



SASTRA

DEEMED TO BE UNIVERSITY

1057, K. J. Somaiya Road, K. J. Somaiya



School of Computing
First CIA Exam –Sept 2022
Course Code: ENG315
Course Name: Design Thinking
Duration: 90 minutes
Max Marks: 50

PART A (10 Marks)

who what why where

Q1. Imagine your company manufactures digital tablets and you are a part of the DT team in the Research and Development Wing. You feel that your company should come up with a tablet that contains those features of laptops which most tablets don't possess. Now, you (along with the team) have to brainstorm and design a tablet that meets market requirements. **Draft 10 POV Problem Statements based on the 4 Ws. Follow the format given below:**

[User Needs Reasons]

PART B (20 Marks)

Q2. Create four insight capture grids for the following situation: Imagine you are a design thinking consultant. The Managing Director of the Cherrydrop Group of Companies approaches you with an issue. Cherrydrop is a popular brand that manufactures biscuits, cakes, and chocolates. For the past six months, they haven't been doing so well. A number of staff have resigned from the company and the profit margin has dropped low.

say do think feel

PART C (20 MARKS)

Q3. Formulate FOUR feasible and innovative human-centric solutions to the following case study by applying DT principles.

Imagine you are part of a management consultancy that operates on the principles of design thinking. You are approached by an advertising agency that deals with poster and graphic design and printing. The Managing Director of the agency feels that they haven't been performing quite well for the past few months. The staff are experts in their concerned fields and they are even prepared for working long hours, when asked to. In spite of these advantages, the agency has not attracted the expected number of customers.

or

Imagine you are a DT consultant. The Director of the VISMEE group of restaurants consults you to solve their problems. Their restaurants, which were at the top of the scale, are now facing major losses. The number of customers seem to be dwindling although they offer quality food. Their branches are located in the city and are close to theatres, malls, schools, colleges, and supermarkets. Yet, some of their branches are facing a huge problem. They are thinking of shutting them down. They approach you as a last resort to see if you can help them out.



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UNIVERSITY OF ARTS AND SCIENCES

THINKING THINKING THINKING THINKING



School of Computing
I CIA Examination – SEP 2023

Course Code: ENG315

Course Name: Design Thinking

Duration: 90 minutes Max Marks: 50

PART A (10 Marks)

Q1. Imagine that your company manufactures furniture for schools and colleges. You are a part of the DT team in the Research and Development Wing. You feel that your company should come up with a new set of furniture that contains features to attract more customers. Now, you (along with the team) have to brainstorm and design a new set of furniture that meets market requirements. Draft 10 POV Problem Statements. Follow the format given below:

[User Needs Reasons]

PART B (20 Marks)

Q2. Create 10 HMW questions for the following POV Problem Statements:

- "Pushpa, an XI std. student, wants comfortable and cushioned chairs because she gets back pain if she sits on hard, wooden chairs without any proper back-rest."
- "Rohit, a tall college student, wants a comfortable seating place because he finds it difficult to write and can't stretch his legs freely as the chairs and desks are too small for him."

PART C (20 MARKS)

Q3. Formulate FOUR feasible and innovative human-centric solutions to the following case study by applying DT principles.

Imagine you are a part of a management consultancy that operates on the principles of Design Thinking. You are approached by the Director of a private school for introducing innovative curricular & co-curricular activities for primary & secondary students. The management feels that some innovation should be brought into the traditional curriculum to bring about an over-all development in students.

or

Imagine you are a DT consultant. The Director of the SWADISH group of restaurants consults you to solve their problems. Their restaurants, which were at the top of the scale, are now facing major losses. The number of customers seem to be dwindling although they offer quality food. Their branches are located in the city and are close to theatres, malls, schools, colleges, and supermarkets. Yet, some of their branches are facing a huge problem. They are thinking of shutting them down. They approach you as a last resort to see if you can help them out.



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U.S. 1st of Dec 1997 Act 1950



School of Computing
II CIA Exam – NOV 2022
Course Code: ENG315

Course Name: Design Thinking

Duration: 90 minutes

Max Marks: 50

LTC108/DT-5

PART A (10 Marks)

Q1. Create Value Proposition for any one of the following services –

- Spotify
- Netflix
- WhatsApp

PART B (20 Marks)

Q2. Imagine you are part of a management consultancy that operates on the principles of design thinking. You are approached by a small-scale handloom agency that deals with handwoven sarees, dhotis, shirt materials, etc. The Managing Director of the agency feels that they haven't been performing quite well for the past six months. The staff are expert in their concerned fields and they are even prepared to work long hours when asked to. In spite of these conducive conditions, the agency has failed to make profits as expected. Now that the scene is set, it is your turn to offer solutions. You have completed the empathizing phase and you are ready for creating personas based on the insight capture grids you have drafted. Draft **two** personas for the given situation.

PART C (20 MARKS)

Q3. Draft 20 HMW (How Might We) questions for the following Point of View Statement:

"Local business owners need cheap and efficient ways to cool their data centers, and reuse the energy because the current technology involving air conditioning and water-cooling is very expensive and wasteful to the environment."



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2015-16-2017-18



School of Computing
II CIA Exam - OCT 23
Course Code: ENG315

Course Name: Design Thinking
Duration: 90 minutes
Max Marks: 50

PART A (20 Marks)

Q1. Create Value Proposition for any TWO of the following services --

- FACEBOOK
- INSTAGRAM
- SWIGGY

PART B (30 Marks)

Q2. Imagine you are part of a management consultancy that operates on the principles of Design Thinking. You are approached by the Dean of Students' Welfare of XYZ University. He wants to promote unity and self-discipline amidst students. He also wants the students to crack through the campus interviews and make bright endeavors in life. Try to ideate using the Story Telling Strategy prescribed in DT. Use PIXAR Story Telling Rules for ideating here.



SASTRA

SRINIVASA KRISHNA UNIVERSITY

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ESTD IN 1983

WISDOM BETTER | THINK FASTER | LEARN EASIER



School of Computing
III CIA Exam – NOV. 2023

Course Code: ENG315

Course Name: Design Thinking

Duration: 90 minutes

Max Marks: 50

PART A (20 Marks)

Q1. Imagine that you are part of a management consultancy that operates on the principles of Design Thinking. You are approached by the Director of Schema Textile Industries Pvt. Ltd. The Director wants to improve the customer services, and manufacture new and trendy fabrics to design dresses for college students. Your help is sought in this regard. Now that the scene is set, it is your turn to offer solutions. You have completed the empathizing phase and you are ready for creating personas based on the insight capture grids you have drafted. Draft two personas for the given situation.

PART B (20 Marks)

Q2. Draft 10 HMW (How Might We) questions for the following Point of View Statements:

1. *"Geetha, a college girl, wants light-weight, trendy, nifty and stylish spectacle frames so that she can wear them comfortably during all occasions without looking old-fashioned & out-moded."*
2. *"Mrs. Megha, a retired Professor, wants light-weight, scratch & water proof, low-priced, classy, durable and handy spectacle frames so that she can wear them comfortably during all occasions without looking old-fashioned & out-moded."*

PART C (10 Marks)

- Q3.** Imagine your company manufactures digital tablets and you are a part of the DT team in the Research and Development Wing. You feel that your company should come up with a tablet that contains those features of laptops which most tablets don't possess. Now, you (along with the team) have to brainstorm and design a tablet that meets market requirements. **Draft 5 POV Problem Statements based on the 4 Ws. Follow the format given below:**
- [User Needs Reasons]**



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SRI ANANDRAJAH
UNIVERSITY



School of Computing
First CIA Exam –Sept 2022

Course Code: MGT133

Course Name: BUSINESS STRATEGY

Duration: 90 minutes Max Marks: 50

PART A

Answer all the questions

10 * 2 marks

1. State advantages of pursuing differentiation strategy
2. State how do financial objectives differ from strategic objective
3. State key characteristics of a well-constructed goal
4. What do you understand by core values of the organizations?
5. State reasons why vision must be communicated to employees
6. What does organization value indicate?
7. How does an investor view "above average returns"?
8. State some disadvantages of low-cost strategy
9. Why do companies prefer a "focus strategy"?
10. Give some examples of strategic objectives a firm can set

PART B

Answer three questions

(Q.11 and Q 12. are compulsory)

3 * 10 marks

11. Explain different techniques used by firms to pursue low cost and differentiation strategy?
12. How does the concept of sequential steps in strategic making differ from the planned-deliberate-emergent strategy?
13. Apple mission statement reads :

Apple designs Macs, the best personal computers in the world, along with OS X, iLife, iWork and professional software. Apple leads the digital music revolution with its iPods and iTunes online store. Apple has reinvented the mobile phone with its revolutionary iPhone and App Store, and is defining the future of mobile media and computing devices with iPad.

a. State what a mission statement constitutes.

b. Is the above statement sufficient to satisfy a mission statement? And if not, then what is missing in this above statement?

14. *"Successful companies focus more on core competencies of their businesses rather than treating their business as a collection of discrete businesses or SBU"* Gary Hamel and CK Prahalad, Discuss

 <p>SASTRA SAKSHI ACADEMY OF SCIENCE, TECHNOLOGY, AND RESEARCH DEEMED TO BE UNIVERSITY KUMARAKOTTAI - 621 004</p>	<p>School of Computing First CIA Examination – Sep 2023 Course Code: MGT133 Course Name: Business Strategy Duration: 90 minutes Max Marks: 50</p>
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PART A

Answer all the questions

10 x 2 = 20 Marks


1. State the need for vision and mission statements for a firm.
2. What do you mean by SWOT Analysis?
3. What are the steps involved in the strategic planning process?
4. Define 'Strategic Intent'.
5. Give examples of objectives of a firm.
6. List TWO examples of a firm's competitive advantage.
7. What are 'Global Level' Strategies?
8. When should a firm go for 'Diversification' Strategy?
9. How will you define 'Consumer Surplus'?
10. What are 'Emergent Strategies'?

PART B

Answer any THREE

3 x 10 = 30 Marks

11. Discuss the Porter's Generic Strategies with appropriate examples.
12. What is 'Value Chain Analysis'? Illustrate the value chain of a firm.
13. Explain the various strategic options available to a firm under 'Corporate Level Strategies'.
14. Explain the strategic management process, highlighting each step.

 <p style="text-align: center;">SASTRA SRI ANANDRAJAH SASTRA UNIVERSITY FOUNDED IN 1983</p>	<p style="text-align: center;">School of Computing Second CIA Exam – Oct 2022 Course Code: MGT133 Course Name: Business Strategy Duration: 90 minutes Max Marks: 50</p>
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PART A

Answer all the questions (10X2)

1. A team of experts identified Ben & Jerry retail Ice Cream chain's SWOT, but it got mixed-up so help us separate the strengths, weakness, opportunities and threats from statements "a" to "e" properly
 - a. Growing demand for quality ice cream in overseas markets
 - b. Prestigious, well-known brand name across U.S. consumers
 - c. Need for experienced managers to help growth
 - d. 40% share of the US super premium ice cream market
2. What is PESTEL analysis and what firms can infer from these analysis
3. "Increased prices of coffee beans and other raw materials have led Starbucks to raise their prices to maintain their high margins. But Starbucks has differentiated their brand enough to create customer loyalty thus, Customers absorb the price increase!" Which of the five forces can this statement be accommodated with and how do you relate it?
4. What is fragmented industry and state if they have a low or high entry barrier
5. What are strategic groups and state at least 3 factors on the bases of which companies can position themselves within a group.
6. What are mobility barriers in strategic groups?

7. "Macroeconomic forces affect the general health and well-being of a nation and in turn this affects the firm" State how economic forces affect the firm
8. Describe Porters generic competitive strategies
9. For a brand of carbonated drink ^{what can be} how "fruit punches" and "water" ^{in terms of} affect its profitability (answer should be written from Porter's Five Forces)
10. What is value chain, and state its parts?

PART B

Answer any 2 questions

(15X2)

11. What is industry life cycle? What are some of the important ^{factors} to consider at each stage of life cycle? How do those factor ^{affect} choice of business strategies?
12. Explain the effective barriers to entry and how effectively ^{industry} have used the barriers. Give an example of any one ^{industry} strategic group (min 2 or more group) and state where the ^{entry} barriers will be high
13. Explain the functional level strategies that the company ^{use} to obtain competitive advantage



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TRICHY



SASTRA UNIVERSITY TRICHY

School of Computing
Second CIA Examination – Oct 2023
Course Code: MGT133
Course Name: Business Strategy
Duration: 90 minutes Max Mark.: 60

PART A

Answer all the questions

10 x 2 = 20 Marks

1. Why should a firm evaluate its environment?
2. What do you mean by EPA Matrix?
3. What makes an industry unattractive?
4. State the primary activities of Porter's Value Chain.
5. Give examples of 'Business Level Strategies'.
6. What are 'Strategic Groups'?
7. Give Examples for 'Cost Leadership'.
8. What constitutes the demographic segment of a firm's environment?
9. What are the steps involved in external environmental analysis?
10. What do you mean by 'Switching Costs'?

PART B

Answer any THREE

3 x 10 = 30 Marks

11. Discuss the Porter's Five Force Model and relate it to an industry of your choice, with appropriate examples.
12. How will you describe the PESTLE analysis as a major evaluator of external environment?
13. Illustrate the 'Industry Life Cycle' and elaborate on each stage of it.
14. What are 'Functional Strategies' of a firm? Give Examples.



SASTRA
SARAJITHA ANTHRA
SCHOOL OF ANTHRA STUDIES



SAVAITHI ENGINEERING COLLEGE, THIRUVARUR

School of Computing
Third CIA Exam - Nov 2022

Course Code: MGT133

Course Name: BUSINESS STRATEGY

Duration: 90 minutes

Max Marks: 50

PART A

Answer all the questions

10 * 2 marks

1. Draw a diagram depicting relationship between the intendent and emergent strategies, as proposed by Mintzberg
2. Describe the five sequential strategic management process
3. Which source of competitive advantage is usually more sustainable a patent or a brand? Why?
4. What strategies you suggest for firms in declining industry
5. List any 6 key drivers why firms choose unrelated diversification
6. List some reasons why acquisitions fail.
7. Mention different types of restructuring techniques used by companies (Public limited)
8. List and give your understanding of the 3 Types of Strategic Control Systems
9. Draw a diagram with proper labelling of BCG matrix and state each of the components
10. List out any dimensions of organization structure and describe them briefly

PART B

Answer any two questions

2 * 10 marks

11. Explain how strategic framework of PESTEL is used to evaluate businesses
12. Explain neatly with diagram the Porters five forces and analyze the intensity of rivalry and thereat of new entrant in Indian airline industry
13. Explain different international growth strategies and discuss the Pressure Companies face in the global marketplace

PART C



Read the case and answer the questions below

1*10 marks

Wal-Mart, headquartered in Bentonville, Arkansas, is the largest retailer in the world. Wal-Mart has long recognized that its huge supercenters and discount stores do not serve the needs of customers who want a quick and convenient shopping experience. It also recognized that places like neighborhood supermarkets, drugstores, and convenience stores are a very lucrative segment. So, it decided to explore the concept of what it calls Neighborhood Market supermarkets. These supermarkets are around 40,000 square feet, and stock 20,000 to 30,000 items, as opposed to the over 100,000 items available in its larger stores.

Of course, Wal-Mart's main concern was that these new stores make a profitable return on its investment, and so it wanted to experiment by opening stores slowly in good locations to see if its cost-leadership model would work on this small a scale of operations. First, Walton developed a financial control system that provided managers with day-to-day feedback about the performance of all aspects of the business. Information about store profits and the rate of turnover of goods is provided to store managers daily, and store managers in turn communicate this information to Wal-Mart's 1.2 million U.S. employees. If any store seems to be underperforming, managers and associates meet to probe the reasons and to find solutions. Walton insisted on linking performance to rewards. Each manager's individual performance, measured by his or her ability to meet specific goals or output to Walton instituted an elaborate system of controls, such as rules and budgets, to shape employees' behavior. Each store performs the same activities in the same way, and all employees receive the same kind of training so that they know how to behave toward customers. In this way, Wal-Mart is able to standardize its operations, which leads to major cost savings and allows managers to make storewide changes easily. The strong customer-oriented values that Walton created are exemplified in the stories, they include stories such as the one about Sheila, who risked her own safety when she jumped in front of a car to prevent a little boy from being struck.

- a. Which entry strategy did Walmart adopt into new retail business models such as neighborhood super markets (5 mks)
- b. What control mechanisms do Walmart use to bind their massive work force to work towards single goal. (5 mks)

 <p>SASTRA SAHAKARANATHAN SASTRIAN UNIVERSITY DEEMED TO BE UNIVERSITY ESTD. 1983, REC. NO. 1984 THIRUVARUR / THIRU TRIVANIPUR / THIRU KODAI</p> 	<p>School of Computing Third CIA Examination – Nov 2023 Course Code: MGT133 Course Name: Business Strategy Duration: 90 minutes Max Marks: 50</p>
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PART A

Answer all the questions

10 x 2 = 20 Marks

1. How do you differentiate vision from mission statement of a firm?
2. What do you mean by 'Emergent Strategy'?
3. Expand 'PESTLE'.
4. List down the secondary activities of Porter's Value chain
5. Why should a firm conduct SWOT analysis?
6. What are business level strategies?
7. What do you mean by Unrelated Diversification?
8. What are the strategic choices available to a firm to enter a foreign market?
9. List down the various stages of 'Industry Lifecycle'.
10. Why is strategic control necessary?

PART B

Answer any THREE

3 x 10 = 30 Marks

11. Explain the process of Strategic Management in a Large scale firm.
12. Briefly explain core competence as the root of competitive advantage
13. Discuss the FIVE forces of industry attractiveness which shape the strategy of a firm
14. How BCG matrix is used to evaluate the business portfolio of a firm?



School of Computing
First CIA Exam –Sept 2022
Course Code: CSE320
Course Name: Compiler Design
Duration: 90 minutes
Max Marks: 50

PART A

10*2=20 marks

Answer all the questions

1. Differentiate Compiler and Interpreter.
2. List out the applications of compiler technology.
3. Mention the different parameter passing mechanism in programming language.
4. Differentiate tokens, patterns and lexemes.
5. Write a regular expression for language $L = \{w \in \{0,1\}^* : w \text{ has no pair of consecutive zeros}\}$.
6. Differentiate NFA & DFA.
7. Explain LEX & YACC.
8. Write a CFG for language $L = \{a^n b^m : 2n \leq m \leq 3n\}$ with $n \geq 0, m \geq 0$.
9. How do you find the ambiguity in grammar?
10. What are the different types of parsing in compiler design?

PART B

3*10=30 marks

Answer all the questions

11. Demonstrate the working of various components of compiler like Lexical Analyzer, Syntax Analyzer, Semantic Analyzer, Intermediate Code Generator, Optimizer and Code Generator with a proper example.
12. Construct a Deterministic Finite Automata for the given Regular Expression $(ab)^*abb$ using McNaughton & Yamada algorithm.
13. Construct LL(1) parsing table for the given grammar. Also parse the given input $“(a,(a,a))$”$.
 $S \rightarrow a \mid \uparrow \mid (T)$
 $T \rightarrow T, S \mid S$



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(2013-14) (2013-14)



School of Computing
First CIA Examination – Sep 2023
Course Code: CSE320
Course Name: Compiler Design
Duration: 90 minutes Max Marks: 50

PART A

Answer all the questions

10*2 = 20 marks

1. Differentiate compiler and interpreter.
2. List out the applications of compiler technology.
3. Differentiate NFA and DFA.
4. How can you tell a grammar is ambiguous?
5. Eliminate left factoring for the grammar: $S \rightarrow iEtS / iEtSeS / a$
 $E \rightarrow b$
6. Find a regular expression for $L = \{w \in \{0,1\}^* : 'w' \text{ has at least one pair of consecutive zeros}\}$.
7. Write context free grammar for $L = \{ww^R : w \in \{a,b\}^*\}$.
8. What is Lex and its components?
9. Describe tokens, patterns, and lexemes.
10. Define sentinels.

PART B

Answer all the questions

3*10=30 marks

1. Construct LL(1) parse table for the following grammar :-
 $S \rightarrow a / \uparrow / (T)$
 $T \rightarrow T, S / S$
Also validate the input $(a,(a,a))$ using the parse table.
2. Write a Lex & Yacc program for "Do While" looping construct of C programming language.
3. Explain in detail about the various phases of compiler with a suitable example. Sketch down the architecture of compiler.



School of Computing
Second CIA Exam -OCT 2022
Course Code: CSE320
Course Name: Compiler Design
Duration: 90 minutes
Max Marks: 50

PART A

10*2= 20 marks

Answer all the questions

1. Differentiate LR(0) and LR(1) parser.
2. What is the maximum number of reduce moves that can be taken by a bottom-up parser for a grammar with no epsilon & unit production to parse a string with "n" tokens?
3. Describe about the error handling scheme in YACC.
4. Mention the role of dependency graph in syntax directed translation.
5. How syntax directed translation scheme is implemented in compiler design?
6. List out the applications of syntax directed translation.
7. Draw a Directed Acyclic Graph for the expression $a + a \times (b - c) + (b - c) \times d$
8. Define SSA form.
9. List out the types of type checking mechanism in compiler semantic phase.
10. What is the purpose of unification algorithm in type expressions?

PART B

3*10= 30 marks

Answer any three questions

11. Explain in detail about Syntax Directed Definition with a suitable example.
12. Illustrate Linear Intermediate Representation with a suitable example.
13. Develop a Lex & Yacc program for simple arithmetic calculator.
14. Construct the LR(1) parsing table for the following grammar.

$S \rightarrow CC$

$C \rightarrow aC$

$C \rightarrow d$



SASTRA

SRINAGAR CAMPUS OF SASTRA UNIVERSITY

DEEVED TO BE UNIVERSITY

ESTABLISHED IN 1983

THINK ALIGHT | THINK TRANSPARENTLY | THINK SASTRA



School of Computing

Second CIA Examination – OCT 2023

Course Code: CSE320

Course Name: Compiler Design

Duration: 90 minutes Max Marks: 50

PART A

Answer all the questions

10*2=20 marks

1. Mention the drawbacks of SLR (1) parser.
2. List out the advantages of LALR parser.
3. Define abstract syntax tree.
4. Write three address code for the expression " $a = b \times -c + b \times -c$ ".
5. Define Syntax-Directed Definition.
6. Differentiate inherited and synthesized attributes in SDD.
7. Why bottom-up parser is better than top-down parser?
8. What is Yacc and its components?
9. Write the rules for converting a L-attributed SDD into SDT.
10. What is dependency graph in compiler design?

$t_1 = \text{minus } c$
 $t_2 = b * t_1$
 $t_3 = t_2$
 $a = t_2 + t_3$
 $t_4 = a$

PART B

Answer any 3 questions

3*10=30 marks

11. Construct the LR(1) parsing table for the following grammar :-
 $S \rightarrow CC$
 $C \rightarrow aC / d$
12. a) Draw DAG for the given expression " $a + a \times (b - c) + (b - c) \times d$ " using value-numbering method. (5 marks)
b) List any 5 common three-address instruction forms. (5 marks)
13. Explain in detail about the role of symbol table in compiler design and also discuss its uses.
14. Illustrate Syntax-Directed Translation Technique in the construction of syntax trees with suitable example.



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ESTABLISHED IN 1983



School of Computing
Third CIA Examination – Dec 2022

Course Code: CSE320

Course Name: Compiler Design

Duration: 90 minutes

Max Marks: 50

PART A

Answer all the questions

10*2 = 20 marks

1. Why buffering is used in lexical analysis?
2. What is language grammar and automata?
3. How do you eliminate ambiguity in grammar?
4. Mention the applications of symbol table.
5. Write the given expression in 3 address form: $x+y \times z$
6. Modern programming languages uses array indexing from zero. Justify?
7. Describe the role of activation record in compiler design.
8. List out the types of optimization in compiler design.
9. Define register allocation and assignment.
10. Define semi lattice in data flow analysis.

CD (13)

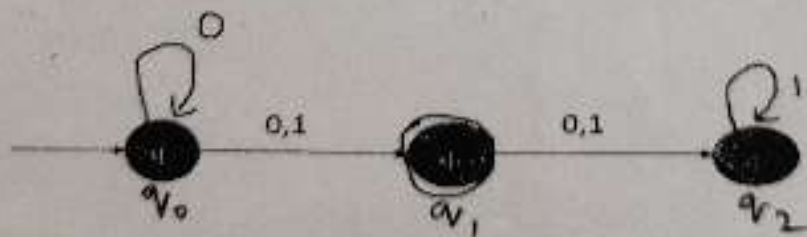
LTC 208

PART B

Answer any two

2*10 = 20 marks

11. Convert the given NFA into DFA using subset algorithm.




12. Develop a LEX & YACC program for "while" looping construct.
13. Explain about the issues in the design of a code generator in compiler.

PART C

Compulsory

1*10 = 10 marks

14. Discuss about heap memory management in compiler design.

 <p style="text-align: center;">SASTRA SRI ANANDRAJAH UNIVERSITY OF TECHNOLOGY</p>	<p style="text-align: center;">School of Computing Third CIA Examination – NOV 2023 Course Code: CSE320 Course Name: Compiler Design Duration: 90 minutes Max Marks: 50</p>
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PART A Answer all the questions 10*2=20 marks

1. What is S-Attributed and L-Attributed definitions?
2. Define Unification in terms of expressions.
3. Mention the drawback of access link approach to nonlocal data.
4. List out the rules to construct basic blocks.
5. Describe peephole optimization technique.
6. List out the properties of transfer function in data flow framework.
7. What is the role of linker & loader in compiler design?
8. Describe construction of DFA from NFA.
9. Write a context free grammar for $L = \{a^n b^n : n > 0\}$.
10. List out the uses of symbol table.

PART B Answer any 2 questions 2*10=20 marks

11. Discuss about stack allocation of space in run time environments with appropriate example.
12. Construct a Deterministic Finite Automata (DFA) for the language $L = \{w : n_a(w) \bmod 3 > n_b(w) \bmod 3\}$ where $\Sigma = \{a, b\}$.
13. Develop a parser for "switch case" construct of C programming language.

PART C 1*10=10 marks

14. Explain in detail about the semantics preserving transformations with suitable example in code optimization.

LTC 306 MWA +18



SASTRA
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WOMEN'S EMPOWERMENT / INNOVATION

School of Computing

First CIA Examination – Sep 2023

Course Code: INTJ16

Course Name: Modern Web Applications

Duration: 90 minutes

Max Marks: 50

PART A

Answer all the questions

10 x 2 = 20 Marks

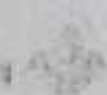
1. Recall the attributes of the `` tag in HTML and their purposes.
2. Differentiate between the `<th>` and `<td>` tags in HTML with suitable example.
3. What is the role of the `<a>` tag in HTML, and how is it used to create hyperlinks?
4. Explain role of submit and reset buttons in the form processing.
5. Demonstrate how to create dropdown list in a HTML document.
6. Apply any two CSS to styles a paragraph.
7. Analyze the difference between an external CSS file and inline CSS, considering their advantages and disadvantages.
8. Demonstrate the use of `alert()` function in JavaScript with an example.
9. Evaluate the use of the `getElementById()` function in JavaScript and explain how it can manipulate HTML elements.
10. Demonstrate how to use the `colspan` attribute to merge table cells horizontally in an HTML table.

PART B

Answer All

3 x 10 = 30 Marks

11. Develop a registration form for an online event management system. The form should collect attendees' personal information, including name, email, mobile number, gender, blood group, certificate required or not, and allow them to select multiple workshops to attend. Implement this registration form using HTML and HTML forms.
12. A) Demonstrate the creation of ordered and unordered list with suitable examples. (5 Marks)
B) Demonstrate the application of different CSS selectors using practical examples. (5 Marks)
13. A) Write a JavaScript to compute the factorial of given n value. (3 Marks)
B) Create a simple calculator to perform arithmetic operations using JavaScript. (7 Marks)



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UNIVERSITY



RAJAPET, TAMIL NADU - 605 006

School of Computing

Second CIA Examination - Oct 2023

Course Code: INT310

Course Name: Modern Web Applications

Duration: 90 minutes Max Marks: 50

PART A

Answer all the questions

10 x 2 = 20 Marks

1. Define a PHP variable and outline the steps to declare one.
2. Recall the PHP code to display a welcome message.
3. Explain the purpose of the GET method in form handling and identify situations where it's suitable to use.
4. Describe the distinctions between single-quoted and double-quoted strings in PHP.
5. Compare and contrast the switch statement in PHP with the if statement, and clarify when to apply each.
6. Discuss the significance of the foreach loop in PHP and differentiate it from other loop types.
7. Describe what an array is in PHP, highlighting its differences from regular variables, and provide an example of array declaration and initialization.
8. Explain how to declare a PHP function with parameters.
9. Write SQL queries for two tasks: a) inserting values into the "event" table, and b) listing all events booked by a customer.
10. Analyze what occurs in a switch statement when no cases match and there's no default case.

PART B

Answer any two questions

2 x 15 = 30 Marks

11. A) Construct an HTML and PHP program to compute simple interest and present the outcome.
B) Evaluate the significance of input sanitization in form handling, supported by an example.
12. Illustrate the steps involved in establishing a connection between PHP and a MySQL database, using a relevant example.
13. Develop a registration form for a parking management system that collects information such as vehicle number, owner name, parking charge, vehicle type (2-wheeler/4-wheeler), and contact number. Write a PHP MySQL database program to store the details in the database. Also write a PHP program to display all vehicle details.

**SASTRA**

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School of Computing**Third CIA Examination – Nov 2023**

Course Code: INT316

Course Name: Modern Web Applications

Duration: 90 minutes Max Marks: 50

PART A**Answer all the questions****10 x 2 = 20 Marks**

1. Demonstrate the fundamental syntax for embedding an image in an HTML page.
2. Elaborate on how inline styles are implemented in HTML, providing an illustrative example.
3. Define XML vocabularies and furnish an instance of a specific XML vocabulary employed in a real-world context.
4. Compose JavaScript code to validate a given age value, ensuring it falls within the range of 18 to 25. Display 'Valid age' if within the range; otherwise, display 'Invalid age'.
5. Write a PHP program using an if statement to determine whether a given number is even or odd.
6. Predict the output of the following PHP program involving an array of cars and an echo statement.

```
<?php
```

```
$cars[] = "BMW";
```

```
$cars[] = "Amaze";
```

```
$cars[] = "Breeza";
```

```
echo 'My Car is $cars[3]';
```

```
?>
```

7. Demonstrate the use of a method for input sanitization with an example.
8. Write a SQL query to retrieve mobile numbers for customers under 25 years old residing in 'Bengaluru' from the 'Customer' table.
9. How can you verify the success of a MySQL database connection in PHP? Offer an example.
10. Provide PHP code to initiate a session.

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First CIA Test – February 2023

Course Code: INT316

Course Name: Modern Web Applications

Duration: 90 minutes

Max Marks: 50

PART A**10 x 2 = 20 Marks**

1. Differentiate IP Address and Domain Names with example.
2. Can you name all the Top Level Domains used in Internet?
3. List out the different types of Web Sites.
4. Tell me how the Anchor tag can be used for inter and intra page linking.
5. Choose the syntax to display the following statement in the browser.
"INDIA is my Country"
6. A Car showroom owner wants to list all car models with serial number in web page. Write the HTML code with appropriate tag to achieve this task.
7. How will you create a textbox which will accept only Email ID?
8. Identify the difference between CSS and Bootstrap CSS.
9. While creating web page, in what circumstances we use Id Selector and Class Selector of CSS.
10. Illustrate the way to display alert messages using JavaScript.

PART B**3 x 10 = 30 Marks**

11. a) Create the HTML Script to produce following output in the browser. (5m)

Batch	Name	Age
Computer Science	Abhishek	15
	Bob	23
Break		

- b) Demonstrate the following functionalities of HTML. (5m)

- i) Inserting an Image on a Web Page
- ii) Displaying Alternate Text for an Image
- iii) Aligning an Image

12. Design a webpage using HTML and CSS to capture the following details when registering a new doctor in Hospital Management System. First Name, Middle Name, LastName, Registration No, DOB, Gender (use radio button), EmailID, Specialization, Qualification, Contact Number, Address, Visiting Time, VisitingDays (multiple selection should be allowed), NoOfPatientsPerDay and DepartmentNo. Indicate the mandatory fields on the page. All fields except middle name and address are mandatory. Use below mentioned sample values for drop down/check boxes: Visiting Days – Mon, Tues, Wed, Thurs, Fri, Sat, and Sun. Visiting Time – Morning, Afternoon, and Evening.

13. Demonstrate the different ways of adding CSS into HTML document.



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School of Computing

Second CIA Test – March 2023

Course Code: INT316

Course Name: Modern Web Applications

Duration: 90 minutes

Max Marks: 50

PART - A

10 x 2 = 20 Marks

1. DHTML is a Markup language. Say Yes or No and Justify your answer.
2. Illustrate the `==`, `===` Operators used in JavaScript.
3. How will you create Objects in JavaScript?
4. How will you display the Success and Danger Button in Bootstrap JavaScript?
5. Implement a Script to display following formula using mathML.
$$x^2+4x+4=0$$
6. How is XSL different from CSS?

7. Design a XML Script to Represent the following table.

Item	Category	Price
Apple	Fruits	100
Carrot	Vegetables	80

8. Illustrate any two string operators in PHP.
9. Differentiate Break and Exit in PHP.
10. Predict the output of following code.

```
<?php
```

```
$lang = "PHP"; $ret = print $lang. " is a web development language.";  
print "</br>"; print "Value return by print statement: ".$ret; ?>
```

PART - B (Answer Any Three)


3 x 10 = 30 Marks

11. Discuss the various events in JavaScript with examples.
12. Design a web form that collects a user's name, email, gender, languages known, and phone number. Write a JavaScript function that validates the form inputs and displays an error message if any of the inputs are invalid. The function should check the following:

- Name: The name field should be required and must not be empty. It should only contain letters and spaces.
- Email: The email field should be required and must be a valid email address. It should contain a single "@" symbol followed by a domain name, which must contain at least one "." symbol.
- Phone number: The phone number field should be required and must be a valid phone number. It should be 10 digits long and may include parentheses, hyphens, or spaces.

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 SASTRA DEEMED TO BE UNIVERSITY TAMIL NADU TRUTH ALONE TRIUMPHS CHANNAYAR ROAD, KANNIYAKUMARI	School of Computing First CIA Exam - April 2022 Course Code: CSE316 Course Name: Software Design with UML Duration: 90 minutes Max Marks: 50
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PART A

SDWML-1

Answer all the questions

(10 x 2 = 20) Marks

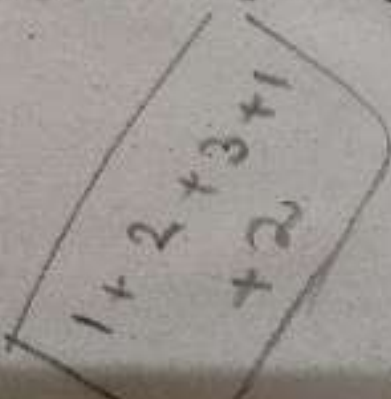
1. Why object-oriented software development better than structured approach?
2. What are the causes of software crisis?
3. Write a note on object-oriented themes.
4. Illustrate the software development life cycle.
5. List out the object modelling technique models with example.
6. State the activities involved in object-oriented software development.
7. Differentiate between waterfall and spiral model.
8. Write a scenario for online mobile recharge.
9. What are the different kinds of design patterns?
10. List out the Software quality attributes.

PART B

Answer all the questions

(3 x 10 = 30) Marks

11. Describe the building blocks of UML.
12. Illustrate the various UML diagrams for online shopping system.
13. Apply requirements elicitation activities and draw a use case diagram for engineering college admission system.





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TRINAMALUR THIRU VALLUVAR UNIVERSITY OF TECHNOLOGY

School of Computing
First CIA Examination – Sep 2023
Course Code: CSE316
Course Name: Software design with UML
Duration: 90 minutes Max Marks: 50

PART A

Answer all the questions

5 x 2 marks = 10 marks

1. Differentiate: UCP and HCP with example.
2. What are the Stages of MVP (Minimum viable product)?
3. Generate one skill set matrix of software project management.
4. When do you manage the Software crisis? Either Proactive or reactive? Justify.
5. How many phases in UP and V-model? Illustrate with picture.

PART B

Answer to all Questions

4 x 10 marks = 40 marks

6. An US client asked you to design a web site that "Assist the Road" to pop up a available petrol bunks, electric vehicle charging ports, water, mechanic help, ambulance help, navigation help, disaster/emergency management help using a Google map based on existing (static) spatial information, seeking (dynamic) vendor service currently available or not information, automatic counter for counting number of vehicles crossed the toll booth with necessary new road signal symbols and sensor speed controllers.
 - a. Draw the detail stages of water fall-Linear process model with its merits and demerits from software aspect-(3 marks).
 - b. Draw the detail stages of Spiral-Incremental process model with its merits and demerits-(3 marks). Identify the risks to resolve - (4 marks).
7. Explain Object Oriented Principles (5 marks), Software Design SOLID principles (5 marks) with example.
8. Differentiate structured analysis vs OOAnalysis modeling for a Point of Promoting system (PPS) with E-R and MVC (Model View Controller) Package diagrams
9. Apply major GoF (Gang of Four) GRASP design pattern of the given use case: To get hall allotment, Desk position of an entrance exam using hallNo, ticketID of a candidate among 10 halls using linear search algorithm. (Creator, Information expert, controller, low-coupling, Pure fabrication)-(5*2=10marks).



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TRUTH ALONE TRIUMPHS

School of Computing
Second CIA Exam – May 2022
Course Code: CSE316
Course Name: Software Design with UML
Duration: 90 minutes
Max Marks: 50

PART A

Answer all the questions

(10 x 2 = 20) Marks

1. Identify the attributes and operations for online electricity bill payment class.
2. Write a note on sequence diagram UML notations.
3. Classify the following classes relationships into aggregation, association, generalization or aggregation
 - a) Mobile phone contains SIM card
 - b) Courses offered as full time and part time
 - c) School comprised of many departments
 - d) Students enrolled in online courses
4. Model the following in UML
 - a) Employees works for one company
 - b) Each company has one or more supervisors
5. How to manage complex class diagram?
6. Illustrate time ordering messages for online mobile recharge.
7. Differentiate between aggregation and generalization relationship for library management system classes.
8. List out the association ends with example.
9. State the test questions to identify the association or aggregation relationship between classes.
10. How to represent imports and exports packages in UML

PART B

Answer any TWO questions

(2 x 15 = 30) Marks

11. Draw class and package diagram for the following problem statement. An android application is developed for students of ABC College. The student can view attendance, marks report and select their elective course, exam and semester fees payment through this application. The system admin maintains student and professor

information. The professor will maintain attendance and mark details of student.

12. Apply the following for the online courier management system

a) Analysis model (8 marks)

b) Analysis activities (7 marks)

13. Draw a sequence and collaboration diagram for online car rental software owned by VBC cabs providing prompt service to customers such as car details, enquiry, booking, payment and cancellation etc.

SASTRA

SAKSHI ACADEMY
SASTRIAN UNIVERSITY



Department of Computer Science
Second Year Examination - Oct '23
Course Code: CS2234
Course Name: Software Design with UML
Duration: 90 minutes, Max Marks: 80

PART A

Answer all the questions

3 x 2 marks = 10 marks

1. Expand UML, CASE, ECMA and its usages.
2. Differentiate dynamic and static modeling.
3. Distinguish User domain, application domain, and technical domain modeling of 3D VR animated "chota bheem" UK3 movie education cartoon.
4. Write any two types class association with its UML design.
5. Compare Factory and singleton pattern.

PART B

Answer to any 4 Questions

4 x 10 marks = 40 marks

6. Find following day today activities of you (primary actor) and Draw collaboration diagrams (online, offline) to Develop Integrated Reminder app.) 5+5 marks

Actions	What Time ?	Off-line collaborators	Go to Place	Online Software collaborator
Wakeup()	5AM?	Alarm/Friend	Hostel Room	Alarm app
Breakfast()	8AM?	Mother/Warden	Dining Hall	Swiggy app
Notes()	9AM?	Tutors	Class	GCR
Tennis()	6PM?	Team	Playground	Rummy app
Read()	7PM?	Books	Library	Ebooks
Watch()	8PM?	Movie/ News	TV stand	Youtube app
GD()	9PM?	Friends	Corridor	Whatsapp
Sleep()	10PM?	Songs	Couch	Spotify app

7. Design a sequence diagram of a popular story with its 5 characters and its interactive communication messages to make 3D cartoon picture and store the narrated audio within a Multimedia Data Base.
8. Develop class diagram of online cab booking system which consist of GPS, passenger, driver, car-AC/MON AC, Bank and Online Interface.
9. Develop all three architectural, control, interface styles with definition diagram, merits, demerits and UML notations guidelines.
10. Generate UML view or package diagram (5 marks) of UML class packages document, spreadsheet, powerpoint, excel, DB, web design and *editor*



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School of Computing

Third CIA Examination – Nov '23

Course Code: CSE316

Course Name: Software design with UML

Duration: 90 minutes Max Marks: 50

PART A

Answer all the questions

10 x 1 marks = 10 marks

1. Define: UML, CASE, RUP, ECMA.
2. Compare dynamic and static modeling.
3. Differentiate Functional and Non-Functional requirements.
4. Write a problem statement that you are providing a navigational Native NLP voice route from Ukraine Doha to Indian medical camp for our Indian NRI.
5. Distinguish User domain, application domain, and technical domain modeling with example.
6. Draw any two specialization symbols of class diagram.
7. What is use of state chart diagram of forget password scene.
8. Map the given objects and its types: student, e-book, online library, pwd. *Start Boundary, End Boundary, controller, Entity.*
9. Describe any two automatic characteristics of components.
10. What are the two major components of deployment diagram symbols?

PART B

Answer to any 4 Questions

4 x 10 marks = 40 marks

11. Explain Object Oriented Principles (5 marks), Software Design SOLID principles (5 marks) with example.

OR

12. An US client asked you to design a web site that "Assist the Road" to pop up a available petrol bunks, electric vehicle charging ports, fire help, mechanic help, ambulance help, navigation help, disaster/emergency management help using a Google map based on existing (static) spatial information, seeking (dynamic) vendor service currently available or not information, automatic counter for counting number of vehicles crossed the mechanic shed with necessary new road signal symbols and sensor speed controllers.
 - a. Draw the detail stages of water fall-Linear process model with its merits and demerits from software aspect-(3 marks).
 - b. Draw the detail stages of Spiral-Incremental process model with its merits and demerits-(3 marks). Identify the types of risks to resolve-(4 marks).

13. Differentiate Structured analysis vs OOAnalysis modeling for a Point of Promoting system (PPS) with E-R, class and MVC (Model View Controller) Package diagrams.

OR

14. Apply and define the following Creator, observer, proxy, singleton, iterator design patterns of the given use case: To monitor 60 minutes online entrance exam (5*2=10marks).

15. Find following day today activities of you (primary actor) to perform given activities by which collaborators helps to meet out that activities. Draw **activity** and collaboration diagrams of it. (5+5)

Actions	Collaborators (offline)	Place	Replaced by Mobile phone (online)
Wakeup()	Alarm/Friend	Hostel Room	Alarm app
Breakfast()	Mother/Warden	Mess Hall	Swiggy app
Notes()	Tutors	Class rooms	NPtel
Tennis()	Team	Playground	Rummy app
Read()	Books	Library	Ebooks
Watch()	Movie	TV stand	Netflix app
Sleep()	Songs	Couch	Spotify app
GD()	Friends	Corridor	Telegram app

OR

16. A. Design a sequence diagram of a popular story with its 5 characters and its places to make 3D cartoon picture and store the narrated audio in to the Multimedia Data Base. (5 marks)

B. Develop a state chart diagram of stack operations pop(), peep(), push() with stack over flow and underflow conditions. (5 marks)

17. a. Generate component diagram (5 marks) of MS office package (document, spread sheet, power point, access DB, web design) and Visual Studio (python, C, C++, Java, HTML)

OR

18. A. Check OS compatibility, configuration, path to install and deploy the music app system or online library system using deployment diagram (5 marks). B. Describe SRS, use cases of above online system. (+5)



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School of Computing
First CIA Test – Sep 2023

Course Code: MGT211

Course Name: Fundamentals of Fundamentals of
Human Resource Management

Duration: 90 minutes

Max Marks: 50

PART A

10 x 2 = 20 Marks

1. Identify the process of gathering relevant information about various aspects of a job, including its content, context and the job performer's skill requirements – explain content, context and the job performer's skill requirements.
2. Outline Ulrich's four-role model.
3. Explain in brief, how does an organization's HR philosophy influence and shape its organizational culture with an example.
4. Compare Job Description and Job Specification.

Match the following:

5.	HR practices	automated system for gathering, storing, retrieving, analyzing and disseminating HR-related data
	HR policies	Building critical organizational capabilities
	HR Philosophy	define how the company will deal with stakeholders
	HRIS	revolves around management's beliefs and assumption

6. Give examples of successful diversity management strategies that have enhanced workplace culture and business outcomes.
7. Explain what you understand by HR audit.
8. Identify which type of HRIS is primarily used at the operational levels of the organization and explain.
9. Summarize the challenges of HRM.

10. Differentiate between policies and procedures.

PART B 3 q. 10 = 30 Marks

- | | |
|-----|---|
| 11. | Elaborate on notable HR practices that have contributed to organization's success of your choice. |
| 12. | Discuss on the key reasons why HR planning is considered a critical function for organizations, and how does effective HR planning contribute to achieving organizational goals. |
| 13. | Explain how HR functions be strategically aligned with the principles of Strategic Human Resource Management (SHRM) to not only support the organization's growth but also drive sustainable performance improvements? Share examples of successful SHRM practices and their impact on organizational outcomes. |



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School of Computing

FIRST CIA Examination – SEP 2023

Course Code: MGT132

Course Name: FUNDAMENTALS OF
MANAGEMENT FOR ENGINEERS

Duration: 90 minutes

Max Marks: 50

PART A

Answer all the questions

10x2=20

- 1) State the difference between effectiveness and efficiency
- 2) Define Management
- 3) Recall the concept of Differential piece Rate System
- 4) Relate any three importance of management
- 5) Mention the key managerial roles in an organization
- 6) Specify the managerial qualities required for a manager
- 7) Identify the meaning for the term Bureaucracy
- 8) Summarize the elements of management
- 9) Discuss the term corporate governance
- 10) List out the four natures of Management

PART B

Answer any Three out of Four

3X10=30

- 11) Elaborately show the contribution of F.W.Taylor
- 12) Enumerate the contribution of George Elton Mayo
- 13) Explain the functions of Management
- 14) Compare and contrast the various control techniques



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School of Continuing

REGULATED CMA Examination - OCT 2023

Course Code: MGT103

Course Name: PERSONAL & OR

MANAGEMENT FOR ENGINEERS

Duration: 90 minutes

Max Marks: 50

PART A

Answer all the questions

10x2=20

- 1) Define Personality
- 2) What is Machiavellianism
- 3) Recall the concept of perception
- 4) Differentiate Introvert and Extravert
- 5) Mention the term Figure Head Principle
- 6) Specify the features of Learning
- 7) Identify the meaning for the term Learning
- 8) Summarize the term reinforcement
- 9) Discuss the goals of Organizational Behavior
- 10) List out the phases in organizational life cycle

PART B

Answer any Two out of Three

2X10=20

- 1) Elaborately discuss the different organizational structure
- 2) Explain the different approaches to organizational design
- 3) Describe the foundations of individual behavior in detail

PART C

Compulsory Case Study

A company has been registered under the Companies Act with an authorized share capital of Rs.20,000 crores. Its registered office is situated in Delhi and manufacturing unit in a backward district of Rajasthan. Its marketing department is situated in Bhopal. The company is manufacturing Fast Moving Consumer Goods (FMCG).

1. Suggest with the help of a diagram a suitable organization structure for the company.
2. State any three advantages & disadvantages of this organization structure.

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School of Computing
First CIA Test – Sept 2022

Course Code: MGT 132

Course Name: FUNDAMENTALS OF MANAGEMENT
FOR ENGINEERS

Duration: 90 minutes Max Marks: 50

PART A (Answer all)**10 x 2 = 20 Marks**

1.	Father of Mr. 'Y' acts as Vice President in ABC Ltd. Name the level of Management he is working? Explain any two functions performed by him?
2.	Previous theories of management have focused on identifying 'one best way of operating and managing a job'. Later, researchers suggested that different organizational settings and circumstances require different approaches to be successful. – Identify and brief this approach by highlighting its relevance today.
3.	State why planning comes first in any list of management functions.
4.	Visualize MBO model and mention its significance.
5.	'Connecting customers to restaurants' is Zomato's main goal. To establish its overall goal, what type of planning is required to position the organization in its competitive environment.
6.	Hero Ltd's target is to produce 10,000 shirts per month at a cost of 150 per shirt. The production manager could achieve this target at a cost of 160 per shirt. Do you think the production manager is effective? Give reason in support of your answer.
7.	No Smoking : the statement is related to which type of plan?
8.	Aman Ltd. is manufacturing Toys and has Production Sales, Purchase and finance Department, which type of organization structure would you suggest to them? State any three advantage of this organization structure.?
9.	Identify the type of Organizational design which is rigid and the Organization design which are flexible and comment on its suitability with organizations.
10.	Both Centralization and Decentralization are relative, not absolute – comment.

PART B (Any three questions)

3 x 10 = 30 Marks

11.	Critically examine the contributions of F.W Taylor and Fayol to management by highlighting the principles.
12.	<p>Two years ago, Sarah completed her degree in food technology. She worked for sometime in a company that manufactured chutneys, pickles and murabbas. She was not happy in the company and decided to have her own organic food processing unit for the same. She set the objectives and the targets and formulated an action plan to achieve the same.</p> <p>One of her objectives was to earn 10% profit on the amount invested in the first year. It was decided that raw materials like fruits, vegetables, spices, etc. will be purchased on three months credit from farmers cultivating only organic crops. She also decided to follow the steps required for marketing of the products through her own outlets. She appointed Mohan as the Production Manager who decided the exact manner in which the production activities were to be carried out. Mohan also prepared a statement showing the number of workers that will be required in the factory throughout the year. Sarah informed Mohan about her area wise sales target for different products for the forthcoming quarter. While working on the production table, a penalty of Rs.100 per day for not wearing caps, gloves and apron was announced.</p> <p>Quoting lines from the above paragraph, identify and explain the different types of plans discussed.</p>
13.	Suggest the type of organization design, when the organization needs to give equal priority to both products and functions. Highlight its strengths and weaknesses of the organizational design.
14.	<p>The activities and employees in 'Elegance Pvt. Ltd.', a footwear manufacturing company, can be broadly grouped into five departments namely; production, purchase, marketing, accounts and personnel. Over the years the company has grown and expanded its operations manifold. The company now intends to diversify into leather bags segment. So its management has decided to restructure its operations. They plan to create separate product divisions for each product line wherein the functioning of each division will be further divided into five departments namely; production, purchase, marketing, accounts and personnel.</p> <p>In context of the above case:</p> <ol style="list-style-type: none"> 1) How is the company's future organisational structures likely to be different from the existing one? 2) State the difference between the two types of organisational structures by highlighting its features.

S.No	PART A (Answer all the questions)	10 x 2 = 20 Marks
1.	Identify and discuss the conflict that occurs across departments and between different levels of the organization.	
2.	Compare Rational vs. Political model.	
3.	Mention one conflict handling strategy which matches your personality.	
4.	Contrast Hard and Soft power.	
5.	Define Cooptation with an example.	
6.	When managers use politics, it usually leads to conflict and disharmony and will likely disrupt the smooth functioning of the organization – Agree/Disagree. Write the reason.	
7.	Differentiate Power and authority.	
8.	List the observable aspects of organization culture.	
9.	Identify the type of Organizational design when organizations are in complex environment and when organizations grow large with several products or markets.	
10.	Cultures serve two critical functions in organizations. What are they?	

	PART B (Answer any three questions) 3 x 10 = 30 Marks
11.	Suggest the type of organization design, for organizations which are extremely flexible and rapid response to changing market conditions Highlight its strengths and weaknesses of the organizational design with an appropriate example.
12.	Organizations are born, grow and develop, reaches maturity, decline and age and finally they die (in many cases). – Discuss in detail.
13.	Elaborate vertical sources of power highlighting its significance in organizations.
14.	Managers want a corporate culture that reinforces the strategy and structural design that the organization needs to be effective within its environment. Based on this, discuss different organization cultures with appropriate examples.



School of Computing
Third CIA Exam - Dec 2022
Course Code: MGT132
Course Name: Fundamentals of
Management for Engineers
Duration: 90 minutes
Max Marks: 50

PART A Answer all the questions **5 * 2 = 10 Marks**

Q.No	Questions
1.	List two types of interacting features of organizations
2.	Define Stereotypes and list out its effects.
3.	Compare and contrast four types of teams.
4.	What is 'Halo effect' and mention its impact in organization.
5.	Differentiate Power and Authority

PART B Answer any two of the following **2 * 15 = 30 Marks**

6.	Discuss the application of Fayol's principles of management in any company of your choice.
7.	Explain how group norms, roles, and status systems affect employee behavior and performance?
8.	Elaborate on some early theories of motivation? How applicable are they today?

Even though the outside appearance of Google headquarters may be filled with stereotypical visions of nap pods and scenes from "The Internship," there is still a lot of work that is accomplished by those working there. With work, there can come stress, and job-related stress is a huge issue, with studies by the Behavioral Science and Policy Association stating that working long hours has been shown to increase mortality by 20 percent. No matter how many cushy perks you can get, they won't make everyone happy, and Google is combating this with creativity. They attempt to counteract the stress-related issues by offering specific classes—for example Meditation 101 and Mindfulness-Based Stress Reduction. They also encourage their employees to join their online and in-person community called gPause. This specific group helps support and encourage meditation practice. The key to this stress-reducing revolution at Google is that they have a company culture that supports the behavior. The company also promotes day meditation retreats at a handful of their locations. This type of creativity is sure to take hold at other companies across the globe.

Questions:

1. Google is one of the leading tech companies in the world. What do you think of their approach to handling stress within the workplace? Do you think that this approach will be effective? Why or why not?
2. A company culture that supports stress reduction is key to the success of any program within the company. What are some obstacles that can arise when handling stress within a workplace? What are some methods that you would employ as manager to counteract these obstacles and implement stress-reduction programs within your workplace?