Roll No. Total Pages: 4

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COMMERCIAL BIOTECHNOLOGY

Paper-XII

Semester-III

Time Allowed: 3 Hours] [Maximum Marks: 75

Note: The candidates are required to attempt **two** questions each from Sections A and B carrying 15 marks each and the entire Section C consisting of 10 short answer type questions carrying 1½ marks each.

SECTION—A

 (a) Discuss about the scope of Biotechnology in Punjab.

- (b) Write note on the role of DBT in developmentof Biotechnology.
- 2. (a) Discuss in detail the Cartagena Protocol and its significance.
 - (b) Describe about the different types of Intellectual property.5
- 3. What are the different criteria for Patentability?

 Discuss the different types of patent applications in detail.

 15
- 4. Write notes on the following:
 - (a) Patent infringement.
 - (b) International depository authorities. 7½

 $7\frac{1}{2}$

SECTION—B

5. Define the Quality. Discuss the concept, role and importance of Total Quality Management in Industry.

6. (a) Write a detailed note on the contributions of management thinkers in quality Management.

10

- (b) Write a short note on the competitive benchmarking.
- (a) What are the four pillars of TQM? Explain different techniques for analyzing quality process.
 - (b) Write note on the requirements of GMP certification.
- 8. Write notes on the following:

(a) ISO 14000 : 2004. 7½

(b) ISO 9000 : 2008. 7½

SECTION—C

- 9. Write short notes on the following : $10 \times 1\frac{1}{2} = 15$
 - (i) What do you understand by Biohazzards?

- (ii) What is IGMORIS?
- (iii) What are Trade secret operations?
- (iv) What do you understand by Prior art search?
- (v) What are Copyrights?
- (vi) Mention the basic features of TQM.
- (vii) What are some major obstacles to TQM implementation?
- (viii) What do you understand by TRIPS?
- (ix) Why researches need IPR?
- (x) What are the different types of Patents?