

REV-01
BPT/06/12

2023/06

**BACHELOR OF PHYSIOTHERAPY
SECOND SEMESTER
BIOCHEMISTRY
BPT – 205 [REPEAT]
[USE OMR SHEET FOR OBJECTIVE PART]**

**SET
A**

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

(Objective)

Marks: 20

Choose the correct answer from the following:

1 × 20 = 20

1. The example of buffer is/are:
a. Bicarbonate
b. Phosphate
c. Protein
d. All of the above
2. Maltose is a disaccharide of
a. Fructose and lactose
b. Glucose and glucose
c. Glucose and galactose
d. Glucose and lactose
3. Which sugars are present in Sucrose?
a. Glucose and glucose
b. Fructose and galactose
c. Fructose and glucose
d. Glucose and galatose
4. Rancidity of lipids of lipid-rich foodstuff is because of
a. Reduction of fatty acids
b. Hydrogenation fatty acids
c. Dehydrogenation of saturated fatty acids
d. Oxidation of fatty acids
5. Purine base found in RNA is
a. Cytosine
b. Thymine
c. Uracil
d. Guanine
6. Nucleoside contains
a. Base-sugar
b. Base-phosphate
c. Base-sugar-phosphate
d. Sugar-phosphate
7. Which of the following amino acids has to be supplemented in the diet?
a. Phenylalanine
b. Cysteine
c. Glutamine
d. Asparagine
8. This enzyme catalyzes the first step of glycolysis or the EMP pathway
a. Glucokinase
b. Pyruvate kinase
c. Phosphofructokinase-1
d. Hexokinase
9. Which of the following is not formed during the Krebs cycle?
a. Lactate
b. Isocitrate
c. Succinate
d. Both (a) and (b)

(Descriptive)

Time : 2 hrs. 30 min.

Marks:50

[Answer question no.1 & any four (4) from the rest]

1. Describe the TCA cycle in detail. How many ATP are produced in the cycle? 10
2. Explain lipoproteins with a diagram. How are lipoproteins classified? 5+5=10
3. What is buffering capacity? Explain the 3 types of buffer systems. 2+8=10
4. Explain the process of digestion and absorption of lipids. 10
5. Explain the role of activation energy in enzyme catalysed reaction 10
6. Define vitamins and classify them according to their solubility 4+6=10
7. Define BMR? Explain the factors affecting BMR 2+8=10
8. What are cofactors explain their role in enzyme catalysed reaction 2+8=10

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