## B.V.Sc. & A.H. (Part – ) Examination – 2017 of the Five-Year Degree Course

## LIVESTOCK PRODUCTS TECHNOLOGY PAPER-I

|                 | LR-1   |                               |      |
|-----------------|--|-------------------------------|------|
| ime:            | Three Hours  |                               |      |
|                 | Maximum  | Marks:                        | 90   |
| ection          | A: Milk and Milk Products Technology: LPT-311 B: Abattoir Practices and Animal Products Technology: LPT-312 C: Meat Science: LPT-321 | Marks :<br>Marks :<br>Marks : | 30   |
| struct          | ions:  | water to                      | ,,,  |
| 1)              | Attempt all questions  |                               |      |
| 2)              | Answer of all questions is to be written in the space provided the question in question-booklet.                                     | along w                       | itl  |
| 3)              | Overwriting is not allowed in the objective type question.   |                               |      |
|                 | SECTION – A  |                               |      |
| ilk and         | Milk Products Technology: LPT-311 Maximum  | Marks 3                       | 0    |
| l Fill i        | n the blanks   | 0.75 = 4.5                    |      |
| Doub            | le toned milk contains percen  |                               | ~,   |
| Temp            | erature-time requirement for HTST pasteurization is  |                               |      |
|                 | fuge is a centrifuge that separates from mi  |                               |      |
| AMU.            | L was established in the year  |                               |      |
| The th          | ird phase of Operation Flood ended in  |                               |      |
| The va          | rious test performed at the receiving dock are called  |                               |      |
| Choos<br>1 or 2 | the most suitable answer and write the number of the corre<br>or 3 or 4 in the space given against each sub question: (6x            | ect ans v<br>0.75 = 4         | ve 1 |
| Choa is         | s atype of milk product:   | ( )                           | )    |
|                 | Fermented     Partially dehydrated   |                               |      |
|                 | 3. Dried   |                               |      |
|                 | 4. Coagulated  |                               |      |
|                 |  |                               |      |

| ii) Standardization of   | milk refers to:                |   |      |
|--------------------------|--------------------------------|---|------|
| I A                      | II US CITICITE OF THE          | The second second                           |      |
| 2. Se                    | paration of milk               |   |      |
|                          | eating of milk                 |   |      |
| 4. No                    | one                            |   |      |
| iii) Principal carbo hyc | lrate of milk is:              | (   |      |
| 1. GI                    | ucose                          | (   | 3    |
| 2. Ga                    | lactose                        |   |      |
| 3. La                    | ctose                          |   |      |
| 4. Fn                    | ictose                         |   |      |
|                          | milk is measured with:         | ,   |      |
|                          | tyrometer                      | (   |      |
|                          | fractometer                    |   |      |
|                          | tometer                        |   |      |
|                          | drometer                       |   |      |
| v) Phosphatase test is 1 | used to assess the quality of: |   |      |
| 1. Ster                  | rilized milk                   | (   | )    |
| 2. Pasi                  | teurized milk                  |   | 1    |
| 3. Bac                   | to fuged milk                  |   |      |
| 4 Star                   | dardized mill-                 |   |      |
| vi) Cow milk is general  | lly preferred for making:      |   |      |
| 1. Cha                   | nna                            | (   | 1    |
| 2. Pane                  | eer                            | ,   | ,    |
| 3. Kho                   | a                              |   |      |
| 4. All o                 | of the above                   |   |      |
|                          |                                |   |      |
| Q.3 Attempt any six or   | it of the follow:              |   |      |
| should be in 2 to 3      | lines. Ans                     | Worofass                                    |      |
| i) Homoon.               |                                | wer of each que                             | stic |
| i) Homogenization        |                                | (0x1.5=9)                                   |      |
|                          |                                | estions. Answer of each question (6x1.5= 9) |      |
|                          |                                |   |      |
|                          |                                |   |      |
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| ii) Rost C               |                                |   |      |
| ii) Bactofugation:       |                                |   |      |
| ii) Bacto fugation:      |                                |   |      |

| iii)<br> | MMPO:            |               | <br> | <br> |
|----------|------------------|---------------|------|------|
|          |                  |               | <br> | <br> |
| iv)      | AMUL:            | e and thought |      |      |
| v)       | Butter milk:     |               | <br> |      |
| <br>vi)  | Paneer:          |               |      | <br> |
|          |                  |               |      |      |
| vii)     | Specific gravity | :             |      | <br> |
|          |                  |               |      |      |

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|---|---|
| viii) Titrable acidity:   |   |
|   |   |
|   |   |
| Q.4 Attempt any two out of the following three question question should be in 5 to 8 lines. | ns. Ans wer of each (2x3 =              |
| i) Tetra packaging of milk:   |   |
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| i) Organic milk:  | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |
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## SECTION - B

| The loss   | W. I.PT-312    | M             |                          |
|--|----------------|---------------|--------------------------|
| Abattoir Practices and Animal Products Technolog   | ,y. E1 1-512   | Maximum (6x0) | $Marks_{30}$ $.75 = 4.5$ |
| Q.6 Fill in the blanks.  |                |               | 13 = 4.5                 |
| ot in of import care   |                |               | \                        |
| transidase is also called  |                |               |                          |
|  | is (           | called sweat  | broot                    |
| ii)  |                |               | oread.                   |
| is forbidden in case of  |                |               |                          |
| vi) Post mortelli is for access when vi) Insulin can be obtained from                                |                |               |                          |
| (1) mount out to the answer and write t  | he number of   | the           |                          |
| Q.7 Choose the most suitable answer and write to<br>1 or 2 or 3 or 4 in the space given against each | ch sub questio | n: (6x0.7     | answer $5 = 4.5$         |
| i) Heparin is obtained from:   |                | ,             |                          |
| 1. Intestine   |                | (             | )                        |
| 2. Lungs   |                |               |                          |
| 3. Liver   |                |               |                          |
| 4. All of the above  |                |               |                          |
| ii) Maws are prepared from:  |                | ,             |                          |
| 1. Small intestine of hog  |                | (             | )                        |
| Blind gut of hog     Stomach of hog  |                |               |                          |
| 4. None of the 1   |                |               |                          |
| iii) Gas anaesthesia is generally preferred for:   |                |               |                          |
| 1. Pigs generally preferred for:   |                | ,             |                          |
| 2. Buffalo   |                | (             | )                        |
| 3. Poultry   |                |               |                          |
| 4. Rabbit  |                |               |                          |
| iv) Lard is a rendered fat of:   |                |               |                          |
|  |                |               |                          |
| 2. Cattle<br>3. Sheep  |                | ( -           | )                        |
| 4. Goat  |                |               |                          |
| Hide, which t  |                |               |                          |
| 1. Green how the   |                |               |                          |
| 4. Goat Hide, which has not been branded is known as: 1. Green hide 2. Kip 3. Nation 1.              |                |               |                          |
| 3. Native hide   |                | (             | )                        |
| 4. Fallen hide   |                |               |                          |
| nide   |                |               |                          |

| ant of light in inspection area is   |                           |
|--|---------------------------|
| nequire ment of the  | ( )                       |
| Requirement of light in inspection area is:  | ( )                       |
|  |                           |
| 2 110 Lux  |                           |
| 4. 50 Lux  |                           |
| 4. 50 2  |                           |
| s Aftempt any $six$ out of the following eight questions should be in 2 to 3 lines.  |                           |
| 8 Aftempt any six out of the following eight questions should be in 2 to 3 lines.  | . Answer of each question |
| 8 Aud be in 2 to 5 thes.   | (6x1.5=9)                 |
| show   | (341.5 ))                 |
| Emergency slaughter:   |                           |
| 1) Ellers  |                           |
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| and the same of th |                           |
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| l. ovetem:   |                           |
| ii) Freibank system:   |                           |
| u)   |                           |
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| A 100 M 100  |                           |
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| iii) Dressing percentage:  |                           |
| iii) Dressing percentage.  |                           |
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| A NAME OF STREET OF STREET ASSESSMENT ASSESS |                           |
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| iv) HACCP:   |                           |
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| v) Fiber diameter:                |   |
|                                   |   |
|                                   |   |
| cuit Cuine.                       |   |
| vi) Suint:                        |   |
|                                   |   |
|                                   |   |
| vii) Mohair:                      |   |
|                                   |   |
|                                   |   |
| viii) DFD;                        |   |
|                                   |   |
|                                   |   |
| Q.9 Attempt any two out of the fi | following three questions. Answer of each $(2x3 = 6)$ |
| Specialty fibres:                 | thes. questions. Answer of each (2x3 = 6)             |
|                                   |   |
|                                   |   |
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| I/16/S1/3 <sup>rd</sup> yr/2017/M |   |

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|                              |                           |                                       |                |
|                              | ii) Leather:              |                                       |                |
| _                            |                           |                                       |                |
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| 1 1                          | iii) Lairage:             |                                       |                |
|                              |                           |                                       |                |
| * 1*                         |                           |                                       |                |
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|                              |                           |                                       |                |
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| *   1                        |                           |                                       |                |
|                              |                           |                                       |                |
|                              |                           |                                       | page 1         |
|                              | LPT-I/16/S1/3rd vr/2017/M | В                                     |                |

Q.10 Answer the following question in 1-2 pages (attempt any one). (1x6 = 6)

Describe in detail about important sections required in modern abattoir with

Describe in detail about with suitable diagram?

ii) Describe in detail about utilization of glandular by-products for pharmaceutica purpose?

|   | SECTION - C  |                                     |
|---|--|-------------------------------------|
| Meat Science: LPT<br>Q.11 Fill in the bla | Г-321<br>nks. М  | aximum Marks 30                     |
| Q.11 Fill III Car                         | City packaging   |                                     |
| i) etaling                                | packaging is generally used for large  | and uno                             |
| ii) Most prefe                            | erred method of meat preservation is   | and theven cuts.                    |
|   | ng method is generally preferred for   |                                     |
| 14/                                       | ition is usually encountered in  | cuts.                               |
| v) Hurdle tec                             | hnology is used for  | •                                   |
| vi) Meat diffe                            | rentiation can be done by  |                                     |
| Q.12 Choose the or 2 or 3 or              | most suitable answer and write the number of 4 in the space given against each sub question: | the correct answer $(6x0.75 = 4.5)$ |
|   | of unpackaged meat leads to:   |                                     |
| 1.  | Freezer burn   | ( )                                 |
| 2.  | Dehydration  |                                     |
| 3.  | Discolouration   |                                     |
| 4.  | All of the above   |                                     |
|   | Giblet includes:   | (                                   |
|   | Heart  |                                     |
|   | Liver  |                                     |
|   | Gizzard  |                                     |
| 4.  | All of the above   |                                     |
|   | embrane is mainly made up of:  | (                                   |
| **  | Calcium carbonate  |                                     |
|   | Magnesium sulphate   |                                     |
| 3.  | Calcium acetate  |                                     |
| 4.  | Calcium sulphate   | -                                   |
| iv) Stroma p                              | protein found in meat is:  | (                                   |
| 1.  | Collagen   |                                     |
| 2.  | Reticulin  |                                     |
| 3.  | Elastin  |                                     |
| 4.  | All of the above   | -                                   |
| v) Preserva                               | tion of smoked meat is due to:   | (                                   |
| 1.  | Surface dehydration  |                                     |
| 2.  | Lowering surface pH  |                                     |
| 3   | Antioxidant property   |                                     |
| 4   | All of the above   |                                     |
| 1.  |  |                                     |

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|  |                                | ,                             |
| vi) Which one is used as binder in  1. Wheat flour  2. Potato starch  3. Corn flour  4. Skim milk powder |                                | ( )                           |
| Q.13 Attempt any six out of the folloquestion should be in 2 to 3 lin                                    | owing eight questions. Answes. | er of each<br>(6x1.5=9        |
| i) Meat emulsion:  |                                |                               |
|  |                                | ns. Ans wer of each (6x1.5=9) |
|  |                                |                               |
| ii) Water holding capacity:  |                                |                               |
|  |                                |                               |
|  |                                |                               |
| iii) Marbling:   |                                |                               |
|  |                                |                               |
|  |                                |                               |
| Cold shortening:   |                                |                               |
|  |                                |                               |
|  |                                |                               |
|  |                                |                               |
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LPT-1/16/91/201

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| Modified atmosphere packaging:  |            |
|   |            |
|   |            |
| vi) Consumer panel:   |            |
| VI) Comments  |            |
|   | ******     |
|   |            |
| vii) ISO-9000:  |            |
|   |            |
|   |            |
| viii) Ring precipitation test:  |            |
|   |            |
| 14 Attempt any <u>two</u> out of the following three questions. Answer of eac question should be in 5 to 8 lines. | h<br>2x3 = |
| i) Meat proteins:   |            |
|   |            |
|   |            |
|   |            |
| Paj   | ge 19 0    |

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| ii) Poultry industry by-pro            | oducts:               |      |      |
| ii) Poultry made                       |                       | <br> |      |
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| ii) Egg structure:                     |                       |      |      |
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| 1/3 <sup>rd</sup> yr/2017/M            |                       |      |      |
| 74//11////                             |                       |      |      |

D

Q.15 Answer the following question in 1-2 pages (attempt any one). (126 = 6)

i) Write down in detail about post mortem changes takes place during conversion of muscle to meat?

ii) Enlist various meat preservation techniques and describe the freezing and curing techniques in detail?