PARAMEDICAL BOARD, BENGALURU
ANNUAL EXAMINATION, AUGUST 2019
III YEAR DIPLOMA IN
MEDICAL LABORATORY TECHNOLOGY (DMLT)

TIME: 3 HRS **(RS -2 SCHEME)** **MAX. MARKS: 100**

QP CODE: 6101, BIOCHEMISTRY

I.SHORT NOTES – ANSWER ANY EIGHT QUESTIONS **8x5= 40**

1) Write in detail about spectrophotometer and its applications.
2) Types of Jaundice. Write Characteristic features of Hepatic Jaundice.
3) Random access auto analyzer.
4) Liver function tests.
5) Name the different methods of Glucose Estimation. Mention their Advantages & Disadvantages.
6) Hypertension.
7) ELISA.
8) RIA.
9) Respiratory acidosis and Respiratory alkalosis.
10) Post analytical factors importance in clinical chemistry.

II. SHORT ANSWERS **20x3=60**

11) Benedict's test.
12) Iodine test.
13) Van den berg test.
14) Reference values and its Interpretation.
15) Chloride shift.
16) Normal serum levels of chloride, Na^+, K^+.
17) List of causes of Hypokalaemia.
18) Principles of Quality assurance.
19) Explain the terms : Accuracy, precision, specificity and sensitivity.
20) Basic principles of estimation of Blood gases and PH.
21) Types of analysers and its benefits.
22) Isoenzymes.
23) Electrophoresis.
24) Cardiac enzymes.
25) Fasting blood sugar.
26) Formation of Bilirubin.
27) Renal regulation of Acid Base Balance.
28) Serum Cholesterol level and its interpretation.
29) Tests for Bile salt and Bile pigments.
30) Write about colorimetric absorbance and transmission of light.

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VIDYA INSTITUTE OF PARA MEDICAL SCIENCES
Mysore Road, Malavalli - 571 430, Mandya Dist.

KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY

PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JANUARY 2020

III YEAR DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY

QP CODE: 6101, BIOCHEMISTRY(RS -2 SCHEME)

(WRITE IN GREEN ANSWERBOOK)

TIME: 3 HRS **MAX. MARKS: 100**

I.SHORT NOTES – ANSWER ANY EIGHT QUESTIONS **8x5= 40**

1) Colorimetry, Principle, absorbance, transmittance and applications.
2) Random access auto analyzer.
3) Formation of Bilirubin.
4) Cardiac enzymes in Heart disease.
5) Jaundice and its classification.
6) Mention different methods of Glucose estimation.
7) Electrophoresis and its applications.
8) Enzyme Linked Immunosorbant Assay (ELISA).
9) Radio Immuno Assay (RIA).
10) Name the types of analyzers and benefit of automation.

II. SHORT ANSWERS **20 x 3=60**

11) Metabolic acidosis & alkalosis.
12) Principles of Quality assurance.
13) Pre analytical factors importance in clinical chemistry.
14) Accuracy, Specificity & Sensitivity.
15) Reference values and its interpretations.
16) Spectrophotometry and its importance.
17) Laws of Photometry.
18) Benedict's test.
19) Renal function test.
20) Van den berg test.
21) Myocardial infarction.
22) Chloride shift.
23) Biuret test.
24) Percentage error in laboratory.
25) Different methods of cholesterol estimation.
26) Biochemical findings in Hepatic Jaundice.
27) Specific gravity of Normal Urine.
28) Application of flame Photometer.
29) Creatinine clearance test.
30) Lipid profile.

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PARAMEDICAL BOARD, BENGALURU

ANNUAL EXAMINATION, NOVEMBER 2020

III YEAR DIPLOMA IN

MEDICAL LABORATORY TECHNOLOGY (DMLT)

TIME: 3 Hrs **(RS -2 SCHEME)** **MAX. MARKS:100**

QP CODE: 6101, BIOCHEMISTRY

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES - ANSWER ANY EIGHT **8 x 5=40**

1 Explain the terms; accuracy, precision, specificity and sensitivity
2 Cardiac enzymes pattern in heart diseases
3 Discuss the principle and applications of estimation of electrolytes
4 Explain the principle, advantages and disadvantages of any one method of glucose estimation
5 Discuss the principle, instrumentation and applications of spectrophotometry
6 Internal quality control
7 Principle and applications of ELISA
8 Renal regulation of acid base balance
9 Different types of jaundice with their biochemical findings
10 Automation in clinical chemistry; principle and applications

SHORT ANSWERS **20x3=60**

11 Preanalytical variation in clinical chemistry
12 Explain the laws of photometry
13 Hypoglycemia
14 Chloride shift
15 Biuret test
16 Write the normal values of serum electrolytes
17 Principles of quality assurance
18 Seliwanoff's test
19 Define pH, what is the normal pH of blood? Interpret on it
20 Limits of error allowable in clinical laboratory
21 Lipid profile
22 Radio Immuno Assay (RIA)
23 Hypokalemia
24 Angina pectoris
25 Applications of electrophoresis
26 Random access autoanalyser
27 Benedict's test
28 Bilirubin formation
29 Reference values and interpretations
30 Respiratory acidosis and respiratory alkalosis

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PARAMEDICAL BOARD, BENGALURU

SUPPLEMENTARY EXAMINATION, JULY 2021

III YEAR DIPLOMA IN

MEDICAL LABORATORY TECHNOLOGY (DMLT)

TIME: 3 Hrs **(RS -2 SCHEME)** **MAX. MARKS:100**

QP CODE: 6101, BIOCHEMISTRY

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES - ANSWER ANY EIGHT **8 x 5=40**

1 Write instrumentation and benefits of autoanalyser
2 Explain laws, parts, instrumentation and applications of spectrophotometer
3 Write principles and applications of Radio Immuno Assay (RIA)
4 Patterns of cardiac enzymes in heart diseases
5 Write principle and applications of electrolyte analyser
6 Renal regulation of acid base balance
7 Define jaundice and write different types of jaundice with their characteristics features
8 External Quality Control
9 Write principle, types and applications of electrophoresis
10 Write advantages and disadvantages of different methods of glucose estimation

SHORT ANSWERS **20x3=60**

11 Isoenzymes
12 Explain accuracy and precision
13 Percentage error in laboratory
14 Respiratory acidosis and Respiratory alkalosis
15 Fouchet test
16 Reference value and its interpretation
17 Applications of flame photometry
18 Chloride shift
19 Define hypertension. Write different types of hypertension
20 Pre analytical factors in clinical chemistry
21 Principle and applications of blood gas analyser
22 Biochemical finding in hepatic jaundice
23 Principle and advantages of glucose oxidase method
24 Lipid profile
25 Blood buffers
26 Biochemical findings in pre hepatic jaundice
27 Post analytical factors in clinical chemistry
28 Benedict's test
29 Principles of quality assurance
30 Test for bile salts

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KARNATAKA NURSING & PARAMEDICAL SCIENCES EDUCATION (REGULATION) AUTHORITY

PARAMEDICAL BOARD, BENGALURU

ANNUAL EXAMINATION, NOVEMBER 2021

III YEAR DIPLOMA IN

MEDICAL LABORATORY TECHNOLOGY (DMLT)

TIME: 3 Hrs **(RS -2 SCHEME)** **MAX. MARKS:100**

QP CODE: 6101, BIOCHEMISTRY

(WRITE IN GREEN ANSWER BOOK)

SHORT NOTES - ANSWER ANY EIGHT **8 x 5=40**

1 Colorimetry- Principle, absorbance, transmittance and applications
2 Mention different methods of Glucose estimation
3 Name the types of analyzers and benefits of automation in clinical laboratory
4 Enzyme Linked Immunosorbant Assay (ELISA)-Principle and applications
5 Define Jaundice and mention the types
6 Pattern of Cardiac enzymes in heart diseases
7 Electrophoresis and its applications
8 Lipid profile
9 Arterial blood gas (ABG) analysis
10 Metabolic acidosis

SHORT ANSWERS **20x3=60**

11 Glomerular filtration rate (GFR)
12 Give Reference values for a) Urea b) Creatinine c) Uric acid
13 Define a) Accuracy and b) Specificity
14 Mention three Pre-analytical errors
15 Define pH and mention the normal blood pH value
16 Percentage error
17 Name the serum electrolytes and mention their normal values
18 Principle of quality Assurance
19 Applications of Radioimmunoassay (RIA)
20 Give the normal value of serum cholesterol. Mention different methods of cholesterol estimation
21 Angina
22 Define Hypertension and mention the normal values for blood pressure (BP)
23 Name three bile pigments
24 Mention the normal value of a) FBS b) PPBS c) RBS
25 Applications of flame photometry
26 Respiratory acidosis
27 Name the liver function tests to assess the carbohydrate metabolism.
28 Benedict's test- principle and significance
29 Creatinine clearance test
30 Hypokalemia

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