

# UGP-301

## B.C.A. (Part-II) Examination, 2021

### PYTHON

#### Paper - BCA 206 (A)

Time : 1½ Hours ]

श्री जैन (पी.जी.) कॉलेज, बीकानेर

[ Maximum Marks : 70

#### Section-A

(Marks : 2 × 10 = 20)

**Note :-** Answer all *ten* questions (Answer limit 50 words). Each question carries 2 marks.

(खण्ड-अ)

(अंक : 2 × 10 = 20)

**नोट :-** सभी दस प्रश्नों के उत्तर दीजिए (उत्तर-सीमा 50 शब्द)। प्रत्येक प्रश्न 2 अंक का है।

#### Section-B

(Marks : 4 × 5 = 20)

**Note :-** Answer all *five* questions. Each question has internal choice (Answer limit 200 words). Each question carries 4 marks.

(खण्ड-ब)

(अंक : 4 × 5 = 20)

**नोट :-** सभी पाँच प्रश्नों के उत्तर दीजिए। प्रत्येक प्रश्न में विकल्प का चयन कीजिए (उत्तर-सीमा 200 शब्द)। प्रत्येक प्रश्न 4 अंक का है।

#### Section-C

(Marks : 10 × 3 = 30)

**Note :-** Answer any *three* questions out of five (Answer limit 500 words). Each question carries 10 marks.

(खण्ड-स)

(अंक : 10 × 3 = 30)

**नोट :-** पाँच में से किन्हीं तीन प्रश्नों के उत्तर दीजिए (उत्तर-सीमा 500 शब्द)। प्रत्येक प्रश्न 10 अंक का है।

### Section-A

1. Attempt all *ten* questions. Answer should not exceed **50** words in each question.
  - (i) What is the difference between a keyword and an identifier ?
  - (ii) What are literals in Python ? How many literals are allowed in Python ?
  - (iii) Explain 'PUSH' in STACK.
  - (iv) Write a Python script to read an integer  $> 1000$  and reverse the number.
  - (v) In which cases, the else clause of a loop does not get executed ?
  - (vi) What is a String Slice ? How is it useful ?
  - (vii) How are lists different from strings when both are sequences ?
  - (viii) What is the difference between Formal Parameters and Actual Parameters ?  
What are their alternative names ?
  - (ix) Explain exit ( ) function in Python with example.
  - (x) What is Tuple ?

### Section-B

*Note :-* Answer all *five* questions. Each question has internal choice (Answer limit **200** words).

2. Explain the use of the Pass Statement. Illustrate it with an example.

*Or*

Write a Python program to print fibonacci series up to  $n$  times.

3. What is an ATOM ? What is an expression ? What is the difference between implicit type conversion and explicit type conversion ?

*Or*

Write short notes on the following :

- (i) List Manipulation
- (ii) Cloning List

4. What is Object-oriented Programming ? Explain its concept.

*Or*

Differentiate break and continue with suitable example.

5. How Python programming language is more useful over other programming language ? Discuss its advantages.

*Or*

Explain conditional statements in Python.

6. What are the Identifiers ? How to write the identifier in Python.

*Or*

Explain Python Interpreter and how to use Python as calculator.

### **Section-C**

*Note :-* Answer any *three* questions out of five (Answer limit **500** words).

7. What are the differences between Stack and Queues ? Why STACK is called a LIFO Data Structure explain how, PUSH and pop operations are implemented on a STACK ?

8. What is String ? How to perform String Slice, String Comparison, String Traversal ?

9. Explain the over view of packages :

(i) Numpy

(ii) Matplotlib

(iii) Networkx

10. Explain the operators in Python and also discuss their associativity and precedence with example.

11. How are classes and objects different from one another ? Why are classes termed as user defined function ? And also explain the role of `-init-()`, `-del-()`, `-str-()` methods.

श्री जैन (पी.जी.) कॉलेज, बीकानेर

**BC-289**

**B.C.A. (Part-II) Examination, 2022**

**PYTHON**

Paper - BCA-206 (A)

Time : 3 Hours ]

[ Maximum Marks : 70

श्री जैन (पी.जी.) कॉलेज, बीकानेर

**Section-A**

**(Marks : 2 × 10 = 20)**

*Note :-* Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

**Section-B**

**(Marks : 4 × 5 = 20)**

*Note :-* Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **4** marks.

**Section-C**

**(Marks : 10 × 3 = 30)**

*Note :-* Answer any *three* questions out of five (Answer limit **500** words). Each question carries **10** marks.

**Section-A**

1. (i) How to write multiline comments in Python ?
- (ii) Explain ternary expression in Python.
- (iii) Difference between list and set.

- (iv) Write a Python script to join two list.
- (v) Write full form of Numpy and how to install numpy (write command only) ?
- (vi) How to create Array in Python using Numpy ?
- (vii) How to create series using Scalar Value ?
- (viii) Explain data frame head and tail function.
- (ix) Write a Python Script to draw line plot using Matplotlib.
- (x) What is Scipy ?

### Section-B

2. Explain type carting in Pyhton.

*Or*

Explain loops in Python.

3. How to Access and Add Item in List ?

*Or*

How to remove and copy items in Dictionary ?

4. Explain Lambda functions in Python.

*Or*

Explain objects and method in Python.

5. Explain any *two* data structure of Pandas.

*Or*

How to create series using Numpy and Dictionary ?

6. Write the applications of Python.

*Or*

How to create histograms in Python using Matplotlib ?

## Section-C

7. Explain the following :
  - (i) Indentation
  - (ii) Scalar Data Type
  - (iii) Range Function
  - (iv) Pass
8. Explain functions in Python. How to return multiple values from function with suitable example ?
9. How to Access 1-D, 2-D and 3-D Array using Numpy with suitable example ?
10. Explain the following :
  - (i) How to read data from CSV file ?
  - (ii) How to create dataframe object ?
  - (iii) Difference between loc and iloc.
  - (iv) Dropna and mean.
11. Explain Exception Handling in Python with inbuilt exception using suitable example.