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RAN-2503000504037001

S. Y. B. Sc. (NEP) (Sem. - IV) Examination April - 2025

Medical Laboratory Technology (Major)

MLT-MJ-403 : Instrumentation

Time: 2 Hours]

[Total Marks: 50

સૂચના : / Instructions

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the details of signs on your answer book

Name of the Examination:

S. Y. B. Sc. (NEP) (Sem. - IV)

Name of the Subject :

**Medical Laboratory Technology (Major)
MLT-MJ-403 : Instrumentation**

Subject Code No.: **2503000504037001**

Seat No.:

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Student's Signature

Q. 1. Answer in Short (Any 10)

10

1. Enlist the components of flame photometer.
2. Give the use of a tungsten filament.
3. What does spectrophotometer use as a monochromators?
4. Give the full form of TEMED.
5. State any two applications of agarose gel electrophoresis.
6. Name the two types of PAGE.
7. Write one advantage of paper chromatography.
8. Write formula to find RF value.
9. Which are components of scintillation cocktail?
10. What is used to measure P-emitters in solid scintillation counter?
11. What is full form of RIA.

Q. 2. Attempt any Two of the Following

10

1. Discuss the components of spectrophotometer.
2. Explain the principle and use of flame photometer.
3. Write a note on principle and components of colorimeter.

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[P.T.O.]

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- Q. 3. Attempt any Two of the Following 10**
1. Discuss in brief agarose gel electrophoresis.
 2. Write a note on PAGE as a supporting media.
 3. Mention the factors affecting electrophoresis. Explain any four factors.
- Q. 4. Attempt any Two of the Following 10**
1. Explain principle and types of chromatography.
 2. TLC is used for separation of various biomolecules, explain.
 3. PC Vs TLC
- Q. 5. Attempt any Two of the Following 10**
1. Stable isotopes differ from Radioactive isotopes.
 2. Which are different types of radioactive emission, explain.
 3. Describe GM counter.
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