S.Y.B.PHARM. SEMESTER-III (2011 Course) : SUMMER - 2019

SUBJECT: PHARMACEUTICAL BIOCHEMISTRY – II

Day : Thursday
Date : 25/04/2019

S-2019-4431

Time 02.00 PM TO 05.00 PM
Max. Marks: 80

N.B.

1) **Q.1** and **Q.5** are **COMPULSORY**. And out of remaining solve **TWO** questions from each section.
2) Answer to both the section should be written in **SEPARATE** answer book.
3) Figures to the right indicate **FULL** marks.

SECTION – I

Q.1 Answer any **FIVE** of the following: **(10)**

a) What are biological redox systems? Give examples.
b) How pyruvate is converted to acetate?
c) State the significance of purine salvage pathway.
d) State the catabolism of glycine.
e) How many ATP are formed, when palmitate is completely oxidized to carbondioxide and water?
f) What is transamination?

Q.2 **a)** How ammonia is converted to urea in liver? Explain in detail. **(08)**
b) Describe structure of m-RNA. **(07)**

Q.3 **a)** What is diagnostic PCR? Explain post PCR analysis in detail. **(08)**
b) What is the role of Vitamin-D in calcium metabolism? **(07)**

Q.4 Write short note on any **THREE** of the following: **(15)**

a) Electrolyte balance
b) Reverse transcription
c) Regulation of blood sugar
d) Biosynthesis of thyroxin

SECTION – II

Q.5 Answer any **FIVE** of the following: **(10)**

a) Give important role of intrinsic factor present in gastric juice.
b) State the biochemical reaction catalyzed by glutamate dehydrogenase.
c) What is gout?
d) What is RNA splicing?
e) What is anti-serum?
f) In which condition IgE antibodies are expressed?

Q.6 **a)** Describe the working of electron transport chain. Illustrate how ($NADH+H^+$) gives three ATP on oxidation. **(08)**
b) State biosynthesis of Physiologically important metabolites from tryptophan and tyrosine. **(07)**

Q.7 **a)** What are lipoproteins? Give their different types and their clinical significance. **(08)**
b) What are inborn errors of metabolism? Explain with examples and discuss management and prevention. **(07)**

Q.8 Write short note on any **THREE** of the following: **(15)**

a) Primer selection in PCR
b) Molecular hybridization
c) Radioimmunoassay (RIA)
d) Kwashiorkor

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