(4)   Code No. : B-219(B)

ZÀÎÀ–3.   –¡ ӓ¨yӧ§ý£½à §ý âwâsÑÎÀ jÊ½ö§µL Íuâ©uà §µLÀk¥ ñ

Describe different steps of   -oxidation.

OR

¥Àkà¢t §µ OnÊâ§ý£½ mnà £quâ§ªmà âvâh¥ ñ

Describe enzyme immobilization and its applications.

ZÀÎÀ–4. âÀuçªuç»ÿ}Îâ yçkÀâyÞuà t§LÊQÿjàq yätàÑqàtãâ»µÀÀ Òàm §µLÀk¥ ß–

| â§ýä kÀâyÞuà §µLÊQÿjàq yätà | 30–40, 40–50, 50–60, 60–70, 70–80 |
| ÊQÿjàq yätà ÑqàkÀâyÞuà | 50,   54,   85,   45   30 |

Calculate median value for B.P. range of population for given data :

| Blood pressure range of population was | 30–40, 40–50, 50–60, 60–70, 70–80 |
| Number of population B.P. range has | 50,   54,   85,   45   30 |

OR

â§ýä kÀâyÞuà t§Îâ§Êà §µL yâÞmà 30, 31, 32, 33, 34, 35, 36, 37 §ÿtÎâß 2, 9, 3, 4, 8, 7, 8, 5 Íuâ0ÿ§ýâv¥ qâuâªuâñ Îâ§Êà yâÞmà ÑqàtàâþâÆà§ÿâvçñ

Sugar concentration in a population was found 30, 31, 32, 33, 34, 35, 36, 37,   for 2, 9, 3, 4, 8, 7, 8, 5 persons, find out mode for sugar concentration.

ZÀÎÀ–5. â§ýä §ÿÊÀuâÎÊ §ý yÊj Àâä¢t§ý yÞ°µÀ §µ w½âµÀ §µLÀk¥ ñ

Describe sructural components of a computer.

OR

wâ½àâ§ý Zàuâ½à t§ÿÊÀuâÎÊ §ý £quâ½à §µ w½âµÀ §µLÀk¥ ñ

Describe application of computer in scientific experiment.

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Code No. : B-219(B)

Annual Examination - 2017

B.Sc.-I

BIOTECHNOLOGY

Paper - I

BIOCHEMISTRY, MATHS AND COMPUTER

Max.Marks : 50

Time : 3 Hrs.   Min Marks : 17

¹àq ß h½»þ'¡ ' t§Ày ¡ âmvi½âÆâ ZÀÎÀ ÑÀ¡ àkÑÑµÑv §ý£Àà¡ âÑawâuéÑèñ h½»þ'r' t§yi½âÆâ ZÀÎÀ h½»þ'y' t§Àäi ê£ÀÊÀu ZÀÎÀ Ñèñ h½»þ'¡ ' §ýà;yryçqÑvçÑv §ý£þñ yàtàÑu §ÿ ¨uàv¢LÊ §µ £quâ§âÿuà kà y§ÿmà Ñèñ

Note : Section 'A' is objective type, containing 10 questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first. Simple calculator is allowed.

h½»þ'¡ '(Section-'A')

âkâÊÁÀ»§ým ¡ âm vi£ÀÊÀu ZÀÎÀâþ§ý £ÀÊ ¥§ý uà Àâ;qàÊQÿuâ t§Àþñ
(Answer the following very short-answer-type questions in one or two lines.)   (1x10=10)

ZÀÎÀ–1. Àâ;tàkây§µ¢»þ§ÿâ§§ÿâä yà rà½þkâþmà Ñè?
Which bond connects two monosaccharide?

ZÀÎÀ–2. Zàâ¹§µÀ t§§ÿâä yà rþ ywâä0§ý tkrân ÑqàmàÑè?
Which bond in protein is strongest bond?

ZÀÎÀ–3. Íuâ¢qâÎà âvâq»§ÿâä £ÀâäÑ£½ Àãâk¥ ñ
Give an example of derived lipid.

ZÀÎÀ–4. nàuÊâ¨ yâÆà §µà ¥§ý §µâuêâvâh¥ ñ
Write one function of thyroxin.

ZÀÎÀ–5. β ¡ ӓ¨yӧ§ý£½à Ñqâ yâÑÿu Àâÿ¹â¡¡ Êv §ÿâ;tà¢¹§µ£½»þuà t§§ÿâä yà Zàâ¹§µÀ ÐnâkâÀmÆm §ÿÊÀmàÑè?
Which protein tansfer active fatty acid inside mitochondria for   -oxidation?

P.T.O.

ZàÎÅà–6.   ¥Åkà¢t §ÿ।á§ÿüàqÊ màq §ÿâ ¨üàŽàsàw qðÞþùàÑ?

What will be effect of temperature on mode of action of enzyme.

ZàÎÅà–7.   ytàmÊ tàÍu §ÿ। qáÊsàxà âvàh¥ñ

Give definition of Arithmatic mean.

ZàÎÅà–8.   Zàtàq âwj vÅà §ÿâ qáÊsàxà âvàh¥ñ

Define Standard Deviation.

ZàÎÅà–9.   tÀÊràþ¨üàÑ?

What is motherboard?

ZàÎÅà–10.§ÿ। ràþþ§ÿ। £quáßÿâmà âvàh¥ñ

Write the use of keyboard?

h½»þ-'r'(Section-'B')

àÅzÅààþ§ÿm v i áÊÜàÊâu ZàÎÅàà þ§ÿý £ÜàÊ 150–200 ÎàÎÅA-yàtà tþÀþñ

(Answer the following short-answer type questions with word limit 150-200)   (3x5=15)

ZàÎÅà–1.   Zàà¢þÅàা §ÿ। àðõmàu§ÿý yÊjÅàà §ÿà w½Åàà §ÿ।àk¥ñ

Describe secondary structure of protein.

OR

Ð¹þ|jê§ÿ। yÊjÅàà ytlà¢¥ñ

Explain structure of starch.

ZàÎÅà–2.   ¡ªÅààÎàu §ÿýÑàtàÅà §ÿâ §ÿàþê âvàh¥ñ

Write functions of Pancreas hormone.

OR

Àà¢¡ yhÍm Äÿ¹þ¡¡Êv §ÿâ Åààt ¥wþyÊjÅàà âvàh¥ñ

Write name and structure of two unsaturated fatty acid.

ZàÎÅà–3.   qàuÚâw§ÿý ¡Êv ¥ày¹þ¢v §ÿàþ-¥Åkà¢t-'¥' tþ§ÿýyçqÊwâmên Ñàþà þàÑ?

How pyruvic acid converts into Acetyl co-enzyme-A?

OR

Äÿ¨¹þ¡þk 1–6 rà¢ÆÅàðÄÿ¹þ| ªvàyÊ0Í»Ñà¢»þ3–ÄÿðÄÿ¹þ|þ§ÿý Àà¢¡ ½àtþ§ÿýyçqÊwâmên Ñàþà þÑ?

How does fructose 1-6-biphosphate convert into two molecules of glyceraldehyde 3-phosphate.

ZàÎÅà–4.   ¡ àwàm uÐÿ¡»þ|þà §ÿýâv¥ ytàmÊ tàÍu §ÿ। ªÅ½Åàà §ÿýç§ÿÊþà¢?

How you can calculate arithmatic mean for data with their frequency?

OR

yçb¡uáÊã ¥wþ£y§ÿý ªÅ½àbqÊ ¥§ÿý yþÐÿàÑm â¹þq½äà âvàh¥ñ

Write short note on set theory and its properties.

ZàÎÅà–5.   §ÿïÅuàÿÎÊ ¥Î ªàüÆÀît ¨üàÑ?

What is computer algorithm?

OR

§ÿïÅuàÿÎÊ ¡ äÎþt¢Åÿà yç¡ àq ¨üà ytlmçÑ?

What do you understand by computer automation?

h½»þ-'y'(Section-'C')

àÅzÅààþ§ÿm Àáã ê£Ü Êâu ZàÎÅàà þ§ÿý £ÜàÊ 300–350 ÎàÎÅA-yàtà tþÀþñ

(Answer the following long-answer type questions with word limit 300-350)   (5x5=25)

ZàÎÅà–1.   Zàà¢þÅàা ¨üàÑ? Zàà¢þÅàা §ÿà w½ªÅ§ÿÎ½à âvàh¥ñ

What is protein? Write classification of protein.

OR

tàèÅày§ÿýÊà¢»þ §ÿ। yàõã ó£Íüà à mñà wvu yÊjÅàà ÑðmÅàây÷àm §ÿ। Íuà©üà §ÿ।àk¥ñ

Explain the principle for formulation of straight chain and ring structure of monosaccharide.

ZàÎÅà–2.   âvqàþþ¨üàÑ? âvqàþþwªÅ§ÿÎ½à ¥wþÊàyàuàáßÿ§ÿý ªÅ½Åà âvàh¥ñ

What is lipid? Write classification and chemical properties of lipid.

OR

¥Åkà¢t §ÿ। á§ÿüà âwàâo §ÿ। Íuà©üà §ÿ।àk¥ñ

Describe the mechanism of action of enzyme.