## Department of Computer Science & Engineering University of Asia Pacific (UAP)

Class Test Fall 2021 4<sup>nd</sup> Year 2<sup>nd</sup> Semester

Course Code: CSE 429 Course Title: Compiler Design Credits: 3

Full Marks: 20 Duration: 30 minutes

1. Consider the following Context-Free Grammar (CFG):

$$EXPR1 \rightarrow EXPR1 + EXPR2 \mid EXPR2 \mid EXPR1 = EXPR2$$

$$EXPR2 \rightarrow (EXPR1) \mid id$$

EXPR3  $\rightarrow$  id

- a. Find out the LR (0) item sets for the above stated grammar.
- b. Construct two parsing tables for i) LR (0) ii) SLR (1)
- c. State if the parser is LR (0) or SLR (1) with proper reasons?