**B.SC. (I. T.) SEM. - IV (2011 COURSE) : SUMMER - 2018**

**SUBJECT : THEORY OF COMPILERS**

Day : **Wednesday** **S-2018-0982** Time : **10.00 am to 12.00 Noon**

Date : **23/05/2018** Max. Marks : 40

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**N.B.:**

1) Attempt **ANY FIVE** questions.
2) All questions carry **EQUAL** marks.

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**Q.1** Define Compiler. Using neat labeled diagram describe the various phases of a compiler.

**Q.2** What are Symbol Tables? Explain the implementation of Symbol Tables. Describe using an appropriate example.

**Q.3** Describe the rules and steps for constructing FIRST( ), FOLLOW( ) sets.

**Q.4** **a)** Describe Intermediate Code Generation.

**b)** Describe the techniques and steps for Machine Code Generation.

**Q.5** Define the following terms:

**a)** Language,

**b)** Grammar,

**c)** Expression,

**d)** Interpreter.

**Q.6** Write short notes on:

**a)** Lexical Analyzer.

**b)** Brute Force Technique.

**Q.7** Construct an SLR parsing table for the following grammar:

$S \rightarrow L = R / R$

$L \rightarrow * R / id$

$R \rightarrow L$

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