(ii) Fungi
HeâHeâo

(iii) Rancidity
KeŠJeeme

Unit-IV / FkeâeF-IV

8. (a) Discuss the sources of containmation of food and give two examples each for microbial spoilage of following mentioned foods: 3½

(1) Fresh food

(2) Canned foods

(3) Milk

KeeÅe meo<eCe keâ œeeeÙe keâ eJe<eÙe ce eJemÙeejheJekeâ eueeKeÙe ÙeLee evecveeueeKeÙe GeuueeKeÙe KeeÅe heoeLee keâe me#cepeeJeeÙe eJekeâeÙe keâ oe GoenjCe oeepeS:

(1) Ieepee KeeÅe heoeLe

(2) Ševe e[yyeeyevo KeeÅe heoeLe

(3) oOe

(b) Irradiations can be used as a food preservation method. Explain it. 4

KeeÅe heoeLe keâ mejj#eCe keâ eueS ekeâjCeve keâe GheÙeeie neÙee n~ JÙeeKÙee keâeepeS~

9. Discuss in detail the methods of bacterial recombination. 7½

peeJeeeCJekeâ hevemeÙeepeve heæeÙeÙee keâe eJemÙeejme GuueKe keâeepeS~

A (Printed Pages 4)

S-740

B.Sc. (Part-I) Examination, 2015

CND

Second Paper

(Nutritional Biochemistry & Food Microbiology)

Time Allowed : Three Hours] [Maximum Marks : 50

Note : Answer five questions in all. Question No. 1 is compulsory. Attempt one question from each unit.

keâue heeÙe ØeMvee keâ Gòej oeepeS~ ØeMve me. 1 DeeveJeeÙe n~ ØeÙekeâ FkeâeF me Skeâ ØeMve keâeepeS~

1. Answer the following in brief : 2×10=20

evecveeueeKeÙe keâ Gòej me#ehe ce oeepeS :

(i) Comment on the functions of plasmids.

hueeepce[me keâ keâeÙee hej eŠhheCee keâeepeS~

(ii) Define septicaemia.

jòeâeJe<eCCeÙee keâe heejYeee<eÙe keâeepeS~

(iii) Write down the differences between exotoxin and endotoxin.

SkepeeŠeekemeve SJe S[eŠeekemeve keâ DeÙej eueeKeS~

(iv) Name any two hormones that are secreted from pancreas.
ekeâvne oe neceeve pee DeivÙeeMeÙe me œeeeJele n, keâ veece eueeKeS~

(v) What is homolactic acid fermentation?
neceeueekeškeâ Decue ekeâCJeve keÙee n?

(vi) How many ATPs are formed in the conversion of glucose into pyruvate during glycolysis?
iueeFkeâeeueememe Éeje heeF™JeŠ ce iuekeâepe keâ eJeeveceÙe hej ekeâleve S.še.hee. yevele n?

(vii) What is ammonification?
Deceeeveeheâkeâ Meve me Deehe keÙee mecePele n?

(viii) What do you mean by diabetic ketosis?
ceOecen Decuejòeâlee me Deehe keÙee mecePele n?

(ix) Name any two inhibitors of electron transport chain.
Fuekeševe meJeen ëeKeuee keâ ekeâvne oe evejeOekeâe keâ veece yeleeFS~

(x) What is microbial spoilage of food?
KeeÅe heoeLee keâe me#cepeeJeeÙe eJekeâele keÙee n?

Unit-I / FkeâeF-I

2. Discuss molecular aspect of transport in detail. 7½
meJenve keâ DeeeCJekeâ he#e keâe eJemlele JÙeeKÙee keâeepeÙe~

3. Write short notes: 7½
(a) Passive Diffusion
(b) Electron Transport chain
(c) Nucleic Acids
mee#ehle eŠhheCee eueeKeÙe :
(keâ) heemeJe e[HeÙepeve
(Ke) FuekeŠeve ŠevmeheeŠ Ûeve
(ie) vÙeekeuekeâ Decue

Unit-II / FkeâeF-II

4. Draw and explain Pentose Phosphate Pathway.
hevšepe heâemheâš heeLeJe keâe eÛe$eCe SJe JeCeve keâejÙe~ 7½

5. Explain β oxidation of fatty acids in detail. 7½
JemeeÙe Decue keâe β (yeeše) Deekemee[Meve eJemlele ™he me eueeKeÙe~

Unit-III / FkeâeF-III

6. (a) Draw the growth curve of bacteria. 3½
peeJeeeCJekeâ meJeeæ Je>eâ eÛee$ele keâejS~

(b) Discuss any two methods to measure bacterial growth. 4
peeJeeeCJekeâ meJeeæ keâ ceuÙeekeâve keâjve keâ eueS ekeâvne oe heæeleÙee keâe GuueKe keâeepeS~

7. Write short notes on the following: 2½ × 3
evecveeueeKele hej mee#ehle eŠhheCee eueeKeS:
(i) Viruses
eJe<eeCe