

**S.D.E.**  
**M.C.A. SEM - V : WINTER - 2017**  
**SUBJECT: SOFTWARE PROJECT MANAGEMENT**

Day: **Tuesday**  
Date: **12/12/2017**

Time: **10.00 A.M. TO 1.00 P.M.**  
Max. Marks: 80

**W-2017-4437**

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**N.B.:**

- 1) Attempt any **FIVE** questions from Section –I and any **TWO** questions from Section –II.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Answers to both the sections should be written in **SEPARATE** answer books.
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**SECTION-I**

- Q.1** What is software project management? Differentiate between software projects and other type of projects. **(10)**
- Q.2** What do you mean by requirement engineering? Explain requirement engineering process in detail. **(10)**
- Q.3** Describe traditional methods of cost estimation with their merits and demerits. **(10)**
- Q.4** What is Risk? Explain elements of risk management in detail. **(10)**
- Q.5** Discuss the outline of software quality assurance plan. **(10)**
- Q.6** What do you mean by work breakdown structure? Explain the role of WBS in resource planning and scheduling with suitable example. **(10)**
- Q.7** Write short notes on any **TWO** of the following: **(10)**
- a) Spiral model
  - b) Software metrics
  - c) PMBOK

**P. T. O.**

## SECTION-II

- Q.8** Draw an activity network diagram and find out earliest start time and earliest finish time for each activity. Also find the critical path for the project given below: **(15)**

Activity	Immediate predecessor	Duration (in week)
A	-	2
B	A	6
C	A	6
D	A	4
E	D	3
F	D	4
G	E	1
H	E,G	2
I	C,H	3
J	B	2

- Q.9** Consider the following project: **(15)**  
Number of programmers -25  
Number of programs -95  
Number of inputs-19  
Number of outputs-19  
Number of internal files -35  
Number of external files – 07  
Number of enquiries - 10  
Compute the functions point value for all the three complexities. (consider  $\sum fi=1$ )
- Q.10 a)** “Adding more people to an already delayed project delays it further”. Justify with example. **(10)**
- b)** “Testing is crucial part in project”. – Comment. **(05)**