Name of the Bundle	Intermediate Bundle V1	**Subject**	Python Programming V1
Topic	Built in functions	**Last updated on**	06 August 2025

1. What are pre-defined functions in Python?
    a. User-defined functions
    b. Modules
    c. Built-in functions
    d. Libraries

Ans: c. Built-in functions

Explanation: Built-in functions are predefined Python functions used for common tasks, like pow (), random (), and divmod().

2. Why are pre-defined functions useful in Python?
    a. Make the code big
    b. Remove comments
    c. Perform common tasks
    d. Create errors

Ans: c. Perform common tasks

Explanation: Pre-defined functions help perform common tasks easily, such as printing or finding the length.

3. Which module should be imported to use mathematical functions in Python?
    a. input
    b. number
    c. math
    d. logic

Ans: c. math

Explanation: The math module provides functions like sqrt(), sin(), and log().

Name of the Bundle	Intermediate Bundle V1	Subject	Python Programming V1
Topic	Built in functions	Last updated on	06 August 2025

4. What is the correct way to access functions from the math module?
    a. use math
    b. define math
    c. import math
    d. start math

Ans: c. import math

Explanation: The import keyword is used to load the math module and use its functions.

5. What does the divmod() function return?
    a. Only quotient
    b. Only remainder
    c. Quotient and remainder
    d. float value

Ans: c. Quotient and remainder

Explanation: divmod() gives both quotient and remainder in one go.

6. What is the output of the following code? print (divmod(10, 3))
    a. (3, 1)
    b. (3, 0)
    c. (10, 3)
    d. (3.3, 1)

Ans: a. (3, 1)

Explanation: The divmod() function returns a tuple containing the quotient and remainder when dividing 10 by 3.

Name of the Bundle	Intermediate Bundle V1	**Subject**	Python Programming V1
Topic	Built in functions	**Last updated on**	06 August 2025

7. What built-in Python function raises a number to a specified power?
    a. sqrt ()
    b. pow ()
    c. abs ()
    d. round ()

Ans: b. pow ()

Explanation: The pow () function takes two arguments, the base and the exponent, and returns the base raised to the power of the exponent.

8. What is the use of the pow() function?
    a. Adds numbers
    b. Subtracts numbers
    c. Raises a number to the power
    d. Divides numbers

Ans: c. Raises a number to the power

Explanation: pow() raises a number to a certain power (like 2^3).

9. What is the result of the following code? print (pow (2, 3))
    a. 6
    b. 8
    c. 9
    d. 12

Ans: b. 8

Explanation: The pow (2, 3) function calculates 2 raised to the power of 3, resulting in 8.

Name of the Bundle	Intermediate Bundle V1	Subject	Python Programming V1
Topic	Built in functions	Last updated on	06 August 2025

10. Which function rounds a number to a specific number of decimal places?

    a. ceil ()
    b. floor ()
    c. round ()
    d. fabs ()

Ans: c. round ()

Explanation: The round () function rounds a number to the nearest integer or a specified number of decimal places.

11. What does the round() function do?

    a. Finds square root
    b. Converts to integer
    c. Rounds number
    d. Returns string

Ans: c. Rounds number

Explanation: round() rounds the number to a certain decimal point.

12. What is the output of print(round(7.8946, 3))?

    a. 7.894
    b. 7.895
    c. 7.893
    d. 7.890

Ans: b. 7.895

Explanation: The round() function rounds the number 7.8946 to three decimal places, so the result is 7.895.

Name of the Bundle	Intermediate Bundle V1	Subject	Python Programming V1
Topic	Built in functions	Last updated on	06 August 2025

13. What is the purpose of the sum () function in Python?
    a. Subtract numbers
    b. Add numbers to a list
    c. Count values
    d. Show length

Ans: b. Add numbers to a list

Explanation: The sum () function returns the sum of all items in an iterable, such as a list or tuple.

14. Which function returns the smallest value from a list of values?
    a. max ()
    b. sum ()
    c. min ()
    d. sorted ()

Ans: c. min ()

Explanation: The min () function returns the smallest value in an iterable or among two or more arguments.

15. Given a list value = [5, 3, 8, 1, 6], which function call returns 1?
    a. max(values)
    b. min(values)
    c. sum(values)
    d. sorted(values)

Ans: b. min(values)

Explanation: The min () function returns the smallest value in the list, which is 1.

Name of the Bundle	Intermediate Bundle V1	Subject	Python Programming V1
Topic	Built in functions	Last updated on	06 August 2025

16. Which of the following functions returns the largest value from a list of values?

    a. sorted ()
    b. len ()
    c. max ()
    d. min ()

Ans: c. max ()

Explanation: The max () function returns the largest value in an iterable or among two or more arguments.

17. Given a list values = [5, 3, 8, 1, 6], which function call returns the Maximum value?

    a. max(values)
    b. min(values)
    c. sum(values)
    d. sorted(values)

Ans: a. max(values)

Explanation: The sum () function calculates the total of all elements in the list [2, 4, 6, 8], which is 20.

18. What does the ceil() function return?

    a. Smaller value
    b. Same value
    c. Greater integer value
    d. Average value

Ans: c. Greater integer value

Explanation: ceil() gives the next whole number greater than the given value. Example: ceil(3.7) is 4.

Name of the Bundle	Intermediate Bundle V1	**Subject**	Python Programming V1
Topic	Built in functions	**Last updated on**	06 August 2025

19. What will be the output of math.ceil(4.2)?

    a. 4
    b. 5
    c. 4.0
    d. 5.0

Ans: b. 5

Explanation: ceil(4.2) returns the next whole number, which is 5.

20. Which function gives the smallest integer greater than the input?

    a. floor()
    b. round()
    c. int()
    d. ceil()

Ans: d. ceil()

Explanation: ceil() always rounds a number upward to the next integer.

21. What does the floor() function return?

    a. Greater value
    b. Smaller integer value
    c. Decimal value
    d. Negative value

Ans: b. Smaller integer value

Explanation: floor() returns the largest integer less than the number. Example: floor(3.7) gives 3.

Name of the Bundle	Intermediate Bundle V1	Subject	Python Programming V1
Topic	Built in functions	Last updated on	06 August 2025

22. What is the result of math.floor(6.9)?

a. 7
b. 6
c. 6.0
d. 7.0

Ans: b. 6

Explanation: floor(6.9) gives the greatest integer less than or equal to 6.9, which is 6.

23. Which function gives the greatest integer smaller than the input?

a. ceil()
b. round()
c. int()
d. floor()

Ans: d. floor()

Explanation: floor() rounds the number downward to the nearest whole number.

24. Which function returns E raised to the power of x in Python?

a. exp(x)
b. pow(x)
c. log(x)
d. sqrt(x)

Ans: a. exp(x)

Explanation: exp(x) returns E^x, where E ≈ 2.718282.

Name of the Bundle	Intermediate Bundle V1	**Subject**	Python Programming V1
Topic	Built in functions	**Last updated on**	06 August 2025

25. What is the approximate value of the constant E?

a. 3.14
b. 2.71
c. 1.41
d. 1.73

Ans: b. 2.71

Explanation: E is the base of natural logarithms, approximately 2.718282.

26. If x = 1, what will math.exp(x) return approximately?

a. 1
b. 2.7
c. 3.14
d. 0

Ans: b. 2.7

Explanation: exp(1) returns E^1, which is approximately 2.718282.

27. Which function is used to return the absolute value in Python?

a. abs()
b. int()
c. round()
d. floor()

Ans: a. abs()

Explanation: abs() removes the negative sign and gives the positive value.

Name of the Bundle	Intermediate Bundle V1	**Subject**	Python Programming V1
Topic	Built in functions	**Last updated on**	06 August 2025

28. What does abs() do to a negative number?

    a. Doubles it
    b. Changes it to zero
    c. Makes it positive
    d. Adds one

Ans: c. Makes it positive

Explanation: abs() gives the positive value of any number.

29. What is the result of abs(-9)?

    a. -9
    b. 0
    c. 9
    d. 1

Ans: c. 9

Explanation: abs(-9) gives 9 by removing the negative sign.

30. What type of number is generated using the random module?

    a. Fixed number
    b. Even number
    c. Predictable number
    d. Unpredictable number

Ans: d. Unpredictable number

Explanation: Random numbers are unpredictable and cannot be reasonably guessed.

Name of the Bundle	Intermediate Bundle V1	**Subject**	Python Programming V1
Topic	Built in functions	**Last updated on**	06 August 2025

31. Which module is to be imported to use random functions?

    a. math
    b. random
    c. trigonometric
    d. datetime

Ans : b. random

Explanation: To use random functions in Python, import the random module. It provides functions for generating random numbers and performing random operations.

32. What does random.random() return?

    a. An integer
    b. A string
    c. A float between 0 and 1
    d. A float greater than 1

Ans: c. A float between 0 and 1

Explanation: random.random() returns a decimal number between 0.0 and 1.0.

33. What does random.randint(1, 5) return?

    a. Any float between 1 and 5
    b. An integer between 1 and 5
    c. A string
    d. Always 5

Ans: b. An integer between 1 and 5

Explanation: randint() gives a random integer, including both end values.

Name of the Bundle	Intermediate Bundle V1	**Subject**	Python Programming V1
Topic	Built in functions	**Last updated on**	06 August 2025

34. What does random.randrange(1, 5) return?

    a. A float
    b. A number between 1 and 4
    c. A number between 1 and 5
    d. Only 5

Ans: b. A number between 1 and 4

Explanation: randrange() returns a random integer excluding the stop value.

35. What does random.choice(['red', 'green', 'blue']) return?

    a. A number
    b. A random color from the list
    c. An error
    d. The length of the list

Ans: b. A random color from the list

Explanation: choice() selects one random item from a sequence.

36. Which function is best for picking one random element from a list?

    a. choice()
    b. randint()
    c. range()
    d. shuffle()

Ans: a. choice()

Explanation: choice() picks a random item from a list or tuple.

Name of the Bundle	Intermediate Bundle V1	**Subject**	Python Programming V1
Topic	Built in functions	**Last updated on**	06 August 2025

37. What does the random.shuffle () function do in Python?

    a. Sorts a list
    b. Reverses a list
    c. Shuffles a list
    d. Finds an element

Ans: c. Shuffles a list

Explanation: The random.shuffle() function randomly rearranges the elements of a list.

38. Which function is used to check if two values are close to each other?

    a. round()
    b. abs()
    c. isclose()
    d. ==

Ans: c.isclose()

Explanation: isclose() checks if two floating-point numbers are nearly equal, accounting for precision errors.

39. What does random.uniform(2.0, 4.0) return?

    a. Only integers
    b. Only 2 or 4
    c. A float between 2.0 and 4.0
    d. A negative number

Ans: c. A float between 2.0 and 4.0

Explanation: uniform() gives a random decimal between the given range.

Name of the Bundle	Intermediate Bundle V1	Subject	Python Programming V1
Topic	Built in functions	Last updated on	06 August 2025

40. Why should floats not be compared for equality using == or != in Python?
    a. They can have rounding errors.
    b. They are case-sensitive.
    c. They are stored as characters.
    d. They are always positive numbers.

Ans: a. They can have rounding errors.

Explanation: Floats may contain small rounding errors, so using == or != can lead to incorrect comparisons.

41. What is the result of the comparison 0.4 == 0.1 + 0.3 in Python?
    a. True
    b. False
    c. Error
    d. Depends on system

Ans: b. False

Explanation: Due to floating-point precision, 0.1 + 0.3 may not be exactly equal to 0.4.

42. What is an instruction that a Python interpreter can execute called?
    a. Function
    b. Statement
    c. Expression
    d. Module

Ans: b. Statement

Explanation: A statement is an instruction that the Python interpreter can execute. Statements can be classified as simple (e.g., print(), assignment) or compound (e.g., if, for loops).

Name of the Bundle	Intermediate Bundle V1	Subject	Python Programming V1
Topic	Built in functions	Last updated on	06 August 2025

43. Which statement in Python can evaluate a mathematical operation like a= 5 + 7?

    a. Assignment statement
    b. Expression statement
    c. Import statement
    d. Augmented assignment statement

Ans: b. Expression statement

Explanation: An expression statement evaluates an expression, such as 5 + 7, but does not store the result unless explicitly assigned to a variable.

44. When would you use an assert statement in Python?

    a. To define a new variable
    b. To handle exceptions
    c. To raise error if false
    d. To print debug messages

Ans: c. To raise error if false

Explanation: The assert statement is used to test conditions. If the condition is False, it raises an AssertionError.

45. What is the result of an assignment statement in Python, like x = 10?

    a. Creates a new function
    b. Deletes a variable
    c. Assigns the value 10 to the variable x
    d. Checks if x is equal to 10

Ans: c. Assigns the value 10 to the variable x

Explanation: An assignment statement assigns a value to a variable, such as x = 10.

Name of the Bundle	Intermediate Bundle V1	Subject	Python Programming V1
Topic	Built in functions	Last updated on	06 August 2025

46. Which of the following is an example of an augmented assignment statement?

a. x = 10
b. x += 5
c. x == 5
d. x > 5

Ans: b. x += 5

Explanation: An augmented assignment statement combines an arithmetic operation with assignment, such as x += 5.

47. Which Python statement would you use to remove a variable from memory?

a. remove statement
b. erase statement
c. delete statement
d. del statement

Ans: d. del statement

Explanation: The del statement is used to delete a variable or an object from memory.

48. What does the import statement do in a Python script?

a. Imports a function from a class
b. Imports external modules or libraries
c. Deletes unused variables
d. Sorts a list in ascending order

Ans: b. Imports external modules or libraries

Explanation: The import statement is used to include external modules or libraries, allowing access to additional functions and classes.

Name of the Bundle	Intermediate Bundle V1	Subject	Python Programming V1
Topic	Built in functions	Last updated on	06 August 2025

49. How can you write a long Python statement across multiple lines?

    a. backslash
    b. Use square brackets []
    c. Use curly braces {}
    d. Use the semicolon ;

Ans: a. backslash

Explanation: Parentheses or a backslash (\) can be used to extend a Python statement over multiple lines for better readability.

50. What is the purpose of the datetime module in Python?

    a. To perform mathematical calculations
    b. To handle and manipulate dates and times
    c. To create graphical user interfaces
    d. To manage network connections

Ans: b. To handle and manipulate dates and times

Explanation: The datetime module in Python provides classes for representing and manipulating dates and times, and for formatting and parsing them in various formats.

51. Which module is used to represent a specific date and time?

    a. time
    b. date
    c. datetime
    d. calendar

Ans: c. datetime

Explanation: The datetime class from the datetime module is used to represent both date and time together.

Name of the Bundle	Intermediate Bundle V1	Subject	Python Programming V1
Topic	Built in functions	Last updated on	06 August 2025

52. Which class is used to calculate the difference between two dates or times?

a. timedelta
b. datetime
c. time
d. timezone

Ans: a. timedelta

Explanation: The timedelta class represents the difference between two dates or times.

53. What does datetime.date(2020, 7, 23) return?

a. 2020-07-23
b. Error
c. Date object
d. Current date

Answer: a. 2020-07-23

Explanation: The datetime.date() constructor creates a date object, and printing it returns a string in the format YYYY-MM-DD.

54. What is the output of datetime.now()?

a. Only time
b. Only date
c. Current date and time
d. None

Answer: c. Current date and time

Explanation: datetime.now() returns the current local date and time as a datetime object (e.g., 2025-08-06 15:10:45.123456).

Name of the Bundle	Intermediate Bundle V1	Subject	Python Programming V1
Topic	Built in functions	Last updated on	06 August 2025

55. Which class gives the current year using today.year?

a. time
b. datetime
c. date
d. timedelta

Answer: c. date

Explanation: datetime.date.today().year accesses the current year. The date class contains the today() method.

56. What is the output of time(11, 34, 56).minute?

a. 34
b. 11
c. 56
d. 0

Answer: a. 34

Explanation: time(11, 34, 56) creates a time object (11:34:56), and .minute returns the minute part, which is 34.