Total No. of Pages: 4

Register Number: **7291**

Name of the Candidate:

DIPLOMA EXAMINATION - 2010

(LIVESTOCK PRODUCTS TECHNOLOGY)

(PAPER – III)

130. TECHNOLOGY OF LIVESTOCK PRODUCTS PACKAGING

(*Time: 3 Hours* *December*)

Maximum: 100 Marks

I. Choose the Correct Answer: **(5 × 1 = 5)**

1. Demerits of Rigid Plastic container is
   a. Cost
   b. Deterioration
   c. Easily fabricated
2. Tyrosine value is a measure of
   a. autolysis
   b. water in meat
   c. thermo stability
3. Major function of oxygen in MAP IS TO
   a. Preserve meat colour
   b. Prevent pack collapse
   c. Delay meat ageing
4. MAP materials should have
   a. Heat sealability
   b. Low cost
   c. Rigidity
5. Advantages of glass bottle is
   a. Less weight
   b. Less microbial contamination
   c. Rigidity

II. Fill up the blanks with suitable words: **(10 × 1 = 10)**

1. The common package material for ghee is _____
2. Timber is sprayed with _____ to make it water resistant.
3. Flexible package film prevents food from _____

4. _____is a typical laminate.
5. Glass packaging has the demerit of _____
6. One of the demerits of the aluminium foil is_____
7. Bulk package of butter is made in _____
8. Disadvantages of gas packaging is _____
9. Packing products in a film of low permeability is called _____
10. The gas _____ is filled as an alternate to oxygen in vacuum packaging.

III. Define any FIVE of the following: (5 × 2 = 10)

1. Parchment paper
2. Cans
3. Polycarbonate
4. Requirement of fresh meat package material
5. Controlled atmospheric packaging
6. Role of oxygen in gas packaging
7. MAP

IV. Write short notes on any FIVE of the following: (5 × 5 = 25)

1. CARTONS IN milk packaging
2. Functions of packaging
3. Mechanism of action of carbon dioxide
4. Polymers
5. Plastics used for meat products package
6. Package of butter
7. Types of MAP.

V. Write an essay on any FIVE of the following: (5 × 10 = 50)

1. Write about the usefulness and advantages of retort pouches
2. Analyze the merits and demerits of rigid and flexible plastic packaging material in dairy industry.
3. Write in detail about the packaging of cheese and ice cream.
4. Give an account of aseptic packaging.
5. Discuss the gases used in gas packaging of meat.

6. Explain the advantages and disadvantages of glass bottles for packaging of milk.
7. Explain packing of frozen and cured meat.

jkpHhf;fk;

I. rhpahd tpiliaj; njh;e;bjLj;bjGJ: **(5 × 1 = 5)**

1. fod gpsh!;of; FLitapd; FiwghL
   (m) tpiy
   (M) vspjpy; bfl;LtpLk;
   (,) vspjpy; cUthf;ff;ToaJ
2. ijnuhrpd; mstpd; gad;ghL
   (m) ,iwr;rp bfLjiy mwpa.
   (M) ,iwr;rpapd; ePh;j;jd;ik mwpa
   (,) ,iwr;rpapd; btg;gj;ij jhfFgpoj;jiy mwpa
3. jpUj;jpa NH;epiy igafg;gLj;jypy; gpuhztha[tpd; g';F
   (m) ,iwr;rpapd; epwj;ij ghJfhj;jy;
   (M) igafg; bghUspd; RU';Fjiy jtph;j;jy;
   (,) ,iwr;rp bfLjiy jtph;j;jy;.
4. jpUj;jpa NH;epiy igafg; bghUl;fs;
   (m) btg;gj;ij jh';ff; ToaJ.
   (M) Fiwe;j tpiy.
   (,) fodj;jd;ik cilait.
5. fz;zho Ftisfspd; gad;ghL
   (m) Fiwe;j vil
   (M) Fiwe;j fpUkp jhf;Fjy;
   (,) fodj;jd;ik

II. nfhol;l ,l';fis epug;g[f: **(10 × 1 = 10)**

1. Rhjhuzkhf bea; igafg;gLj;Jk; bghUs; _____

2. kuj;ij jz;zPhpypUe;J ghJfhf;f _____ g{Rthh;fs;.
3. ,yF jd;ika[ila igafg; bghUl;fs; czit _____ ghJfhf;fpd;wd.
4. _____ xU nkYiw rt;t[.
5. fz;zho Ftis igafg;gLj;jypd; FiwghL _____.
6. mYkpdpa fhfpjj;jpd; FiwghL_____ .
7. btz;izia bkhj;jkhf igafg;gLj;jg; gad;gLk; bghUs; _____.
8. tha[igafg;gLj;jypd; FiwghL _____
9. Fiwe;j gpuhztha[mDkjpf;Fk; Kiwapy; igafg;gLj;Jk; Kiwia _____ vd;W Twth;.
10. btw;wpl igafg;gLj;jypy; gpuhztha[t[f;Fg; gjpyhf epug;gg;gLk; tha[_____

III. VnjDk; Ie;jpw;Fr; rpWFwpg;bgGJ: **(5 × 2 = 10)**

1. ghh;r;bkz;l; jhs;
2. nfd;fs;
3. ghyp fhh;gndl;Lfs;
4. Fsp%l;lg;glhj ,iwr;rpiag; igafg;gLj;Jk; bghUl;fspd; jd;ikfs;
5. fl;Lg;gLj;jg;gl;l NH;epiyapy; igafg;gLj;Jjy;.
6. tha[igafg;gLj;jypy; gpuhztha[tpd; g';F
7. jpUj;jpa NH;epiy igafg;gLj;Jjy;.

IV. VnjDk; Ie;jpw;Fr; rpW tpilasp: **(5 × 5 = 25)**

1. ghiy igafg;gLj;jypy; fhh;l;ld; ml;ilfspd; g';F.
2. igafg;gLj;jypd; gz;g[fs;.
3. igafg;gLj;jypd; fhpakpy tha[bray;gLk; tpjk;.

4. ghypkh;fs;.
5. ,iwr;rpg; bghUl;fis igafg;gLj;Jjypy; gad;gLk; gpsh!;of; bghUl;fs;.
6. btz;iziag; igafg;gLj;Jjy;.
7. jpUj;jpa NH;epiy igafg;gLj;jypd; tiffs.

V. VnjDk; Ie;jpw;F kl;Lk; tphpthd tpilasp: **(5 × 10 = 50)**

1. hplhh;l; milg;ghdpd; cgnahfk; kw;Wk; ed;ikfs; gw;wp vGJf.
2. ghy; gz;iz bjhHpypy; befpH;tw;w kw;Wk; befpGk; jd;ika[s;s igafg;gLj;J bghUl;fspd; ed;ik jPikfis gw;wp Muha;f.
3. ghyhilf;fl;o kw;Wk; gdpf;TH; igafg; gLj;Jjy; gw;wp tphpthf vGJf.
4. Ez;zpaphp g[fh igafg;gLj;J Kiw gw;wp vGJf.
5. ,iwr;rpia tha[igafg;gLj;Jtjpy; cgnahfg;gLk; tha[f;fs; gw;wp tpthjp.
6. ghy; igafg;gLj;Jtjpy; fz;zho ghl;oy;fspd; ed;ik jPikfis tpsf;Ff.
7. ciwe;j kw;Wk; gjdpl;l ,iwr;rp igafg;gLj;Jjy; gw;wp tpsf;Ff.

%%%%%