**NLP – WORKSHEET 4**

**(Solutions)**

**ANS 1)**

A) It consists of a set of production rules

B) The production rules are of the following form:

A-> BC where A is non terminal while B, C can be either terminal or non-terminal.

C) These grammars are free of context in which they are used, they will remain same regardless of the context in which they are used.

**ANS 2)**

A) All the production rules in PCFG has probability associated with them while in CFG we do not have Probability of a production rule.

B) With PCFG we can find the most probable parse tree of a sentence which we cannot find CFG.

**ANS 3)**

D) All of the above

**ANS 4)**

C) Dependency Parsing

**ANS 5)**

A) It establish dependencies between words of a sentence

B) The dependencies are established in terms of subject-object-verb and other dependencies.

**ANS 6)**

A) Chunking

C) unigram chunker

D) bigram chunker

**ANS 7)**

A) It uses the POS tag of a word and find the most probable IOB label for that POS tag

**ANS 8)**

C) It assigns that IOB label which has the maximum probability based on the POS tag

**ANS 9)**

A) It is a sequential modeling process for assigning POS tags to the word

B) It uses a dictionary of IOB labels to assign a IOB entity label

C) It uses the POS tag of the word and its previous word to assign the most probable IOB label

**ANS 10)**

B) Bigram chunker

**ANS 11)**

A) Word Tokenization

B) Lemmatization

C) Dependency Parsing

D) POS tagging

**ANS 12)**

D) All of the above

**ANS 13)**

A) It starts with start symbol S

B) we use the CFG production rule to generate the sentence from the S start symbol

**ANS 14)**

A) pattern = “#\w\*”

**ANS 15)**

C) pattern = “@\w\*”