

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)

CLASS: M. Pharm.  
BRANCH: PHARMACY

SEMESTER: II  
SESSION: SP2022

SUBJECT: MQA201T-Hazards and Safety Management

TIME: 3.00 Hours

FULL MARK: 75

INSTRUCTIONS:

1. Answer five out of seven questions
  2. The missing data, if any, may be assumed suitably.
  3. Before attempting the question paper, be sure that you have got the correct question paper.
  4. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- 1a. Describe the effect of industrial pollution on human health and how you can control them? [7]  
1b. Discuss water and forest resources looking into Indian scenario and state the majors to preserve them. [8]
- 2a. Describe PHA and steps involved in it. Discuss critical elements of hazards checklist. [7]  
2b. Define clean room specification. Design an aseptic area for ophthalmic using HVAC system. [8]
- 3a. Write short notes on: [7]  
(I) Classification of chemical hazards  
(II) Labelling of chemical hazards  
(III) Sensitizing substances
- 3b. Discuss about "Right to know law" in hazards communication stating its significance. [8]
- 4a. Define oxidising gas. Calculate the oxidising power of a mixture of gas containing 10% oxygen, 15% nitrous oxide and 75% helium. [7]  
4b. Write a short note on management of combustible gases and toxic gases. Explain briefly TLV concept. [8]
- 5a. Outline the important elements of emergency planning. Describe different phases of emergency management. [7]  
5b. Write a short note on BOD. [8]
- 6a. Illustrate the primary mechanisms of different types of fire extinguishers. Discuss any one of the fire extinguishers. [7]  
6b. Categorize different types of mechanical hazards. Describe the causes of mechanical hazards. [8]
- 7a. Define accident. Demonstrate different preventive measures for an accident in an industrial environment. [7]  
7b. Explain the elements of the safety management system. [8]

:::::25/04/2022:::::