

Seat No.	
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M.Sc. (Semester - I) (New) (CBCS) Examination: March/April-2023
ENTREPRENEURSHIP
Industrial Chemistry - I (MSC28101)

Day & Date: Wednesday, 19-07-2023
 Time: 03:00 PM To 06:00 PM

Max. Marks: 80

- Instructions:** 1) Q. Nos. 1 and 2 are compulsory
 2) Attempt any three questions from Q. No. 3 to Q. No. 7
 3) Figure to right indicate full marks.

Q.1 A) Choose correct alternative.

10

- 1) In Sulfonating, which acid group is used?
 - a) -OH
 - b) -SO-OH
 - c) -SO₂-OH
 - d) -SO₃-OH
- 2) In the nitration of benzene, the nitration mixture contains _____
 - a) 1:2 proportion of nitric acid and sulphuric acid
 - b) 1:2 proportion of sulphuric acid and nitric acid
 - c) 3:1 proportion of nitric acid and sulphuric acid
 - d) 3:1 proportion of sulphuric acid and nitric acid
- 3) The example of thermosetting polymer is _____.
 - a) Polyester resin
 - b) Epoxy resin
 - c) Polyurethanes
 - d) All of the above
- 4) Which catalyst is used for manufacturing process of monochloro acetic acid?
 - a) FeCl₃
 - b) PCl₃
 - c) MgSO₄
 - d) MgCl₂
- 5) Vulcanization of rubber is done with help of _____.
 - a) Nitration
 - b) Carbon
 - c) Sulphur
 - d) Calcium
- 6) Natural polymer starch is contains _____.
 - a) δ -D glucose
 - b) β -D glucose
 - c) α -D glucose
 - d) None of these
- 7) Amino resins are widely employed in _____.
 - a) Molding compound
 - b) Adhesive
 - c) Paper coating
 - d) All of the above
- 8) Which of the following compound inhibits sulfone formation?
 - a) Acetic acid
 - b) Mercury
 - c) Sulphuric acid
 - d) Phosphoric acid
- 9) "-NO₂" produces which effect?
 - a) +I effect
 - b) -I effect
 - c) Both a and b
 - d) Does not produce any effect

- 10) Chloral is used in the manufacture of _____.
 a) DDT
 b) BHC
 c) Parathion
 d) None of these

B) Write True/ False**06**

- 1) Sulfonates are classified into four main chemical types.
- 2) The nitrating agent is called Nucleophilic reactant.
- 3) The reverse esterification is hydrolysis.
- 4) Benzene presents a very stable configuration.
- 5) PET is prepared by a transesterification reaction.
- 6) Nitric acid has different UV spectrum.

Q.2 Answer the following**16**

- A) Liquid Phase Oxidation with oxygen
- B) Nitrate resins
- C) Photohalogenation
- D) Manufacture of cellulose acetate

Q.3 Answer the following.

- A) What is Nitration? Explain relation between D.V.S. and Stability of nitrator charge. **08**
- B) Explain the Continuous manufacturing process of nitrobenzene. **08**

Q.4 Answer the following.

- A) What is sulphonation? Describe the sulphonating agents and their application. **08**
- B) Discuss the mechanism of aromatic sulphonation. **08**

Q.5 Answer the following.

- A) Explain the Acrylonitrile polymers **08**
- B) Describe the various methods of polymerization. **08**

Q.6 Answer the following.

- A) Describe the manufacturing process of monochloroacetic acid. **08**
- B) Explain with flow chart the manufacturing process of vinyl chloride from acetylene. **08**

Q.7 Answer the following.

- A) Give an account of Vapour phase with oxidizing compound. **08**
- B) Explain the manufacturing of ethyl acetate. **08**

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M.Sc. (Semester - I) (New) (CBCS) Examination: March/April-2023
ENTREPRENEURSHIP
Microbial Technology- I (MSC28102)

Day & Date: Thursday, 20-07-2023
 Time: 03:00 PM To 06:00 PM

Max. Marks: 80

- Instructions:** 1) Q. Nos. 1 and 2 are compulsory.
 2) Attempt any Three questions from Q.No.3 to Q.No.7.
 3) Figures to the right indicate full marks.

Q.1 A) Choose the correct alternatives from the options.

10

- 1) IMViC tests are used for _____.
 - a) Identification of biological isolates
 - b) Studying the cell culture techniques
 - c) Identification and isolation of the active ingredients from a plant part
 - d) For testing the efficiency of the sterilization technique in laboratory
- 2) _____ is differential staining method.
 - a) Negative staining
 - b) Gram staining
 - c) Flagella staining
 - d) Spore staining
- 3) _____ is not the use of baffles.
 - a) Increase the effect of agitation
 - b) Improve aeration efficiency
 - c) Improve cooling capacity
 - d) Improve the fermenter capacity
- 4) _____ is best to sterilize heat labile solutions.
 - a) Dry heat
 - b) Autoclave
 - c) Membrane filtration
 - d) Pasteurization
- 5) _____ does not kill endospores.
 - a) Autoclave
 - b) Incineration
 - c) Hot air sterilization
 - d) Pasteurization
- 6) Cold sterilization is carried using _____.
 - a) Freezing
 - b) Moist heat
 - c) Dry heat
 - d) Gamma radiation
- 7) MacConkey's agar is an example of _____ medium.
 - a) Synthetic
 - b) Natural
 - c) Selective
 - d) Minimal
- 8) The colouring property of dye is due to _____ group.
 - a) Auxochrome
 - b) Chromophore
 - c) Cytochrome
 - d) Cytophore
- 9) _____ is an example of enrichment medium.
 - a) N₂ Free mannitol broth
 - b) Blood sugar
 - c) Milk agar
 - d) Nutrient agar

- 10) Fluid Thioglycolate medium is used for the cultivation of _____.
 a) Aerobic bacteria b) Anaerobic bacteria
 c) Viruses d) All of the above

B) Fill in the blanks 06

- 1) Agar is obtained from red algae named _____.
- 2) _____ was the first widely used antiseptic and disinfectant.
- 3) _____ is used to count cells in a biological fluid by observing them, through microscope, on a calibrated grid, the exact dimensions of which are known.
- 4) The recovery and purification of biochemical products with proper treatment is called as _____ processing.
- 5) _____ is used for the presumptive identification of Enterobacteriaceae based on the fermentation sugars.
- 6) _____ is an example of enrichment medium for Azotobacter species.

Q.2 Answer the following. 16

- a) Sugar utilization test
- b) Principle and significance of Negative staining
- c) Synthetic media
- d) Environmental monitoring

Q.3 Answer the following.

- a) Describe in detail sterilization by radiation. 08
- b) Describe in detail sterilization by filtration. 08

Q.4 Answer the following.

- a) Take detailed account of cultivation of anaerobic bacteria. 08
- b) Explain in detail indirect methods of cell enumeration. 08

Q.5 Answer the following.

- a) Write on mechanism and significance of IMViC test. 08
- b) Describe types of media depending upon the purpose of the medium. 08

Q.6 Answer the following.

- a) Discuss primary screening of microorganisms with suitable example. 08
- b) Write on strain development strategies. 08

Q.7 Answer the following.

- a) What are Fermentation media? Discuss Fermentation media with example. 08
- b) Write in detail on exploitation of microorganisms and their products. 08

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M.Sc. (Semester - I) (New) (CBCS) Examination: March/April-2023
ENTREPRENEURSHIP
Agricultural Biotechnology- I (MSC28103)

Day & Date: Friday, 21-07-2023
 Time: 03:00 PM To 06:00 PM

Max. Marks: 80

- Instructions:** 1) Q. Nos. 1 and. 2 are compulsory.
 2) Attempt any three questions from Q. No. 3 to Q. No. 7
 3) Figure to right indicate full marks.

Q.1 A) Choose correct alternative. (MCQ) 10

- 1) _____ is found in the nitrogen fixing root nodules of leguminous plants.
 - a) Cnyoglobulin
 - b) Leghemoglobin
 - c) Legumin
 - d) Nitro albumin
- 2) _____ is produced by fermenting soybeans.
 - a) Yogurt
 - b) Kombucha
 - c) Jiangs
 - d) Miso
- 3) The diagnostic enzyme for denitrification.
 - a) Nitrate reductase
 - b) Nitrate oxidase
 - c) Nitrate hydrolase
 - d) Nitrate decarboxylase
- 4) _____ is used as a biocontrol agent against Caterpillars of butterflies.
 - a) Strepto coccus
 - b) Mycobacteria
 - c) Rhodospirillum
 - d) B. thuringiensis
- 5) _____ are used as probiotic.
 - a) E. Coil
 - b) Rhizobia
 - c) Lactic acid bacteria
 - d) Pseudomonas
- 6) Sauerkraut is fermented from _____.
 - a) Cabbage
 - b) Lemam
 - c) Mango
 - d) Potato
- 7) _____ serves as an important biofertilizer in paddy fields.
 - a) Clostridium
 - b) Cyanobacteria
 - c) Frankia
 - d) Mycorrhiza
- 8) _____ enzyme is used in starch food processing.
 - a) Cellulase
 - b) Glucokinase
 - c) Amylase
 - d) Proteolytic
- 9) _____ is an example of symbiotic nitrogen fixer.
 - a) Azotobacter
 - b) Rhizobium
 - c) Clostridium
 - d) Nitrobacter
- 10) _____ is major biogas produced by agricultural waste.
 - a) CNG
 - b) CO₂
 - c) O₂
 - d) Methane

- B) Write true or false.** **06**
- 1) Azotobacter is free living aerobic nitrogen fixing bacteria.
 - 2) Urea is used as fertilizer in organic farming.
 - 3) Yogurt is produced by fermenting milk.
 - 4) E. Coil is an example of phosphate solubilizing bacteria.
 - 5) Trichoderma is used as biofertilizer.
 - 6) Azospirillum is used as bioinsecticide.
- Q.2 Write short notes on.** **16**
- a) Biofuels.
 - b) Need of enzymes in food processing.
 - c) Production of soya sauce.
 - d) VAM.
- Q.3 Answer the following.**
- a) Describe in detail industrial production Indol acetic acid (IAA). **08**
 - b) Write an essay on rhizobium biofertilizer. **08**
- Q.4 Answer the following.**
- a) Describe in detail production of Bioinsecticides. **08**
 - b) Write in detail manufacture of cheese. **08**
- Q.5 Answer the following.**
- a) Write an essay on Azofertilizers. **08**
 - b) Write an essay on Bio manure. **08**
- Q.6 Answer the following.**
- a) Describe the various enzyme used in fruit juice industry. **08**
 - b) Describe in detail production of bread. **08**
- Q.7 Answer the following.**
- a) Describe in detail quality control of Bio fertilizers. **08**
 - b) Describe in detail advantages and health benefits of probiotic foods. **08**

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M.Sc. (Semester - I) (New) (CBCS) Examination: March/April-2023
ENTREPRENEURSHIP
Entrepreneur Skill - I (MSC28108)

Day & Date: Saturday, 22-07-2023
 Time: 03:00 PM To 06:00 PM

Max. Marks: 80

- Instructions:**
- 1) Questions 1 & 2 are compulsory.
 - 2) Attempt any three questions from Q.3 to Q.7
 - 3) Figures to the right indicate full marks.
 - 4) Draw neat labeled diagrams wherever necessary.

Q.1 A) Choose the correct alternative and rewrite the sentences again. 10

- 1) Reports from the subordinates to the superiors take the form of _____.
 - a) Upward
 - b) Downward
 - c) Diagonal
 - d) Lateral
- 2) _____ is the final step in the communication cycle.
 - a) Encoding
 - b) Decoding
 - c) Feedback
 - d) Receiving
- 3) _____ is an instance of non-verbal communication.
 - a) Speech
 - b) Proximity
 - c) Email
 - d) Notice
- 4) _____ is an example of oral communication.
 - a) Phone Call
 - b) Email
 - c) Newspaper
 - d) Letters
- 5) "Two students talking over a phone" - is an example of _____.
 - a) Written
 - b) Personal
 - c) Public
 - d) Interpersonal
- 6) Pointing finger to something is an example of _____.
 - a) Expression
 - b) Eye contact
 - c) Body language
 - d) Para language
- 7) _____ communication method does not require any language to Understand.
 - a) Verbal
 - b) Non verbal
 - c) Both a & b
 - d) None of these
- 8) _____ method is good for taking leave in the office.
 - a) Notice
 - b) E-mail
 - c) Website
 - d) Circular
- 9) Communication starts with _____.
 - a) Encoding
 - b) Decoding
 - c) Channel
 - d) Feedback
- 10) _____ combinations are the example/s of oral communication.
 - a) Meetings, memos, and presentations
 - b) meetings, memos, and performance reviews
 - c) Meetings, presentations, and performance reviews
 - d) All of these

- B) Fill in the blanks. (One Mark Each) 06**
- 1) Sending a letter is _____ type of communication.
 - 2) The term “communis” derived from _____ word.
 - 3) Receiving a sales order is an example of _____.
 - 4) Gestural communication is a _____.
 - 5) Written words are for _____ speech sounds.
 - 6) Communication problems otherwise known as _____.
- Q.2 Answer the following. 16**
- a) Define Oral Communication.
 - b) Define Written Communication.
 - c) Define Noise
 - d) Note on Time management.
- Q.3 Answer the following. 08**
- a) Define Communication. Explain barriers to Communication. 08
 - b) Define listening. Explain types of Listening. 08
- Q.4 Answer the following. 10**
- a) Define Writing. Explain report writing in details. 10
 - b) Write note on Memos. 06
- Q.5 Answer the following. 10**
- a) Define Non-verbal Communication. Explain types and tools of non-verbal communications. 10
 - b) Write note on business etiquettes. 06
- Q.6 Answer the following. 10**
- a) Define group discussion. Comment on group discussion for decision making in business houses. 10
 - b) Write note on presentation skills. 06
- Q.7 Answer the following. 10**
- a) Explain model of 15 competencies in entrepreneurship. 10
 - b) Write note on Table manners. 06

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M.Sc. (Semester - I) (New) (CBCS) Examination: March/April-2023
ENTREPRENEURSHIP
Entrepreneur Skill - II (MSC28109)

Day & Date: Saturday, 22-07-2023
 Time: 03:00 PM To 06:00 PM

Max. Marks: 80

- Instructions:** 1) Questions 1 & 2 are compulsory.
 2) Attempt any three questions from Q.3 to Q.7
 3) Figures to the right indicate full marks.
 4) Draw neat labeled diagrams wherever necessary.

Q.1 A) Choose the correct alternative and rewrite the sentences again. 10

- 1) The subject matter of economics is distributed into _____ parts.
 - a) two
 - b) four
 - c) three
 - d) five
- 2) The concept of 'Consumer Surplus' was introduced in Economics by _____.
 - a) Prof. Robbins
 - b) Prof. Samuelson
 - c) Prof. Smith
 - d) Prof. Marshall
- 3) If the price elasticity of demand is $|0.5|$, then the commodity is _____.
 - a) Luxury
 - b) Necessary
 - c) Inferior
 - d) Giffen
- 4) In the case of rare coins, supply curve will be _____.
 - a) Horizontal
 - b) Vertical
 - c) backward bending
 - d) positively sloped
- 5) When the price elasticity of demand is equal to one, the demand curve is _____.
 - a) rectangular hyperbola
 - b) Parallel to the horizontal axis
 - c) parallel to the vertical axis
 - d) negatively sloped straight line
- 6) Dynamic Pricing is mostly followed by _____.
 - a) Automobile Manufacturing Companies
 - b) Cooking Gas Supplying Companies
 - c) On-line Companies
 - d) Brand Name Food Companies
- 7) Due to the operation of 'Laws of return to Scale' LAC curve is _____.
 - a) Rectangular hyperbola
 - b) U-Shaped
 - c) Parallel to the horizontal axis
 - d) Parallel to the vertical axis
- 8) The AR curve and industry demand curve are identical _____.
 - a) in case of monopoly
 - b) in case of oligopoly
 - c) in case of monopolistic competition
 - d) in case of perfect competition

- 9) Penetration Pricing is adopted by following a _____.
 - a) low price
 - b) high price
 - c) dual price
 - d) support price
- 10) Production creates _____ utility.
 - a) Place
 - b) Time
 - c) Form
 - d) Possession

B) Fill in the blanks.

06

- 1) _____ competition exists when the basic features of Perfect Competition are not present.
- 2) Income minus Savings is equal to _____.
- 3) Long-run equilibrium price is known as _____.
- 4) In a competitive market, _____ is the price - maker.
- 5) Economics of scales are divided into _____ types.
- 6) On the basis of competition, markets are classified into _____ types.

Q.2 Answer the following.

16

- a) Define cardinal utility.
- b) Define Marginal Analysis.
- c) Define Demand elasticity.
- d) Define Demand forecasting.

Q.3 Answer the following.

16

- a) Explain theory of consumer choice.
- b) Explain Baumol's Sales maximization model in details.

Q.4 Answer the following.

- a) What is collusive behavior? Explain product differentiation and price discrimination in details.
- b) Write Note on Game Theory.

10

06

Q.5 Answer the following.

- a) Define pricing. Explain techniques in pricing.
- b) Explain managerial theory of firm.

10

06

Q.6 Answer the following.

- a) Define risk. Explain investment and capital replacement decision.
- b) Write note on National Income.

10

06

Q.7 Answer the following.

- a) What is business cycle? Explain types of business cycle.
- b) Explain tariff analysis.

10

06

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M.Sc. (Semester - II) (New) (CBCS) Examination: March/April-2023
ENTREPRENEURSHIP
Industrial Processing-I (MSC28201)

Day & Date: Wednesday, 19-07-2023
 Time: 11:00 AM To 02:00 PM

Max. Marks: 80

- Instructions:** 1) Q. 1 & Q. 2 are compulsory.
 2) Solve any 3 questions out of Q. NO 3 To 7.
 3) Figures to the right indicate full marks.
 4) Draw neat labeled diagrams wherever necessary.

Q.1 A) Multiple choice questions.

10

- 1) Any individual who purchases goods and service from the market for his/ her end use is called as:
 - a) Customer
 - b) Consumer
 - c) Purchaser
 - d) All of these
- 2) A firm identifies the target market, needs and wants of customer through:
 - a) Marketing research
 - b) Planning
 - c) Promotion
 - d) Segmentation
- 3) Consumer behavior can be defined as: _____
 - a) a field of study focusing on marketing activities
 - b) a field of study focusing on consumer activities
 - c) a study of pricing
 - d) the study of decision rules
- 4) _____ is the buying behavior of final consumer.
 - a) Global purchasing
 - b) Business buying behaviour
 - c) Reseller buying behaviour
 - d) Consumer buying behaviour
- 5) _____ dividing markets based on location.
 - a) Lifestyle segmentation
 - b) Geographic segmentation
 - c) Distribution segmentation
 - d) Price segmentation
- 6) In case of frequently bought consumer goods such as tea, toothpaste, soap, detergents etc, _____ base is used for market segmentation.
 - a) Demographic
 - b) Geographic
 - c) Psychographic
 - d) Behavioral
- 7) Age, gender, occupation, etc, are _____ variables of market segmentation.
 - a) Demographic
 - b) Geographic
 - c) Psychographic
 - d) Behavioral
- 8) _____ is the process of evaluating each market segment's attractiveness and selecting one or more segments to enter.
 - a) Product differentiation
 - b) Market segmentation
 - c) Market targeting
 - d) Market positioning
- 9) The process of designing the company's image and offering to get a distinctive place in the minds of the target market is known as _____.
 - a) Positioning
 - b) Targeting
 - c) Segmentation
 - d) None of above

10) According to Maslow's Hierarchy of Needs, the lowest order of needs are called:

- a) Self-actualization needs
- b) Social needs
- c) Safety needs
- d) Physiological needs.

B) Answer in one sentence

06

- 1) Define Consumer Behaviour.
- 2) Define Organizational Buyers.
- 3) Define Consumer research.
- 4) Define Positioning.
- 5) Define Motivation.
- 6) Who is founder of Reliance Industries?

Q.2 Answer the following

16

- a) Explain any four Marketing Concepts.
- b) Explain importance of consumer behavior in marketing.
- c) Write note on different Positioning Errors.
- d) Write note on Psychological Equations.

Q.3 Attempt any Two of the following.

16

- a) Explain importance of market segmentation.
- b) Explain any four Positioning Approaches.

Q.4 Answer the following.

16

- a) Factors affect the Market Segmentation.
- b) Discuss McClelland's need theory.

Q.5 Attempt any Two of the following.

16

- a) Explain importance of Consumer Research.
- b) Differentiate between Consumer and Customers.

Q.6 Answer the following.

16

- a) Discuss Maslow's hierarchy of needs.
- b) What is segmentation? Explain Bases for Segmentation.

Q.7 Attempt any Two of the following.

16

- a) Explain Consumer Research Process.
- b) Write success story of any two entrepreneurs.

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M.Sc. (Semester - II) (New) (CBCS) Examination: March/April-2023
ENTREPRENEURSHIP
Industrial Chemistry-II (MSC28202)

Day & Date: Sunday, 23-07-2023
 Time: 11:00 AM To 02:00 PM

Max. Marks: 80

- Instructions:** 1) Q. Nos. 1 and 2 are compulsory.
 2) Attempt any Three questions from Q.No.3 to Q.No.7.
 3) Figures to the right indicate full marks.

Q.1 A) Choose the correct alternatives from the options. 10

- 1) Where does saponification takes place in continuous process?
 - a) Hydrolysis tower
 - b) Blender
 - c) Vacuum still
 - d) Mixer
- 2) Anti-foam agent in water based paints is _____.
 - a) Casein
 - b) Pine oils
 - c) Phenols
 - d) Alcohols
- 3) Which of the following is food safety tool?
 - a) Good Hygiene practice
 - b) Hazard Analysis critical control point
 - c) Total Quality Management
 - d) All of above
- 4) Fats and Oils also referred to as _____.
 - a) Ghee
 - b) Dalda
 - c) Lipids
 - d) None of these
- 5) A higher proportion of salts of saturated acids gives _____.
 - a) Hard soap
 - b) Soft soap
 - c) Detergents
 - d) None of these
- 6) In nitric acid concentration by H₂SO₄ which equipment is used for concentrating purpose?
 - a) Stoneware towers
 - b) Dehydrating tray towers
 - c) Cooling towers
 - d) Chilling towers
- 7) An example of cationic detergent is _____.
 - a) pyridiniumderivatives
 - b) fatty acid amides
 - c) sulfonates
 - d) aliphatic polyhydric alcohol esters

- 8) Why iron oxide used in the ammonia production process?
a) To increase porous iron
b) To maximize operating temperature
c) To maximize operating pressure
d) To reduce porous iron
- 9) How many moles of nitric acid is required to convert 1 mole of sulphur to sulphuric acid?
a) 10
b) 4
c) 48
d) 20
- 10) A substance needed by the body for growth, energy, repairs and maintenance is called _____.
a) Nutrient
b) Carbohydrate
c) Calorie
d) Fatty acid

B) Write True/ False 06

- 1) Food poisoning can be prevented by using expired food product.
- 2) Soap powder contains soap along with lime.
- 3) Vat dye is essentially soluble in water.
- 4) Melanin is a protein pigment that is responsible for skin color in humans.
- 5) The oxidation state of P is +3 in phosphorus acid.
- 6) Nitrogen is first converted into nitrites and then into nitrates by micrococcus.

Q.2 Answer the following. 16

- a) Describe the Biosurfactants and Enzymes detergents.
- b) Discuss about chemical composition and nutritional value of common foodstuffs.
- c) How is baking powder and DAP manufactured?
- d) Describe the raw materials used in soap formation.

Q.3 Answer the following. 08

- a) Explain the manufacturing of Sulphuric acid by Contact process. 08
- b) How Ammonia is prepared in Nitrogen industry? 08

Q.4 Answer the following. 08

- a) Explain the testing and evaluation of soaps. 08
- b) Define detergents and describe the types of detergents. 08

Q.5 Answer the following. 08

- a) Discuss in detail the classification and properties of food. 08
- b) Explain the food preservation and processing by fermentation and radiation. 08

Q.6 Answer the following.

- a) Explain the constituents and formulation of paints. **08**
- b) Describe the manufacturing process of titanium dioxide. **08**

Q.7 Answer the following.

- a) Describe the classification of dyes according to their mode of application. **08**
- b) Explain the manufacturing of Urea. **08**

Seat
No.

M.Sc. (Semester - II) (New) (CBCS) Examination: March/April-2023
ENTREPRENEURSHIP

Microbial & Agriculture Technology - II (MSC28207)

Day & Date: Tuesday, 25-07-2023

Max. Marks: 80

Time: 11:00 AM To 02:00 PM

- Instructions:** 1) Q. No. 1 and 2 are compulsory.
2) Attempt any three questions from Q. No. 3 to 7
3) Draw neat labeled diagrams wherever necessary.
4) Figure to right indicate full marks.

Q.1 A) Choose the correct alternative and rewrite the sentences. 10

- 1) Streptomycin is _____ spectrum antibiotic.
 - a) Narrow
 - b) Broad
 - c) Both a and b
 - d) None of the above
- 2) White button mushroom is a type of _____.
 - a) Poisonous mushroom
 - b) Rare mushroom
 - c) Edible mushroom
 - d) Non-edible mushroom.
- 3) Substrate used by microorganisms to produce single-cell proteins includes _____.
 - a) Hydrocarbon
 - b) Citric acid
 - c) Ethanol
 - d) Sulphure
- 4) Wool fiber is obtained from _____.
 - a) Tiger
 - b) Elephant
 - c) Cow
 - d) Sheep
- 5) The juice that is extracted from the grapes is called as _____.
 - a) Malt
 - b) Clear juice
 - c) Must
 - d) Hops
- 6) National center for mushroom is located in _____ of India.
 - a) Tamilnadu
 - b) Delhi
 - c) Uttar Pradesh
 - d) Himachal Pradesh
- 7) _____ is an example of beta lactum antibiotic.
 - a) Chloramphenicol
 - b) Penicillin
 - c) Gentamycin
 - d) Grisofulvin
- 8) The conservation of germplasm under natural condition is called as _____.
 - a) *In-situ* conservation
 - b) *Ex-situ* conservation
 - c) Genebank
 - d) Obsolute cultivars
- 9) _____ is father of tissue culture.
 - a) Bonner
 - b) Laibach
 - c) Haberlandt
 - d) Gautheret
- 10) The culturing of cells in liquid agitated medium is called as _____.
 - a) liquid culture
 - b) Micropropagation
 - c) Suspension culture
 - d) Agar culture

B) Define and explain of the following.

- 1) Define Antibiotic.
- 2) Application of Citric acid
- 3) Wine Types
- 4) Define Tissue Culture.
- 5) SCP
- 6) Germplasm

Q.2 Answer the following.**16**

- a) Applications of Antibiotic
- b) Uses of Glutamic acid
- c) Flowchart for wine production
- d) Post harvest technology

Q.3 Answer the following.**16**

- a) Write a note on Germplasm conservation.
- b) Write in detail Commercial egg production.

Q.4 Answer the following.**16**

- a) Give a detailed account on SCP production.
- b) Describe in detail Mushroom production.

Q.5 Answer the following.**16**

- 1) Explain in detail on Tissue culture techniques.
- 2) Explain in detail Citric acid production.

Q.6 Answer the following.**16**

- 1) Discuss in detail Commercial wool production
- 2) Write in detail industrial production of commercial meat.

Q.7 Answer the following.**16**

- 1) Explain in brief Wine production.
- 2) Write in detail Micro-organisms involved, media and product recovery of Penicillin.