# **Question Paper**

Exam Date & Time: 22-Apr-2022 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER M.Sc. MLT DEGREE EXAMINATION - APRIL 2022 SUBJECT: MMLT 601 - HEMATOLOGY AND CLINICAL PATHOLOGY (SPECIALIZATION: MICROBIOLOGY AND IMMUNOLOGY) (2018 SCHEME)

Marks: 100 Duration: 180 mins.

#### Answer all the questions.

1)	Write test under coagulation profile with normal range. Discuss principle, procedure and graphical interpretation of Platelet aggregation study.  (5+2+5+8 = 20 Marks)	(20)
2)	Classify hemolytic anemia. Discuss in detail molecular defect, clinical symptoms and lab diagnosis of $\beta$ paroxysmal nocturnal hemoglobinuria. (5+3+5+7 = 20 Marks)	(20)
3A)	Compare and contrast AML and ALL	(10)
3B)	Discuss clinical symptoms and Lab diagnosis of CML	(10)
3C)	Explain briefly the different Pregnancy Test with its Advantages and Disadvantages.	(10)
3D)	Explain briefly the microscopic examination of Pleural fluid.	(10)
4A)	Schilling test	(5)
4B)	Paroxysmal nocturnal hemoglobinuria	(5)
4C)	Crystals in urine with clinical significance	(5)
4D)	Leukocyte Alkaline phosphatase (LAP) score	(5)

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# **Question Paper**

Exam Date & Time: 23-Apr-2022 (10:00 AM - 01:00 PM)



### MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST SEMESTER M.Sc. MLT DEGREE EXAMINATION - APRIL 2022 SUBJECT: MMLT 605 - CLINICAL BIOCHEMISTRY PART - I (SPECIALIZATION: MICROBIOLOGY AND IMMUNOLOGY) (2018 SCHEME)

Answer ALL the questions. Draw diagrams if necessary.

Marks: 100 Duration: 180 mins. Define and classify jaundice. Explain various tests for liver function based on its role in bilirubin (20)1) metabolism. Add a note on Prothrombin time. (5+12+3 = 20 marks)2) Discuss various chemical hazards in a clinical laboratory. Add a note on laboratory safety practices (20) in a clinical chemistry lab. (10+10 = 20 marks)3. Write detailed notes on the following: 3A) Discuss the patient preparation, procedure and interpretation of oral glucose tolerance test. (10)3B) Explain renal tubular function tests in detail. (10)3C) Enumerate diagnostic enzymes. Discuss cardiac enzymes. (10)3D) Explain the various stimulation tests for gastric function. (10)4. Write short notes on the following: 4A) Describe briefly on Lipid profile. (5)4B) Discuss the Quality control procedures for preanalytical variable. (5) Write a brief essay on discrete analyzers. 4C) (5)4D) Explain histamine stimulation test. (5)

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