

**SUPPLEMENTARY**  
**BACHELOR OF COMPUTER APPLICATIONS (CBCS - 2018 COURSE)**  
**B.C.A. Sem-VI :SUMMER- 2022**  
**SUBJECT : SOFTWARE PROJECT MANAGEMENT**

Day : Friday

Time : 10:00 AM-01:00 PM

Date : 26-08-2022

S-18800-2022

Max. Marks : 60

**N.B.:**

- 1) Q. No. 4 from Section –I is **COMPULSORY**.
- 2) Solve any **TWO** questions from Q. no. 1 to Q. no. 3.in Section –I
- 3) Solve any **TWO** questions from Q. no. 5 to Q. no. 7.in Section –II.
- 4) Figures to the right indicate **FULL** marks.
- 5) Answer to both the sections should be written in **SAME** answer book.

**SECTION-I**

- Q.1** a) Define project. Describe how software projects are different than other types of projects. (06)  
b) What do you mean by work breakdown structure? Explain benefits, rules and process of developing WBS. (06)
- Q.2** a) Explain the concept of time management. (06)  
b) Explain non algorithmic methods of cost estimation with their merits and demerits. (06)
- Q.3** a) Explain various McCall's quality factors. (06)  
b) What is risk? Explain the importance of risk management. (06)
- Q.4** Write short notes on any **THREE** of the following: (12)
- a) Microsoft Project
  - b) Gantt chart
  - c) Factors affecting cost estimation
  - d) CMM

**SECTION-II**

- Q.5** Draw activity diagram for following project. Find earliest completion time and critical path for the same. (12)

	Activity	Duration (Weeks)	Dependence
A	Identify requirements	4	-
B	Define scope	2	A
C	Hardware selection	2	A
D	Prepare software design	4	A, B,C
E	Prepare test plan	3	D
F	Coding and testing	3	D,E
G	Software implementation	2	F
H	User training	1	G

- Q.6** Calculate the total function point value for the following project: (12)
- Number of Programmers – 12  
Number of Algorithms – 23  
Number of inputs – 15  
Number of outputs- 21  
Number of internal files – 19  
Number of external files – 19  
Number of enquiries – 30  
Number of programs – 23  
Compute for all the three complexities. (consider  $\sum fi = 1$ )

- Q.7** Explain the elements of risk management in detail. (12)