

B.Sc. Semester-5 Examination

CC 301

Bio-Chemistry

March-2024

Time : 2-30 Hours]

[Max. Marks : 70

Q-1 A. EXPLAIN - E M P – PATHWAY WITHOUT STRUCTURE. 7

B. DISCUSS FATE OF PYRUVATE WITH STRUCTURE. 7

OR

A. SHORT NOTE ON INBORN ERROR OF GLYCOGEN METABOLISM. 7

B. DISCUSS IRREVERSIBLE REACTIONS OF GLYCOLYSIS WITH STRUCTRE. 7

Q-2 A. WRITE FULL UREA CYCLE – PATHWAY WITHOUT STRUCTURE. 7

B. SHORT NOTE ON TRANSAMINATION WITH EXAMPLE. 7

OR

SHORT NOTE ON INBORN ERROR – P K U, ALBINISM IN DETAIL . 14

Q-3 EXPLAIN B-OXIDATION OF PALMITIC ACID WITH ATP CALCULATION IN DETAIL. 14

OR

A. EXPLAIN STEPS OF FATTY ACID SYNTHESIS. 7

B. SHORT NOTE ON INBORN ERROR OF LIPID METABOLISM. 7

Q-4 A. WRITE ANY 3 REACTIONS OF KREBS CYCLE WITH STRUCTURE. 7

B. EXPLAIN GLYCEROL PHOSPHATE SHUTTLE. 7

OR

A. EXPLAIN MALATE-ASPARTATE SHUTTLE. 7

B. EXPLAIN COMPLEX 1 AND 2 OF E T C. 7

Q-5 WRITE ANY 7 FROM FOLLOWINGS 14

1 GIVE FULL FORM OF PDH , HMP .

2 WRITE ALTERNATIVE NAME OF TCA CYCLE.

3 WRITE STRUCTURE OF OAA, SUCCINYL-COA.

P.T.O

E1263-2

4 DEFINE CATABOLISM AND HIGH ENERGY COMPOUND.

5 WRITE ABOUT P/O RATIO.

6 NAME 2 ENZYMES OF KETONBODIES METABOLISM.

7 EXPLAIN COMPLEX - 4 OF ETC WITH INHIBITORS.

8 NAME HORMONES REGULATING – CARBOHYDRATE METABOLISM.

9 EXPLAIN – CHEMIOSMOTIC HYPOTHESIS.

10 WRITE ENZYMES OF PDH COMPLEX REACTIONS.

11 WRITE ALL CO-ENZYMES OF PDH COMPLEX.

12 NAME ADDITIONAL ENZYMES NEEDED FOR UNSATURATED FATTY ACID β -OXIDATION

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