



ଓଡ଼ିଶା ରାଜ୍ୟ ମୁକ୍ତ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ସମ୍ବଲପୁର, ଓଡ଼ିଶା  
Odisha State Open University, Sambalpur, Odisha  
Established by an Act of Government of Odisha.

# ASSIGNMENTS

CSP-45, 46 & 47

(Theory & Practical)

SESSION: 2020-21

**P.G DIPLOMA IN COMPUTER APPLICATIONS**

**P G D C A**

**Please read the instructions carefully before attempting assignment questions.**

## INSTRUCTIONS FOR DOING ASSIGNMENTS

### Dear Learner,

You are required to submit one assignment per course within the stipulated time in order to become eligible to appear in the term-end examination. The assignments will be evaluated by the counselors at your Study Centre. Please submit your assignment solutions to the Coordinator of your Study Center.

### Purpose of Assignments:

1. Assignments are part of the continuous evaluation process in Open and Distance Learning (ODL) system. Due weightage is given to the marks/grades you obtain in assignments. This will help you for better performance in the term-end examination. If you secure good grades/marks in assignments, your overall performance will improve.

2. Assignments are also a part of the teaching-learning process in ODL system. Your assignment, after evaluation, will be returned back to you with specific and general comments by the evaluator. This will help you to know your strength as well as your weakness. Thus, it will establish a two-way communication between learner and evaluator.

### How to Write Assignments:

Please read the instructions for writing the response of an assignment before you start writing your answer.

1. Write your name, programme code, course title, enrolment no. and study center name with code in the top sheet of the assignment answer booklet as per the format given below.

**PROGRAMME TITLE:** .....**ENROLMENT No.:** .....

**NAME:**.....

**ADDRESS:**.....

**COURSECODE.....COURSETITLE:**.....

**ASSIGNMENT CODE:**..... **SIGNATURE:**.....

**STUDY CENTRE:** .....**DATE:** .....

2. Before you attempt the assignments, please go through the course materials carefully, understand the same and write answers in your own language and style.
3. **Write the answers in your own handwriting.** Give sufficient margin in the left side of each page so that the evaluator will give comments on each paragraph/page.
4. Your handwriting should be neat and readable.

### Weightage for each Assignments:

1. Each Theory Assignment will carry 15% weightage and each Practical Assignment will carry 10% weightage and term-end examination will carry 75% weightage.
2. Each assignment will be of 100 marks. But it will carry 25% weightage.
3. You have to score minimum pass mark i.e. 40% in each assignment. In case you do not submit assignment or get fail mark in assignment you have to re-submit in the next year.

**SUBMISSION DATES FOR ASSIGNMENTS**

Sl. No.	Course Code	Name of the Course	Date of Submission	Day (As per Calendar)
<b>Theory</b>				
1	CSP-45	Programming in Java	<b>21<sup>st</sup> March 2021</b>	<b>Sunday</b>
2	CSP-46	Introduction to Android Programming & Python	<b>21<sup>st</sup> March 2021</b>	<b>Sunday</b>
3	CSP-47	Introduction to Multimedia & Photoshop	<b>21<sup>st</sup> March 2021</b>	<b>Sunday</b>
<b>Practical</b>				
4	CSPL-45	Programming in Java Lab	<b>21<sup>st</sup> March 2021</b>	<b>Sunday</b>
5	CSPL-46	Introduction to Android Programming & Python Lab	<b>21<sup>st</sup> March 2021</b>	<b>Sunday</b>
6	CSPL-47	Introduction to Multimedia & Photoshop Lab	<b>21<sup>st</sup> March 2021</b>	<b>Sunday</b>

# ASSIGNMENTS

## Programming in Java (CSP-45)

**(Theory)**

**Full Mark – 100**

### GROUP-‘A’

**Q. No. 1**

**Mark: 1 X 10 = 10**

- a) Multilevel Inheritance is supported by Java.(T/F)
- b) The Java interpreter is used for the execution of the source code. (True/False).
- c) JVM Stands for?
- d) Which method is used to change the name of a thread?
- e) The java program is enclosed in a class definition (True/False).
- f) What is the return type of program’s main() method?
- g) Which method waits for a thread to die?
- h) What charAt() function will do?
- i) Init() function is used to begin a program thread. (true/false).
- j) What stop() function will do in a thread program.

### Group ‘B’

**Q. No. 2 (Word Limit: 50 Words)**

**Mark: 5 × 4= 20**

- a) What are the OOPs concept that supported by java?
- b) Why java is Platform independent?
- c) Explain about Break & Continue statement with example.
- d) Write a Java Program to get Input from User using Scanner class.

### Group ‘C’

**Q. No. 3 (Word Limit: 200 Words)**

**Mark: 10 × 4= 40**

- a) Difference between Application and Applet program.
- b) Notes on Function Overloading concept with example.
- c) Program to check whether input number is palindrome or not.
- d) Define the role of ADTs. give a description with example.

### Group ‘D’

**Q. No. 4 (Word Limit: 250 Words)**

**Mark: 15 × 2= 30**

- a) Explain the feature Polymorphism using a java code. Describe various types of polymorphism.
- b) Give a brief description about applet life cycle with a suitable example.

# ASSIGNMENTS

(Theory)

## Introduction to Android Programming & Python (CSP-46)

Full Mark – 100

### GROUP-‘A’

Q. No. 1

Mark: 1 × 10= 10

- a) Python is a high level language (True/False).
- b) What was the first commercial version of Android.
- c) iOS is a Mobile Operating System (True/False).
- d) A python line comment begins with\_\_\_\_\_.  
i) //                    ii) /\*                    iii) #                    iv) \$\$
- f) Name any two Debugging Tools used in Android Framework.
- g) Are *nested if-else* are allowed in Python (Yes/No)?
- h) To start python from the command prompt\_\_\_\_\_command is use.
- i) Which one of the following is not a python’s predefine datatype?  
i) list    ii) dictionary    iii) tuple                    iv) class
- j) IDLE Stands for?

### Group ‘B’

Q. No. 2 (Word Limit: 50 Words)

Mark: 5 × 4= 20

- a) What is the role of Python in Mobile Application?Explain.
- b) Name 31 keywords in Python.
- c) What is Android? Explain.
- d) Explain the role of R.java file.

### Group ‘C’

Q. No. 3 (Word Limit: 200 Words)

Mark: 10 × 4= 40

- a) Explain Android Architecture in details.
- b) Implement *for* loop in python with an example.
- c) What are the different Android platform versions and its specific features? Explain.
- d) Explain the role of AndroidManifest.xml file in an Android application.

### Group ‘D’

Q. No. 4 (Word Limit: 250 Words)

Mark: 15 × 2= 30

- k) Creating a new Android project in Android Studio and print “OSOU”
- l) What is an Activity in Android? Explain Activity Lifecycle in details.

# ASSIGNMENTS

## Introduction to Multimedia & Photoshop (CSP-47)

(Theory)

Full Mark – 100

### GROUP-‘A’

Q. No. 1

Mark: 1 × 10= 10

- 1 Gigabyte = \_\_\_\_\_Megabytes.
- ISDN stands for?
- RAM is a volatile memory (True/False).
- What is the pixel size of NTSE format?
- Krita* is a commercial software use for\_\_\_\_\_.
- Sumopaint* is a Raster based image editing software (True/False)
- The number of square dots i.e. pixels used on the computer screen is called\_\_\_\_\_.
- Write the full form of CMYK.
- illustrator* is used for creating cartoon characters (True/False).
- Flat-Bed Scanner is an input device (True/False).

### Group ‘B’

Q. No. 2 (Word Limit: 50 Words)

Mark: 5 × 4= 20

- Write five Distributions of LINUX Operating System?
- List the types of communication network that are used to provide multimedia communication services.
- What is an input device? List any four input devices.
- Explain the three major steps involve in the process of animation.

### Group ‘C’

Q. No. 3 (Word Limit: 200 Words)

Mark: 10 × 4= 40

- Describe the various video and audio formats.
- Write the function of Network Layer of OSI Model.
- What is Spot Healing Brush Tool? How to use it ?Explain.
- Discuss the various tools in Adobe Photoshop?

### Group ‘D’

Q. No. 4 (Word Limit: 250 Words)

Mark: 15 × 2= 30

- What are the different Television Video Output format. Explain in details.
- What is a *Google group*? What are the advantages of *Google groups*? Explain with example.

# **ASSIGNMENTS**

## **(PRACTICAL)**

# ASSIGNMENTS

## Programming in Java Lab (CSPL-45)

### (Practical)

Full Marks: - 100

*Answer Any Five (each question carries 20 marks)*

1. Explain JVM architecture in details.
2. Write a java applet program to display Fibonacci series of first 10 terms inside a label.
3. Write a keyboard input program to accept two numbers and add it.
4. Write a java program to print the following pattern:

```
      *
     * *
    * * *
   * * * *
  * * * * *
```

5. Write a java program to design a GUI based calculator application which perform addition, subtraction, multiplication, division operation on integers.
6. Develop a Library Interface which has drawbook(), returnbook()(with fine), checkstatus() and reservebook methods. All the methods are tagged with public in the following ways:
  - a) Using drawbook() – get the required book based on title.
  - b) Using checkstatus() – user book returned date details.
  - c) Using with fine() – Whether failed to return the book within a time period charge – Rs 5/day.
  - d) Using reserve book() – block or reserve particular book for their
  - e) account.
7. Write a program to perform the following operations on an array, using **generic classes**:
  - a) Add an element in the beginning.
  - b) Delete an element from a given position.

# ASSIGNMENTS

## Introduction to Android Programming & Python Lab (CSPL-46) (Practical)

Full Marks: - 100

*Answer Any Five (each question carries 20 marks)*

1. Enlist the different features of Android Operating System.
2. Create an android application to do addition of two numerical digits (xml file and java class only).
3. Write a Python program to display odd numbers between 1 to 30.
4. Write a Python program to compare two string using function.
5. Write a Python program to check whether a year is a leap year or not.
6. Write a Python program to make a calculator that can add, subtract, multiply and divide using functions.
7. Write a Python program that creates a GUI with a textbox, OK button and Quit button. On clicking OK, the text entered in the textbox is to be printed in Python shell; on clicking Quit, the program should terminate.

# ASSIGNMENTS

## Introduction to Multimedia & Photoshop Lab (CSPL-47) (Practical)

Full Marks: - 100

*Answer Any Five (each question carries 20 marks)*

1. Design a **visiting card** for any company utilizing your creativity and desktop publishing skills.
2. Make a PowerPoint presentation to describe about “OSOU” (minimum 5 slides) using animation and special effect.
3. Show the application of following options in **selection tools** in Adobe Photoshop :- (Move Tool, Marque Tools, Lasso Tools, Quick Selection Tool, Magic Wand Tool)
4. Write down the stepwise procedure to create a **YouTube** account and also show how videos are uploaded in **YouTube** account.
5. Write down the steps to create a pattern in Photoshop
6. Explain different layers in Photoshop
7. Make a Facebook account for “OSOU”. Also upload a photo in the account.