MGM College of Engineering & Technology, Noida
Department of Computer Science and Information Technology
Second Sessional Exam-2018-19(Odd Sem)
Subject Name: Principles of Programming Languages
Subject Code: RCS-503

Class: TT (V Sem) **Branch: CS** **Max. Marks: 20** **Time: 1 hour**

SECTION A: Attempt all questions: **[4x1=4]**

1. What are types of polymorphism ?
2. What is thread and why it is used ?
3. What is monitor ?
4. What is semaphore ?

SECTION B: Attempt any two questions. **[2x4=8]**

1. What is exceptional handling ? Why it is used ? Why it occurs ? Give an example by writing a program.
2. What is scope and scoping rules ? How scope and lifetime different ?
3. Write the difference between abstraction and encapsulation. Why there is need of abstraction ? Also write types of abstraction.

SECTION C: Attempt any one question. **[1x8=8]**

1. What is referencing environment ? Explain its five types.
2. Write parameter passing mechanisms with example of each type.

MGM's College of Engineering & Technology NOIDA

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Second Sessional Exam-2018-19 (ODD SEM)

Subject Name-DESIGN AND ANALYSIS OF ALGORITHM

Subject Code-RCS-502

Class-TT Year- 3rd Semester-5th Branch-CS Max Marks-20 Time-1Hour

Section A:-Attempt any five Questions. Each Question Carry Equal Marks (1 marks):-

1. Define All pair shortest path problem with example.
2. Difference between Greedy and Dynamic Programming Approach.
3. For which type of graph the Bellman Ford algorithm is used ?and how it is different from Dijkstra algorithm.
4. How Fractional knapsack problem is solved?

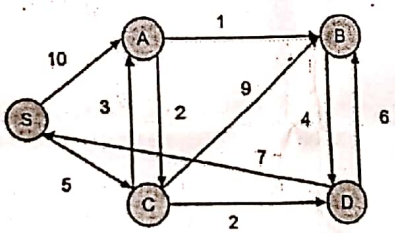
(4*1=4)

Section B:-Attempt any two Questions. Each Question Carry Equal Marks (4 marks):-

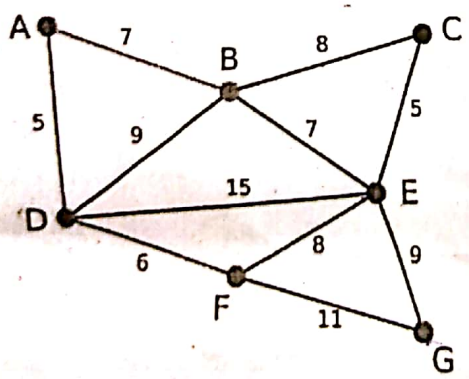
1. What is the optimal Huffman code for the following set of frequencies ,based on the first 8 fibonacci Numbers?

a:1 b:1 c:2 d:3 e:5 f:8 g:13 h:21

2. Apply Dijkstra's Algorithm on the given graph and calculate shortest path fron 'S' to each node.



3. (a)Apply Prim's Algorithm on the following Graph and find out the MST (Minimum Spanning Tree) and cost.



(2*4=8)

PTO

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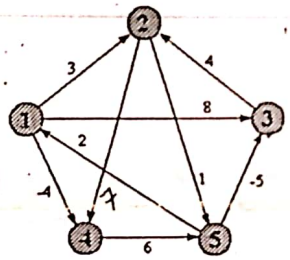
Class-TT Year- 3rd Semester-5th Branch-CS Max Marks-20 Time-1Hour

Section C:-Attempt any one Questions. Question Carry 8 Marks:-

1) (a)Find an optimal parenthesis of a matrix chain product whose sequence of dimensions is <6,5,7,3,8>.
(b) Write an algorithm for **Matrix-Chain-Order** and **Print-optimal-parens.**

2 . For the graph (Weighted and Directed) apply floyd warshall algorithm for constructing shortest path. Show the matrix D^k that results each iteration.



(1*8=8)

Mahatma Gandhi Mission's
College of Engineering & Technology
Second Sessional Exam -2018-19 (Odd Semester)
Subject: Database Management System
Subject Code: RCS-501

Class: TT-CS **Year: (5th Semester)** **Branch: CS**

Max Marks: 20 **Duration: 1 hr**

Q1] Attempt the following [4 × 1]

a) Write about precedence graph and its use in serializability.
b) What is normalization?
c) Explain Transaction concept with suitable example.
d) Explain First and Second Normal Form.

Q 2] Attempt any two questions. [2 × 4]

a) What do you understand by serializability of schedules? Explain with some suitable example.
b) Explain lossless join decomposition.
c) Explain Conflict & View Serializable Schedule.

Q 3] Attempt any one question. [1 × 8]

a) Define multi-valued dependencies. Explain the BCNF and third normal form with suitable example.
b) Explain ACID Properties and transaction state with state diagram.

MGM's College of Engineering and Technology, Noida
Department of CS and ECSecond Sessional Examination 2018-19 (odd Sem.)
Year: 3rd (Vth Sem) Branch: CS, EC Maximum Marks: 20
Subject: Industrial Sociology, Code: RAS-502,Time- 1hour

SECTION-A

1. Attempt *all* Questions each question carries equal marks. (1X4 = 4)

a) What is the difference between strikes and lockouts?

b) What are the objectives of the India's industrial policy?

c) Define the term industrial conflict.

d) Briefly write about Navratna companies of India.

SECTION-B

2. Answer any *two* parts of the following: (4X2 =8)

a) Briefly explain the growth of industrial activity in India during the medieval period.

b) Discuss the growth of industry after the industrial policy resolution 1956.

c) Briefly explain the causes and consequences of Industrialisation.

SECTION-C

3. Answer any *one* part of the following: (8X1=8)

a) What is an industrial dispute? How does it adversely affects the workers, the management and the nation as a whole.

OR

b) Explain the major provisions of the New Industrial Policy, 1991.

ALL THE BEST.

Mahatma Gandhi Mission's
College of Engineering & Technology
Second Sessional Exam -2017-18 (Odd Sem)
Subject: Managerial Economics
Code: RAS-501

Class :TT-ME,EC,CS,CE **Yr:3rd (5th Semester)** **Branch :ME,EC,CS,CE**
Max Marks:20 **Duration: 1 hr**

Q1] Attempt the following [1 × 4]

a) Give two features of monopoly
b) Give some characteristics of Market.
c) What are the different types of cost?
d) Give two differences between monopoly and monopolistic Competition

Q 2] Attempt any two questions. [4 × 2]

a) "Duopoly is a situation of perpetual disequilibrium". Explain.
b) Explain break even analysis with the help of diagram.
c) How firms attain equilibrium under monopoly in long run?

Q 3] Attempt any one question. [1 × 8]

a) Discuss the different types of returns to scale with the help of suitable diagrams.
b) What is a cartel? Explain price determination under the cartel system of oligopoly.