MEAT TECHNOLOGY

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| 1 | Natural casings are prepared from | | | | | |  |  |
|  | a | Mucosa | b | submucosa | c | muscular layer | d | serosa |
| 2 | Most commonly used barrier bag for vacuum packaging are | | | | | | | |
|  | a | polyethylene | b | poly vinylidene | c | polypropylene | d | polyester |
| 3 | Frankfuter is a typical example of | | | | | |  |  |
|  | a | uncooked sausage | b | cooked unsmoked  sausage | c | Cooked smoked  sausage | d | Uncooked smoked  sausage |
| 4 | Cold shortening of muscle occurs when pre-rigor muscle is exposed to a temperature between | | | | | | | |
|  | a | -5 to –10 oC | b | 0 to 15 oC | c | -1.5 to –3 oC | d | -20 to –30 oC |
| 5 | Myofibrillar proteins are | | | | | |  |  |
|  | a | globular | b | fibrous | c | globular and fibrous | d | none of the above |
| 6 | Bloom is referred as the property of | | | | | |  |  |
|  | a | fresh carcass | b | frozen carcass | c | cooked meat | d | smoked meat |
| 7 | is referred as inspectors lymph node | | | | | |  |  |
|  | a | bronchial | b | mediastinal | c | supra scapular | d | poplitial |
| 8 | Livestock unit is | | | |  |  |  |  |

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|  | a | 1 adult bovine  : 2 pigs : 3  calves : 5 sheep | b | 1 adult bovine : 3 pigs : 5 calves  : 10 sheep | c | 1 adult bovine :  3 pigs : 3  calves : 5 sheep | d | 1. adult bovine : 2. pigs : 3   calves : 6 sheep |
| 9 | The colour of the pigment nitrosohemochromogen is | | | | | | | |
|  | a | brown | b | pink | c | red | d | bright red |
| 10 | Casings prepared from small intestine of sheep are called | | | | | | | |
|  | a | weasand | b | middles | c | bungs | d | rounds |
| 11 | Average protein content of carcass meal | | | | | |  |  |
|  | a | 50% | b | 30% | c | 70% | d | 40% |
| 12 | Cytoplasm of muscle fiber is called as | | | | | |  |  |
|  | a | protoplasm | b | sarcoplasm | c | sarcomere | d | ground substance |
| 13 | Bacterial spoilage in chilled meat is due to bacteria of group | | | | | | | |
|  | a | psychrophilic | b | mesophilic | c | thermophilic | d | microaerophilic |
| 14 | Meat pattice are cooked in an oven to an internal temperature of | | | | | | | |
|  | a | 70 oC | b | 90 oC | c | 60 oC | d | 85 oC |
| 15 | Glycogen content of normal bovine muscle ranges from | | | | | | | |
|  | a | 0.5-1.3% | b | 0.1-1% | c | 2 – 3.5 % | d | 1- 3 % |
| 16 | When meat is frozen slowly the largest crystals are formed | | | | | | | |
|  | a | inside muscle fiber | b | between muscles | c | out side muscle fiber | d | between epi and perimysium |
| 17 | The temperature of the retort during canning of meat chunks is | | | | | | | |
|  | a | 100 oC | b | 120 oC | c | 150 oC | d | 200 oC |
| 18 | The radiation dose of is sufficient to kill the pathogenic bacteria. | | | | | | | |
|  | a | 0.1 M rad | b | 1 M rad | C | 1.5 M rad | d | 2 M rad |
| 19 | Water activity in intermediate moisture foods is maintained between | | | | | | | |

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|  | a | 0.6 – 0.85% | |  | b | 0.3 – 0.4 % |  |  | c | 0.8 – 1 % | |  | d | 0.2 – 0.5 % |
| 20 | Freezing point of meat lies between | | | | | | | | | |  |  |  |  |
|  | a | - 1 to –1.5 oC | | | b | - 2 to – 0 oC | |  | c | 0 to – 3 oC | |  | d | - 1 to 0 oC |
| 21 | Scalding temperature in pigs is about | | | | | | | | | | |  |  |  |
|  | a | 50 - 55 oC | |  | b | 62 - 64 oC |  |  | c | 70 - 85 oC | |  | d | 90 oC |
| 22 | Animals should be bled within seconds after electrical stunning to avoid muscle splashing. | | | | | | | | | | | | | |
|  | a | 60 sec |  |  | b | 30 sec |  |  | c | 90 sec |  |  | d | 10 sec |
| 23 | The end product of ATP break down responsible for flavour is | | | | | | | | | | | | | |
|  | a | hypoxanthine | |  | b | furfural |  |  | c | creatinine | |  | d | furfural |
| 24 | The characteristic yellow colour of egg yolk is due to | | | | | | | | | | | | | |
|  | a | carotene |  |  | b | vitamin- a |  |  | c | biotin |  |  | d | xanthophyll |
| 25 | Brucellosis is also known as | | | | | | | | | |  |  |  |  |
|  | a | BVD | b | bangs diseased | | | c | black disease | | | d | mucosal disease | | |
| 26 | Since Jan 2001 Britain is facing a severe crisis in beef production due to out break of | | | | | | | | | | | | | |
|  | a | FMD |  |  | b | RP |  | c | Mad cow disease | | | | d | Brucellosis |

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| 27 | Strength of pickle solution is measured by | | | | | |  |  |
|  | a | Barometer | b | Torry meter | c | Gyrometer | d | Salinometer |
| 28 | Emulsion is prepared in | | | |  |  |  |  |
|  | a | Tumbler | b | Homogenizer | c | Flaker | d | Bowl chopper |
| 29 | The carcinogenic compounds in smoke are | | | | | |  |  |
|  | a | benzyl pyrenes | b | carbonyls | c | aldehydes | d | PAH |
| 30 | Case on systems of dressing is used in \_ | | | | | |  |  |

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|  | a | cattle | b | buffalo | c | sheep | d | pig |
| 31 | Each muscle fiber is covered by | | | | |  |  |  |
|  | a | perimycium | b | epimysium | c | endomysium | d | fascia |
| 32 | Bacon is prepared from | | | |  |  |  |  |
|  | a | boston butt | b | leg portion | c | picnic shoulder | d | bellies |
| 33 | Multiplication of bacteria is highest during phase of growth. | | | | | | | |
|  | a | lag phase | b | log phase | c | phase of + ve acceleration | d | stationary phase |
| 34 | The indicator of fecal contamination is | | | | | |  |  |
|  | a | E.coil | b | Salmonella | c | S.faecalis | d | S. bovis |
| 35 | Iodine no. in horse fat is . | | | |  |  |  |  |
|  | a | 70 - 85 | B | 35 – 46 | c | 50 – 70 | d | 30 - 50 |
| 36 | Dressed chicken can be stored in a refrigerator at 2oC for . | | | | | | |  |
|  | a | 7 days | b | 2 days | c | 10 days | d | 15 days |
| 37 | The fat content of chicken egg albumen is | | | | | |  |  |
|  | a | 0.2 % | b | 10 % | c | 15 % | d | 20 % |
| 38 | Green rot in egg is caused by | | | | | |  |  |
|  | a | Pseudomonas | b | Staphylococcus | c | Serratia | d | Cladosporium |
| 39 | During ageing the lysosomal enzymes act at the pH | | | | | |  |  |
|  | a | below pH 6 | b | 7 – 9 | c | 10 | d | 12 |
| 40 | The optimum concentration of CO2 gas in stunning of pigs is | | | | | | | |
|  | a | 70% | b | 20% | c | 50% | d | 90% |
| 41 | Parasites in meat such as *Cysticercus bovis* and *Trichenella spiralis* are killed by | | | | | | | |

a 0.01 – 0.1 M rad b 0.5 – 1 M rad c 1 – 2 M rad d 10 M rad

1. The voltage during electrical stunning of sheep is usually

a 40 V b 75 – 80 V c 90 V d 120 V

1. Speed of freezing of meat is the time taken to pass from

a 0 to -5 0 C b +2 to -2 0 C c +1 to -1 0 C d +5 to -2 0 C

1. Antibacterial action of cloves is due to

a eugenol b isothiocyanate c carbonic acid d phenol

1. Wet dog flavour is typical of

a AFD meat b Irradiated meat c chilled meat d cooked meat

1. The product corned beef, the corn refers to

a Corn flavour b granulated salt c Na – Nitrite d polyphosphate

1. A minimum of nitrite is necessary to ensure normal colour and flavour in cured meats.

a 20 – 40 ppm b 100 ppm c 200 ppm d 10 ppm

1. Bound water forms about % of the total water content in meat a 10 % b 5 % c 20 % d 25 %
2. Ultimate pH of meat protein is

a 4.5 b 5.4 c 5 d 4

1. The moisture content of AFD meat is

a 2% b 10% c 15% d 20%

1. W.B. Shear force meter measure the strength required in of meat. a biting b tearing c chewing d cutting
2. Thaw rigor is caused by the activity of enzyme

a lysozyme b protease c ATPase d lipase

1. For preparing fermented sausages the culture is used.

a Lactobacillus b Leuconostock c Achromobactor d Psedomonas

1. ions are responsible for muscle contraction

a Na b K c Ca d SO4

1. Recovery of fat from the dead carcasses is called as

a rendering b simmering c braising d pasteurization

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| 56 | Humidity in carcass chilling room should be about | | | | | | | |  |
|  | a | 90% | b | 40% | c | 50% |  | d | 60% |
| 57 | Cabbage odour due to methanediol in sliced vacuum packed bacon is due to | | | | | | | | |
|  | a | Pseudomonas | b | Proteus inconstans | c | Pediococcus |  | d | Micrococcus |
| 58 | The black colouration in bone taints is due to production of | | | | | | | | |
|  | a | H2S gas | b | NH3 | c | CO2 |  | d | mercaptans |
| 59 | Heparin is extracted from | | | | | |  |  |  |
|  | a | lung | b | liver | c | spleen |  | d | adrenals |
| 60 | The process of tanning sheep skin with fish oil is popularly known as | | | | | | | | |
|  | a | shammoying | b | dying | c | bating |  | d | desliming |
| 61 | Animal casings are mainly graded based on their\_ | | | | | | |  |  |
|  | a | length | b | diameter | c | colour |  | d | moisture content |
| 62 | Whiskers on meat surface are caused by | | | | | |  |  |  |
|  | a | penicillin | b | tamnidium | c | aspergillus |  | d | achromobactor |
| 63 | In meat product preparation maida is used for | | | | | | |  |  |
|  | a | flavour | b | colour | c | water binding |  | d | fat binding |
| 64 | The famous traditional meat products in Jammu and Kashmir is | | | | | | | | |
|  | a | Rapka | b | Momo | c | Rista |  | d | Kola urandi |
| 65 | Measly beef is an another name for | | | | | |  |  |  |
|  | a | Cysticercus tenucollis | b | Cysticercus bovis | c | Cysticercus cellusae |  | d | Multiceps multiceps |
| 66 | Tyrosine value estimates the extent of breakdown in meat. | | | | | | | | |
|  | a | fatty acids | b | protein | c | carbohydrate |  | d | vtiamin |
| 67 | Average generation time for bacteria is | | | | | |  |  |  |
|  | a | 20 min | b | 10 min | c | 30 min |  | d | 40 min |
| 68 | Carter’s agar is used for cultivation of | | | | | |  |  |  |
|  | a | E.coli | b | Fungus | C | Proteus | D | Stapohylococcus | |
| 69 | gives acid fast reaction on Ziehl Neelsen’s staining. | | | | | | | |  |
|  | a | Closrtidium | b | Salmonella | c | Campylobactor | | d | Tuberculosis |
| 70 | Example of spirochets is | | | |  |  |  |  |  |
|  | a | Leptospira | b | Vibrio | c | Mycoplasma |  | d | Klebsiella |

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| 71 | is the most tender cut in beef carcass. | | | | | | | | |  |  |  |  |
|  | a | Rump |  | b | Short plate | |  | c | Chuck and blade | | | d | Sirloin |
| 72 | Colour of rabbit meat is | | | | | | |  |  |  |  |  |  |
|  | a | pale brown |  | b | red |  |  | c | cherry red |  |  | d | pink |
| 73 | Main objective of adding salt during meat emulsion preparation is | | | | | | | | | | | | |
|  | a | to extract  myofibrillar proteins |  | b | antioxidant | |  | c | antimicrobial | |  | d | flavour |
| 74 | is the GRAS chemical additive | | | | | | | | |  |  |  |  |
|  | a | citric acid | b | KMnO4 | | C | Sodium hypochlorite | | |  |  | d | benzylpyrines |
| 75 | Technical fat is used in manufacture of | | | | | | | | |  |  |  |  |
|  | a | soap |  | b | fat liquor |  |  | c | lubricant |  |  | d | edible oils |
| 76 | Fatty acid composition of oils can be estimated by | | | | | | | | | | |  |  |
|  | a | TLC |  | b | GLC |  |  | c | Refractomete | | r | d | AAS |
| 77 | Average dressing % in Indian goats is about | | | | | | | | | | |  |  |
|  | a | 35-50% |  | b | 55% |  |  | c | Above 70% |  |  | d | 60% |
| 78 | instrument is used to measure the smoke density in smoke houses. | | | | | | | | | | | | |
|  | a | Electric eye |  | b | Plannimeter | |  | c | Ameter | d | Densitometeric scan | | |
| 79 | Alarm water content in fat free dehydrated meats is | | | | | | | | | | |  |  |
|  | a | 15% |  | b | 30% |  |  | c | 40% |  |  | d | 50% |
| 80 | Ruffle fat is a fat around | | | | | |  |  |  |  |  |  |  |
|  | a | kidney |  | b | mesentery | | c | thoracic region | |  |  | d | rectum |
| 81 | Haugh index is used to determine the internal quality of | | | | | | | | | | | | |
|  | a | milk |  | b | meat |  |  | c | paneer |  |  | d | egg |
| 82 | initiated the concept of canning of foods. | | | | | | | | |  |  |  |  |
|  | a | B.Franklin |  | B | R.A.Lawrie | |  | c | N.Appert |  |  | d | R.Hamm |
| 83 | The food poisoning caused by Bacillus cereus is referred as | | | | | | | | | | | | |
|  | a | infection |  | b | infestation | |  | c | intoxication | |  | d | ingestion |
| 84 | The quality standards for foods all over the world are monitored as per | | | | | | | | | | | | |
|  | a | ISO |  | b | APEDA |  |  | c | OIE |  |  | d | FAO |
| 85 | Yellow fever is an example of zoonoses | | | | | | | | |  |  |  |  |

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|  | a | direct zoonoses | b | meta zoonoses | | c | cyclo zoonoses | | d | sapro zoonoses |
| 86 | An association between two organism in which both are benefited is | | | | | | | | | |
|  | a | symbiosis | b | synnenecrotic | | c | antagonism | | d | mutualistic |
| 87 | Mycobacterium piscium causes T.B.in | | | | | | |  |  |  |
|  | a | cattle | b | sheep |  | c | frog | | d | birds |
| 88 | Anthrax is also known as | | | | |  |  |  |  |  |
|  | a | Charbon | b | Struck |  | c | Weil’s disease | | d | Undulant fever |
| 89 | Clenbutarol is an | | | | |  |  |  |  |  |
|  | a | growth promoter |  | b | antiseptic |  | c | antibiotic | d | lipolytic agent |
| 90 | are the principal host for Leptospirosis | | | | | | | |  |  |
|  | a | cattle | b | man |  | c | lizard | | d | rodent |
| 91 | All organophosphorous compounds produce residue in tissues. | | | | | | | | | |
|  | a | little or no | b | moderate | | c | high | | d | heavy |
| 92 | is taken for toxic residue analysis. | | | | | | | |  |  |
|  | a | liver | b | heart |  | c | spleen | | d | intestine |
| 93 | The method of packing dressed broiler chicken is known as | | | | | | | | | |
|  | a | trussing | b | wrapping | | c | tetrapacking | | d | none of the a,b,c |
| 94 | Scalding temperature for turkey is usually - | | | | | | | |  |  |
|  | a | 60o C for 60 sec | b | 53 o C for 120 sec | | c | 60o C for 120 sec | | d | 93 o C for 5 sec |
| 95 | Meat bone ratio in dressed broiler is approximately | | | | | | | |  |  |
|  | a | 4:1 | b | 2:1 |  | c | 3:1 |  | d | 5:1 |
| 96 | National Research Center on meat is situated in | | | | | | | |  |  |
|  | a | Bombay | b | Calcutta | | c | Hyderabad | | d | Delhi |
| 97 | In India, processed meat products from chicken are manufactured by | | | | | | | | | |
|  | a | Lipton | b | Venkys | | c | Hindustan liver | | d | Griffon |
| 98 | Meat analogues are prepared from | | | | | |  |  |  |  |
|  | a | pork | b | vegetable proteins | | c | beef | | d | mutton |
| 99 | The enzyme present in chalyza of chicken gee which has antibacterial effect is | | | | | | | | | |
|  | a | lysozyme | b | amylase | | c | protease | | d | pectinase |

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| 100 | Meat containing sarcocyst is | | | |  |  |  |  |
|  | a | rejected on  aesthetic ground | b | rejected due to zoonoses | c | passed | d | passed with  caution of cooking |

# ANSWER KEY

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| **Sr no.** | **Answer** | **Sr no.** | **Answer** | **Sr no.** | **Answer** | **Sr no.** | **Answer** |
| 1 | b | 26. | a | 51. | d | 76. | b |
| 2 | b | 27. | d | 52. | c | 77. | a |
| 3 | b | 28. | d | 53. | a | 78. | a |
| 4 | b | 29. | d | 54. | c | 79. | a |
| 5 | c | 30. | c | 55. | a | 80. | a |
| 6 | a | 31. | c | 56. | a | 81. | d |
| 7 | a | 32. | d | 57. | b | 82. | c |
| 8 | a | 33. | b | 58. | a | 83. | a |
| 9 | a | 34. | a | 59. | a | 84. | a |
| 10 | d | 35. | a | 60. | a | 85. | b |
| 11 | a | 36. | a | 61. | b | 86. | d |
| 12 | b | 37. | a | 62. | c | 87. | c |
| 13 | a | 38. | a | 63. | c | 88. | a |
| 14 | d | 39. | a | 64. | c | 89. | a |
| 15 | a | 40. | a | 65. | b | 90. | d |
| 16 | a | 41. | a | 66. | b | 91. | a |
| 17 | b | 42. | b | 67. | a | 92. | a |
| 18 | a | 43. | a | 68. | d | 93. | a |
| 19 | a | 44. | a | 69. | d | 94. | d |
| 20 | a | 45. | b | 70. | a | 95. | a |
| 21 | a | 46. | b | 71. | d | 96. | c |
| 22 | b | 47. | a | 72. | a | 97. | b |
| 23 | a | 48. | b | 73. | a | 98. | b |
| 24 | a | 49. | b | 74. | a | 99. | a |
| 25 | b | 50. | a | 75. | a | 100. | A |