Q.P. CODE:500-B-CBME

DR. NTR UNIVERSITY OF HEALTH SCIENCES:AP:VIJAYAWADA-520 008

M.B.B.S. DEGREE EXAMINATION – JAN/FEB, 2022

FIRST M.B.B.S. EXAMINATION

BIOCHEMISTRY – PAPER-II (Set A)

(Multiple Choice Questions)

Time : 20 Minutes Max. Marks: 20

Note : Answer all questions

SECTION – I (MCQs- 20 MARKS) 1x20=20

1) During urea cycle two nitrogen atoms are derived from
   a) Ammonia and arginine
   b) Ammonia and aspartic acid
   c) Both from Ammonia
   d) Ammonia and Ornithine

2) Ammonia is trapped in brain by
   a) Glutamine Synthetase reaction
   b) Glutaminase reaction
   c) Urea Synthesis cycle
   d) Glutamate dehydrogenase reaction

3) The Major Donor of Carbon Atoms to the One-Carbon Pool is
   a) Serine
   b) Tyrosine
   c) Threonine
   d) Proline

4) Which amino acid will give rise to major pigment of the body?
   a) Histidine
   b) Glutamic acid
   c) Ornithine
   d) Tyrosine

5) Homogentisic acid is excreted in urine in
   a) Phenylketonuria
   b) Maple syrup urine disease
   c) Tyrosinosis
   d) Alkaptonuria

6) Ochronosis is seen in
   a) Phenyl Ketonuria
   b) Alkaptonuria
   c) Tyrosinosis
   d) Albinism

Contd. ….. 2

7) The anti-coagulant found in the body
   a) Potassium oxalate
   b) Sodium Citrate
   c) Heparin
   d) EDTA

8) Hemopexin carries
   a) Free hemoglobin
   b) Free heme
   c) Free bilirubin
   d) Free iron

9) Administration of diuretics cause loss of potassium which may lead to
   a) Metabolic acidosis
   b) Respiratory acidosis
   c) Respiratory alkalosis
   d) Metabolic alkalosis

10) Which of the following conditions will produce high anion gap acidosis?
   a) Diarrhea
   b) Renal tubular acidosis
   c) Renal failure
   d) Uretero sigmoidostomy

11) ECF volume does not change with
   a) ADH
   b) Aldosterone
   c) Calcitriol
   d) Renin

12) The cation with lowest intra cellular concentration
   a) Potassium
   b) Magnesium
   c) Sodium
   d) Calcium

13) Which contains iron
   a) Ceruloplasmin
   b) Xanthine oxidase
   c) Albumin
   d) Superoxide desmutase

14) Which enzyme do not contain copper?
   a) Cytochrome Oxidase
   b) Superoxide dismutase
   c) Xanthine oxidase
   d) Tyrosinase

Contd …. 3

15) The micro mineral present in teeth is
   a) Calcium
   b) Iodine
   c) Fluorine
   d) Manganese

16) Which of the following trace element has antioxidant role?
   a) Chromium
   b) Zinc
   c) Selenium
   d) Nickel

17) Sigma factor is
   a) A sub unit of DNA polymerase
   b) A sub unit of RNA polymerase
   c) A sub unit of 50 S ribosome
   d) responsible for initiation of replication

18) Intron is portion of
   a) DNA that is cleaved of during replication
   b) mRNA that is removed after transcription
   c) tRNA that is added on after its synthesis
   d) Protein removed after translation

19) Which hormone does not act at the level of transcription
   a) Cortisol
   b) Calcitriol
   c) Aldosterone
   d) Calcitonin

20) M band in serum protein electrophoresis is seen in which condition?
   a) Cirrhosis
   b) Chronic infections
   c) Multiple myeloma
   d) Heavy chain disease

CBME

DR. NTR UNIVERSITY OF HEALTH SCIENCES:AP:VIJAYAWADA-520 008
M.B.B.S. DEGREE EXAMINATION – JAN/FEB, 2022
FIRST M.B.B.S. EXAMINATION
BIOCHEMISTRY – PAPER-II (Set B)
(Multiple Choice Questions)

Time : 20 Minutes Max. Marks: 20
Note : Answer all questions

SECTION – I (MCQs- 20 MARKS) 1x20=20

1) Which amino acid will give rise to major pigment of the body?
   a) Glutamic acid
   b) Ornithine
   c) Tyrosine
   d) Histidine

2) The Major Donor Of Carbon Atoms To The One-Carbon Pool Is
   a) Tyrosine
   b) Threonine
   c) Proline
   d) Serine

3) Ammonia is trapped in brain by
   a) Glutaminase reaction
   b) Urea Synthesis cycle
   c) Glutamate dehydrogenase reaction
   d) Glutamine Synthetase reaction

4) During urea cycle two nitrogen atoms are derived from
   a) Ammonia and aspartic acid
   b) Both from Ammonia
   c) Ammonia and Ornithine
   d) Ammonia and arginine

5) Hemopexin carries
   a) Free heme
   b) Free bilirubin
   c) Free iron
   d) Free hemoglobin

6) The anti-coagulant found in the body
   a) Sodium Citrate
   b) Heparin
   c) EDTA
   d) Potassium oxalate

Contd … 2

7) Ochronosis is seen in
   a) Alkaptonuria
   b) Tyrosinosis
   c) Albinism
   d) Phenyl Ketonuria

8) Homogentisic acid is excreted in urine in
   a) Maple syrup urine disease
   b) Tyrosinosis
   c) Alkaptonuria
   d) Phenylketonuria

9) The cation with lowest intra cellular concentration
   a) Magnesium
   b) Sodium
   c) Calcium
   d) Potassium

10) ECF volume does not change with
   a) Aldosterone
   b) Calcitriol
   c) Renin
   d) ADH

11) Which of the following conditions will produce high anion gap acidosis?
   a) Renal tubular acidosis
   b) Renal failure
   c) Uretero sigmoidostomy
   d) Diarrhea

12) Administration of diuretics cause loss of potassium which may lead to
   a) Respiratory acidosis
   b) Respiratory alkalosis
   c) Metabolic alkalosis
   d) Metabolic acidosis

13) Which of the following trace element has antioxidant role?
   a) Zinc
   b) Selenium
   c) Nickel
   d) Chromium

Contd ….3

14) The micro mineral present in teeth is
    a) Iodine
    b) Fluorine
    c) Manganese
    d) Calcium

15) Which enzyme do not contain copper?
    a) Superoxide dismutase
    b) Xanthine oxidase
    c) Tyrosinase
    d) Cytochrome Oxidase

16) Which contains iron
    a) Xanthine oxidase
    b) Albumin
    c) Superoxide dismutase
    d) Ceruloplasmin

17) M band in serum protein electrophoresis is seen in which condition?
    a) Chronic infections
    b) Multiple myeloma
    c) Heavy chain disease
    d) Cirrhosis

18) Which hormone does not act at the level of transcription
    a) Calcitriol
    b) Aldosterone
    c) Calcitonin
    d) Cortisol

19) Intron is portion of
    a) mRNA that is removed after transcription
    b) tRNA that is added on after its synthesis
    c) Protein removed after translation
    d) DNA that is cleaved of during replication

20) Sigma factor is
    a) A sub unit of RNA polymerase
    b) A sub unit of 50 S ribosome
    c) Responsible for initiation of replication
    d) A sub unit of DNA polymerase

CBME

DR. NTR UNIVERSITY OF HEALTH SCIENCES:AP:VIJAYAWADA-520 008
M.B.B.S. DEGREE EXAMINATION – JAN/FEB, 2022
FIRST M.B.B.S. EXAMINATION
BIOCHEMISTRY – PAPER-II (Set C)
(Multiple Choice Questions)

Time : 20 Minutes Max. Marks: 20
Note : Answer all questions

SECTION – I (MCQs- 20 MARKS) 1x20=20

1) The Major Donor Of Carbon Atoms To The One-Carbon Pool Is
   a) Threonine
   b) Proline
   c) Serine
   d) Tyrosine

2) During urea cycle two nitrogen atoms are derived from
   a) Both from Ammonia
   b) Ammonia and Ornithine
   c) Ammonia and arginine
   d) Ammonia and aspartic acid

3) Which amino acid will give rise to major pigment of the body?
   a) Ornithine
   b) Tyrosine
   c) Histidine
   d) Glutamic acid

4) Ammonia is trapped in brain by
   a) Urea Synthesis cycle
   b) Glutamate dehydrogenase reaction
   c) Glutamine Synthetase reaction
   d) Glutaminase reaction

5) The anti-coagulant found in the body
   a) Heparin
   b) EDTA
   c) Potassium oxalate
   d) Sodium Citrate

6) Homogentisic acid is excreted in urine in
   a) Tyrosinosis
   b) Alkaptonuria
   c) Phenylketonuria
   d) Maple syrup urine disease

Contd .. 2

7) Hemopexin carries
   a) Free bilirubin
   b) Free iron
   c) Free hemoglobin
   d) Free heme

8) Ochronosis is seen in
   a) Tyrosinosis
   b) Albinism
   c) Phenyl Ketonuria
   d) Alkaptonuria

9) ECF volume does not change with
   a) Calcitriol
   b) Renin
   c) ADH
   d) Aldosterone

10) Administration of diuretics cause loss of potassium which may lead to
   a) Respiratory alkalosis
   b) Metabolic alkalosis
   c) Metabolic acidosis
   d) Respiratory acidosis

11) The cation with lowest intra cellular concentration
   a) Sodium
   b) Calcium
   c) Potassium
   d) Magnesium

12) Which of the following conditions will produce high anion gap acidosis?
   a) Renal failure
   b) Uretero sigmoidostomy
   c) Diarrhea
   d) Renal tubular acidosis

13) The micro mineral present in teeth is
   a) Fluorine
   b) Manganese
   c) Calcium
   d) Iodine

Contd … 3

14) Which contains iron
    a) Albumin
    b) Superoxide dismutase
    c) Ceruloplasmin
    d) Xanthine oxidase

15) Which of the following trace element has antioxidant role?
    a) Selenium
    b) Nickel
    c) Chromium
    d) Zinc

16) Which enzyme do not contain copper?
    a) Xanthine oxidase
    b) Tyrosinase
    c) Cytochrome Oxidase
    d) Superoxide dismutase

17) Which hormone does not act at the level of transcription
    a) Aldosterone
    b) Calcitonin
    c) Cortisol
    d) Calcitriol

18) Sigma factor is
    a) A sub unit of 50 S ribosome
    b) Responsible for initiation of replication
    c) A sub unit of DNA polymerase
    d) A sub unit of RNA polymerase

19) M band in serum protein electrophoresis is seen in which condition?
    a) Multiple myeloma
    b) Heavy chain disease
    c) Cirrhosis
    d) Chronic infections

20) Intron is portion of
    a) tRNA that is added on after its synthesis
    b) Protein removed after translation
    c) DNA that is cleaved of during replication
    d) mRNA that is removed after transcription

CBME

DR. NTR UNIVERSITY OF HEALTH SCIENCES:AP:VIJAYAWADA-520 008
M.B.B.S. DEGREE EXAMINATION – JAN/FEB, 2022
FIRST M.B.B.S. EXAMINATION
BIOCHEMISTRY – PAPER-II (Set D)
(Multiple Choice Questions)

Time : 20 Minutes Max. Marks: 20
Note : Answer all questions

SECTION – I (MCQs- 20 MARKS) 1x20=20

1) Ammonia is trapped in brain by
   a) Glutamate dehydrogenase reaction
   b) Glutamine Synthetase reaction
   c) Glutaminase reaction
   d) Urea Synthesis cycle

2) Which amino acid will give rise to major pigment of the body?
   a) Tyrosine
   b) Histidine
   c) Glutamic acid
   d) Ornithine

3) During urea cycle two nitrogen atoms are derived from
   a) Ammonia and Ornithine
   b) Ammonia and arginine
   c) Ammonia and aspartic acid
   d) Both from Ammonia

4) The Major Donor Of Carbon Atoms To The One-Carbon Pool Is
   a) Proline
   b) Serine
   c) Tyrosine
   d) Threonine

5) Ochronosis is seen in
   a) Albinism
   b) Phenyl Ketonuria
   c) Alkaptonuria
   d) Tyrosinosis

6) Hemopexin carries
   a) Free iron
   b) Free hemoglobin
   c) Free heme
   d) Free bilirubin

Contd … 2

7) Homogentisic acid is excreted in urine in
   a) Alkaptonuria
   b) Phenylketonuria
   c) Maple syrup urine disease
   d) Tyrosinosis

8) The anti-coagulant found in the body
   a) EDTA
   b) Potassium oxalate
   c) Sodium Citrate
   d) Heparin

9) Which of the following conditions will produce high anion gap acidosis?
   a) Uretero sigmoidostomy
   b) Diarrhea
   c) Renal tubular acidosis
   d) Renal failure

10) The cation with lowest intra cellular concentration
   a) Calcium
   b) Potassium
   c) Magnesium
   d) Sodium

11) Administration of diuretics cause loss of potassium which may lead to
   a) Metabolic alkalosis
   b) Metabolic acidosis
   c) Respiratory acidosis
   d) Respiratory alkalosis

12) ECF volume does not change with
   a) Renin
   b) ADH
   c) Aldosterone
   d) Calcitriol

13) Which enzyme do not contain copper?
   a) Tyrosinase
   b) Cytochrome Oxidase
   c) Superoxide dismutase
   d) Xanthine oxidase

Contd … 3

14) Which of the following trace element has antioxidant role?
    a) Chromium
    b) Zinc
    c) Selenium
    d) Nickel

15) Which contains iron
    a) Superoxide dismutase
    b) Ceruloplasmin
    c) Xanthine oxidase
    d) albumin

16) The micro mineral present in teeth is
    a) Manganese
    b) Calcium
    c) Iodine
    d) Fluorine

17) Intron is portion of
    a) Protein removed after translation
    b) DNA that is cleaved of during replication
    c) mRNA that is removed after transcription
    d) tRNA that is added on after its synthesis

18) M band in serum protein electrophoresis is seen in which condition?
    a) Heavy chain disease
    b) Cirrhosis
    c) Chronic infections
    d) Multiple myeloma

19) Sigma factor is
    a) Responsible for initiation of replication
    b) A sub unit of DNA polymerase
    c) A sub unit of RNA polymerase
    d) A sub unit of 50 S ribosome

20) Which hormone does not act at the level of transcription
    a) Calcitonin
    b) Cortisol
    c) Calcitriol
    d) Aldosterone
