

Information Technology MCQ Practice

+2 1st Year (Class XI)

45 questions · 9 chapters · answers with explanations

How to use: attempt each chapter's questions without looking, then check the Answer Key at the end. Read the one-line explanation for every question you got wrong, and revise that topic in your notes.

Hardware Concepts

- Which of these is an input device?
(a) monitor (b) printer
(c) keyboard (d) speaker
- The brain of the computer is the
(a) RAM (b) CPU
(c) hard disk (d) monitor
- RAM is a
(a) permanent memory (b) volatile memory
(c) secondary storage (d) input device
- 1 kilobyte (KB) equals
(a) 1000 bits (b) 1024 bytes
(c) 1024 bits (d) 8 bytes
- Which part of the CPU does arithmetic and logical operations?
(a) Control Unit (b) ALU
(c) Register (d) Cache
- Which memory is the fastest?
(a) hard disk (b) RAM
(c) cache memory (d) pen drive

Types of Software

- An operating system is an example of
(a) application software (b) system software
(c) utility hardware (d) firmware only
- MS Word is an example of
(a) system software (b) application software
(c) an operating system (d) a compiler
- A compiler translates
(a) the whole program at once (b) one line at a time
(c) machine code to high-level code (d) images to text

10. Antivirus software is a type of
(a) utility software
(c) operating system
(b) application game
(d) programming language
11. Which of these is an operating system?
(a) Linux
(c) Oracle
(b) Python
(d) Chrome

Open Source Concepts

12. Open source software allows users to
(a) only use it
(c) only buy it
(b) view and modify its source code
(d) never share it
13. Which is an open source operating system?
(a) Windows
(c) macOS
(b) Linux
(d) iOS
14. FOSS stands for
(a) Free and Open Source Software
(c) File Organised Storage System
(b) Fast Operating System Software
(d) Free Online Secure Service
15. LibreOffice is an open source alternative to
(a) Photoshop
(c) Windows
(b) MS Office
(d) Tally
16. GPL is a type of
(a) programming language
(c) hardware
(b) software licence
(d) virus

Getting Started with Programming (Java)

17. Java source files have the extension
(a) .jav
(c) .class
(b) .java
(d) .js
18. Java bytecode is executed by the
(a) compiler
(c) editor
(b) JVM
(d) browser only
19. NetBeans is a
(a) database
(c) web browser
(b) Java IDE
(d) operating system
20. Execution of a Java application starts from the
(a) main() method
(c) constructor
(b) first class
(d) import statement

Programming Fundamentals

21. Which data type stores a single character in Java?
(a) String
(c) int
(b) char
(d) boolean

22. The size of an int in Java is
(a) 2 bytes (b) 4 bytes
(c) 8 bytes (d) 1 byte
23. The result of $7 \% 3$ in Java is
(a) 2 (b) 1
(c) 2.33 (d) 0
24. Which operator is used for "equal to" comparison?
(a) = (b) ==
(c) != (d) :=
25. A boolean variable can hold
(a) any number (b) true or false
(c) text (d) characters only
26. Which loop always runs at least once?
(a) for (b) while
(c) do...while (d) none

Programming Guidelines

27. Comments in a program are
(a) executed by the computer (b) ignored by the compiler
(c) errors (d) variables
28. A single-line comment in Java starts with
(a) # (b) //
(c) /* (d) <!--
29. An error that occurs because of wrong grammar in the code is a
(a) logical error (b) syntax error
(c) run-time error (d) hardware error
30. Choosing meaningful variable names makes a program
(a) faster (b) easier to read and maintain
(c) smaller (d) secure

Relational Database Management System

31. In a relational database, data is stored in
(a) files only (b) tables
(c) images (d) folders
32. A row in a table is also called a
(a) field (b) tuple (record)
(c) attribute (d) key
33. A primary key
(a) can have duplicate values (b) uniquely identifies each record
(c) can be NULL (d) is always text
34. A foreign key is used to
(a) link two tables (b) delete tables
(c) sort data (d) encrypt data

35. The number of columns in a table is called its

- (a) cardinality
- (c) domain

- (b) degree
- (d) tuple

Introduction to MySQL

36. SQL stands for

- (a) Structured Query Language
- (c) System Query Logic

- (b) Simple Question Language
- (d) Sequential Query Language

37. Which command is used to fetch data from a table?

- (a) GET
- (c) FETCH

- (b) SELECT
- (d) SHOW

38. Which command adds a new row to a table?

- (a) ADD
- (c) UPDATE

- (b) INSERT INTO
- (d) CREATE

39. Which clause is used to filter rows?

- (a) ORDER BY
- (c) GROUP

- (b) WHERE
- (d) FROM

40. CREATE TABLE is a

- (a) DML command
- (c) TCL command

- (b) DDL command
- (d) query only

41. To arrange the result in ascending order we use

- (a) SORT
- (c) ARRANGE

- (b) ORDER BY ... ASC
- (d) GROUP BY

IT Applications

42. e-Governance means

- (a) using IT to deliver government services
- (b) online shopping
- (c) playing games
- (d) using e-mail only

43. Which is an example of e-commerce?

- (a) online shopping on a website
- (c) reading a book

- (b) writing a letter
- (d) a phone call

44. e-Learning refers to

- (a) learning using electronic media and the internet
- (b) learning electricity
- (c) learning only in class
- (d) learning e-mails

45. An online form must check the user's input. This is called

- (a) data validation
- (c) encryption

- (b) data deletion
- (d) formatting

Answer Key with Explanations

Hardware Concepts

1. (c) keyboard — A keyboard sends data into the computer.
2. (b) CPU — The CPU processes all instructions.
3. (b) volatile memory — Its contents are lost when power is switched off.
4. (b) 1024 bytes — In binary measure, 1 KB = 2^{10} bytes.
5. (b) ALU — ALU = Arithmetic Logic Unit.
6. (c) cache memory — Cache sits closest to the CPU.

Types of Software

7. (b) system software — It manages the hardware and runs other programs.
8. (b) application software — It does a specific user task: word processing.
9. (a) the whole program at once — An interpreter works line by line.
10. (a) utility software — Utilities maintain and protect the system.
11. (a) Linux — Linux manages hardware; the others are a language, a database and a browser.

Open Source Concepts

12. (b) view and modify its source code — The source code is freely available.
13. (b) Linux — Linux is released under the GNU GPL.
14. (a) Free and Open Source Software — Software that is free and gives source code.
15. (b) MS Office — It has Writer, Calc and Impress.
16. (b) software licence — GNU General Public License.

Getting Started with Programming (Java)

17. (b) .java — Compiled bytecode is stored in .class files.
18. (b) JVM — Java Virtual Machine — "write once, run anywhere".
19. (b) Java IDE — IDE = Integrated Development Environment.
20. (a) main() method — public static void main(String[] args).

Programming Fundamentals

21. (b) char — char holds one Unicode character.
22. (b) 4 bytes — 32 bits.
23. (b) 1 — % gives the remainder.
24. (b) == — = assigns; == compares.
25. (b) true or false — Only two values.
26. (c) do...while — The condition is checked after the body.

Programming Guidelines

27. (b) ignored by the compiler — They are for human readers only.
28. (b) // — /* ... */ is used for multi-line comments.
29. (b) syntax error — The compiler reports it.
30. (b) easier to read and maintain — Good naming is a basic programming guideline.

Relational Database Management System

31. (b) tables — Tables = relations made of rows and columns.
32. (b) tuple (record) — Columns are attributes (fields).
33. (b) uniquely identifies each record — It must be unique and not NULL.
34. (a) link two tables — It refers to the primary key of another table.
35. (b) degree — The number of rows is the cardinality.

Introduction to MySQL

36. (a) Structured Query Language — The standard language for relational databases.
37. (b) SELECT — SELECT * FROM table;

- 38. (b) INSERT INTO — INSERT INTO t VALUES (...);
- 39. (b) WHERE — SELECT ... WHERE condition.
- 40. (b) DDL command — DDL defines the structure of the database.
- 41. (b) ORDER BY ... ASC — ASC is the default; DESC gives descending order.

IT Applications

- 42. (a) using IT to deliver government services — Examples: DigiLocker, online certificates.
- 43. (a) online shopping on a website — Buying and selling over the internet.
- 44. (a) learning using electronic media and the internet — Examples: SWAYAM, DIKSHA.
- 45. (a) data validation — It stops wrong or incomplete data being saved.