Please write your Roll Number above this line

Total Number of pages 16

B.V.Sc. & A.H. (Third Professional) Examination – 2025

Livestock Products Technology Paper –II

(MSVE 2016)

To be filled by the candidate:

Candidate's Roll Number:

In figure .....

In words .....

Candidate's Enrolment Number: .....

Day and date of examination: .....

Please see for general instructions overleaf.

Signatures of invigilators verifying the details filled by the candidate

Signature of invigilator 1: ..... 2: .....

Candidate should not write anything below this line

Marks to be filled by the examiner:

Section A	
Q. No.	**Marks**
1.	
2.	
3.	
4.	
5.	
Total	

Total Marks obtained:

In figures: ..... In words: .....

Signature of examiner: .....

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B.V.Sc. & A.H. (Third Professional) Examination – 2025
Livestock Products Technology Paper –II
(MSVE 2016)

Time: Three Hours **Maximum Marks: 100**
Weightage: 20

Unit-3 (Abattoir Practices and Animal By-products Technology)
Unit-4 (Meat Science)

Instructions:
1) Attempt all questions
2) Answer of all questions is to be written in the space provided along with the question in question-booklet.
3) Overwriting is not allowed in the objective type question.

Q.1 Fill in the blanks. **(20x 0.5 = 10)**

1.1 The most abundant fatty acid in meat fat is _____

1.2 _____ (name of vitamin) is present in good quantity in poultry meat.

1.3 PSE stands for _____

1.4 _____ refers to stiffening of muscles after death.

1.5 The iodine number for horse fat is _____

1.6 The stable pink pigment responsible for attractive cured meat colour is _____

1.7 In smoked meat products, _____ acts mainly as chief bacteriostatic compound.

1.8 _____ refers to subdivision or reduction of raw meat into meat pieces or particles.

1.9 _____ is an emulsion type sausage prepared from the meat of older animals.

1.10 _____ refers to the scientific method of containing a food for optimum protection till it reaches the ultimate consumer.

1.11 Flavour is a complex sensation comprising mainly of taste and _____

1.12 The outer protective covering of an egg is shell which comprises around _____ of its total weight.

1.13 Red rot in eggs is caused by _____

1.14 Blood meal contains _____ protein.

1.15 _____ is the rendered fat of the hog with a titre less than 40°C.

1.16 For distances over 500 km, it is advisable to transport animals by _____.

1.17 _____(enzyme) is obtained from the mucosal lining of the hog stomach.

1.18 _____ is a casing prepared from clean pig stomach.

1.19 The post-mortem judgement for anthrax affected carcass is _____

1.20 The intermuscular fat deposition in carcass is also known as _____

Q.2 Choose the most suitable answer and write the number of the correct answer 1 or 2 or 3 or 4 in the space given against each sub question: (20x0.5 = 10)

2.1 _____ is one of the most popular products among the ground meat items and generally used as filling for burger roll or sandwich. ( )

1. Meat patty
2. Luncheon meat
3. Meat balls
4. Meat loaves

2.2 Summer sausage is ( )

1. Pepperoni
2. Hot dog
3. Salami
4. Thuringer

2.3 Important intrinsic factor(s) which affect the growth of micro-organisms in meat is/are ( )

1. pH
2. Water activity
3. Redox potential
4. All of the above

2.4 The ideal time for conducting sensory evaluation of meat and meat products is ( )

1. Late morning
2. Late afternoon
3. Both a and b
4. None of the above

2.5 In water glass treatment for preservation of eggs, following ingredient is used ( )

1. Calcium carbonate
2. Magnesium carbonate
3. Sodium silicate
4. Potassium silicate

2.6 Average conversion ratio of raw material to cracklings in Dry rendering ( )

1. 1:1
2. 2:1
3. 3:1
4. 4:1

2.7 _____ is freshly acquired bone from slaughter house ( )
1. Green bone
2. Desert bone
3. .Fallen bone
4. .All of the above

2.8 Which of the following microbial count does not come under food safety criteria? ( )
1. Aerobic Plate Count
2. *Salmonella sp.*
3. *Bacillus cereus*
4. *Listeria monocytogenes*

2.9 Which of the following statement is incorrect regrading gelatine production? ( )
1. 60°C yields highest quality gelatin
2. 65-70°C yields medium quality gelatine
3. 80°C yields low quality gelatine
4. Boiling point (100°C) yields best quality gelatine

2.10 Heparin is obtained from ( )
1. Lung
2. Liver
3. Intestine
4. All of the above

2.11 Stamping ink is a solution of 1-2% of fuschine in _____ ( )
1. Citric acid
2. Sulphuric acid
3. Acetic acid
4. Nitric acid

2.12 Which of the following organ is not a part of pluck? ( )
1. Trachea
2. Oesophagus
3. Heart
4. Liver

2.13 Tyrosine value estimates the extent of _____ breakdown in meat. ( )
1. Fat
2. Protein
3. Carbohydrate
4. Vitamin

2.14 The apex regulatory body for maintaining standards for food in India is ( )
1. APEDA
2. MPEDA
3. BIS
4. FSSAI

2.15 Meat Food Products Order was promulgated in the year ( )
1. 1960
2. 1973
3. 1995
4. 2025

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2.16 ISO-14000 deals with ( )
1. Food safety management system
2. Environment management system
3. Quality management system
4. All of the above

2.17 The per capita availability of meat for the year 2023-24 was _____ kg/annum ( )
1. 6.52
2. 6.82
3. 7.10
4. 7.39

2.18 _____ is first principal byproduct obtained after sticking of food animal. ( )
1. Blood
2. Skin
3. Hide
4. Tear

2.19 Evernazoin method is also known as ( )
1. Halal
2. Jhatka
3. Jewish
4. Neck stab method

2.20 Which of the following is not a primal cut of pork? ( )
1. Ham
2. Belly
3. Boston butt
4. Breast

Q.3 Attempt any ten out of the following twelve questions. Answer of each question should be in 2 to 3 lines. (10x2.0= 20)

3.1 Define abattoir

3.2 Define HACCP

3.3 Explain flaying

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3.4 Define BOD

3.5 Define slaughter of food animals

3.6 Explain Neat's foot oil

3.7 Define sarcomere

3.8 Explain hurdle concept

3.9 Define WHC

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3.10 Explain the concept of ageing of meat

3.11 Define sausage with examples

3.12 Define thermo-stabilization of eggs

Q.4 Attempt any six out of the following eight questions. Answer of each question should be in 8 to 10 lines. **(6 x 6 = 36)**

4.1 Differentiate between emergency and casualty slaughter.

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4.2 Differentiate between cold shortening and thaw rigor.

4.3 Differentiate between dry and wet rendering.

4.4 Nutritive value of meat

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4.5 Organic meat products

4.6 Structure of egg with well labelled diagram

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4.7 Preslaughter care of food animals

4.8 Steps in slaughtering and dressing of pig

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Q.5 Answer the following question in 1-2 pages (attempt any two). **(2x12 = 24)**

5.1 Draw well labelled diagram of state of art modern abattoir. Mention the functions of each section of abattoir in brief.

5.2 Explain the principle involved in meat emulsion formation. Write procedure for preparation of emulsion-based meat products?

5.3 Explain the steps involved in conversion of muscle to meat.

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