

# JAVA INSTITUTE FOR ADVANCED TECHNOLOGY

## Department of Examinations



COURSE(S) – (LEADING TO)	PROFESSIONAL DIPLOMA IN SOFTWARE ENGINEERING
UNIT NAME	SOFTWARE APPLICATION DEVELOPMENT
UNIT ID	H7E1 04
ASSIGNMENT ID	H7E1 04/AS/01
DESCRIPTION	THIS ASSIGNMENT ASSESSES THE SKILLS OF CANDIDATES IN SIMPLE GUI DEVELOPMENT AND LOGIC MANIPULATION FROM AN OBJECT ORIENTED PROGRAMMING LANGUAGE
DURATION	1 WEEK
WORD COUNT	-
SUBMISSION VIA	ONLINE (STUDENT PORTAL)
DOCUMENT FORMAT	MICROSOFT WORD OFFICE DOCUMENT

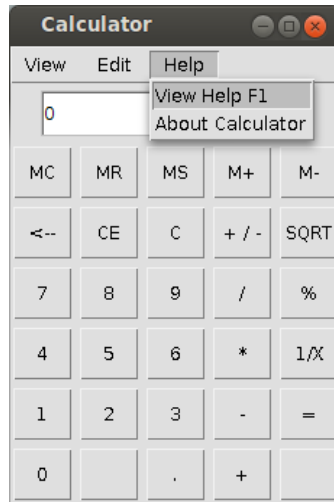
### GUIDE LINES FOR CANDIDATES

- Students are expected to use reference books, the Internet, journals and other similar sources in order to accomplish the task specified above.
- Students are expected to refrain from repeating any content in their research document.
- Students will be penalised for any plagiarism.

NAME	:	..... (BLOCK CAPITALS)
ADMISSION NO	:	.....
NIC NO	:	.....

**Question:**

1. Students should develop a simple calculator application according to the GUI Sample given below.



2. Students should manipulate following manipulation operations in above layout:
  - Addition
  - Subtraction
  - Multiplication
  - Division
  - Percentage
  - Square Root
  - Clear
3. Not expected do following operations:
  - Memory Recall
  - Memory n Recall
  - Memory Plus

**Assignment Guide Lines:**

1. Should Use GUI Components of a GUI Development Package (e.g. Java Abstract Window Toolkit (AWT)) such as Frame, Panel, Layout, Button, TextField, and Menu in order to develop a Simple Software Application for a given sample
2. Develop Interactive GUI applications with event handlers (e.g. ActionListener and ActionPerformed components)
3. Identify and apply programming techniques to manipulate logic in the application in an appropriate manner
4. Develop an entire application without using an Integrated Development Environment (IDE)

# Assignment Submission Guidelines for Students

Students are advised to strictly follow the guidelines specified herein when formulating and submitting research assignments

## Important Information for Students

1. The assignment should be submitted only as a soft copy in a Microsoft Word format on or before the specified assignment due date.
2. The soft copy of the assignment should be uploaded to the student portal using the SCN number.
3. The submission date provided for all assignments are the final dates on which you can hand upload the assignments. Please note that late submissions are not allowed.
4. Plagiarism is treated as a serious offence and the work you produce should be individual and original. However, note that students will have to work in groups in certain scenarios.
5. All sources of information in any assignment must be referenced using the “Harvard referencing” system, where a reference listing should be included at the end of the assignment.
6. Please contact your branch on assignments, re-submission, and related procedures.
7. Students are expected to maintain a backup of all assignments. The Java Institute for Advanced Technology retains all the rights to re-call soft copies of any assignment at any time during the course.
8. Students should use the attached assignment coversheet and declaration of authentication form to the assignment
9. Students are expected to provide the following information in their assignment coversheet of the softcopy in the CD:
  - Student name
  - SQA ID number
  - NIC No
  - Subject name
  - Subject code
  - Branch.
10. Assignment Report Rules
  - Paper Size:A4
  - Word Count:1500 words
  - Line Spacing:1.5
  - Printing Margin:1 inch on LHS and RHS
  - Binding Margin:½ inch
  - Header and Footer:1 inch

- Printing: Single-sided
- Basic Font Size:12pt
- Heading:16pt
- Sub-headings:14pt, Bold
- Body:12pt, Justified Aligned
- Font Style: Times New Roman/Calibri.