

Roll No.

Question Booklet Number

O. M. R. Serial No.

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Question Booklet Number

M. Sc. (Microbiology) (Fourth Semester)
EXAMINATION, 2025-26
(New Syllabus Effective from 2023)
ENTREPRENEURIAL MICROBIOLOGY

Paper Code								
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Questions Booklet
Series

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Time : 1:30 Hours]

[Maximum Marks : 75

Instructions to the Examinee :

1. Do not open the booklet unless you are asked to do so.
2. The booklet contains 100 questions. Examinee is required to answer 75 questions in the OMR Answer-Sheet provided and not in the question booklet. All questions carry equal marks.
3. Examine the Booklet and the OMR Answer-Sheet very carefully before you proceed. Faulty question booklet due to missing or duplicate pages/questions or having any other discrepancy should be got immediately replaced.

परीक्षार्थियों के लिए निर्देश :

1. प्रश्न-पुस्तिका को तब तक न खोलें जब तक आपसे कहा न जाए।
2. प्रश्न-पुस्तिका में 100 प्रश्न हैं। परीक्षार्थी को 75 प्रश्नों को केवल दी गई OMR आन्सर-शीट पर ही हल करना है, प्रश्न-पुस्तिका पर नहीं। सभी प्रश्नों के अंक समान हैं।
3. प्रश्नों के उत्तर अंकित करने से पूर्व प्रश्न-पुस्तिका तथा OMR आन्सर-शीट को सावधानीपूर्वक देख लें। दोषपूर्ण प्रश्न-पुस्तिका जिसमें कुछ भाग छपने से छूट गए हों या प्रश्न एक से अधिक बार छप गए हों या उसमें किसी अन्य प्रकार की कमी हो, तो उसे तुरन्त बदल लें।

(Remaining instructions on the last page)

(शेष निर्देश अन्तिम पृष्ठ पर)

(Only for Rough Work)

1. Which of the following best defines an entrepreneur ?
 - (A) A government official who regulates trade and commerce.
 - (B) An individual who manages a large corporation's existing department.
 - (C) A consumer who regularly purchases new products on the market.
 - (D) A person who organizes, operates, and assumes the risk for a new business venture.
2. What is the purpose of a patent in microbial entrepreneurship ?
 - (A) To publish research
 - (B) To train employees
 - (C) To provide exclusive rights over an invention
 - (D) To advertise a product
3. What is SCP ?
 - (A) Single Cell Protein
 - (B) Special Cellular Protein
 - (C) Spirulina Cell Protein
 - (D) Special Cell Probiotics
4. Which parameter is most critical when preparing bioinoculants for field application ?
 - (A) High sugar content
 - (B) Moisture content of 70-90%
 - (C) Viable cell/spore count
 - (D) Absence of any minerals
5. Organisms have GRAS status, which significantly reduces the time and cost of regulatory approval by agencies like the FDA. GRAS is an abbreviation for :
 - (A) Generally Recognized As Safe
 - (B) Generally Regulatory Applied Solution
 - (C) Generally Reported As Safe
 - (D) Genetic Recombination As Sustainable

6. In entrepreneurship, what does the term 'Bootstrapping' refer to ?
- (A) Acquiring a competitor's business to expand market share.
 - (B) Using personal savings and initial revenue to fund a business.
 - (C) Automating all manufacturing processes using robotics.
 - (D) Hiring highly experienced executives from day one.
7. A company provides "Strain Optimization" services to other large breweries rather than selling its own beer. This is an example of which business model ?
- (A) B2C (Business to Consumer).
 - (B) B2B (Business to Business) Service Provider.
 - (C) Non-profit research.
 - (D) Brick and mortar retail.
8. An entrepreneur discovers a unique combination of three soil bacteria that, when grown together, degrade plastic 50% faster than any single strain. To protect this "Product," which is the most likely path for IP protection ?
- (A) Patenting the individual bacteria as "Found in Nature."
 - (B) Patenting the "Microbial Consortium" and the specific synergistic method of application.
 - (C) Keeping the formulation a "Trade Secret" to avoid disclosing the species names.
 - (D) Both (B) and (C) are viable entrepreneurial strategies.
9. Measures that prevent the misuse of biological agents, including microbes, pathogens, and biotechnologies, that could pose threats to human, animal, or environmental health are :
- (A) Biosecurity
 - (B) Bioethics
 - (C) Biovalues
 - (D) Secret Process

10. When optimizing a microbial fermentation process for a startup, what is the primary entrepreneurial reason to switch from Batch to Fed-batch fermentation ?
- (A) It simplifies the cleaning process of the bioreactor.
 - (B) It allows for higher cell densities and prevents “substrate inhibition,” increasing the final product yield per run.
 - (C) It eliminates the need for sterilized equipment.
 - (D) It is the only way to measure the IC50 of the resulting product.
11. If a new strain of metabolically engineered microbe enhances enzyme production, the entrepreneur should first :
- (A) Release it on the market
 - (B) Apply for patent protection
 - (C) Publish in a newspaper
 - (D) Use it only in their own garden
12. A startup originally designed a microbe to clean up oil spills (Bioremediation) but finds the market is too small. They decide to use the same microbe’s enzymes for “Stone-washing” denim jeans in the textile industry. This move is known as a :
- (A) Liquid Liquidation.
 - (B) Strategic Pivot.
 - (C) Biological Contamination.
 - (D) Patent Infringement.
13. The full form of MSME is :
- (A) Ministry of Micro, Small and Medium Enterprises
 - (B) Ministry of Macro, Small and Medium Enterprises
 - (C) Ministry of Micro, State and Medium Enterprises
 - (D) Ministry of Micro, Small and Maximum Entrepreneurship

14. What does the term “patent” refer to in the context of Intellectual Property Rights ?
- (A) Exclusive rights granted to protect artistic works such as books and music.
 - (B) Protection granted to inventions, granting exclusive rights to the inventor for a limited period.
 - (C) Legal protection granted to distinctive signs used to identify products or services.
 - (D) Rights granted to creators of original works, protecting their expression of ideas.
15. Which cyanobacterium is widely cultivated as SCP due to its high protein and vitamin content ?
- (A) *Anabaena*
 - (B) *Spirulina*
 - (C) *Oscillatoria*
 - (D) *Nostoc*
16. Which condition is MOST suitable for commercial cultivation of *Volvariella volvacea* ?
- (A) Low temperature (10-15°C) and composted manure
 - (B) Moderate temperature (20°C) and casing soil
 - (C) High temperature (30-35°C) and straw substrate
 - (D) Anaerobic submerged conditions
17. A key limitation of submerged fermentation (SmF) for filamentous fungi is :
- (A) Lack of nutrients
 - (B) Excess oxygen availability
 - (C) Inability to produce enzymes
 - (D) Pellet formation affecting mass transfer

18. Which type of bioreactor is MOST commonly adapted for SSF at industrial scale ?
- (A) Stirred tank reactor
 - (B) Packed bed or tray fermenter
 - (C) Airlift reactor
 - (D) Bubble column reactor
19. What is the purpose of a 'Value Proposition' ?
- (A) To calculate the total taxes owed by the business.
 - (B) To list the salaries of all employees in the company.
 - (C) To describe the unique benefit a product provides to customers.
 - (D) To outline the legal structure of the partnership.
20. Which of the following is a common method used in the production of bioplastics from plant biomass ?
- (A) Polymerization of petro-based monomers
 - (B) Fermentation of sugars from renewable resources
 - (C) Extraction of petroleum-based polymers
 - (D) Refining of fossil fuels
21. Which of the following is a potential market for microbial biotechnology ?
- (A) Pharmaceuticals
 - (B) Food and beverages
 - (C) Biomanufacturing
 - (D) All of the above

22. Agricultural waste can be used in biorefineries to produce :
- (A) Only fertilizers
 - (B) Value-added products like enzymes, bioplastics, and biofuels
 - (C) Pesticides only
 - (D) Packaging foam only
23. Golden Rice is genetically modified to produce :
- (A) Iron
 - (B) Vitamin A
 - (C) Vitamin C
 - (D) Protein
24. Which organism is commonly used to transfer genes to plants ?
- (A) *Bacillus subtilis*
 - (B) *Agrobacterium tumefaciens*
 - (C) *Escherichia coli*
 - (D) *Saccharomyces cerevisiae*
25. Entrepreneurial ventures in probiotics are growing due to :
- (A) Decrease in dairy industry
 - (B) Elimination of GMOs
 - (C) Ban on dietary supplements
 - (D) Rising interest in gut health and functional foods
26. Prebiotics are mostly composed of :
- (A) Antibiotics
 - (B) Short-chain fatty acids
 - (C) Non-digestible dietary fibers
 - (D) Vitamins
27. Which intellectual property tool is most used to protect microbial inventions ?
- (A) Copyright
 - (B) Trademark
 - (C) Patent
 - (D) Trade secret

28. Which agency in India supports biotech startups ?
- (A) FCI
 - (B) ISRO
 - (C) BIRAC
 - (D) DRDO
29. Innovation in entrepreneurship can be :
- (A) Product innovation
 - (B) Process innovation
 - (C) Business model innovation
 - (D) All of the above
30. Which of the following is a characteristic of “second-generation” biofuels ?
- (A) Produced from food crops like corn
 - (B) Produced from non-food crops like switchgrass
 - (C) Produced from fossil fuels
 - (D) Produced from algae
31. Which document outlines the goals of a business and the strategy for achieving them ?
- (A) An Income Statement
 - (B) A Purchase Order
 - (C) A Business Plan
 - (D) A Resume
32. Which of the following is a free-living nitrogen-fixing bacterium used as a biofertilizer ?
- (A) *Rhizobium*
 - (B) *Azotobacter*
 - (C) *Frankia*
 - (D) *Mycobacterium*
33. Probiotics are defined as :
- (A) Dead microbes that improve digestion
 - (B) Antibiotics used for microbial control
 - (C) Live microorganisms that confer health benefits to the host
 - (D) Microbial toxins that enhance immunity

34. Which by-product of sugar industry serves as a major substrate in yeast industry ?
- (A) Bagasse
 - (B) Molasses
 - (C) Pressmud
 - (D) Filter cake
35. Types of commercial legume inoculants include :
- (A) Peat based inoculants
 - (B) Liquid inoculants
 - (C) Granular Inoculants
 - (D) All of the above
36. In yeast fermentation for baking, CO₂ production results in :
- (A) Curdling
 - (B) Dough rising
 - (C) Alcohol flavoring
 - (D) Enzyme inactivation
37. What is the primary goal of the National Biofuel Policy in India ?
- (A) To reduce reliance on imported oil
 - (B) To increase ethanol blending in gasoline
 - (C) To promote the use of coal
 - (D) To reduce the cost of fertilizer
38. Which of the following are NOT examples of microbial bioplastic are ?
- (A) Polylactic acid
 - (B) Polyhydroxyalkanoates
 - (C) Polyhydroxybutyrates
 - (D) Polyethylene terephthalate
39. What does 'MVP' stand for in the context of Lean Startup methodology ?
- (A) Most Valuable Product
 - (B) Minimum Viable Product
 - (C) Market Value Price
 - (D) Maximum Volume Production

40. For successful *Agaricus bisporus* cultivation, the casing layer should :
- (A) Contain high nitrogen
 - (B) Be highly acidic
 - (C) Retain moisture and allow gas exchange
 - (D) Be rich in lignin
41. Composting agricultural waste primarily produces :
- (A) Plastics
 - (B) Humus-rich organic fertilizer
 - (C) Methane gas
 - (D) Synthetic fiber
42. Which of the following is added to beer for bitterness and aroma ?
- (A) Malt
 - (B) Barley husk
 - (C) Hops
 - (D) Sorghum
43. Which government organization plays a key role in providing financial assistance and infrastructure support to small and medium enterprises ?
- (A) The Reserve Bank of India (RBI)
 - (B) The National Bank for Agriculture and Rural Development (NABARD)
 - (C) The Small Industries Development Bank of India (SIDBI)
 - (D) The Industrial Credit and Investment Corporation of India (ICICI).
44. Which of the following is used to produce biogas from biomass ?
- (A) Anaerobic treatment
 - (B) Aerobic treatment
 - (C) Fermentation
 - (D) Pyrolysis
45. Which of the following is an example of microbial entrepreneurship ?
- (A) Opening a fast-food chain.
 - (B) Commercializing a new antibiotic from soil microbes
 - (C) Teaching microbiology in college
 - (D) Publishing a research paper

46. In fermentation industries, scale-up failure is MOST commonly due to :
- (A) Improper labeling
 - (B) Lack of glassware
 - (C) Changes in oxygen transfer and mixing dynamics
 - (D) Excess sterilization
47. In India, which office handles patent filings ?
- (A) Registrar of Companies
 - (B) Indian Patent Office
 - (C) BIRAC
 - (D) NITI Aayog
48. Biosafety in industrial microbiology is MOST directly concerned with :
- (A) Maximizing profit margins
 - (B) Preventing environmental and worker exposure to harmful microbes
 - (C) Increasing fermentation time
 - (D) Reducing substrate cost
49. The bio ethanol obtained in the fermentation process has purity.
- (A) 95%
 - (B) 96.2%
 - (C) 97.4%
 - (D) 99.7%
50. A startup develops a “Lactose-Free” milk using microbial-derived Lactase enzyme. From a business perspective, what is the primary advantage of this product ?
- (A) It reduces the shipping weight of the milk.
 - (B) It allows the company to target a niche market segment (lactose-intolerant consumers) at a premium price point.
 - (C) It makes the milk taste significantly more sour.
 - (D) It eliminates the need for refrigeration.

51. What is 'Scalability' ?
- (A) Selling a business to a larger corporation.
 - (B) The process of measuring employee performance on a scale of 1 to 10.
 - (C) The ability of a business to increase revenue with minimal increase in costs.
 - (D) The weight of a product relative to its shipping cost.
52. Which of the following is a substrate for biogas production ?
- (A) Municipal and residential waste
 - (B) E-waste
 - (C) Metallic waste
 - (D) Gaseous effluents
53. A dairy entrepreneur wants to claim their "Kefir" drink improves gut health. To satisfy regulatory bodies and justify a high price, they must provide :
- (A) A list of all the colors used in the packaging.
 - (B) Clinical trial data showing that the specific microbial strains survive the stomach acid and provide a measurable health benefit.
 - (C) A testimonial from a famous celebrity.
 - (D) Proof that the milk came from a cow with a name.
54. Angel investors typically provide capital to a business in exchange for :
- (A) The right to use the company's office space.
 - (B) Ownership equity or convertible debt.
 - (C) A lifetime supply of the product.
 - (D) A fixed monthly interest payment.

55. Why do large-scale industrial yogurt producers use Defined Strain Starters (specific, known ratios of *L. bulgaricus* and *S. thermophilus*) instead of traditional “Back-slopping (using a bit of the previous day’s yogurt) ?
- (A) Traditional methods are too cheap to be profitable.
- (B) Defined strains are the only ones that can survive pasteurization.
- (C) Back-slopping is illegal in all countries.
- (D) Defined strains ensure process predictability, consistent texture, and flavor profiles required for branding.
56. In microbiology, entrepreneurship can most directly lead to :
- (A) Development of vaccines
- (B) Creation of microbial-based products or services
- (C) Research publications
- (D) Buying laboratory equipment
57. In mushroom cultivation, the vegetative part used for inoculation is called :
- (A) Spore print
- (B) Mycelium spawn
- (C) Basidiocarp
- (D) Hyphal knot
58. In bioleaching of copper, the key role of *Acidithiobacillus ferrooxidans* is :
- (A) Reducing metal ions
- (B) Oxidizing Fe^{2+} to Fe^{3+} and sulfide minerals
- (C) Precipitating copper directly
- (D) Producing organic acids
59. Vermicomposting differs from traditional composting because it involves :
- (A) Earthworms enhancing microbial activity
- (B) Absence of organic matter
- (C) Use of chemical fertilizers
- (D) Thermophilic bacteria only

60. Which microorganism is used as a fungal bioinoculant for biocontrol of plant pathogens ?
- (A) *Trichoderma harzianum*
 - (B) *E. coli*
 - (C) *Pseudomonas putida*
 - (D) *Candida albicans*
61. Proteolytic enzymes used in detergents must possess which combination of properties ?
- (A) Acidic pH optimum and low stability
 - (B) Neutral pH and low temperature tolerance
 - (C) Alkaline pH stability and thermostability
 - (D) Strict anaerobic activity
62. In fermentation-based production of microbial enzymes, solid-state fermentation (SSF) is often preferred over submerged fermentation because :
- (A) It eliminates contamination risks completely
 - (B) It provides higher product yields for certain fungi with lower water activity
 - (C) It requires more energy input
 - (D) It prevents oxygen transfer
63. A probiotic strain intended for therapeutic use must primarily demonstrate :
- (A) High antibiotic resistance gene transfer potential
 - (B) Ability to survive gastric acidity and bile salts
 - (C) Rapid toxin production
 - (D) High mutation frequency

64. In uranium bioleaching, microorganisms primarily facilitate :
- (A) Reduction of U to U
 - (B) Oxidation of U to soluble U
 - (C) Precipitation of uranium salts
 - (D) Adsorption of uranium to biomass
65. What is the main risk an entrepreneur faces ?
- (A) Being forced to take a vacation.
 - (B) Having too many customers at once.
 - (C) Financial loss and business failure.
 - (D) Receiving too much positive press.
66. A transgenic plant engineered to overexpress DREB transcription factors will MOST likely exhibit :
- (A) Enhanced resistance to fungal pathogens only
 - (B) Improved tolerance to drought and salinity via ABA-independent pathways
 - (C) Increased chlorophyll degradation
 - (D) Reduced osmolyte accumulation
67. Microbial production of natural food colorants like carotenoids is preferred over synthetic dyes because :
- (A) Higher chemical toxicity
 - (B) Lack of regulatory approval
 - (C) Biodegradability and consumer safety perception
 - (D) Lower production cost always
68. Which economic parameter is MOST critical when selecting a microbial strain for industrial fermentation ?
- (A) Color of colonies
 - (B) Genetic stability and high yield
 - (C) Shape of cells
 - (D) Gram reaction only
69. The systematic procedures used to ensure that microbiological products meet safety, efficacy, and regulatory standards are known as :
- (A) Bioethics
 - (B) Quality Control
 - (C) Quality Assurance
 - (D) GCP

70. Prebiotics selectively promote beneficial microbiota mainly through :
- (A) Direct antimicrobial activity
 - (B) Acting as digestible sugars for the host
 - (C) Serving as substrates for specific gut microbes
 - (D) Neutralizing stomach acid
71. Which microorganism is commonly exploited for industrial production of β - carotene used as food colorant ?
- (A) *Escherichia coli*
 - (B) *Dunaliella salina*
 - (C) *Clostridium botulinum*
 - (D) *Streptococcus thermophilus*
72. Under food safety regulations, HACCP primarily focuses on :
- (A) Increasing production yield
 - (B) Identifying and controlling critical hazards in processing
 - (C) Marketing strategies
 - (D) Export taxation
73. A biotech startup aims to commercialize a fermented probiotic beverage in India. Approval must primarily comply with :
- (A) ISRO guidelines
 - (B) FSSAI regulations (successor to FPO)
 - (C) RBI policies
 - (D) AICTE norms
74. Market Research is primarily used to :
- (A) Calculate the exact date the business will be sold
 - (B) Guarantee that a business will never fail.
 - (C) Decorate the office with charts and graphs.
 - (D) Understand customer needs and the competitive landscape.

75. Expression of Bt toxin genes (Cry proteins) in transgenic crops provides resistance by :
- (A) Inhibiting plant photosynthesis
 - (B) Disrupting insect gut epithelial cells via pore formation
 - (C) Increasing lignin synthesis
 - (D) Blocking nitrogen fixation
76. Raw material for the production of yeast biomass does includes :
- (A) Molasses
 - (B) Whey
 - (C) Agricultural by-product
 - (D) All of the above
77. Single Cell Protein (SCP) is mainly associated with :
- (A) Energy production
 - (B) Food and feed industry
 - (C) Waste management
 - (D) Drug delivery
78. In biofertilizer formulation, carrier material selection is crucial. Which property is MOST desirable ?
- (A) High toxicity to microbes
 - (B) Low water holding capacity
 - (C) High organic matter and moisture retention
 - (D) Sterility not required
79. Biosafety in industrial microbiology is MOST directly concerned with :
- (A) Maximizing profit margins
 - (B) Preventing environmental and worker exposure to harmful microbes
 - (C) Increasing fermentation time
 - (D) Reducing substrate cost

80. What is a business plan in the context of entrepreneurship ?
- (A) A detailed strategy for personal development
 - (B) A document outlining the goals and methods for a business
 - (C) A financial statement for personal expenses
 - (D) A marketing brochure
81. Which of the following is a high-value product from agricultural waste ?
- (A) Synthetic rubber
 - (B) Bioethanol
 - (C) Cement
 - (D) Glass
82. Production of citric acid using *Aspergillus niger* is an example of :
- (A) Enzyme industry
 - (B) Fermentation industry
 - (C) Biofuel industry
 - (D) Agriculture industry
83. The clarity of wine is improved in the final step by :
- (A) Filtering through cotton
 - (B) Heat sterilization
 - (C) Fining agents like bentonite
 - (D) Adding malt extract
84. A biotech company develops a biosurfactant for oil recovery. Which property makes microbial biosurfactants industrially superior to chemical surfactants ?
- (A) Higher toxicity
 - (B) Non-biodegradability
 - (C) Stability at extreme pH and temperature
 - (D) Lower emulsification capacity

85. In industrial enzyme production, *Bacillus subtilis* is preferred over *E. coli* mainly because :
- (A) Faster growth rate
 - (B) Ability to secrete proteins extracellularly
 - (C) Higher plasmid stability
 - (D) Lower mutation rate
86. In brewing, the process of converting starches into fermentable sugars is known as :
- (A) Mashing
 - (B) Malting
 - (C) Filtering
 - (D) Bottling
87. What is an 'Incubator' in the startup world ?
- (A) An organization that helps early-stage startups grow by providing resources and mentorship.
 - (B) A machine used to keep servers cool in a data center.
 - (C) A software tool for hacking competitors.
 - (D) A legal firm that specializes in shutting down companies.
88. Which industry utilizes microbes for degradation of pollutants ?
- (A) Textile industry
 - (B) Bioremediation industry
 - (C) Paper industry
 - (D) Leather industry
89. In brewing industries, yeast fermentation is primarily aimed at :
- (A) Carbon dioxide production
 - (B) Protein synthesis
 - (C) Alcohol generation
 - (D) Acid production
90. The yeast most commonly used for industrial ethanol and baking is :
- (A) *Candida albicans*
 - (B) *Saccharomyces cerevisiae*
 - (C) *Kluyveromyces lactis*
 - (D) *Schizosaccharomyces pombe*

91. Microorganisms producing antibiotics like penicillin are mainly used in :
- (A) Food industry
 - (B) Pharmaceutical industry
 - (C) Agriculture industry
 - (D) Cosmetic industry
92. Which agricultural waste is commonly used for mushroom cultivation ?
- (A) Coconut shells
 - (B) Wheat and paddy straw
 - (C) Corn cobs
 - (D) Banana peels
93. Bt cotton is genetically engineered for resistance against :
- (A) Fungal infections
 - (B) Weeds
 - (C) Insects
 - (D) Drought
94. The 'Break-even Point' is when :
- (A) The business has more debt than assets.
 - (B) A business goes public on the stock exchange.
 - (C) Total revenue equals total expenses.
 - (D) The entrepreneur decides to quit their day job.
95. Transgenic plants can be engineered to improve :
- (A) Only size
 - (B) Nutritional content, pest resistance, and drought tolerance
 - (C) Just taste
 - (D) None of the above

96. Which of the following best describes a main feature of secondary agriculture ?
- (A) The direct cultivation of cereal crops and pulses in the field
- (B) Activities that utilize primary agricultural products as raw materials to create high-value products (e.g., food processing, extraction of essential oils).
- (C) The large-scale irrigation of land using groundwater resources.
- (D) The biological study of soil nutrient composition for better crop yield.
97. Which of these is a common reason for startup failure ?
- (A) Using a logo that has more than two colors.
- (B) Having too much initial funding.
- (C) Lack of market need for the product.
- (D) Being too nice to competitors.
98. The main mechanism by which phosphate-solubilizing bacteria (PSB) enhance plant growth is :
- (A) Fixation of atmospheric CO
- (B) Production of auxins
- (C) Acidification of the rhizosphere to solubilize inorganic phosphate
- (D) Chelation of iron
99. Which of the following is NOT correct example for Yeast and their Industrial application ?
- (A) *Pichia pastoris*- enzymes
- (B) *Yarrowia lipolytica*- Lipids
- (C) *Candida Torula*- SCP
- (D) *Spirulina maxima*- Bioethanol
100. A startup takes Whey and uses microbes to ferment it into Bio-ethanol or animal feed. This is an example of :
- (A) Value added product development
- (B) Reusing
- (C) Dumping
- (D) Waste segregation

(Only for Rough Work)

4. Four alternative answers are mentioned for each question as—A, B, C & D in the booklet. The candidate has to choose the correct answer and mark the same in the OMR Answer-Sheet as per the direction :

Example :

Question :

Q. 1 (A) ● (C) (D)

Q. 2 (A) (B) ● (D)

Q. 3 (A) ● (C) (D)

Illegible answers with cutting and over-writing or half filled circle will be cancelled.

5. Each question carries equal marks. Marks will be awarded according to the number of correct answers you have.
6. All answers are to be given on OMR Answer Sheet only. Answers given anywhere other than the place specified in the answer sheet will not be considered valid.
7. Before writing anything on the OMR Answer Sheet, all the instructions given in it should be read carefully.
8. After the completion of the examination candidates should leave the examination hall only after providing their OMR Answer Sheet to the invigilator. Candidate can carry their Question Booklet.
9. There will be no negative marking.
10. Rough work, if any, should be done on the blank pages provided for the purpose in the booklet.
11. To bring and use of log-book, calculator, pager and cellular phone in examination hall is prohibited.
12. In case of any difference found in English and Hindi version of the question, the English version of the question will be held authentic.

Impt. : On opening the question booklet, first check that all the pages of the question booklet are printed properly. If there is any discrepancy in the question Booklet, then after showing it to the invigilator, get another question Booklet of the same series.

4. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार सम्भावित उत्तर—A, B, C एवं D हैं। परीक्षार्थी को उन चारों विकल्पों में से सही उत्तर छँटना है। उत्तर को OMR आन्सर-शीट में सम्बन्धित प्रश्न संख्या में निम्न प्रकार भरना है :

उदाहरण :

प्रश्न :

प्रश्न 1 (A) ● (C) (D)

प्रश्न 2 (A) (B) ● (D)

प्रश्न 3 (A) ● (C) (D)

अपठनीय उत्तर या ऐसे उत्तर जिन्हें काटा या बदला गया है, या गोले में आधा भरकर दिया गया, उन्हें निरस्त कर दिया जाएगा।

5. प्रत्येक प्रश्न के अंक समान हैं। आपके जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।
6. सभी उत्तर केवल ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर ही दिये जाने हैं। उत्तर-पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।
7. ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाये।
8. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी OMR Answer Sheet उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें। परीक्षार्थी अपने साथ प्रश्न-पुस्तिका ले जा सकते हैं।
9. निगेटिव मार्किंग नहीं है।
10. कोई भी रफ कार्य, प्रश्न-पुस्तिका के अन्त में, रफ-कार्य के लिए दिए खाली पेज पर ही किया जाना चाहिए।
11. परीक्षा-कक्ष में लॉग-बुक, कैलकुलेटर, पेजर तथा सेल्युलर फोन ले जाना तथा उसका उपयोग करना वर्जित है।
12. प्रश्न के हिन्दी एवं अंग्रेजी रूपान्तरण में भिन्नता होने की दशा में प्रश्न का अंग्रेजी रूपान्तरण ही मान्य होगा।

महत्वपूर्ण : प्रश्नपुस्तिका खोलने पर प्रथमतः जाँच कर देख लें कि प्रश्न-पुस्तिका के सभी पृष्ठ भलीभाँति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्षनिरीक्षक को दिखाकर उसी सिरीज की दूसरी प्रश्न-पुस्तिका प्राप्त कर लें।