(6 pages)

Reg. No. :

Code No.: 6450

Sub. Code: ZCSM 34

M.Sc. (CBCS) DEGREE EXAMINATION, NOVEMBER 2022.

Third Semester

Computer Science - Core

RESEARCH METHODOLOGY

(For those who joined in July 2021 onwards)

Time: Three hours

Maximum: 75 marks

PART A — $(10 \times 1 = 10 \text{ marks})$

Answer ALL questions.

Choose the correct answer:

- A research which follows case study method is called
 - (a) Clinical or diagnostic
 - (b) Causal
 - (c) Analytical
 - (d) Qualitative

- 2. Research conducted in class room atmosphere is called
 - (a) Field study
 - (b) Survey
 - (c) Laboratory research
 - (d) Empirical research
- 3. "Reasoning from general to particular" is called
 - (a) Induction
- (b) Deduction
- (c) Observation
- (d) Experience
- "Deduction and induction are a part of system of reasoning" - stated by
 - (a) Caroline
- (b) P.V Young
- (c) Dewey John
- (d) Emory
- 5. Variance of a random variable X is given by
 - (a) E(X)

- (b) E(X2)
- (c) $E(X^2) (E(X))^2$
- (d) (E(X))2
- 6. If the null hypothesis is false then which of the following is accepted?
 - (a) Null hypothesis
 - (b) Positive hypothesis
 - (c) Negative hypothesis
 - (d) Alternative hypothesis

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- 7. What is plagiarism?
 - (a) Using words or ideas of another author/researcher without citing the source
 - (b) Paraphrasing original content and not citing it
 - (c) Using your own previous works without proper acknowledgment
 - (d) All of the above
- 8. Copyright is
 - (a) Positive right
- (b) Negative right
- (c) Exclusive right
- (d) Both (a) and (b)
- 9. In which of these people with similar interests contribute with their knowledge?
 - (a) Seminar
- (b) Conference
- (c) Symposium
- (d) Convention
- 10. Which of the following is not an effective way for presentation?
 - (a) not relying on technology
 - (b) use visuals wisely
 - (c) consider audience
 - (d) presentation without plan

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PART B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 250 words.

11. (a) List and explain the objectives of research methodology.

Or

- (b) How to do you go about formulating research problem? Discuss.
- 12. (a) Analyze the relationship between the explanation and prediction.

Or

- (b) Write the limitations of primary data collection.
- 13. (a) Differentiate between probability and non probability sampling.

Or

- (b) Construct the structure of scientific reports.
- 14. (a) Explain the different criteria's of patentability.

Or

(b) How to select a good trademark? Discuss.

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[P.T.O.]

15. (a) Tell about objectives of teaching.

Or

(b) Enumerate the advantages and disadvantages of discussion method of teaching.

PART C — $(5 \times 8 = 40 \text{ marks})$

Answer ALL questions, choosing either (a) or (b)
Each answer should not exceed 600 words.

16. (a) Categorize the various types of research.

Or

- (b) Discuss the importance of critical literature review and its uses in planning innovation research.
- 17. (a) Develop the research plant for computer science research.

Or

- (b) Explain the various sources of obtaining data for the selected research problem.
- 18. (a) What are the steps involved in writing good research report? Analyze.

Or

(b) Describe the guidelines for preparing a good research report oral presentation.

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 (a) Why copy rights are preferred rather than patents in case of software? Justify your answer.

Or

- (b) As a student what are the precaution to be taken to publish a plagiarism free report. Discuss.
- 20. (a) Elucidate the effectiveness of ICT corner.

Or

(b) Demonstrate the principles of adolescent development.

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