Part Ia: Structure of Papers 1 and 2 in 2023

Paper 1

Section A
Attempt 1 question
1. Foundations of Computer Science
2. Foundations of Computer Science

Section B
Attempt 1 question
3. Object-Oriented Programming
4. Object-Oriented Programming

Section C
Attempt 1 question
5. Introduction to Probability
6. Introduction to Probability

Section D
Attempt 1 question
7. Algorithms 1
8. Algorithms 1

Section E
Attempt 1 question
9. Algorithms 2
10. Algorithms 2

Paper 2

Section A
Attempt 1 question
1. Digital Electronics
2. Digital Electronics

Section B
Attempt 1 question
3. Operating Systems
4. Operating Systems

Section C
Attempt 1 question
5. Software and Security Engineering

Section D
Attempt 2 questions
7. Discrete Mathematics
8. Discrete Mathematics
9. Discrete Mathematics
10. Discrete Mathematics

Attempt five questions on each paper. For Paper 2 answer one question from each of Sections A, B and C, and two questions from Section D.
Part Ia: Structure of Paper 3 in 2023

Paper 3

Section A
Attempt 1 question
1 Databases
2 Databases

Section B
Attempt 1 question
3 Introduction to Graphics
4 Introduction to Graphics

Section C
Attempt 1 question
5 Interaction Design
6 Interaction Design

Section D
Attempt 2 questions
7 Machine Learning and Real-world Data
8 Machine Learning and Real-world Data
9 Machine Learning and Real-world Data

Attempt five questions on the paper, one question from each of Sections A, B and C, and two questions from Section D
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Part I b: Structure of Papers 4 to 7 in 2023

Paper 4
1 Compiler Construction
2 Compiler Construction
3 Concepts in Programming Languages
4 Prolog
5 Programming in C and C++
6 Programming in C and C++
7 Cybersecurity
8 Cybersecurity

Paper 5
1 Computer Networking
2 Computer Networking
3 Computer Networking
4 Concurrent and Distributed Systems
5 Concurrent and Distributed Systems
6 Introduction to Computer Architecture
7 Introduction to Computer Architecture
8 Introduction to Computer Architecture

Paper 6
1 Complexity Theory
2 Complexity Theory
3 Computation Theory
4 Computation Theory
5 Data Science
6 Data Science
7 Logic and Proof
8 Logic and Proof
9 Semantics of Programming Languages
10 Semantics of Programming Languages

Paper 7
1 Artificial Intelligence
2 Artificial Intelligence
3 Economics, Law and Ethics
4 Economics, Law and Ethics
5 Formal Models of Language
6 Formal Models of Language
7 Further Graphics
8 Further Graphics
9 Further HCI
10 Further HCI

Attempt any five questions on each of papers 4-7.
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**Part II: Structure of Papers 8 and 9 in 2023**

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<td>5. Denotational Semantics</td>
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<tr>
<td>6. Hoare Logic and Model Checking</td>
<td>6. Hoare Logic and Model Checking</td>
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<td>7. Information Theory</td>
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<td>8. Machine Learning and Bayesian Inference</td>
<td>8. Machine Learning and Bayesian Inference</td>
</tr>
<tr>
<td>13. Types</td>
<td>13. Types</td>
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*Attempt any five questions on each paper.*