

Roll No. ....

Question Booklet Number

O. M. R. Serial No.

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Question Booklet Number
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## M. Sc. (Industrial Chemistry) (Fourth Semester)

### EXAMINATION, 2022-23

#### ENVIRONMENTAL IMPACT ASSESSMENT

Paper Code						
M	S	I	C	4	0	1

Questions Booklet Series
<b>A</b>

Time : 1:30 Hours ]

[ Maximum Marks : 75

#### Instructions to the Examinee :

परीक्षार्थियों के लिए निर्देश :

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.
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. Full form of UNCED is :
  - (A) United National Conference on Environmental and Development
  - (B) United Nations Conference on Environment and Development
  - (C) United Nations Conference on Ecology and Development
  - (D) United Nations Conferences on Environment and Development
2. Full form of WCED is :
  - (A) World Council on Environment and Development
  - (B) World Conference on Environment and Development
  - (C) World Commission on Ecology and Development
  - (D) World Commission on Environment and Development
3. Stockholm Conference was held in the year :
  - (A) 1972
  - (B) 1982
  - (C) 1971
  - (D) 1970
4. Rio Conference was in the year :
  - (A) 1992
  - (B) 1972
  - (C) 1982
  - (D) 1990
5. Hazardous waste management rules came in :
  - (A) 2016
  - (B) 2006
  - (C) 2007
  - (D) 2012
6. Definition of hazardous substance is in EPA Act 1986 :
  - (A) 2(a)
  - (B) 2(e)
  - (C) 2(b)
  - (D) 2(d)
7. Full form of NGT is :
  - (A) Nation Green Tribunal
  - (B) National Green Tribunal
  - (C) National Greek Tribunal
  - (D) National Green Tribute

8. Full form of UNCHE is :
- (A) Union Nations Commission on the Human Environment
  - (B) United National Conference on the Human Environment
  - (C) United Nations Conference on the Human Ecology
  - (D) United Nations Conference on the Human Environment
9. Sustainable development was explained first time in :
- (A) World Development Report
  - (B) First Earth Summit Report
  - (C) Brundtland Commission Report
  - (D) Human Development Report
10. First stage of EIA cycle :
- (A) Scoping
  - (B) Screening
  - (C) Public hearing
  - (D) Appraisal
11. When did Environmental (Protection) Act, 1986 come into force ?
- (A) 01 March, 1986
  - (B) 01 April, 1986
  - (C) 01 May, 1986
  - (D) 19 November, 1986
12. The term Environmental Pollution has been defined under which section of the Environment Protection Act, 1986 ?
- (A) 2(c)
  - (B) 2(b)
  - (C) 2(d)
  - (D) 2(a)
13. This emphasizes on protecting the future generation :
- (A) Intragenerational Equity
  - (B) Intergenerational Equity
  - (C) Both (A) and (B)
  - (D) None of the above
14. The Earth Summit held at Rio-de-Janeiro, Brazil was on :
- (A) The control of Transboundary movements of Hazardous Waste
  - (B) United Nations Conference on the Human Environment
  - (C) United Nations Conference on Environment and Development
  - (D) None of the above

15. When variations occur within a species due to new combinations of genes, this is called ..... diversity.
- (A) species
  - (B) genetic
  - (C) ecosystem
  - (D) None of the above
16. Shanon-Wiener index gives a measure of .....diversity.
- (A) species
  - (B) genetic
  - (C) ecosystem
  - (D) All of the above
17. Which of the following is an example of ex-situ conservation ?
- (A) Gene bank
  - (B) Biosphere reserve
  - (C) Sanctuary
  - (D) All of the above
18. There are 36 biodiversity hot spots in the world, of which ..... exist in India.
- (A) 2
  - (B) 3
  - (C) 4
  - (D) 5
19. Cryopreservation of plant seeds and pollen is done at a very low temperature of  $-196^{\circ}\text{C}$  by using :
- (A) Ice
  - (B) Liquid Nitrogen
  - (C)  $\text{CCl}_4$
  - (D)  $\text{NH}_3$
20. Species restricted to a particular area are called ..... :
- (A) Endemic
  - (B) Extinct
  - (C) Alpha
  - (D) None of the above
21. Which of the following belongs to in situ conservation ?
- (A) Zoo
  - (B) Gene bank
  - (C) Sanctuaries
  - (D) None of the above
22. ....includes the list of endangered species of plants and animals.
- (A) Red Data Bank
  - (B) Red Data Book
  - (C) Blue Data Bank
  - (D) Blue Data Book

23. The main pollutants emitted by Thermal Power Plants are .....and .....
- (A) SO<sub>2</sub> and CO<sub>2</sub>  
 (B) CO and NO  
 (C) Flyash and SO<sub>2</sub>  
 (D) NO<sub>2</sub> and Fly ash
24. As per Environmental (Protection) (Second Amendment) Rules, 1999 the permissible noise levels for firecrackers are ..... dB.
- (A) 110  
 (B) 115  
 (C) 120  
 (D) 125
25. Bhopal gas tragedy occurred due to leakage of :
- (A) MIC  
 (B) DDT  
 (C) SO<sub>2</sub>  
 (D) Dioxins
26. B. O. D. is always ..... :
- (A) lower than COD  
 (B) higher than COD  
 (C) equal to COD  
 (D) may be higher or lower in different cases
27. Pollution related acts has not include :
- (A) Water (Prevention and Control of Pollution) Act, 1974  
 (B) Right to information  
 (C) The Environment (Protection) Act, 1986  
 (D) None of the above
28. Which article in constitution recognizes environmental protection of one of the fundamental duties of every citizen in India ?
- (A) Article 42  
 (B) Article 48A  
 (C) Article 51A (g)  
 (D) Article 52
29. Which of the following gases has maximum contribution to enhanced greenhouse effect ?
- (A) CFCs  
 (B) CH<sub>4</sub>  
 (C) CO<sub>2</sub>  
 (D) N<sub>2</sub>O

30. The most important agents for ozone depletion are :
- (A) Methane
  - (B) CFC's
  - (C) Nuclear fallout
  - (D) NO<sub>2</sub>
31. Rain water harvesting has the following advantages :
- (A) Recharges ground water
  - (B) Avoids flooding of roads
  - (C) Reduces run-off loss
  - (D) All of the above
32. The 3R approach of resource stands for Reduce, Reuse and :
- (A) Restart
  - (B) Replace
  - (C) Recycle
  - (D) None of the above
33. .... Act provides for setting up of National Parks and Wildlife sanctuaries.
- (A) The Air (Prevention and Control Pollution) Act, 1981
  - (B) Wildlife (Protection) Act
  - (C) Both of the above
  - (D) None of the above
34. September 16-23 is observed as :
- (A) Ozone week
  - (B) Wildlife week
  - (C) Biodiversity week
  - (D) None of the above
35. Environment friendly products are given ISO.....certification.
- (A) 12,000
  - (B) 14,000
  - (C) 9,001
  - (D) 10,000
36. Full form of MoEF is :
- (A) Maintenance of Environment and Forests
  - (B) Maintenance of Enriched Forests
  - (C) Ministry of Environment and Forests
  - (D) None of the above
37. Eco-clubs involves :
- (A) Army Men in Environment Protection Activities
  - (B) Eco-friendly Products
  - (C) School children to participate in environment awareness campaign
  - (D) None of the above

38. Ecomark of our country is :
- (A) Earthen mug
  - (B) Earthen pitcher
  - (C) Earthen saucer
  - (D) Earthen lamp
39. The social domain of sustainable development connects :
- (A) societies and their economy
  - (B) societies and environment
  - (C) plants and animals
  - (D) None of the above
40. The statement “total welfare of human beings does not decline over time” reflects :
- (A) interlinkages
  - (B) dynamic efficiency
  - (C) ecosystem
  - (D) None of the above
41. Increase in amount of goods and services produced over a period of time defines :
- (A) biodiversity
  - (B) environment growth
  - (C) economic growth
  - (D) All of the above
42. The three pillars of sustainable development are :
- (A) Environment, Economy and Society
  - (B) Environment, Economy and Forests
  - (C) Economy, Forests and Society
  - (D) None of the above
43. Extended working domains of sustainable development incorporates :
- (A) industries and technologies
  - (B) conservation of biodiversity and natural resources
  - (C) conservation of waterfalls
  - (D) new ideas
44. Which statement is true ?
- (A) Transformative growth is science and technology based
  - (B) Transformative growth is monetary based only
  - (C) Transformative growth focuses on better economy at any cost
  - (D) All of the above
45. Biodiversity has ..... , ..... and ..... .
- (A) commercial value, ethical value and social value
  - (B) social value, ethical value and aesthetic value
  - (C) commercial value, aesthetic value, ethical value
  - (D) None of the above



46. Blue Baby syndrome is caused by the presence of ..... in drinking water.
- (A) Phosphates  
 (B) Carbonates  
 (C) Sulphates  
 (D) Nitrates
47. Which of the following has more penetration power ?
- (A) Alpha-Particles  
 (B)  $\beta$ -particles  
 (C) Gamma-rays  
 (D) None of the above
48. The IBWL was created in :
- (A) 1948  
 (B) 1950  
 (C) 1952  
 (D) 1954
49. Establishment of central and state boards for pollution control comes under :
- (A) Water (Prevention and Control of Pollution) Act, 1974  
 (B) The Air (Prevention and Control of Pollution) Act, 1981  
 (C) The Environment (Protection) Act, 1986  
 (D) None of the above
50. 'The encourage the industries for recovery of biogas, energy and reusable materials, comes under :
- (A) The Environment (Protection) Rules, 1986  
 (B) Water (Prevention and Control of Pollution) Act, 1974  
 (C) Forest (Conservation) Act, 1980  
 (D) None of the above
51. Which act made provisions for allowing some non-forest activities in forest, without cutting trees ?
- (A) Forest (Conservation) Act, 1980  
 (B) 1992 Amendment in Forest Act  
 (C) Wildlife (Protection) Act, 1972  
 (D) None of the above
52. Which act provides for the constitution of central zoo authority ?
- (A) Forest (Conservation) Act, 1980  
 (B) 1992, Amendment in Forest Act  
 (C) Wildlife (Protection) Act, 1972  
 (D) None of the above

53. IAIA stands for :
- (A) The Indian Association for Impact Assessment
  - (B) The International Association for Impact Assessment
  - (C) The Internal Association for Impact Assessment
  - (D) None of the above
54. Full form of EAC is :
- (A) Environment Action Council
  - (B) Environment Appraisal Committee
  - (C) Environment Action Committee
  - (D) Environment Appraisal Council
55. The first stage of EIA is :
- (A) Screening
  - (B) Scoping
  - (C) Public opinion
  - (D) None of the above
56. The number of stages in EIA is :
- (A) 2
  - (B) 3
  - (C) 4
  - (D) 5
57. Monitoring and Auditing is ..... stage of EIA.
- (A) 2nd
  - (B) 3rd
  - (C) 4th
  - (D) 5th
58. Main activities of the project, location and baseline condition of environment are mentioned in :
- (A) First paragraph of EIS
  - (B) Second paragraph of EIS
  - (C) Third paragraph of EIS
  - (D) None of the above
59. The predicted environmental impacts on surrounding land, water, air and ecological impacts must discussed in .....paragraph of EIS.
- (A) 2nd
  - (B) 3rd
  - (C) 4th
  - (D) 5th
60. EMP is :
- (A) Expert Measure Plan
  - (B) Expert Management Plan
  - (C) Environment Management Plan
  - (D) Environment Monitoring Plan

61. DMP is :
- (A) Disaster Management Plan
  - (B) Disaster Monitoring Plan
  - (C) Disaster Measuring Plan
  - (D) None of the above
62. EIA opines on how to.....environmental effects of any developmental project.
- (A) minimize
  - (B) maintain
  - (C) maximize
  - (D) None of the above
63. The second stage of EIA is :
- (A) Screening
  - (B) Scoping
  - (C) Public opinion
  - (D) None of the above
64. ....is a process of burning municipal solid waste under suitable temperature and conditions in a furnace.
- (A) Recycling
  - (B) Landfill
  - (C) Incineration
  - (D) Vermicomposting
65. The most common and oldest method used to dump solid waste is :
- (A) River
  - (B) Ocean
  - (C) Landfill
  - (D) None of the above
66. Latest amendment in hazardous waste management rules came in :
- (A) 2008
  - (B) 2012
  - (C) 2016
  - (D) 2020
67. Modern concept of sustainable development focuses more on :
- (A) environmental protection
  - (B) social development
  - (C) economic development
  - (D) All of the above
68. Number of sustainable development goals by United Nations is :
- (A) 14
  - (B) 15
  - (C) 16
  - (D) 17

69. .... is the example of non-renewable natural resources.
- (A) Air
  - (B) Water
  - (C) Solar
  - (D) Petroleum
70. The process which improves efficiency of solid waste management is :
- (A) collection
  - (B) composting
  - (C) disposal
  - (D) processing
71. CBA is performed during :
- (A) Implementation
  - (B) Design phase
  - (C) Feasibility study phase
  - (D) Maintenance phase
72. EIAs commenced in the year :
- (A) 1960s
  - (B) 1970s
  - (C) 1980s
  - (D) 1990s
73. The Environment (Protection) Act, 1986 consists of :
- (A) 4 chapters
  - (B) 5 chapters
  - (C) 6 chapters
  - (D) 7 chapters
74. Which statement defines biodiversity ?
- (A) Various flora and fauna in many forests
  - (B) Various populations of one species in one forest
  - (C) Various flora and fauna in one forest
  - (D) None of the above
75. Sustainable development encourages :
- (A) preservation of the resources for the need of future generation
  - (B) growth to meet current needs, preservation for the needs of future and change in all respects of life
  - (C) a change in all respects of life
  - (D) None of the above

76. Environmental protection has been made a fundamental duty of every citizen of India under Article :
- (A) 51-A(g)
  - (B) 51
  - (C) 51-A(a)
  - (D) 51-A(e)
77. The number of biodiversity hotspots in the world is :
- (A) 16
  - (B) 26
  - (C) 36
  - (D) 46
78. Section 2(a) of the Environment (Protection) Act, 1986, environment refers to :
- (A) air, water and land
  - (B) other living creatures, plants, micro-organism and property
  - (C) interrelationship among air, water, land and human beings
  - (D) All of the above
79. CBA compares different projects purely on a ..... basis.
- (A) cost
  - (B) feasibility
  - (C) ground
  - (D) None of the above
80. Every matrix method gives project ..... on one dimension and their corresponding environmental ..... on the other.
- (A) activities, impacts
  - (B) cost, impact
  - (C) plan, issues
  - (D) None of the above
81. A total 8800 possible interactions with environment are reported in :
- (A) Simple matrix
  - (B) Interaction matrix
  - (C) Leopold matrix
  - (D) None of the above
82. GIS stands for :
- (A) General Information System
  - (B) Geographical Information System
  - (C) General Implementation System
  - (D) None of the above
83. In which method a set of maps of project area's environmental characteristics are created ?
- (A) Matrix
  - (B) Checklist
  - (C) Overlays
  - (D) Networks

84. The number of parameters that can be overlaid is limited to ..... for clarity.
- (A) 10
  - (B) 12
  - (C) 14
  - (D) 16
85. Impact tree or sequence diagram is created in :
- (A) checklist method
  - (B) overlays
  - (C) networks
  - (D) None of the above
86. Draft EIA notification has reduced the time of public hearing to how many days ?
- (A) 40 days
  - (B) 30 days
  - (C) 20 days
  - (D) 10 days
87. Which of the following is not included during EIA ?
- (A) Quantitative description measuring higher, medium and lone impacts
  - (B) A detailed assessment of the planned project and selected alternative compared to the baseline conditions
  - (C) All data collection, analysis and developed plans summarized together in a well structured document
  - (D) None of the above
88. Which EIA tool best identifies action effect- impact relations ?
- (A) Checklist
  - (B) Networks
  - (C) Interaction matrices
  - (D) SWOT
89. A short-term environment impact assessment has a time period of :
- (A) 2-5 years
  - (B) 5-10 years
  - (C) 5-10 years
  - (D) 10-15 years
90. Water Act is a main law in action used for EIA formulated in ..... .
- (A) 1962
  - (B) 1982
  - (C) 1974
  - (D) 1986
91. EIA was introduced in :
- (A) 1972
  - (B) 1978
  - (C) 1982
  - (D) 1986
92. Screening criteria is based on :
- (A) type and location of development
  - (B) partial development
  - (C) type and difficulties to development
  - (D) None of the above

93. Lead agencies decide whether ..... is required or not ?
- (A) EIS
  - (B) EIA
  - (C) MOEF
  - (D) SPCB
94. EIA is an intrinsic link between ..... and economic growth.
- (A) ecological
  - (B) domestic
  - (C) pollution
  - (D) environment
95. EIA is supporting the goals of environmental protection and ..... .
- (A) economic growth
  - (B) sustainable development
  - (C) involvement of public
  - (D) None of the above
96. The proof of public hearing and public participation issued by ..... .
- (A) CBCB
  - (B) SEA
  - (C) MOEF
  - (D) SBCB
97. The fourth stage of EIA process is :
- (A) scoping
  - (B) screening
  - (C) public opinion
  - (D) appraisal by EAC
98. The acceptance or rejection of a project solely based on :
- (A) EAC
  - (B) EIS
  - (C) EIA
  - (D) IAIA
99. Category ..... projects do not require EIA clearance.
- (A) A
  - (B) A<sub>1</sub>
  - (C) B<sub>1</sub>
  - (D) B<sub>2</sub>
100. .... category projects are evaluated by state level EAC.
- (A) A
  - (B) A<sub>1</sub>
  - (C) B<sub>1</sub>
  - (D) B<sub>2</sub>

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।