PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2018

(Fifth Semester)

Branch -- SOFTWARE SYSTEMS

(Five year integrated)

PRINCIPLES OF COMPLIER DESIGN

Time: Three Hours Maximum: 75 Marks

SECTION -A (30 Marks)

Answer **ALL** questions

ALL questions carry EQUAL Marks

 $(5 \times 6 = 30)$

1 a Describe about input buffering in detail.

OR

- b Explain in detail the cousins of the compiler.
- 2 a Write short notes on context free grammars.

OR

- b Compare SLR, LALR and LR parses.
- 3 a How assignment statements are translated into three address code?

OR

- b Write short notes on back patching.
- 4 a Describe about target machine in detail.

 $\cap R$

- b Discuss about the peephole optimization.
- 5 a Write in detail about the storage organization.

OR

b Write short notes on parameter passing techniques.

SECTION -B (45 Marks)

Answer any **THREE** questions

ALL questions carry EQUAL Marks

 $(3 \times 15 = 45)$

- With a neat diagram, explain the various phases of a compiler in detail.
- Write in detail about top down parsing method.
- 8 What are the methods of translating Boolean expressions? Explain in detail.
- 9 Explain in detail about a simple code generator.
- Describe about the principal source of optimization in detail.

Z-Z-Z

END