

**2022**

**MSHW**

**(B.Sc. Second Semester End Examination-2022)**

**PAPER-202T**

*Full Marks: 40*

*Time: 02 Hrs*

*The figures in the right hand margin indicate marks  
Candidates are required to give their answers in their own words as  
far as practicable*

*Illustrate the answers wherever necessary*

**Group A**

**1) Answer any five questions from the following: 5x2= 10**

- a. Write Basic Laboratory principles.
- b. Write the steps to prepare a blood sample for cholesterol test in semi auto analyser.
- c. Write the principle of centrifugation.
- d. Write the principle of 'Laminar Air Flow'
- e. What are the applications of incubator?
- f. Write the safety rules and regulations of BSL.
- g. What are the different biosefety levels?
- h. What is bio ethics?

**Group B**

**2. Answer any four questions from the following: 4x5 = 20**

- a. Write the application of 'Gel Electrophoresis'. 5

(2)

- b. What are direct ELISA and Indirect ELISA?  $2\frac{1}{2} + 2\frac{1}{2}$
- c. Write the importance of 'Biosafety cabinet' 5
- d. What are RPM and RCF?  $2\frac{1}{2} + 2\frac{1}{2}$
- e. Write the applications of 'Flow cytometry'. 5
- f. Write a short note on 'Multiplex-PCR' 5

**Group C**

**3. Answer any one question of the following: 1x10 = 10**

- a. What is Fumigation? How Lab will be fumigated? Mention the three names of fumigating agents. What do you mean by phlebotomy and phlebotomist? 2+2+3+3
- b. Differ write the difference between colorimeter and spectrophotometer. Differentiate between end-point PCR and real time PCR. 4+6
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