



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

# ASSIGNMENTS

CSP-80, 45 & 46

(Theory & Practical)

SESSION: 2018-19

**DIPLOMA IN ANDROID PROGRAMMING  
(DAP)**

**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**.....**COURSE TITLE:**.....

**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-80	Operating Systems	<b>18<sup>th</sup> Nov 2018</b>	<b>Sunday</b>
2	CSP-45	Programming in JAVA	<b>18<sup>th</sup> Nov 2018</b>	<b>Sunday</b>
3	CSP-46	Introduction to Android Programming & Python	<b>18<sup>th</sup> Nov 2018</b>	<b>Sunday</b>
<b>Practical</b>				
4	CSPL-80	Operating Systems Lab	<b>18<sup>th</sup> Nov 2018</b>	<b>Sunday</b>
5	CSPL-45	Programming in Java Lab	<b>18<sup>th</sup> Nov 2018</b>	<b>Sunday</b>
6	CSPL-46	Introduction to Android Programming & Python Lab	<b>18<sup>th</sup> Nov 2018</b>	<b>Sunday</b>

# ASSIGNMENTS

## Operating System Basics (CSP-80)

(Theory)

Full Mark – 100

GROUP-‘A’

Q. No. 1

Mark: 1 × 10= 10

- a) The basic architecture of computer was developed by
  - i) John Von neuman
  - ii) Charles Babbage
  - iii) garden Moore
  - iv) Blaise Pascal
- b) How many generations a computer can be classified?
  - i) 3
  - ii) 4
  - iii) 5
  - iv) 6
- c) Which one is not an input device?
  - i) Keyboard
  - ii) Mouse
  - iii) Printer
  - iv) Scanner
- d) Memories which can be read only are called \_\_\_\_\_.
  - i) RAM
  - ii) ROM
  - iii) DRAM
  - iv) Virtual Memory
- e) What is PCI?
  - i) A type of monitor
  - ii) a type of System Bus
  - iii) A kind if Graphics
  - iv) None of these
- f) VLSI stands for \_\_\_\_\_.
- g) Which of the following is not process states?
  - i. New
  - ii. Running
  - iii. Ready
  - iv. Finished
- h) What is interposes communication?
  - i. communication within the process
  - ii. communication between two process
  - iii. communication between two threads of same process
  - iv. None of the above
- i) A process may be loaded into a partition of equal or greater size in ..... of memory.
  - i. Fixed partitioning
  - ii. Simple Paging
  - iii. Virtual memory paging
  - iv. Simple segmentation.
- j) In ..... state, the process is in secondary memory and awaiting an event.
  - i. Ready
  - ii. Blocked
  - iii. Blocked/Suspend
  - iv. Ready/Suspended

Group ‘B’

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

Mark: 5 × 4= 20

- a) How to shut down a Linux system? What is Halt and poweroff command in linux?
- b) What is Software? What are the types of Software? Explain.
- c) What is process? Explain the process life cycle.
- d) What are the functions of Operating System?

Group ‘C’

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

Mark: 10 × 4= 40

- a) List 10 Linux command used in terminal mode with descriptions.
- b) Explain the Application of Computer in details.
- c) What is memory Allocation? Explain first, best and worst Fir algorithm.

d) Notes on System Call.

**Group 'D'**

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

**Mark: 15 × 2= 30**

- a) Explain about the File permission in Linux in details.
- b) Explain some common services that are provided by all most all Operating system

# ASSIGNMENTS

## Programming in Java (CSP-45)

(Theory)

Full Mark – 100

GROUP-‘A’

Q. No. 1

Mark: 1 × 10= 10

a) The following Syntax is used for?

```
class Subclass-name extends Superclass-name
{
//methods and fields
}
```

- i. Polymorphism    ii. Encapsulation    iii. Inheritance    iv. None of the above
- b) Which constructor creates an empty string buffer with the specified capacity as length?  
i. StringBuffer()    ii. StringBuffer(String str)    iii. StringBuffer(int capacity)  
iv. None of the above
- c) How many reserved keywords are currently defined in the Java language?  
i. 48    ii. 49    iii. 50    iv. 47
- d) Which method is used to change the name of a thread?  
a. public String getName()  
b. public void setName(String name)  
c. public void getName()  
d. public String setName(String name)
- e) By using \_\_\_\_\_ you can force immediate termination of a loop, by passing the conditional expression and any remaining code in the body of the loop.  
a. Break    ii. Continue    iii. Terminate    iv. Loop Close
- f) The compiled java program can run on any ..... platform having Java Virtual Machine (JVM) installed on it.  
a. Program    ii. Java    iii. hardware    iv. non java
- g) Which method waits for a thread to die?  
a. stop()    ii. start()    iii. terminate()    iv. join()
- h) Which string function returns the number of characters in a string?  
a. length()    ii. replace()    iii. charAt()    iv. equalsIgnoreCase()
- i) Applet works at client side so less response time. (true/false).
- j) Which method is called only once during the run time of your applet?  
a. stop()    ii. paint()    iii. init()    iv. destroy()

Group ‘B’

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

Mark: 5 × 4= 20

- a) What are the edition of Java?
- b) Why java is Platform independent?
- c) Explain about Return 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 C++ and JAVA (any 10 point)
- b) Notes on Type casting
- c) Program to check whether input number is prime or not
- d) Difference between interface and abstract class.

**Group 'D'**

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

**Mark: 15 × 2= 30**

- a) Explain the features of java.
- b) What is applet life cycle? Explain with a suitable example.

# ASSIGNMENTS

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

(Theory)

Full Mark – 100

### GROUP-‘A’

Q. No. 1

Mark: 1 × 10= 10

- a. In \_\_\_\_\_, Google Purchased the Android Inc. and became the proprietor of the company.  
i) 2007      ii) 2010      iii) 2005      iv) 2003
- b. What was the first commercial version of Android  
i) Donut      ii) Cupcakke      iii) Jelly Bean      iv) API Level 1
- c. Which of the following is not a Mobile Operating System?  
i) iOS      ii) Windows      iii) Mint      iv) Android
- d. What is an Activity in Android?
- e. Which of the following is not an Activity Lifecycle Methods?  
i) onCreate()      ii) onRun()      iii) onPause      iv) onDestroy()
- f. Name any two Debugging Tools used in Android Framework.
- g. Name any two OO Programming Language.
- h. What is the latest version of Python?
- i. What is IDLE in Python Software?
- j. What is void function in Python?

### Group ‘B’

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

Mark: 5 × 4= 20

- a) Why we need programming Language?
- b) Name 31 keywords in Python.
- c) What is the role of Python in Mobile Applications?
- d) Explain the role of R.java file.

### Group ‘C’

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

Mark: 10 × 4= 40

- a) What is Python? Explain the Programming Process.
- b) Write a python program using break statement.
- c) What are the different Android platform versions and its specific features? Explain.
- d) Explain the download and installation process of JDK (JAVA Development Tool Kit) with environmental Setup.

### Group ‘D’

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

Mark: 15 × 2= 30

- a) Creating a new Android project in Android Studio and print “OSOU”
- b) Explain the Features of Python



# **ASSIGNMENTS**

## **(PRACTICAL)**

# ASSIGNMENTS

## Operating System Basics Lab (CSPL-80)

**(Practical)**

**Full Mark – 100**

*Answer any five. Each Question Carries 20 Marks*

1. Write down the steps to format a hard disk and load Windows Operating System.
2. Write down the steps to configure IIS in Windows Operating System.
3. Explain Life Cycle of a Process.
4. Write down the steps to zip and unzip a file in LINUX Operating System.
5. Explain any five File management commands in LINUX Operating System with example.
6. Write the steps of Installing RPM and YUM in Linux.
7. Explain any five different group management commands used in Linux with example.

# ASSIGNMENTS

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

**(Practical)**

**Full Marks: - 100**

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

1. Write down the steps to create an Android project in Eclipse.
2. Explain the features of Android.
3. Write a Python program to display even numbers between 1 to 50.
4. Write a Python program to compare two string using function.
5. Write a Python program to check whether a number is an Armstrong number or not.
6. Write a Python program to make a calculator that can add, subtract, multiply and divide using functions.
7. Explain any five Python string functions with example.

# ASSIGNMENTS

## Programming in Java Lab (CSPL-45)

### (Practical)

**Full Mark – 100**

*Answer any five. Each Question Carries 20 Marks*

1. Write a Java program to remove duplicates in a single dimensional array.
2. Write a Java program to enter a string and count total number of vowels present in the string.
3. Write a Java program to define a class Employee having the following description **Data members/Instance variables:**
  - pan:** to store the personal account number
  - name:** to store the name
  - tax:** to store the annual taxable income
  - income tax :** to store the tax that is calculated**Member Functions:**
  - Employee ():** default constructor
  - void input() :** to accept pan number , name and tax
  - void calc() :** to calculate the tax for an employee according to the given conditionsTotal Annual Taxable income

<b>up to 100000</b>	<b>: No tax</b>
<b>From Rs. 100001 to Rs.150000</b>	<b>: 10% of income tax</b>
<b>From Rs.150001 to Rs.250000</b>	<b>: Rs.5000+20% of tax</b>
<b>Above 250000</b>	<b>: Rs.25000+30% of tax</b>

  - void display() :** to output the name, pan number , Taxable Income and income tax
4. Write a keyboard input program to accept two numbers and add it.
5. Explain the JVM architecture.
6. Write an Applet program to display “Hello World”.