Statometer
Computing 9691/03

Chapter	Not Appeared	Winter	Summer	Total	Frequency	Comments
3.1	**1**	**8**	**8**	**16**	**94%**	**This chapter appeared 94% times in paper history.**
(a) The Main Features of Operating Systems		0	0	0	0%	This topic appeared 0% times whenever chapter 3.1 appeared in exams.
(b) Interrupts		3	2	5	31%	This topic appeared 31% times whenever chapter 3.1 appeared in exams.
(c) Scheduling		6	3	9	56%	This topic appeared 56% times whenever chapter 3.1 appeared in exams.
(d) Memory Management		4	3	7	44%	This topic appeared 44% times whenever chapter 3.1 appeared in exams.
(e) Spooling		1	2	3	19%	This topic appeared 19% times whenever chapter 3.1 appeared in exams.
(f) Desktop PC Operating Systems		1	1	2	13%	This topic appeared 13% times whenever chapter 3.1 appeared in exams.
3.2	**0**	**8**	**9**	**17**	**100%**	**This chapter appeared 100% times in paper history.**
(a) relationship of assembly language and machine code. New topic		0	1	1	6%	This topic appeared 6% times whenever chapter 3.2 appeared in exams.
(b) how an assembler produces machine code. New topic		0	1	1	6%	This topic appeared 6% times whenever chapter 3.2 appeared in exams.
(c) Interpreters and Compilers		4	4	8	47%	This topic appeared 47% times whenever chapter 3.2 appeared in exams.
(d) Lexical Analysis		1	3	4	24%	This topic appeared 24% times whenever chapter 3.2 appeared in exams.
(e) Syntax Analysis		1	2	3	18%	This topic appeared 18% times whenever chapter 3.2 appeared in exams.
(f) Code Generation		2	1	3	18%	This topic appeared 18% times whenever chapter 3.2 appeared in exams.
(g) Linkers and Loaders & library routines.		4	4	8	47%	This topic appeared 47% times whenever chapter 3.2 appeared in exams.
(h) errors recognation and handling		2	1	3	18%	This topic appeared 18% times whenever chapter 3.2 appeared in exams.
3.3	**0**	**8**	**9**	**17**	**100%**	**This chapter appeared 100% times in paper history.**
(a) Von Neumann Architecture		4	5	9	53%	This topic appeared 53% times whenever chapter 3.3 appeared in exams.
(b) The Fetch-Decode-Execute-Reset Cycle		6	7	13	76%	This topic appeared 76% times whenever chapter 3.3 appeared in exams.
(c) System buses. New topic		0	1	1	6%	This topic appeared 6% times whenever chapter 3.3 appeared in exams.
(d) Parallel Processor Systems		6	3	9	53%	This topic appeared 53% times whenever chapter 3.3 appeared in exams.
3.4	**0**	**8**	**9**	**17**	**100%**	**This chapter appeared 100% times in paper history.**
(a) Binary coded decimal (BCD) and hexadecimal		3	3	6	35%	This topic appeared 35% times whenever chapter 3.4 appeared in exams.
(b) Positive & negative Integers		1	4	5	29%	This topic appeared 29% times whenever chapter 3.4 appeared in exams.
(c) Binary integer additions		1	3	4	24%	This topic appeared 24% times whenever chapter 3.4 appeared in exams.
(d) Floating point representation of Real numbers		3	2	5	29%	This topic appeared 29% times whenever chapter 3.4 appeared in exams.
(e) Normalising a Real Number		2	1	3	18%	This topic appeared 18% times whenever chapter 3.4 appeared in exams.
(f) Accuracy and Range		3	1	4	24%	This topic appeared 24% times whenever chapter 3.4 appeared in exams.
(g) Linked Lists		1	2	3	18%	This topic appeared 18% times whenever chapter 3.4 appeared in exams.
(g) The Binary Tree		4	2	6	35%	This topic appeared 35% times whenever chapter 3.4 appeared in exams.
(g) Stacks		1	1	2	12%	This topic appeared 12% times whenever chapter 3.4 appeared in exams.
(g) Queues		1	2	3	18%	This topic appeared 18% times whenever chapter 3.4 appeared in exams.
(h) Difference between static and dynamic implementation of data structures		2	2	4	24%	This topic appeared 24% times whenever chapter 3.4 appeared in exams.

Chapter	Not Appeared	Winter	Summer	Total	Frequency	Comments
(i) Binary and serial searching methods		1	1	2	12%	This topic appeared 12% times whenever chapter 3.4 appeared in exams.
(j) Insertion sort & Quick sort		0	2	2	12%	This topic appeared 12% times whenever chapter 3.4 appeared in exams.
(k) Use of binary tree to sort data		1	0	1	6%	This topic appeared 6% times whenever chapter 3.4 appeared in exams.
(l) Merging Files		1	2	3	18%	This topic appeared 18% times whenever chapter 3.4 appeared in exams.
3.5	**0**	**8**	**9**	**17**	**100%**	**This chapter appeared 100% times in paper history.**
(a) Programming Paradigms		0	0	0	0%	This topic appeared 0% times whenever chapter 3.5 appeared in exams.
(b) Programming Paradigms and examples		0	0	0	0%	This topic appeared 0% times whenever chapter 3.5 appeared in exams.
(c) Structured Design		1	0	1	6%	This topic appeared 6% times whenever chapter 3.5 appeared in exams.
(d) Standard Programming Techniques		3	0	3	18%	This topic appeared 18% times whenever chapter 3.5 appeared in exams.
(e) Stacks and Procedures		2	0	2	12%	This topic appeared 12% times whenever chapter 3.5 appeared in exams.
(f & g) Object-Oriented Programming (OOP)		3	3	6	35%	This topic appeared 35% times whenever chapter 3.5 appeared in exams.
(h) Declarative Languages		2	3	5	29%	This topic appeared 29% times whenever chapter 3.5 appeared in exams.
(i) Use of Special Registers/Memory Addressing Techniques		3	3	6	35%	This topic appeared 35% times whenever chapter 3.5 appeared in exams.
(j) Backus Naur Form and Syntax Diagrams		3	1	4	24%	This topic appeared 24% times whenever chapter 3.5 appeared in exams.
(k & l) Reverse Polish and Infix Notations		0	1	1	6%	This topic appeared 6% times whenever chapter 3.5 appeared in exams.
3.6	**1**	**8**	**8**	**16**	**94%**	**This chapter appeared 94% times in paper history.**
(a) flat files and relational databases		3	2	5	31%	This topic appeared 31% times whenever chapter 3.6 appeared in exams.
(b) design a simple relational database to third normal form (3NF). New topic		1	0	1	6%	This topic appeared 6% times whenever chapter 3.6 appeared in exams.
(c) draw and interpret entity-relationship (E-R) diagrams		5	4	9	56%	This topic appeared 56% times whenever chapter 3.6 appeared in exams.
(d) advantages of using a relational database over flat files		3	2	5	31%	This topic appeared 31% times whenever chapter 3.6 appeared in exams.
(e) define and explain the purpose of primary, secondary and foreign keys		3	2	5	31%	This topic appeared 31% times whenever chapter 3.6 appeared in exams.
elements		0	3	3	19%	This topic appeared 19% times whenever chapter 3.6 appeared in exams.
(g) DBMS including the data dictionary, DDL and DML		1	2	3	19%	This topic appeared 19% times whenever chapter 3.6 appeared in exams.
3.7	**3**	**6**	**8**	**14**	**82%**	**This chapter appeared 82% times in paper history.**
(a) describe real-time applications		2	2	4	29%	This topic appeared 29% times whenever chapter 3.7 appeared in exams.
(b) use of sensors and actuators		1	3	4	29%	This topic appeared 29% times whenever chapter 3.7 appeared in exams.
(c) demonstrate an understanding of the use of robots		1	2	3	21%	This topic appeared 21% times whenever chapter 3.7 appeared in exams.
(d) explain the reasons for simulation		6	5	11	79%	This topic appeared 79% times whenever chapter 3.7 appeared in exams.
(e) advantages of simulation in testing the feasibility of a design		3	0	3	21%	This topic appeared 21% times whenever chapter 3.7 appeared in exams.
Extra: Use of parallel processing in simulation		3	2	5	36%	This topic appeared 36% times whenever chapter 3.7 appeared in exams.
3.8	**3**	**7**	**7**	**14**	**82%**	**This chapter appeared 82% times in paper history.**
(a) different media and their carrying capabilities		1	1	2	14%	This topic appeared 14% times whenever chapter 3.8 appeared in exams.
(b) network components		1	2	3	21%	This topic appeared 21% times whenever chapter 3.8 appeared in exams.
(c) discuss common network environments		5	3	8	57%	This topic appeared 57% times whenever chapter 3.8 appeared in exams.

Chapter	Not Appeared	Winter	Summer	Total	Frequency	Comments
(d) discuss the problem of maintaining confidentiality of data		3	2	5	36%	This topic appeared 36% times whenever chapter 3.8 appeared in exams.
(e) explain the need for encryption, authorisation and authentication		1	1	2	14%	This topic appeared 14% times whenever chapter 3.8 appeared in exams.
Extra: partitioning & duplication of data for distribution over network		1	0	1	7%	This topic appeared 7% times whenever chapter 3.8 appeared in exams.
Extra: topologies		1	1	2	14%	This topic appeared 14% times whenever chapter 3.8 appeared in exams.

NB:

Paper 3: Stat starts from summer 2003 and ends at summer 2011.

Total 17 papers appearances are considered; however all varients, i.e. P31, P32 & P33 in a single session are considered as one.

RED shows least appearances.

GREEN shows most appearances.

YELLOW shows moderate appearances.

This statometer is just for an idea of chapters and topic frquencies and students shall prepare for all of the topics.