Theoretical Computer Science
Tutorial VIII

1) Write the short notes on closure properties of CFL.

2) Prove that the language is not CFL :

$$L=\{a^m\, b^m\, c^n \mid m<=n<=2m\}$$

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4) Convert to CNF:

```
S -> ABC
A -> a | b
B -> Bb | bb
C -> aC | CC | ba
```

5) Convert the following grammar to GNF:

```
S -> ABA

A -> aA | ^

B -> Bb | ^
```

6) Write a short note on decision algorithm.