Sub. Code 7MIT3C1

## M.Sc. DEGREE EXAMINATION, NOVEMBER 2022

## **Third Semester**

# **Information Technology**

#### **COMPILER DESIGN**

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Section A  $(10 \times 2 = 20)$ 

- 1. What are called as intermediate code?
- 2. Define parser.
- 3. Which type of symbol table mechanism gives greater performance?
- 4. Define Recursive decent parsing.
- 5. What is SDD?
- 6. What is Dependency Graph?
- 7. List the Storage allocation strategies.
- 8. What is DAG?
- 9. Write any two approaches to implement conditional jump.
- 10. What is dominator tree?

Section B

 $(5 \times 5 = 25)$ 

Answer all questions, choosing either (a) or (b).

11. (a) How different phases of compiler grouped together? Explain.

Or

- (b) How tokens are recognized for conditional and branching statement? Explain.
- 12. (a) Why symbol table is needed to compiler? Explain.

Or

(b) Let us consider the context free grammar :  $S \rightarrow SS+|SS^*|$ .

Show how the String aa+a\* can be generated by this grammar and construct a parse tree for this string.

13. (a) Explain syntax directed Translation for Array type.

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- (b) With Translation diagram explain reorganization of reserve word and Identifier.
- 14. (a) What are the issues of source language? Explain.

Or

- (b) How the Three address instructions are represented in Quadruples? Explain.
- 15. (a) Describe target machine model for code generation.

Or

(b) Explain the concepts of dead code elimination.

2

**Section C**  $(3 \times 10 = 30)$ 

Answer any **three** questions.

- 16. Explain the functions of lexical analyzer.
- 17. How Grammar is useful to check syntax in programming language? Explain.
- 18. Discuss on syntax directed translation scheme.
- 19. Describe the Translation of switch statement.
- 20. Discuss on simple code generator.

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Sub. Code 7MIT3C2

## M.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

## Third Semester

# **Information Technology**

### SOFTWARE PROJECT MANAGEMENT

(CBCS – 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. What is feasibility study?
- 2. Expand SMART.
- 3. Define the term methodology
- 4. List out the agile methods.
- 5. What is CPM?
- 6. Mention the categories of RISK.
- 7. Define planned value.
- 8. Define team structure.
- 9. Expand COTS
- 10. What is contract management?

Part B

 $(5 \times 5 = 25)$ 

Answer all questions, choosing either (a) or (b).

11. (a) Write a short note on RISK evaluation?

Or

- (b) Discuss about setting objectives.
- 12. (a) Write about extreme programming.

Or

- (b) Where are estimate done?
- 13. (a) Write a short note on Monte Carlo Simulation.

Or

- (b) Discuss about cost schedules.
- 14. (a) Write about earned value analysis.

Or

- (b) Explain how data is collected?
- 15. (a) How teams are categorized?

Or

(b) What are the best method of staff selection?

Part C

 $(3 \times 10 = 30)$ 

Answer any three questions.

- 16. Explain in detail about cost benefit evaluation techniques.
- 17. Explain about effort and cost estimation techniques.

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- 18. Discuss about the objectives of activity planning.
- 19. Discuss in detail about SCM.

20. Categorize the decision-making and discuss.

Sub. Code 7MIT3C3

## M.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

### Third Semester

# **Information Technology**

### **CLOUD COMPUTING**

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

**Part A**  $(10 \times 2 = 20)$ 

- 1. List any four properties of cloud computing.
- 2. List any four companies offering cloud services development services and tools.
- 3. What is collaborative computing?
- 4. What is virtual company?
- 5. Write the benefits of web-based word processors.
- 6. What is the use of Hunt calendars?
- 7. What is cloud Federation?
- 8. What is Aneka?
- 9. What is open source cloud?
- 10. List the two basic products of Nimbus.

Answer all questions, choosing either (a) or (b).

11. (a) Write a brief note on History of cloud computing.

Or

- (b) Write the advantages of cloud computing.
- 12. (a) Discuss about collaborating on Group projects and events by community Groups.

Or

- (b) Discuss about collaborating on Grocery lists and collaborating on contact lists by family.
- 13. (a) Write about collaborating on Databases.

Or

- (b) Explain any two cloud applications for project management.
- 14. (a) Write short notes on Amazon S3.

Or

- (b) Write short notes on Hadoop.
- 15. (a) Write about Nimbus platform.

Or

(b) Write about the main features of Euclayptus.

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**Part C**  $(3 \times 10 = 30)$ 

# Answer any **three** questions.

- 16. Write in detail about the types of cloud service Development.
- 17. Write a brief note on cloud computing for corporation.
- 18. Write about collaboration on event management.
- 19. Write about the four levels of federations.
- 20. Write a brief note on open Nebula.

Sub. Code 7MIT3E3

### M.Sc. DEGREE EXAMINATION, NOVEMBER 2022

#### Third Semester

## **Information Technology**

#### **Elective - BIG DATA ANALYTICS**

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Section A  $(10 \times 2 = 20)$ 

- 1. What is big data?
- 2. List Hadoop components.
- 3. List the main components of map reduce.
- 4. Define Nearest Neighbor search.
- 5. What is data Stream?
- 6. What is cardinality estimation Problem?
- 7. Define Page Rank.
- 8. Write the purpose of iThenticate.
- 9. What are the types of social Network?
- 10. How will you identify overlapping communities in a social graph?

Section B

 $(5 \times 5 = 25)$ 

Answer all questions, choosing either (a) or (b).

11. (a) Explain the characteristic of big data.

Or

- (b) What are the limitations of Hadoop?
- 12. (a) Write map reduce algorithm for projection.

Or

- (b) Discuss the applications of nearest Neighbor search.
- 13. (a) Describe about Data stream model.

Or

- (b) Discuss on Boolean filter.
- 14. (a) What are the techniques of Spam texting? Explain.

Or

- (b) What are the types of Spammer? Explain.
- 15. (a) How SimRank is used to analyze social network group?

Or

(b) Discuss on direct discovery of communities in social graph.

**Section C**  $(3 \times 10 = 30)$ 

Answer any three questions.

- 16. Discuss on traditional data management versus big data approach.
- 17. How RDBMS set operations are performed in map reduce? Explain.

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- 18. What are the issues in Data Stream Querry processing? Discuss.
- 19. Explain briefly about Recommendation Systems.
- 20. How clustering of social graph used to discover groups of interacting object? Explain.

Sub. Code 7MIT3E4

# M.Sc. DEGREE EXAMINATION, NOVEMBER 2022

#### Third Semester

### **Information Technology**

#### Elective - PRINCIPLES OF E-COMMERCE

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

 $SECTION - A (10 \times 2 = 20)$ 

- 1. Sketch the generic frame work for electronic commerce.
- 2. List out any two types of internet.
- 3. What is home shopping?
- 4. How to managing credit risk?
- 5. Define EDI.
- 6. What is Transaction set?
- 7. List out any two encryption techniques.
- 8. What is electronic cash?
- 9. What are search engines? Give an example.
- 10. List out any two limitations of Intelligent agents.

Answer all questions choosing either (a) or (b).

11. (a) Explain about three components of I-way.

Or

- (b) Write short notes on internet terminology.
- 12. (a) Explain about repurchase preparation.

Or

- (b) What are the three basic categories of credit card payment on on-line networks.
- 13. (a) Explain the benefits of EDI.

Or

- (b) Write short notes on EDI standards selection.
- 14. (a) What are the secure electronic payment protocols and explain it.

Or

- (b) Discuss about security issues.
- 15. (a) Explain the web based marketing.

Or

(b) Discuss about intelligent agents.

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SECTION - C

 $(3 \times 10 = 30)$ 

## Answer any **three** questions.

- 16. Discuss briefly about E-Business models.
- 17. Briefly explain about digital token based electronic payment system.
- 18. Explain the following.
  - (a) EDI layerd architecture
  - (b) EDI in action
- 19. Discuss about E-commerce ethics, regulations and social responsibility.
- 20. Discuss the website design issues.