

CENTRAL UNIVERSITY OF HARYANA
School of Engineering and Technology
SESSIONAL - I EXAMINATION

BRANCH- CSE/CE

Subject: Printing and Packaging Materials

Subject Code: BT PPT 409A

Name: Roll No.

SEM. IVth
Time: 1hr
Total Marks: 20

Attempt any two questions from the following.

Q.1 Explain in detail polymers, classification and types of polymers. (10 marks)

OR

Q.2 Write in detail physical, chemical and mechanical properties of polymers. (10 marks)

5 mark each (10

Q.3 Define the following terms:
(marks)

- Write in detail types of paper.
- Write in detail adhesives.

OR

Q.4 Discuss in detail about physical, strength and printing properties of paper (10 marks)

**** Department of CSE, SOET, OJH Mahendergarh ****
Mid Term (Sessional Exam 1st), March 2022

Course: B. Tech. (CSE) 4th Sem
Paper Code: BT CS 401

Subject Title: Databases Management Systems
Max Marks: 20 Time Allowed: 1 hour

Note: Attempt all questions. Each question carries equal marks.

1	Attempt any two:- i. Write the advantages of DBMS over conventional file system. ii. Differentiate between instance and schema iii. Differentiate between two-tier and three-tier architecture.	2.5x2=5
2	What is a key? What are the various types of keys available in DBMS? Explain each with example.	5
3	Draw the ER diagram for Railway Management System. Also convert the ER diagram to tables.	5
4	Consider the following relation <i>Section(course_id, sec_id, semester, year, building, room_no, time_slot_id)</i> Write the query in relational algebra, tuple calculus, domain calculus and SQL for a) Find the set of all courses taught in Fall 2009 or Spring 2010	5

Roll No -----

**** Department of CSE, SOET, CUH Mahendergarh****
Mid Term (Sessional Exam 2nd), May 2022

Course: B. Tech. (CSE) 4th Sem
Paper Code: BT CS 402

Max Marks: 20

Subject Title: OOPS
Time Allowed: 1 hour

Note: Attempt all questions. Each question carries equal marks.

1	Attempt any two:- i. Explain the importance of visibility modes in inheritance? ii. What is Abstract class? Explain it with a suitable example. iii. Compare inheritance and <u>containership</u> .	2.5x2=5
2	Show how to overload * operator which creates the copies of the given string. Ex: "CUH" * 3 gives "CUHCUHCUH"	5
3	Create 2 Classes TIME1 & TIME2 where TIME1 stores hours & minutes and TIME2 stores only minutes. How to save one time object into another using user-defined to user-defined type conversion . Ex: t1 = t2 where t1 & t2 are TIME1 & TIME2 objects respectively.	5
4	What is a Class template? How will this be useful in real world projects?	5

Mid-Term 1

Discrete Mathematics

Max Marks: 10

Q1: Explain the conditional logical operator (implies) and design the truth-table for the same.

Q2: Design the Truth-table for the following expression:

$$p \rightarrow (\sim q \vee (p \wedge r))$$

Q3: Explain the cardinality of the set with appropriate example.

Q4: Explain the following properties of the relations:

1. Reflexivity

2. Symmetry

3. Anti-Symmetry

4. Transitivity

Q5: prove that $(P(A), \subseteq)$ is a poset.

**** Department of CSE, SOET, CUH Mahendergarh****

Mid Term (Sessional Exam 2nd), May 2022

Course: B. Tech. (CSE) 4th Sem
Paper Code: BT CS 401

Subject Title: Databases Management Systems
Max Marks: 20 **Time Allowed: 1 hour**

Note: Attempt all questions. Each question carries equal marks.

1	<p>Attempt any two:-</p> <ol style="list-style-type: none"> With an example Justify the statement "Multivalued dependencies are consequences of 1NF". Also discuss how multivalued dependencies are eliminated with example. Differentiate between 3NF and BCNF. Differentiate between Immediate Update and Deferred Update. 	2.5
2	<ol style="list-style-type: none"> Give an example of a serializable schedule with two transactions such that the order in which the transactions commit is different from the serialization order. What is a recoverable schedule? Why is recoverability of schedules desirable? Are there any circumstances under which it would be desirable to allow non-recoverable schedules? Explain your answer. 	
3	<ol style="list-style-type: none"> Explain optimistic method of concurrency control with example. When a transaction is rolled back under timestamp ordering, it is assigned a new timestamp. Why can it not simply keep its old timestamp? 	
4	<p>Consider the following set F of functional dependencies on the relation schema R (A, B, C, D, E, F): A → BCD, BC → DE, B → D and D → A</p> <p>Find the key of R? Normalize R to the highest form.</p>	

Mid-Term 2

Discrete Mathematics

Max Marks: 10

Q1: Define tree and its properties.

Q2: Distinguish between Tree and Graph.

Q3: A tree has two vertices of degree 2, one vertex of degree 3 and three vertices of degree 4. How many vertices of degree 1 does it have?

Q4. How many ways are there to arrange the eight letters in the word CALCUTTA? 5040

Q5. A committee of 5 is to be formed out of 6 males and 4 females. In how many ways this can be done when (i) at least 2 females are included (ii) at most 2 females are included.

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CENTRAL UNIVERSITY OF HARYANA
School of Engineering and Technology
SESSIONAL - II EXAMINATION

BRANCH- CSE/CE

Subject: Printing and Packaging Materials

Subject Code: BT PPT 409A

Name: Roll No.

SEM. IVth
Time: 1hr
Total Marks: 20

Attempt any two questions from the following.

Q.1 Define the following terms:

5 mark each (10 marks)

- Write in detail photographic materials and its all base materials.
- Write in detail Light sensitive materials.

OR

Q.2 Write in detail aluminum foil, properties, application and uses in Packaging. (10 marks)

Q.3 Define the following terms:

5 mark each (10 marks)

- Write in detail Properties of ink.
- Write in detail Fountain solution.

OR

Q.4 Discuss in detail about ingredients in printing inks.

(10 marks)

Mid-Term 2

Discrete Mathematics

Max Marks: 10

Q1: Define tree and its properties.

Q2: Distinguish between Tree and Graph.

Q3: A tree has two vertices of degree 2, one vertex of degree 3 and three vertices of degree 4. How many vertices of degree 1 does it have?

Q4. How many ways are there to arrange the eight letters in the word CALCUTTA? 5040

Q5. A committee of 5 is to be formed out of 6 males and 4 females. In how many ways this can be done when (i) at least 2 females are included (ii) at most 2 females are included.

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Central University of Haryana
Sessional Exam-2

Subject: Environmental Science

Subject code: BT AUD 308 A

M.M. 20

Time: 60 Minutes

Note: Attempt any four questions. Each question carries equal marks. There are 05 marks for each question.

~~Q. 1. Define water pollution and give its sources and impact on environment?~~

~~Q. 2. Give the impact of air pollution on human being and plants?~~

~~Q. 3. Write short note on environment protection act?~~

~~Q. 4. Write short note on chipko movement?~~

~~Q. 5. Explain the various factors which influence the population growth?~~

~~Q. 6. Write short note on green house effect?~~

**** Department of CSE, SOET, CUH Mahendergarh****
Mid Term (Sessional Exam 1st), March 2022

Course: B. Tech. (CSE) 4th Sem
Paper Code: BT CS 402

Subject Title: Object Oriented Programming using C++
Max Marks: 20 **Time Allowed: 1 hour**

Note: Attempt all questions. Each question carries equal marks.

1	Attempt any two:- i. Difference between procedural programming and OOP. ii. Discuss the major difference between <i>pass by value</i> & <i>pass by reference</i> with an example. iii. Difference between a class and its object. Write your answer pointwise.	2.5x2=5
2	Explain how the effect default argument can be achieved by using function overloading with an example? Example code must be explained briefly.	5
3	Create a class TIME to store only minutes (Integer) and provide two ways to create an object that is by giving- a) Hours & Minutes b) only Minutes as an argument. Explain your code and idea in detail.	5
4	What do you mean by shallow copy & Deep copy? How you can achieve Deep copy using copy constructor? Support your answer with an example code.	5

Central University of Haryana

Sessional Exam-1

Subject: Environmental Science

Subject code: BT AUD 308 A

M.M. 20

Time: 60 Minutes

Note: Attempt any four questions. Each question carries equal marks. There are 05 marks for each question.

- Q. 1. Explain multidisciplinary nature of environmental science?
- Q. 2. Write short note on In-Situ and Ex-Situ conservation of biodiversity?
- Q. 3. Define food chain and food web and give their significance?
- Q. 4. Write short note on Hot Spots of biodiversity?
- Q. 5. Explain the process of ecological succession?
- Q. 6. Write short note on excess use of chemical fertilizers?