

UG

Name:	•••••		Roll No.:
Branch:	•••••		Signature of Invigilator:
Semester:	VIth	Date: 26/04/2022 (MO	RNING)
Subject w	ith Code: IT30	05 SOFTWARE ENGINEER	ING

Marks Obtained	Section A	Section B	Total Marks
	(30)	(20)	(50)
Marks Obtained			

### **INSTRUCTION TO CANDIDATE**

- The booklet (question paper cum answer sheet) consists of two sections. <u>First section consists of MCQs of 30 marks</u>.
  Candidates may mark the correct answer in the space provided / may also write answers in the answer sheet provided. <u>The Second section of question paper consists of subjective questions of 20 marks</u>. The candidates may write the answers for these questions in the answer sheets provided with the question booklet.
- 2. The booklet will be distributed to the candidates before 05 minutes of the examination. Candidates should write their roll no. in each page of the booklet.
- 3. Place the Student ID card, Registration Slip and No Dues Clearance (if applicable) on your desk. <u>All the entries on the cover page must be filled at the specified space.</u>
- 4. <u>Carrying or using of mobile phone / any electronic gadgets (except regular scientific calculator)/chits are strictly prohibited inside the examination hall as it comes under the category of unfair means.</u>
- 5. No candidate should be allowed to enter the examination hall later than 10 minutes after the commencement of examination. Candidates are not allowed to go out of the examination hall/room during the first 30 minutes and last 10 minutes of the examination.
- 6. Write on both side of the leaf and use pens with same ink.
- 7. The medium of examination is English. Answer book written in language other than English is liable to be rejected.
- 8. All attached sheets such as graph papers, drawing sheets etc. should be properly folded to the size of the answer book and tagged with the answer book by the candidate at least 05 minutes before the end of examination.
- 9. The door of examination hall will be closed 10 minutes before the end of examination. <u>Do not leave the examination hall until the invigilators instruct you to do so.</u>
- 10. Always maintain the highest level of integrity. Remember you are a BITian.
- 11. Candidates need to submit the question paper cum answer sheets before leaving the examination hall.

### BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI (END SEMESTER EXAMINATION)

CLASS: BTECH SEMESTER:

BRANC :ECE/EEE/CSE/IT/MECH/PROD/CIVIL SESSION: SP/2022

SUBJECT: IT305, SOFTWARE ENGINEERING

TIME : 2 HOURS MARKS: 50

### **INSTRUCTIONS:**

- 1. The question paper contains 20 questions and Candidates may attempt all questions.
- 2. The missing data, if any, may be assumed suitably.
- 3. Before attempting the question paper, be sure that you have got the correct question paper.

### Section A (Marks 15\*2 = 30)

- 1. What is the first step in the software development lifecycle?
  - a. System Design
  - b. Coding
  - c. System Testing
  - d. Preliminary Investigation and Analysis
- 2. Which of the following is involved in the system planning and designing phase of the SDLC?
  - a. Sizing
  - b. Parallel run
  - c. Specification freeze
  - d. All of the above
- 3. What is the major drawback of the Spiral Model?
  - a. Higher amount of risk analysis
  - b. Doesn't work well for smaller projects
  - c. Additional functionalities are added later on
  - d. Strong approval and documentation control
- 4. Which of the following model will be preferred by a company that is planning to deploy an advanced version of the existing software in the market?
  - a. Spiral
  - b. Iterative Enhancement
  - c. RAD
  - d. Both (b) and (c)
- 5. The agile software development model is built based on \_\_\_\_\_.
  - a. Linear Development
  - b. Incremental Development
  - c. Iterative Development
  - d. Both Incremental and Iterative Development

- 6. Expand COCOMO
  - a. Constructive Cost Estimation Model
  - b. Conditional Cost Estimation Model
  - c. Constructive complementary Estimation Model
  - d. Constructive Cost Enhancement Model
- 7. \_\_\_\_\_is a step in which design is translated into machine-readable form?
  - a) Design
  - b) Conversion
  - c) Debugging
  - d) Coding
- 8. In the spiral model 'risk analysis' is performed
  - a. In the first loop
  - b. In every loop
  - c. Before using the spiral model
  - d.in first and second loop
- 9. Which of the following is the reason that software is delivered late?
  - a) Changing customer requirements that are not reflected in schedule changes
  - b) Technical difficulties that could not have been foreseen in advance
  - c) Human difficulties that could not have been foreseen in advance
  - d) All of the mentioned
- 10. FAST stands for
  - a. Functional Application Specification Technique
  - b. Fast Application Specification Technique
  - c. Facilitated Application Specification Technique
  - d. None of the mentioned
- 11. The user system requirements are the parts of which document?
  - a. SDD
  - b. SRS
  - c. DDD
  - d. SRD
- 12. Which is one of the most important stakeholders from the following?
  - a. Entry level personnel
  - b. Middle level stakeholder
  - c. Managers
  - d. Users of the software
- 13. Which one of the following is not a step of requirement engineering?
  - a) elicitation
  - b) design
  - c) analysis
  - d) documentation
- 14. Which term is used to define testing?
- a. Evaluating deliverable to find errors
- b. Finding broken code

- c. A stage of all projects
- d. None of the above
  - 15. The \_\_\_\_\_\_ of a computer program is an important element of its overall quality.
- A. Verification
- B. Validation
- C. Reliability
- D. None of these

### Section B (Marks 5\*4 = 20)

- 1. Write a short note on Spiral Model.
- 2. Write a short note on verification and validation.
- 3. Describe any three types of software testing.
- 4. Write a short note on project planning.
- 5. What do you understand by UML?















