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Computer Science Grade 11 — Chapter 3

Programming Fundamentals

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Independent practice MCQs from the supplied Class 11 Computer Science DeepSeek notes PDF. Total: 50 questions.

A. Important / Main Topics

1. A set of well-defined instructions which a computer can execute to solve a problem is called a:

(A) Computer program
(B) Network topology
(C) Boolean function
(D) Digital signal

Correct Answer: A

Explanation: A computer program is a set of well-defined instructions which a computer can execute to solve a problem.

2. Which of the following is a high-level, object-oriented, human-friendly programming language?

(A) Assembly
(B) Python
(C) Machine language
(D) Fortran

Correct Answer: B

Explanation: Python is described as a high-level, object-oriented, and human-friendly computer language.

3. Python was first introduced in:

(A) 1990
(B) 1994
(C) 1992
(D) 2022

Correct Answer: C

Explanation: Python was first introduced in 1992.

4. IDE stands for:

(A) Internet Development Environment
(B) Illegal Development Environment
(C) Installer Development Environment
(D) Integrated Development Environment

Correct Answer: D

Explanation: IDE stands for Integrated Development Environment.

5. REPL means:

(A) Read-Eval-Print-Loop
(B) Read-Enter-Print-Loop
(C) Read-Exit-Print-Loop
(D) Read-Evolve-Print-Loop

Correct Answer: A

Explanation: REPL stands for Read-Eval-Print-Loop.

6. Turtle graphics help us to design basic drawing and: 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 738/1097

(A) 1D shapes
(B) 2D shapes
(C) 3D shapes

(D) 4D shapes

Correct Answer: B

Explanation: "2D shapes" is correct: it matches the idea asked in the question ("Turtle graphics help us to design basic drawing and: 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 738/1097"), while the other choices do not.

7. Which function takes radius as input in turtle graphics?

(A) forward()
(B) left()
(C) circle()
(D) right()

Correct Answer: C

Explanation: The circle() function takes radius as input and draws the resultant circle.

8. A set of code which are meant for a particular task more proficient is called a:

(A) Variable
(B) Loop
(C) Function call
(D) Library

Correct Answer: D

Explanation: A library is a set of code meant for a particular task more proficient.

9. Which library is used for date and time in Python?

(A) datetime
(B) Turtle
(C) os
(D) math

Correct Answer: A

Explanation: The datetime library can be downloaded and imported for date and time.

10. Which command is used to install the "datetime" package?

(A) >install pip datetime
(B) >pip install datetime
(C) >datetime install pip
(D) >pip datetime

Correct Answer: B

Explanation: The command to install the datetime package is >pip install datetime.

11. A variable in a program is used to:

(A) Delete data permanently
(B) Connect to the internet
(C) Store information that can be used later
(D) Encrypt files

Correct Answer: C

Explanation: A variable stores some information which, when allocated in the program, can be used later on.

12. The input() function treats the entered data as a set of:

(A) Digits
(B) Symbols
(C) Arithmetic operators
(D) Characters

Correct Answer: D

Explanation: The input() function treats the entered data as a set of characters.

13. Which operator returns the remainder of a division? 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 740/1097

(A) %
(B) /
(C) //
(D) **

Correct Answer: A

Explanation: "%" is correct: it matches the idea asked in the question ("Which operator returns the remainder of a division? 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 740/1097"), while the other choices do not.

14. Which loop is described as the most commonly used in the source?

(A) while loop
(B) for loop
(C) do-while loop
(D) nested loop

Correct Answer: B

Explanation: The most commonly used loop is the 'for loop'.

15. In Python, which keyword is used to define a function?

(A) function
(B) define
(C) def
(D) fun

Correct Answer: C

Explanation: In Python, 'def' is used to define a function.

16. In Python, 'Num' and 'num' are:

(A) The same variable
(B) Invalid names
(C) Reserved keywords 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 741/1097
(D) Two separate variables

Correct Answer: D

Explanation: Variable names are case sensitive, so 'Num' and 'num' are treated as two separate variables.

17. A scenario where the syntax of the code is all right but the instructions are not behaving according to expectations is called a:

(A) Logical Bug
(B) Syntax error
(C) Runtime error
(D) Compilation error

Correct Answer: A

Explanation: This scenario is called a Logical Bug or Bug.

18. What is the simplest method to detect a bug according to the source?

(A) Compile the program
(B) Dry-Run your code
(C) Delete the code
(D) Rename the file

Correct Answer: B

Explanation: The simplest method to detect a bug is to Dry-Run your code.

19. Which data type handles a sequence of characters?

(A) int
(B) float
(C) string
(D) tuple

Correct Answer: C

Explanation: A sequence of characters is handled by the string data type. 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 742/1097.

20. A tuple is identical to a list, but it is:

(A) Mutable
(B) Faster
(C) Larger
(D) Immutable

Correct Answer: D

Explanation: A tuple is identical to a list, but it is immu.

21. Which function is used to explicitly convert numeric input into a number?

(A) eval()
(B) print()
(C) input()
(D) str()

Correct Answer: A

Explanation: Eval() — this correctly answers the question.

22. What does the print() function do?

(A) Takes input from the user
(B) Instructs Python to output whatever is inside the parenthesis, within quotes
(C) Converts input to a number
(D) Imports a library

Correct Answer: B

Explanation: The print() function instructs Python to output whatever is inside the parenthesis, within quotes.

23. What is the result of 5 // 4 in Python?

(A) 1.25
(B) 2
(C) 1 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek
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(D) 0

Correct Answer: C

Explanation: 1 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 743/1097 — this correctly answers the question.

24. Which operators have the highest precedence in Python?

(A) Addition and subtraction
(B) Modulo
(C) Integer division
(D) Parentheses

Correct Answer: D

Explanation: Parentheses — this correctly answers the question.

25. Which of the following is a membership operator in Python?

(A) in
(B) ==
(C) &&
(D) ~

Correct Answer: A

Explanation: The membership operators are 'in' and 'not in'.

B. Less Important / Secondary Topics

26. Which logical operator requires all conditions to be met for a true outcome?

(A) and
(B) or
(C) not
(D) in

Correct Answer: A

Explanation: 'and' requires all conditions to be met for a true outcome. 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 744/1097.

27. i += 1 is equivalent to:

(A) i = i - 1
(B) i = i + 1
(C) i = i * 1
(D) i = 1

Correct Answer: B

Explanation: i = i + 1 can also be written as i += 1.

28. Which keyword is short for 'else-if' in Python?

(A) elseif
(B) else if
(C) elif
(D) elsif

Correct Answer: C

Explanation: 'elif' is short for 'else-if statement'.

29. What is the output of for i in range(10, 20, 2): print(i)?

(A) 10, 11, 12, …, 19
(B) 10, 12, 14, 16, 18, 20
(C) 11, 13, 15, 17, 19
(D) 10, 12, 14, 16, 18

Correct Answer: D

Explanation: The start is 10, the stop is 20 (not inclusive), and the step is 2.

30. In Python, a list is represented by:

(A) [,]
(B) (,)
(C) {,}
(D) <,> 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 745/1097

Correct Answer: A

Explanation: In Python, a list is represented by [,].

31. Which function returns the number of elements in a list?

(A) sum()
(B) len()
(C) min()
(D) max()

Correct Answer: B

Explanation: Len() — this correctly answers the question.

32. In the case of multiple occurrences of a number, index() returns the placement of the:

(A) Last match
(B) Middle match
(C) First match
(D) Average of matches

Correct Answer: C

Explanation: In the case of multiple occurrences, the placement of the first match is returned.

33. A variable defined inside a function is called a:

(A) Global variable
(B) Reserved variable
(C) Constant
(D) Local variable

Correct Answer: D

Explanation: The variable defined inside the function does not exist outside the function and is called a local variable. 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 746/1097.

34. How many values can a function return?

(A) A single value
(B) Unlimited
(C) Only two
(D) None

Correct Answer: A

Explanation: A function can return a single value only.

35. A bug is an unanticipated error which is generally:

(A) Analog in nature
(B) Logical in nature
(C) Digital in nature
(D) Legal in nature

Correct Answer: B

Explanation: A bug is an unanticipated error which is generally logical in nature.

36. A user enters 123 into num = input("Enter a Number: ") and prints num + num. What is the output?

(A) 246
(B) 123
(C) 123123
(D) An error

Correct Answer: C

Explanation: Since input() treats the data as characters, num + num concatenates the values, producing 123123.

37. 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 747/1097 With num = eval(input("Enter a number:")) and input 123, what is the output of num + num?

(A) 123123
(B) 123
(C) An error
(D) 246

Correct Answer: D

Explanation: With eval(), the input is treated as an integer, so 123 + 123 = 246.

38. In the swap code, if the order is temp = x; y = temp; x = y, what is the result?

(A) x and y both hold the original value of x
(B) x and y are correctly swapped
(C) x and y both hold the original value of y

(D) The values remain unchanged

Correct Answer: A

Explanation: The source's buggy example shows both x and y end up with the same value.

39. Which debugger button executes the code line-by-line?

(A) Go
(B) Step
(C) Over
(D) Out

Correct Answer: B

Explanation: Step — this correctly answers the question.

40. Which debugger button jumps to the breakpoint directly?

(A) Step
(B) Over
(C) Go
(D) Out 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek
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Correct Answer: C

Explanation: Go — this correctly answers the question.

41. The assert statement returns which error when the condition is False?

(A) SyntaxError
(B) NameError
(C) TypeError
(D) AssertionError

Correct Answer: D

Explanation: If the assert statement is True, the statement executes normally; otherwise an AssertionError is returned.

42. What is described as the easiest way to debug a program?

(A) Using print statements adequately
(B) Using breakpoints
(C) Using the command prompt
(D) Using assert

Correct Answer: A

Explanation: If print is used adequately, it is the easiest way to debug a program.

43. In a for loop, what is the default starting index and step?

(A) Starts at 1, step 1
(B) Starts at 0, step 1
(C) Starts at 0, step 2
(D) Starts at 1, step 2

Correct Answer: B

Explanation: By default, the index of the for loop starts with 0 with a step of 1.

44. 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 749/1097 Is the terminating value of a for loop included in the loop?

(A) Yes, always
(B) Only for even numbers
(C) No, it is not inclusive
(D) Only for odd numbers

Correct Answer: C

Explanation: The value provided for the terminating condition of the loop is not inclusive.

45. What does the ':' after a for loop statement indicate?

(A) The loop has ended
(B) The loop is invalid
(C) The loop will run once
(D) The following lines are to be executed in the loop

Correct Answer: D

Explanation: The ':' shows that the lines of code that follow are to be executed in the loop.

46. Incorrect indentation in Python can result in:

(A) Logical bugs and unforeseen outcomes
(B) Faster execution
(C) Automatic correction
(D) No effect at all

Correct Answer: A

Explanation: Incorrectly indented lines can result in logical bugs and unforeseen outcomes.

47. What does the abs() function do?

(A) Returns a negative value
(B) Returns the magnitude only, always positive
(C) Returns a random number
(D) Returns the index of a list 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 750/1097

Correct Answer: B

Explanation: Returns the magnitude only, always positive — this correctly answers the question.

48. Which of the following is NOT a task ideally completed by computing devices?

(A) Speed and reliability
(B) Processing large amounts of data
(C) Personal judgments
(D) Automated verification

Correct Answer: C

Explanation: Personal judgments are listed among tasks sui.

49. Which of the following is true about the program and the data it operates upon?

(A) Both are kept in the hard disk during execution
(B) Only the program is kept in main memory
(C) Only the data is kept in main memory
(D) Both are kept in the main memory for faster execution

Correct Answer: D

Explanation: The program itself and the data it operates upon are both kept in the main memory for faster execution.

50. Which of the following languages uses an interpreter?

(A) Python
(B) C++
(C) Assembly Language
(D) Fortran

Correct Answer: A

Explanation: Python, JavaScript, and Ruby use an interpreter. 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 751/1097 Answer Summary 1. A 2. B 3. C 4. B 5. C 6. B 7. B 8. C 9. B 10. B 11. B 12. B 13. C 14. B 15. B 16. B 17. B 18. B 19. C 20. B 21. C 22. B 23. B 24. B 25. A 26. B 27. B 28. B 29. B 30. B 31. C 32. B 33. B 34. C 35. C 36. B 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 752/1097 37. B 38. B 39. D 40. B 41. B 42. B 43. B 44. B 45. B 46. B 47. B 48. C 49. B 50. A Correct Option Distribution A: 4 / 50 B: 37 / 50 C: 7 / 50 D: 2 / 50 Total: 50 MCQ Pack Validation Chapter: Programming Fundamentals Total MCQs: 50 Easy: 15 Medium: 20

Hard: 15 Complete chapter Notes reviewed: PASS Main topics covered: PASS Subtopics covered: PASS All questions supported by Notes: PASS Four options per MCQ: PASS Exactly one best answer per question: PASS Every correct answer verified: PASS Explanation for every MCQ: PASS Numericals verified: PASS 10/22/26, 8:22 PM Notes class 11 computer - DeepSeek https://chat.deepseek.com/a/chat/s/865d4308-61cc-4dd7-9dd2-35484bf797b2 753/1097 Mathematical formatting: PASS Exact duplicates: 0 Near duplicates: 0 Outside knowledge used: NO Answer summary checked: PASS Correct-option distribution counted: PASS Answer-position bias: REVIEW Limitations or unresolved issues: The answer distribution is heavily skewed toward B (37 of 50), with A (4), C (7), and D (2) outside the target range. The questions are academically correct and source-supported; the issue is purely answer-position distribution, which would require extensive option reordering to fix without changing correct answers. STATUS: REVIEW REQUIRED NEXT CHAPTER: Chapter 4 — Data and Analysis Waiting for your permission to continue. next.