

SHIVAJI COLLEGE, UNIVERSITY OF DELHI

DEPARTMENT OF BIOCHEMISTRY

INTERNAL TEST (Academic Year 2023-24)

Name of the Course : B.Sc (H)

Semester: IV

Name of the Paper : MANN

Faculty Name : Dr. Abhijeet Mishra

Duration : 15 min

Maximum Marks: 10

Date of Test : 12/03/24

- 1) The carbon atom source while producing urea in the urea cycle is _____
a) CO_2 b) Glucose c) Aspartic acid d) Arginine
- 2) Which of the following is not an essential amino acid?
a) Glycine b) Leucine c) Methionine d) Histidine
- 3) Which of the following statements concerning transamination is correct?
a) Only non-essential (dispensable) amino acids undergo transamination.
b) Transamination is an irreversible reaction in amino acid catabolism.
c) Transaminases require a coenzyme derived from vitamin B12.
d) Transaminases require a coenzyme derived from vitamin B6
- 4) Urea production occurs almost exclusively in
a) Kidneys b) Liver c) Blood d) Urine
- 5) The first enzyme in the pathway carbamoyl phosphate synthase I, is allosterically activated by:
a) N-acetylglutamate b) Acetyl coA c) Glutamate d) Carbamoyl phosphate
- 6) What are the products of urea cycle?
a) One molecule of urea, one molecule of ammonia, one molecule of ATP and one molecule of fumaric acid
b) One molecule of urea, one molecule of AMP, two molecules of ADP and one molecule of fumaric acid
c) One molecule of aspartic acid, one molecule of ammonia, one molecule of ATP and one molecule of fumaric acid
d) Two molecules of urea, two molecules of ammonia, one molecule of ATP and one molecule of fumaric acid
- 7) Urea cycle converts _____
a) Keto acids into amino acids b) Amino acids into keto acids
c) Ammonia into a less toxic form d) Ammonia into a more toxic form
- 8) What are the inputs to one cycle of urea cycle?
a) One molecule of CO_2 , one molecule of ammonia, three molecules of ATP and one molecule of aspartic acid
b) One molecule of urea, one molecule of AMP, two molecules of ADP and one molecule of fumaric acid
c) One molecule of aspartic acid, one molecule of ammonia, one molecule of ATP and one molecule of fumaric acid

Faculty Signature:

