## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

### TEST -1 EXAMINATION- Sept'2017

## B.Tech (Biotech.), VIIth Semester

**COURSE CODE: 15M11BT431** 

MAX. MARKS:15

COURSE NAME: Traditional Bioprocesses and their upscaling

**COURSE CREDITS: 3** 

MAX. TIME: 1 h

Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

#### I. Match the following one's

 $(5 \times 1 = 5 \text{ M})$ 

Protein

(a) Protein A

(i) Peptococcus Magnus

(b) Protein L

(ii) Staphylococcus aureus

Source

(c) Protein G

(iii) Streptococci.

(d) Protein D

(iv) Clostridium perfringens

(e) Protein P

(v) B. catarrhalis

### II. Short answer questions

 $(5 \times 1 = 5 \text{ M})$ 

- (i) Mention any two disadvantages of culturing of mammalian cells?
- (ii) What denotes the "Isotyping" step of antibody characterization?
- (iii) Write any two advantages of CSTR which suitable for Industrial scale production?
- (iv) Name any two examples for Disposable reactors used for Mab's production?
- (v) Mention the two names of "GRAS" flocculants used in primary recovery of Mab's?

# III. Hypothesis (YES or NO) and provide the supporting text in 4-5 lines $(2 \times 2.5 = 5 \text{ M})$

- (A) Cryogel bioreactor and hollow fiber reactor have same type of network configuration
- (B) Hydrophobic Interaction chromatography is the primary chromatographic technique used in DSP of Mab's rather than Protein A chromatography

@@@@@@@@@@@@@@@ALL THE BEST @@@@@@@@@@@@@@@@@@@@