

Roll No. ....

Question Booklet Number

O. M. R. Serial No.

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Question Booklet Number
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**M. Sc. (Biotechnology) (Fourth Semester)**  
**(NEP) EXAMINATION, 2025-26**  
**IPR, BIOETHICS AND ENTREPRENEURSHIP**

Paper Code							
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Questions Booklet Series
<b>A</b>

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. The “Non-Obviousness” requirement in patent law specifically ensures that :
  - (A) The invention is physically different from existing products.
  - (B) The invention would not be apparent to a person having ordinary skill in the art.
  - (C) The invention has been kept secret prior to the application.
  - (D) The invention provides a significant economic advantage over current technologies.
  
2. Which international agreement, administered by the WTO, set the first comprehensive minimum standards for the protection of intellectual property rights globally ?
  - (A) The Berne Convention
  - (B) The Paris Convention
  - (C) The TRIPS Agreement
  - (D) The WIPO Copyright Treaty
  
3. In the context of “Utility” as a requirement for IP protection, particularly in patents, the invention must :
  - (A) Be aesthetically pleasing to the consumer.
  - (B) Have a life span of at least 20 years.
  - (C) Be more efficient than any existing alternative.
  - (D) Be capable of being used or applied in an industry.
  
4. A “Trade Secret” differs fundamentally from a “Patent” in that :
  - (A) Patents require public disclosure, whereas trade secrets rely on confidentiality.
  - (B) Trade secrets only apply to chemical formulas.
  - (C) Trade secrets are granted by a government office after examination.
  - (D) Patents provide protection for an indefinite period as long as they are kept secret.

5. Which of the following best describes the “Incentive Theory” regarding the utility of IPRs ?
- (A) IPRs are a natural right of the creator to own the fruits of their labor.
  - (B) IPRs exist to ensure that the public can access information for free.
  - (C) IPRs provide temporary monopolies to encourage investment in Research and Development.
  - (D) IPRs are designed to prevent any form of competition in the marketplace.
6. “Geographical Indications” are primarily used to protect :
- (A) Products that have a specific geographical origin and possess qualities.
  - (B) The identity of a manufacturer in a specific city.
  - (C) The specific layout of an integrated circuit.
  - (D) New varieties of plants discovered in specific ecological zones.
7. Under the Berne Convention, the “Principle of National Treatment” implies that :
- (A) Each member nation must have identical IP laws.
  - (B) Foreign authors must be granted the same protection as a country’s own nationals.
  - (C) Intellectual property is only protected within the borders of the author’s home country.
  - (D) All IP disputes must be settled in the International Court of Justice.
8. Which type of IPR would best protect a unique, non-functional, and purely aesthetic shape of a luxury perfume bottle ?
- (A) Trademark
  - (B) Copyright
  - (C) Patent
  - (D) Industrial Design
9. The concept of “Fair Use” or “Fair Dealing” serves as a limitation to which type of IP ?
- (A) Patents
  - (B) Trademarks
  - (C) Copyrights
  - (D) Trade Secrets

10. What is the primary “Social Contract” underlying the patent system ?
- (A) The government pays the inventor for their idea.
  - (B) The inventor gets a lifetime monopoly in exchange for a fee.
  - (C) The inventor receives a limited-term monopoly in exchange for full public disclosure of the invention.
  - (D) The public is allowed to use the invention immediately if it serves a “social good.”
11. “Darjeeling Tea” being associated with a specific region is an example of :
- (A) Patent
  - (B) Trade Secret
  - (C) Copyright
  - (D) Geographical Indication
12. Which of the following is a unique administrative feature of the World Intellectual Property Organization (WIPO) ?
- (A) It is the only UN agency that is entirely funded by taxpayer grants.
  - (B) It acts as a global patent office that grants “International Patents” valid in countries.
  - (C) It is largely self-funded through fees earned from its international registration filing services.
  - (D) It has the power to impose trade sanctions on countries that violate IP laws.
13. The TRIPS Agreement is distinguished from earlier WIPO-administered conventions primarily because :
- (A) It removed the requirement for “Originality” in copyright.
  - (B) It was the first to link intellectual property rights to the international multilateral trading system.
  - (C) It only applies to developed nations, exempting developing nations permanently.
  - (D) It focuses exclusively on the moral rights of authors rather than economic rights.

14. Under the Patent Cooperation Treaty (PCT) , administered by WIPO, an applicant can :
- (A) Obtain a single patent that is automatically effective in every country in the world.
  - (B) File a single “international” patent application to seek protection in countries simultaneously.
  - (C) Avoid the “Prior Art” search required by national offices.
  - (D) Keep their invention secret from the public for 50 years.
15. The “Most-Favored-Nation” (MFN) clause under the TRIPS Agreement implies that :
- (A) Any favor or privilege granted by a member to the nationals of any other must be extended to the nationals of all WTO members.
  - (B) Developing nations must receive more favorable treatment than developed nations.
  - (C) The WTO favors nations that produce the most intellectual property.
  - (D) A country can choose one “favorite” trade partner to exempt from IP enforcement.
16. The Madrid System, managed by WIPO, is specifically designed to facilitate the international registration of :
- (A) Literary works and manuscripts.
  - (B) Industrial designs and blueprints.
  - (C) Trademarks.
  - (D) Plant varieties and seeds.
17. Which international treaty established the “Right of Priority,” allowing an applicant to use their first filing date in one country for subsequent filings in others ?
- (A) The Berne Convention
  - (B) The Paris Convention
  - (C) The Rome Convention
  - (D) The Budapest Treaty
18. The TRIPS Agreement mandates a minimum patent protection term of :
- (A) 10 years from the date of grant.
  - (B) 20 years from the filing date.
  - (C) 50 years after the death of the inventor.
  - (D) 15 years from the date the product enters the market.

19. The WIPO Copyright Treaty (WCT) was adopted in 1996 primarily to address :

- (A) The protection of physical books in libraries.
- (B) Legal challenges posed by digital technologies and the Internet.
- (C) The patenting of computer hardware.
- (D) The duration of protection for motion pictures in the 1950.

20. What is the role of the “Dispute Settlement Body” (DSB) in the context of the TRIPS Agreement ?

- (A) It provides mediation for private companies fighting over copyright.
- (B) It is a WIPO committee that writes new laws for member states.
- (C) It handles disputes between WTO member states regarding the fulfillment of TRIPS obligations.
- (D) It arrests individuals involved in international digital piracy.

21. Consider the following statements regarding patentability :

- (1) An invention must be novel and involve an inventive step.
- (2) The invention must have industrial applicability.
- (3) Discovery of a natural substance is always patentable.

Which of the above is/are ?

**Codes :**

- (A) 1 and 2 only
- (B) 1 only
- (C) 2 and 3 only
- (D) 1, 2 and 3

22. Which of the following statements correctly describe what cannot be patented in India ?

- (1) A scientific principle or abstract theory
- (2) A new form of a known substance without enhanced efficacy
- (3) A mathematical method or algorithm

**Codes :**

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 1, 2 and 3
- (D) 1 only

23. Consider the following statements about patents :

- (1) A patent grants exclusive rights for a limited period.
- (2) A patent holder can prevent others from making or selling the invention.
- (3) A patent gives ownership of the idea even without disclosure.

Which of the above is/are correct ?

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

24. Consider the following statements regarding types of patents :

- (1) Utility patents protect functional aspects of inventions
- (2) Design patents protect aesthetic features
- (3) Plant patents are granted for new varieties of plants.

Which of the above is/are correct ?

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 1, 2 and 3
- (D) 1 only

25. Which of the following statements about patent filing in India is/are correct ?

- (1) Filing can be done by the inventor or an assignee
- (2) Provisional specification can be filed before complete specification
- (3) Patent protection starts only after publication and grant.

**Codes :**

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

26. Which of the following is the official authority for granting patents in India ?

- (A) Ministry of Science and Technology
- (B) Office of the Controller General of Patents, Designs and Trade Marks
- (C) NITI Aayog
- (D) University Grants Commission

27. Consider the following statements regarding patent exclusions :

- (1) Methods of agriculture or horticulture are not patentable
- (2) Computer programs per se are not patentable in India
- (3) Business methods are patentable if innovative.

Which of the above is/are correct ?

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

28. Which of the following statements is/are correct regarding international patent filing ?

- (1) A single global patent is granted worldwide
- (2) Filing through the Patent Cooperation Treaty simplifies multi-country applications
- (3) National phase filing is required after PCT application

**Codes :**

- (A) 2 and 3 only
- (B) 1 and 2 only
- (C) 1 and 3 only
- (D) 1, 2 and 3

29. Arrange the correct sequence of patent filing steps in India :

- (1) Filing of application
- (2) Examination request
- (3) Publication
- (4) Grant of patent

**Codes :**

- (A) 1 → 3 → 2 → 4
- (B) 1 → 2 → 3 → 4
- (C) 1 → 3 → 4 → 2
- (D) 2 → 1 → 3 → 4

30. The “Budapest Treaty” is primarily concerned with which aspect of the patenting process ?

- (A) The international registration of genetically modified crops.
- (B) The deposit of microorganisms for the purposes of patent procedure.
- (C) The ethical review of human cloning experiments.
- (D) The standardization of DNA sequencing fees globally.

31. A landmark decision by the U.S. Supreme Court clarified the patentability of genetic material. Which statement correctly reflects this ruling ?
- (A) All DNA sequences are patentable if they are useful.
  - (B) Only the proteins encoded by genes can be patented, not the genes themselves.
  - (C) Isolated genes are considered “compositions of matter” and are fully patentable.
  - (D) Synthetic DNA is patentable, but naturally occurring DNA sequences are not, even if isolated.
32. To patent a “Transgenic Organism,” the applicant must typically demonstrate that the organism :
- (A) Is a product of nature with no human intervention.
  - (B) Possesses a “novel” trait introduced through recombinant DNA technology that not found in the species naturally.
  - (C) Is capable of reproducing without any laboratory assistance.
  - (D) Has been observed in the wild for at least ten years.
33. In the context of “Isolated Genes,” the term “Isolation” traditionally referred to :
- (A) Keeping the scientist in a sterile environment.
  - (B) The physical separation of a specific gene from its natural environment in genome.
  - (C) Identifying the gene’s function through computer modeling only.
  - (D) Quarantining the biological sample to prevent contamination.
34. Which stage of the patent process involves a third party challenging the validity of a patent after it has been granted ?
- (A) Pre-grant opposition
  - (B) Post-grant opposition
  - (C) Preliminary examination
  - (D) Publication of the application
35. Under the TRIPS Agreement, members may exclude from patentability “plants and animals other than micro-organisms,” but they must provide protection for plant varieties through :
- (A) Trade secret laws only.
  - (B) An effective sui generis system.
  - (C) Copyrighting the plant’s physical appearance.
  - (D) Trademarking the scent of the plant.

36. In Copyright law, the “Idea-Expression Dichotomy” implies that :
- (A) Ideas are protected. but the expression of those ideas is not.
  - (B) Only the physical medium (paper, disc) is protected by law.
  - (C) Copyright protects the specific expression of an idea, not the underlying idea itself.
  - (D) Ideas and expressions are treated identically under the Berne Convention.
37. The Copyright (Amendment) Act, 2012 in India introduced “Right to Royalty” specifically to benefit :
- (A) Software developers and coders.
  - (B) Performers, lyricists, and composers in cinematograph films.
  - (C) Publishing houses and distribution networks.
  - (D) Foreign authors living in India.
38. Which of the following is an “Attribute of Ownership” specifically addressed in the 2012 Indian Copyright Amendment regarding digital works ?
- (A) The removal of all Fair Use provisions for digital content.
  - (B) The introduction of Technological Protection Measures and Rights Management Information.
  - (C) The ban on using copyrighted music in any YouTube video.
  - (D) A mandatory 50% tax on all digital ebook sales.
39. “Arbitrary Marks” in Trademark law are considered highly distinctive because :
- (A) They are words that have no dictionary meaning.
  - (B) They are common words used in a context that has no relationship to their dictionary meaning.
  - (C) They describe the product’s ingredients directly.
  - (D) They are only used by government-owned entities.

40. In India, the term of protection for a registered Trademark is :
- (A) 20 years, non-renewable.
  - (B) 60 years after the death of the owner.
  - (C) 10 years, but it can be renewed indefinitely every 10 years.
  - (D) Permanent from the moment of first use without renewal.
41. Geographical Indications (GIS) differ from Trademarks primarily because :
- (A) GIS can be owned by a single private individual.
  - (B) GIS identify a product as originating in a specific territory where a given quality attributable to its geographical origin.
  - (C) GIS do not require registration in India.
  - (D) GIS only apply to Regional industrial chemicals.
42. The “Doctrine of Honest Concurrent Use” in Trademark law allows :
- (A) Two different parties to use similar marks if they both acted in good faith and have established rights.
  - (B) Companies to steal marks if the original owner is not looking.
  - (C) The government to take over any trademark it deems “famous.”
  - (D) Only one person in a country to use a specific surname as a brand.
43. What is the “Term of Copyright” for a literary work in India ?
- (A) 50 years from the date of publication.
  - (B) 20 years from the date of creation.
  - (C) Lifetime of the author plus 60 years.
  - (D) Lifetime of the author plus 70 years.
44. When an employee creates something as part of their job, who usually owns it ?
- (A) The employee always owns it.
  - (B) The employer usually owns it, unless there is a different agreement.
  - (C) The employee loses all rights permanently.
  - (D) No one can own such work.
45. What happens when a brand name becomes so common that people start using it as a general name for a product ?
- (A) The government removes the trademark on purpose.
  - (B) Two companies with similar names combine.
  - (C) The brand name loses its special identity and becomes a common name for product.
  - (D) The brand name is translated into different languages.

46. Which Indian authority is responsible for the registration and administration of GIs ?
- The Registrar of Copyrights.
  - The Geographical Indications Registry.
  - The Ministry of Agriculture.
  - The Indian Council of Historical Research.
47. Under copyright law, what do an author's special personal rights (moral rights) include ?
- The right to earn high profits.
  - The right to stop the work from being sold in certain countries.
  - The right to take legal action against any criticism.
  - The right to be credited for their work and to prevent changes that harm it.
48. A "Collective Mark" is a type of trademark, who usually uses to show they belong to a group or follow the same standards ?
- Only the central government.
  - Members of a cooperative, association, or other collective group to membership or standards.
  - Multiple unrelated companies that share the same building.
  - An inventor to protect a series of unrelated inventions.
49. Consider the following statements about bioethics :
- Bioethics deals with moral principles governing biological research and applications.
  - Bioethics is limited only to medical practice.
  - Bioethics includes environmental and animal ethics.
- Which of the above is/are correct ?
- 1 and 3 only
  - 2 and 3 only
  - 1 only
  - 1, 2 and 3
50. Which of the following is a major ethical concern related to genetically modified organisms (GMOs) ?
- Increased agricultural productivity
  - Potential ecological imbalance and gene transfer
  - Reduction in pesticide use
  - Improved nutritional quality

51. The Human Genome Project raised ethical concerns primarily related to :
- (A) Industrial pollution
  - (B) Genetic privacy and discrimination
  - (C) Climate change
  - (D) Food security
52. Which of the following best describes an ethical issue in stem cell research ?
- (A) Lack of scientific evidence
  - (B) Destruction of embryos for embryonic stem cells
  - (C) High cost of research
  - (D) Limited laboratory techniques
53. What does the precautionary approach suggest when an action may harm the environment ?
- (A) People proposing the action must prove it is safe.
  - (B) Action should be taken only after full scientific proof of harm.
  - (C) Economic growth should always come first.
  - (D) New technologies should be used immediately to test them.
54. What is a major concern about edible vaccines spreading into the environment ?
- (A) Vaccine-producing plants may mix with wild or other food crops.
  - (B) The cost of vaccines increases national debt
  - (C) Plastic packaging causes water pollution.
  - (D) The taste of vegetables is reduced.
55. Why is controlling the dose difficult in edible vaccines ?
- (A) It is hard to fix a price for fruits like bananas
  - (B) Natural differences in plants make it hard to give the exact required dose.
  - (C) People may eat too many vegetables.
  - (D) It is difficult to track who eats which food.

56. Consider the following statements regarding product selection :

- (1) Market demand analysis is essential for product selection
- (2) Technical feasibility is irrelevant during selection
- (3) Cost considerations influence product viability

Which of the above is/are correct ?

- (A) 1 and 3 only
- (B) 1 only
- (C) 2 and 3 only
- (D) 1, 2 and 3

57. Consider the following statements regarding material and energy economics :

- (1) Efficient material utilization reduces production cost
- (2) Energy optimization contributes to sustainability
- (3) Higher energy consumption always improves product quality

Which of the above is/are correct ?

- (A) 1 and 2 only
- (B) 2 and 3 only
- (C) 1 only
- (D) 1, 2 and 3

58. Which goods are usually called excisable goods ?

- (A) Any goods sold in shops.
- (B) Goods that are manufactured and listed under excise law.
- (C) Only goods that are exported.
- (D) Raw materials imported from other countries

59. When does a business reach the break-even point ?

- (A) When profit is 50% higher than cost.
- (B) When revenue covers only variable costs.
- (C) When total revenue equals total costs, so there is no profit or loss.
- (D) When production reaches full capacity.

60. Why is demand elasticity important for setting taxes ?

- (A) Some goods can be taxed more without much change in their use.
- (B) Elastic goods are free from taxes.
- (C) It tells the weight of goods.
- (D) It stops exports.

61. Why do manufacturers use input tax credit (like CENVAT/GST credit) ?
- (A) To avoid income tax.
  - (B) To reduce tax by adjusting tax paid on inputs against final product tax.
  - (C) To buy cheaper illegal raw materials.
  - (D) To pay worker salaries.
62. What do energy input constraints mean in production ?
- (A) Availability and cost of electricity or fuel needed for production.
  - (B) Workers' physical strength.
  - (C) Food energy given to workers.
  - (D) Energy from transport vehicles.
63. What is the main taxable point in excise law ?
- (A) Sale of goods.
  - (B) Storage in a warehouse.
  - (C) Entry into a city.
  - (D) Manufacture of goods.
64. What does captive consumption mean in manufacturing ?
- (A) Goods used by prisoners.
  - (B) Goods stolen in transport.
  - (C) Goods made and used within the same factory to produce other goods.
  - (D) Goods sold only to the government.
65. In some cases, small manufacturers pay a fixed amount of tax based on how much they can produce, instead of how much they actually produce. What is this system ?
- (A) A tax system for large companies only.
  - (B) A simplified tax system for small producers based on production capacity.
  - (C) A system only for advanced technology industries.
  - (D) A penalty system for companies that avoid taxes.

66. The Prior Art search in patent examination aims to find :
- (A) The artistic value of the invention.
  - (B) Any evidence that the invention is already known to the public.
  - (C) The historical background of the inventor.
  - (D) The market price of similar products.
67. Under TRIPS, which of the following is NOT required for a patent ?
- (A) Novelty
  - (B) Inventive Step
  - (C) Commercial Profitability
  - (D) Industrial Applicability
68. The term “Sui Generis” in IP law usually refers to :
- (A) A standard patent system.
  - (B) A unique or special system of protection (e.g., for plant varieties) .
  - (C) International trade sanctions.
  - (D) Copyright for computer software.
69. Which convention specifically deals with the protection of literary and artistic works ?
- (A) Paris Convention
  - (B) Berne Convention
  - (C) Rome Convention
  - (D) Hague Agreement
70. The “Right of Paternity” in copyright allows an author to :
- (A) Claim authorship of the work.
  - (B) Sell the work to their children.
  - (C) Prevent any changes to the work.
  - (D) Extend the copyright term indefinitely.
71. “Incentive-based Conservation” in biodiversity management often uses :
- (A) Criminal penalties.
  - (B) Economic rewards for protecting habitats.
  - (C) Banning all human entry into forests.
  - (D) Seizing land from indigenous tribes.

72. The Pre-grant Opposition occurs :
- (A) After the patent is granted.
  - (B) Before the patent application is filed.
  - (C) After publications but before the grant of the patent.
  - (D) Only in the Supreme Court.
73. Which type of mark helps consumers identify the quality or standards of a product rather than its source ?
- (A) Trademark
  - (B) Service Mark
  - (C) Certification Mark
  - (D) Collective Mark
74. What happens to a product after it is sold legally for the first time ?
- (A) The patent ends immediately.
  - (B) The owner cannot control how that specific sold product is used or resold.
  - (C) The inventor becomes tired.
  - (D) Trade secrets are cancelled.
75. What are variable costs in production ?
- (A) Costs that never change.
  - (B) Costs that increase or decrease with production level.
  - (C) Costs paid only to the government.
  - (D) Costs related only to top management.
76. Which of the following is a fixed cost in a factory ?
- (A) Cost of raw materials.
  - (B) Electricity used for machines.
  - (C) Rent and insurance.
  - (D) Wages paid per hour to temporary workers.
77. An invention must not be ..... to be considered new and innovative.
- (A) Useful
  - (B) Obvious
  - (C) Profitable
  - (D) Descriptive

78. What must a patent application include ?
- (A) The inventor's bank details.
  - (B) A clear explanation so others can understand and repeat the invention.
  - (C) Names of competing companies.
  - (D) A secret manufacturing method.
79. The "UPOV Convention" is related to the protection of :
- (A) Computer software.
  - (B) New plant varieties.
  - (C) Cinematograph films.
  - (D) Microchips.
80. "Bioprospecting" refers to :
- (A) Mining for gold in biological hotspots.
  - (B) The search for biological resources for commercial or medical use.
  - (C) Counting the number of animals in a park.
  - (D) Selling rare plants on the black market.
81. Which ethical principle emphasizes "doing good" for the research subject ?
- (A) Autonomy
  - (B) Justice
  - (C) Beneficence
  - (D) Non-maleficence
82. Which of the following combinations best supports successful entrepreneurship ?
- (A) Innovation, risk-taking, and resource management
  - (B) Routine work and low risk
  - (C) Dependence on government only
  - (D) Avoidance of competition
83. A feasibility study in entrepreneurship primarily aims to :
- (A) Evaluate viability of a business idea
  - (B) Promote sales
  - (C) Hire employees
  - (D) Fix product price

84. Which of the following is NOT a component of a business plan ?
- (A) Personal hobbies
  - (B) Market analysis
  - (C) Financial projections
  - (D) Operational strategy
85. Opportunity recognition in entrepreneurship depends mainly on :
- (A) Identifying gaps in the market
  - (B) Ignoring market trends
  - (C) Avoiding innovation
  - (D) Reducing competition
86. Which type of entrepreneur adopts existing innovations with slight modifications ?
- (A) Imitative entrepreneur
  - (B) Innovative entrepreneur
  - (C) Fabian entrepreneur
  - (D) Drone entrepreneur
87. In entrepreneurship, break-even point refers to :
- (A) Maximum profit level
  - (B) Minimum production level
  - (C) Loss minimization only
  - (D) Point where total cost equals total revenue
88. Which factor is most critical in scaling a startup ?
- (A) Efficient resource utilization
  - (B) Lack of planning
  - (C) Avoiding funding
  - (D) Ignoring customer feedback
89. Which of the following best explains the role of innovation in entrepreneurship ?
- (A) It creates competitive advantage
  - (B) It reduces risk completely
  - (C) It eliminates need for planning
  - (D) It avoids market research

90. Which of the following is a major challenge faced by entrepreneurs ?
- (A) Market uncertainty
  - (B) Unlimited resources
  - (C) No competition
  - (D) Guaranteed profits
91. Which of the following conditions must be satisfied for a patent to be granted ?
- (A) Novelty, inventive step, industrial applicability
  - (B) Popularity, cost, and branding
  - (C) Creativity, secrecy, and marketing
  - (D) Utility, design, and copyright
92. Which of the following is NOT patentable under most patent laws ?
- (A) A new machine
  - (B) A novel process
  - (C) A useful product
  - (D) A mathematical method
93. Which of the following best describes a trademark ?
- (A) Protection for brand identity
  - (B) Protection for inventions
  - (C) Protection for literary works
  - (D) Protection for trade secrets only
94. Which of the following is an example of copyright protection ?
- (A) A research article
  - (B) Industrial design of a machine
  - (C) A chemical process
  - (D) A new engine
95. The duration of patent protection is generally :
- (A) Around 20 years from filing
  - (B) Unlimited
  - (C) 5 years only
  - (D) Lifetime of inventor

96. Which of the following best explains a trade secret ?
- (A) Publicly disclosed invention
  - (B) Registered logo
  - (C) Government document
  - (D) Confidential business information giving competitive advantage
97. Which of the following differentiates patents from trade secrets ?
- (A) Trade secrets require registration
  - (B) Patents last forever
  - (C) Trade secrets are publicly available
  - (D) Patents require disclosure. trade secrets do not
98. Which organization is responsible for promoting global intellectual property protection ?
- (A) WHO
  - (B) UNESCO
  - (C) World Bank
  - (D) World Intellectual Property Organization
99. Which of the following is a “Geographical Indication” from India ?
- (A) Basmati Rice
  - (B) Kancheepuram Silk
  - (C) Nagpur Orange
  - (D) All of the above
100. In bioethics, the principle of “Justice” focuses on :
- (A) Punishing scientists.
  - (B) The fair distribution of the benefits and burdens of research.
  - (C) The speed of the experiment.
  - (D) The gender of the researcher.

***(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।