

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

**CLASS: M.PHARMACY  
BRANCH: PHARMACY**

**SEMESTER: II  
SESSION: SP2023**

**SUBJECT: MQA201T HAZARDS & SAFETY MANAGEMENT**

**TIME: 3.00 Hours**

**FULL MARK: 75**

**INSTRUCTIONS:**

1. The missing data, if any, may be assumed suitably.
  2. Before attempting the question paper, be sure that you have got the correct question paper.
  3. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
  5. Answer any five questions.
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|-----|---|-----|
| 1a. | Discuss fire hazards and write in detail about management of fire hazards.  | [7] |
| 1b. | Detail about innovative environment conservation measures that can control industrial pollution.                                    | [8] |
| 2a. | Discuss health hazards by organic solvents.   | [7] |
| 2b. | Describe chemical hazards and measures to overcome chemical hazards.  | [8] |
| 3a. | Elaborate about PHA and purpose in work premises.   | [7] |
| 3b. | Describe steps involved in preliminary hazards analysis.  | [8] |
| 4a. | Define clean room specification? Design an aseptic area for parenteral using HVAC system.   | [7] |
| 4b. | Discuss in short on combustible gases and toxic gases. What are the health hazards associated with them?                            | [8] |
| 5a. | Discuss factory act and rules associated with it.   | [7] |
| 5b. | Describe relation of ICH Q9 with Hazards management in work place.  | [8] |
| 6a. | Discuss about "Right to know law" in hazards communication stating its significance.  | [7] |
| 6b. | Describe in short :<br>(I) Classification of chemical hazards<br>(II) Labelling of chemical hazards<br>(III) Sensitizing substances | [8] |
| 7a. | Elaborate with calculation for oxidizing number for combustible gases.  | [7] |
| 7b. | Discuss in short :<br>(I) BOD<br>(II) COD<br>(III) Effluent treatment   | [8] |

:::24/04/2023 E:::