

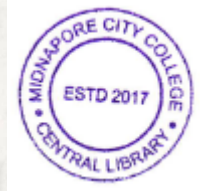
2026

6th Semester Examination (CCFUP : NEP)

BMLT

Paper : MJ 11-T

(Single Core Major)



[Haematological and Histological Slide Analysis]

Full Marks : 40

Time : Two Hours

The figures in the margin indicate full marks.

*Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *five* questions : $2 \times 5 = 10$

- ① What are Döhle bodies?
- ② What is target cell?
- ③ Briefly describe the morphological appearance and diagnostic relevance of a Codocyte?
- ④ What is ImageJ?
- ⑤ What is meant by Platelet Satellitism and why is it important to recognize it during manual smear analysis?
6. Define necrosis.

P.T.O.

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⑦ What are helmet cells?

⑧ Mention the significance of hypersegmented neutrophils.

Group - B

Answer any *four* questions : $5 \times 4 = 20$

9. Discuss the laboratory diagnosis of anaemia using peripheral blood smear examination and correlate the findings with RBC indices.

10. Discuss the role of digital pathology tools in performing quantitative morphometric analysis. What specific tissue features can it calculate? $3+2$

11. Explain the significance of detecting Blast cells in a peripheral blood film and how it aids in screening for Leukaemia. Differentiate between leucocytosis and leukopenia. $(1+2)+2$

12. What is Histological Activity Index? Describe how it can be used for the detection of specific diseases. $1+4$

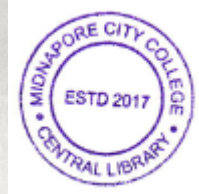
13. Write short notes on the following abnormal erythrocyte inclusions/morphologies :

(a) Basophilic stippling

(b) Heinz bodies. $2\frac{1}{2}+2\frac{1}{2}$

14. Briefly explain thrombocytopenia and poikilocytosis. Mention their diagnostic significance. $3+2$

(3)



Group - C

Answer any *one* question : $10 \times 1 = 10$

15. Explain the methodology of immunohistochemical (IHC) scoring system of H-score. Write short notes on toxic granulation and vacuolation.

$5 + (2\frac{1}{2} + 2\frac{1}{2})$

16. Define NAS. Mention the components and clinical interpretation included in NAS scoring. What is HER2 testing?

$2 + 3 + 3 + 2$
