

2019

Major 3rd Semester Examination
INDUSTRIAL CHEMISTRY

Paper - SEC 1-T

Full Marks : 40

Time : 2 Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

(Chemical Process ECON and Entrepreneurship)

Answer as directed.

Group-A

1. Answer *any five* questions : 2×5=10
- (a) What do you mean by resource management ? 2
- (b) What are financial ratios ? 2
- (c) What are the characteristics of an entrepreneur ? 2

[Turn Over]

- (d) Define the term "Creativity" and "Innovation". 2
- (e) Explain the term "after sales and service". 2
- (f) What do you mean by Product Planning ? 2
- (g) Explain the term "Partnership Act". 2
- (h) Define the term "Breakeven point" ? 2

Group-B

2. Answer *any four* questions : 5×4=20

- (a) (i) What is the difference of QA and QC ?
- (ii) What are the seven quality management principles ? 2+3
- (b) Explain the term "sickness" in small scale industries. 5
- (c) What do you mean by profitability analysis ? 5
- (d) Explain different aspects of marketing. 5
- (e) What is capital investment cost ? 5
- (f) Why packaging is so important ? 5

Group-C3. Answer *any one* question :

10×1=10

(a) (i) What are the various factors associated with cost estimation of a project ?

(ii) Write down the criteria for economic feasibility of a project. 5+5

(b) (i) Explain the term "problem solving tools".

(ii) Explain with example the term SWOT techniques. 5+5

(Basic Computer Programming in C and its applications in Chemistry)

Answer all questions.

1. Answer *any five* questions from the below : 2×5=10

(a) What is Input and Output device ? 2

(b) What do you mean by System software ? 2

(c) What is algorithm ? 2

(d) What is the function of operating system ? 2

[Turn Over]

- (e) What do you mean by preprocessor directive ? 2
- (f) What is Bohr radius ? 2
- (g) Differentiate between looping and branching ? 2
- (h) What is conditional operator in C language ? 2

Group-B

2. Answer *any four* questions : 5×4=20
- (a) What is a compiler ? List three difference between Compiler and Interpreter. 5
- (b) Differentiate between application software and system software. 5
- (c) Distinguish between while and for loop with flow chart and example. 5
- (d) What are the applications of Programming Languages ? 5
- (e) What is array ? Write down the characteristic of an array. 2+3

Group-C

3. Answer *any one* question : 10×1=10
- (a) Draw the basic block diagram of a computer system and explain the different parts of a computer. 10
- (b) Draw a flow chart and write an algorithm to find the highest among three numbers. 10

Intellectual Property Rights (IPR)

Answer all questions.

1. Answer *any five* questions : 5×2=10
(Choose the correct option)
- (a) Intellectual Property Rights (IPR) protect the information and ideas that are of : 2
- (i) Ethical value (ii) Commercial value
- (iii) Social value (iv) Moral value

[Turn Over]

(b) The term 'Intellectual Property Rights' covers : 2

- (i) Copyrights
- (ii) Know-how
- (iii) Trade secret
- (iv) All of the above

(c) The following can be protected : 2

- (i) Machine
- (ii) Process
- (iii) Composition of matter
- (iv) All of the above

(d) Design does not include : 2

- (i) feature and shape
- (ii) composition of lines or colours
- (iii) mode of principle of construction
- (iv) none of the above

(e) The term 'WIPO' stands for : 2

- (i) World Investment Policy Organization
- (ii) World Intellectual property Organization
- (iii) Wild life Investigation and Policing Organization
- (iv) World Institute for Prevention of Organized crime.

(f) A new way to process milk so that there is no fat in any cheese made from it. 2

(i) Copy rights

(ii) Trade mark

(iii) Patent

(iv) Industrial design

(g) Why an Invention should be patented 2

(i) It gives protection to a patentable invention

(ii) It gives legal recognition to the invention.

(h) Which of the principle is applicable to trade marks

(i) A trade mark should be distinctive

(ii) A trade mark should be capable of distinguishing goods or services.

(iii) A trade mark should not cause confusion with previous trade marks.

(iv) A trade mark should not be deceptive.

[Turn Over]

2. Answer *any four* questions : 5×4=20
- (a) (i) What is patent ?
(ii) What are different types of patent ? 2+3
- (b) (i) What is Geographical Indication ?
(ii) Give six Indian examples of Geographical Indications. 2+3
- (c) Write short notes on
(i) Trade marks 5
- (d) Write short notes on
(i) GATT (ii) WTO 2½+½
- (e) (i) What are the importance of intellectual property rights ?
(ii) What is Industrial Design ? Why it is important ? 2+3=5
- (f) (i) What is trade secret ?
(ii) What are the importance of trade secrets ? 2+3=5
3. Answer *any one* question : 10×1=10
- (a) What are the different legislations covering the Intellectual Property Rights in India ? 10
- (b) Discuss the steps for filling application of GI (Geographical Indications). 10