

G. H. Raison College of Engineering, Nagpur
(An Autonomous Institution)

2020-2021 ODD TERM

CAE-1 EXAMINATION FOR SPLIT-II COURSES WINTER-2020 (ONLINE MODE)

Third Semester B.Tech Artificial Intelligence Department

Software Engineering

Time: 1 hr.]

[Max. Marks : 15

- 1) [CO1/CO2/CO...] indicates the question related to specific course outcome.
- 2) All questions carry marks as indicated
- 3) Assume suitable data wherever necessary.
- 4) Due credit will be given to neatness and adequate dimensions.
- 5) Illustrate your answer wherever necessary with the help of neat sketches.
- 6) Use of non-programmable calculator is permitted.

CO.1 a) What is COCOMO Model?

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Assume that the size of an Embedded type software product has been estimated to be 50,000 lines of source code. Assume that the average salary of software engineers be Rs. 27,000/- per month. Determine the **effort** required to develop the product and the nominal development **time**.

Consider Values for Estimation of development effort

Organic : Effort = 2.4(KLOC) 1.05 PM

Semi-detached : Effort = 3.0(KLOC) 1.12 PM

Embedded : Effort = 3.6(KLOC) 1.20 PM

Estimation of development time

Organic : Tdev = 2.5(Effort) 0.38

Months Semi-detached : Tdev = 2.5(Effort) 0.35 Months

Embedded : Tdev = 2.5(Effort) 0.32 Months

b) You are in-charge of commissioning the design of a new software, such as the new Computer based Laboratory Ssystem. Draw up a high-level GANTT chart for this task.

CO.2 a) Draw the network diagram for the project whose activities & duration are given

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Activity	Predecessor	Duration (days)
A	-	3
B	A	4
C	A	2
D	B	5
E	C	1
F	C	2
G	D,E	4
H	F,G	3

OR

b) what are the basic phases in SDLC ? Explain with an example.

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***** Stay Home Stay Safe *****