following formula supplied to you:

Organic : Effort = $2.4 * (KLOC)^{1.05}$ PM Development Time = $2.5 (Effort)^{0.38}$ months.

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12. Write short notes on any *three* from the following :

Procurement management



SPMP

a)

b)

- c) Steps of communication management
- d) SEI CMM model
- e) Cost of quality
- f) MS Project 2003.

END