B. TECH. (COMPUTER SCIENCE & BUSINESS SYSTEMS) (CBCS - 2018 COURSE) B.Tech. (CSBS) Sem - III :SUMMER- 2022 SUBJECT : SOFTWARE ENGINEERING

Day: Friday
Date: 3/6/2022

S-20449-2022

Time: 02:30 PM-05:30 PM

Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat labeled diagrams **WHEREVER** necessary.
- Q.1 Differentiate between programming in small and programming in large.

OR

- Q.1 Define software engineering. State the importance of it in today's world. How this knowledge will help you in the Software Development when you will join the industry?
- Q.2 What is feasibility study? Explain COCOMO Model. (10)

OR

Q.2 What is risk? Explain risk monitoring and mitigation tasks.

(10)

(10)

Q.3 What is difference between process and product quality? Explain Mc Call's (10) quality model.

OR

- Q.3 What are different levels of capability maturity model? Explain in detail. (10)
- Q.4 University offers a number of courses via the internet. A common requirement among these courses is for a system of online assessment. An assessment is any form of graded questions and answer activity like, quizzes, exam exercise and self-assessment.

An assessment can contain a number of questions. Questions can come in many forms, including true / false, single choice among multiple alternatives and an essay there may be other forms as well.

Student take assessment that are administered by instructors. The students, responses are collected by the instructor. Who grades them by comparison to a rubric for each question? A total score for assessment is computed by the instructor.

If this is a self-assessment the score is for information purpose only. For other kind of assessment the instructor records the score in his/ her record book. Information is returned to the student about their performance student aloes demand a copy.

Draw a CRC diagram for the system described above.

OR

Q.4 Explain different elicitation techniques. Also sate which one you will use if (10) given the responsibility of requirement gathering.

Q.5 Explain object oriented design principles. Write an example of each. (10)

OR

- Q.5 What is importance of design patterns? Name any 2 creational design patters and explain them with suitable example. (10)
- Q.6 List different white box and block box testing strategies. Compare above (10) strategies.

OR

Q.6 Write as many test cases as you can for following scenario. If you are a new customer and you want to open a credit card account then there are three conditions. first, you will get a 15% discount on all your purchases today second if you are an existing customers and you hold a loyalty card, you get a 10% discount and third if you have a coupon, you can get 20% off today (above discounts can't be used with a 'new customer's) Discount amounts are added if applicable.

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