

DO NOT BREAK THE SEAL OF THE BOOKLET UNTIL YOU ARE TOLD TO DO SO

QUESTION BOOKLET

SERIES : I

Subjects : General English, General Knowledge & Aptitude and
Dairy Technology

Full Marks : 350

Time Allowed : 2½ Hours

Read the following instructions carefully before you begin to answer the questions.

INSTRUCTIONS TO CANDIDATES

1. This Booklet contains 175 questions to be answered in a separate OMR Answer Sheet using Black Ballpoint Pen in the following three Parts :

Part—A : General English	: 50 questions
Part—B : General Knowledge & Aptitude	: 75 questions
Part—C : Dairy Technology	: 50 questions

2. All questions are compulsory.
3. You will be supplied the Answer Sheet separately by the Invigilator. You must complete the details of particulars asked for.
4. Answer must be shown by completely blackening the corresponding circle in the Answer Sheet against the relevant question number by Black Ballpoint Pen. OMR Answer Sheet without marking Series shall not be evaluated.

Example :

Suppose the following question is asked :

The Capital of Meghalaya is

- (A) Guwahati
(B) Kohima
(C) Shillong
(D) Delhi

You will have four alternatives in the Answer Sheet for your response corresponding to each question of the Question Booklet as below :

(A) (B) (C) (D)

In the above illustration, if your chosen response is alternative (C), i.e., Shillong, then the same should be marked on the Answer Sheet by blackening the relevant circle with a Black Ballpoint Pen only as below :

(A) (B) (C) (D)

The example shown above is the only correct method of answering.

5. Answer the questions as quickly and as carefully as you can. Some questions may be difficult and others easy. Do not spend too much time on any one question.
6. There will NOT be any negative marking for wrong answers.
7. The Answer Sheet must be handed over to the Invigilator before you leave the Examination Hall.
8. No Rough Work is to be done on the Answer Sheet. Space for Rough Work has been provided in the Question Booklet.

SEAL

PART—A : GENERAL ENGLISH

(Marks : 100)

Each question carries 2 marks

Directions (Q. Nos. 1–10) : Choose the one which best expresses the meaning of the underlined word out of the given alternatives.

1. You must ascertain the facts before you make such accusations.
(A) Discover
(B) Make sure of
(C) Search
(D) Acknowledge
2. The minister's speech seeks to allay the fears of the people.
(A) Control (B) Heighten
(C) Calm (D) Stall
3. We heard the news from a reliable source.
(A) Real (B) Trustworthy
(C) Disputed (D) Dubious
4. The vigorous exercises left the old man exhausted.
(A) Excited
(B) Inactive
(C) Ill
(D) Extremely tired
5. The speech was so long that the audience were nodding off.
(A) Falling asleep
(B) Shaking their heads
(C) Agreeing
(D) Clapping
6. Such behavior is totally unexpected from someone of his calibre.
(A) Low quality
(B) Measure
(C) Size
(D) Competence
7. He's not afraid to say what he thinks. His candour is refreshing.
(A) Frankness
(B) Humour
(C) Energy
(D) Enthusiasm
8. To be a good writer, one needs to be observant of life and people.
(A) Unaware
(B) Accepting
(C) Heedless
(D) Take careful notice
9. The policemen fired into the air to disperse the crowd.
(A) To frighten
(B) To threaten
(C) To break up
(D) To gather
10. The late Queen was a woman of great depth and discernment.
(A) Shrewdness
(B) Manners
(C) Fashionable
(D) Wealthy

Directions (Q. Nos. 11–20) : Choose the one which best expresses the opposite meaning of the underlined word out of the given alternatives.

11. Everyone agrees that she is a person of integrity.
(A) Honesty
(B) Dishonesty
(C) Reckless
(D) Foolish
12. The students were defiant of the teacher's order.
(A) Rebelling
(B) Disobedient
(C) Obedient
(D) Arrogant
13. A revengeful nature only leads to more harm.
(A) Exacting
(B) Forgiving
(C) Scornful
(D) Harmless
14. John was extremely nervous on the day of the concert.
(A) Fidgety
(B) Panicky
(C) Excited
(D) Calm
15. The fireman's quick action helped to avert the disaster.
(A) Prevent
(B) Avoid
(C) Defer
(D) Cause
16. Her grandfather was a man of few words.
(A) Speaks little
(B) Speaks nonsense
(C) A chatterbox
(D) A reserved person
17. The project failed for lack of enthusiasm.
(A) Passion
(B) Excitement
(C) Spiritless
(D) Apathy
18. She has a sour disposition so that is why nobody likes her.
(A) Sweet of character
(B) Bitter
(C) Intelligent
(D) Hostile
19. The actor received a lot of compliments from the audience.
(A) Applause
(B) Praises
(C) Censor
(D) Criticism
20. The reports we received from the hospital left us confused.
(A) Confident
(B) Clear about things
(C) Unhappy
(D) Perplexed

Directions (Q. Nos. 21-30) : Fill in the blanks with the appropriate prepositions from the given alternatives.

21. The politician agreed _____ a debate with his opponent.

- (A) to
- (B) on
- (C) over
- (D) with

22. The matter is still _____ discussion.

- (A) over
- (B) under
- (C) about
- (D) at

23. She did not come to work today. She called _____ sick.

- (A) up
- (B) over
- (C) out
- (D) in

24. He was still upset _____ the quarrel with his wife.

- (A) at
- (B) over
- (C) in
- (D) through

25. This child is named _____ her grandmother.

- (A) from
- (B) through
- (C) to
- (D) after

26. Mary is so gentle that people often took advantage _____ her kind nature.

- (A) to
- (B) of
- (C) by
- (D) at

27. Please keep quiet. The Principal has an announcement _____ make.

- (A) to
- (B) of
- (C) for
- (D) on

28. The Captain was overjoyed _____ hearing that they've won the match.

- (A) at
- (B) about
- (C) on
- (D) to

29. We were very disturbed to hear _____ the firing incident.

- (A) at
- (B) on
- (C) of
- (D) since

30. The dog was run _____ by a speeding car.

- (A) at
- (B) on
- (C) in
- (D) over

Directions (Q. Nos. 31–35) : Choose the one which best expresses the meaning of the given idiom/phrase out of the given alternatives.

- 31.** Crying over spilt milk
(A) Crying over accidents
(B) Worrying over something that has already happened
(C) Spilling excess milk
(D) Person who cries excessively
- 32.** By hook or by crook
(A) By fair means
(B) At all times
(C) By any possible means
(D) By unfair means only
- 33.** A fair-weather friend
(A) A friend who sticks with us only during good times
(B) A faithful friend
(C) A friend who sticks with us during good and bad times
(D) An unreliable friend
- 34.** To make ends meet
(A) A circle
(B) The end of something
(C) A meeting point
(D) Earning just enough to live on
- 35.** See eye to eye
(A) Looking at each other
(B) To be in agreement
(C) See something in the eye
(D) To disagree

Directions (Q. Nos. 36–45) : Fill in the blanks with the most appropriate and suitable words from the given alternatives.

- 36.** Many people look _____ to the weekends.
(A) eagerly
(B) onward
(C) forward
(D) glumly
- 37.** The baby _____ crying since morning.
(A) has been
(B) was
(C) have been
(D) will be
- 38.** I hope the weather _____ fine for the picnic.
(A) is
(B) may be
(C) will be
(D) can be
- 39.** Her aunt _____ her a lovely necklace for her birthday.
(A) bring
(B) provide
(C) gift
(D) bought
- 40.** Swimming on a full stomach can be _____ for you.
(A) harmless
(B) harmful
(C) entertaining
(D) boring

41. Last evening the man _____ to his girlfriend.

- (A) purposed
- (B) proposed
- (C) asked
- (D) refused

42. The boy was _____ by a dog.

- (A) biting
- (B) bit
- (C) bitten
- (D) bite

43. After all the hype, the movie _____ to be boring.

- (A) turned out
- (B) happened
- (C) seemed
- (D) was

44. Her parents were not happy with her _____ of friends.

- (A) choose
- (B) chose
- (C) choosing
- (D) choice

45. I will _____ the doctor this evening.

- (A) visits
- (B) be visiting
- (C) visited
- (D) to visit

Directions (Q. Nos. 46–50) : Each of the following sentences is divided into 3 (three) parts which are marked (A), (B), (C). One of these parts may contain an error or may not be acceptable in standard written communication. Mark that part as your answer. If there is no error, mark your answer as (D).

46. Children should be / teach /
(A) (B)
to share things with others. /
(C)
No error
(D)

47. It's okay / to disagree /
(A) (B)
but one should do it respectively. /
(C)
No error
(D)

48. We had / a great time /
(A) (B)
in the movies. / No error
(C) (D)

49. Charles Dickens / is /
(A) (B)
a great writer during his time. /
(C)
No error
(D)

50. True riches /
(A)
is not to be found in wealth /
(B)
but in good health. / No error
(C) (D)

PART—B : GENERAL KNOWLEDGE & APTITUDE

(Marks : 150)

Each question carries 2 marks

51. What is the capital of Canada?
(A) Toronto
(B) Ottawa
(C) Vancouver
(D) Montreal
52. The Nobel Prize is awarded in how many categories?
(A) 4
(B) 5
(C) 6
(D) 7
53. The currency of Japan is
(A) yen
(B) won
(C) yuan
(D) ringgit
54. Which Indian State has the highest literacy rate?
(A) Kerala
(B) Tamil Nadu
(C) Goa
(D) Maharashtra
55. Who discovered the sea route to India in 1498?
(A) Marco Polo
(B) Ferdinand Magellan
(C) Vasco da Gama
(D) Christopher Columbus
56. What is the full form of ISRO?
(A) Indian Scientific Research Organization
(B) Indian Space Research Organization
(C) International Space Research Organization
(D) Indian Satellite Research Office
57. Which is the smallest continent in the world?
(A) Europe
(B) Antarctica
(C) Australia
(D) South America
58. The headquarters of the United Nations is in
(A) Geneva (B) Paris
(C) New York (D) London
59. The Indian National flag was designed by
(A) Mahatma Gandhi
(B) Rabindranath Tagore
(C) Pingali Venkayya
(D) B. R. Ambedkar
60. Which of the following books was written by Arundhati Roy?
(A) *Midnight's Children*
(B) *The God of Small Things*
(C) *A Suitable Boy*
(D) *The White Tiger*

61. Which city is called the Silicon Valley of India?
- (A) Hyderabad
(B) Pune
(C) Bengaluru
(D) Chennai
62. What is the chemical symbol of gold?
- (A) Go
(B) Au
(C) Gd
(D) Ag
63. The first satellite sent into space was
- (A) Explorer 1
(B) Sputnik 1
(C) Aryabhata
(D) Apollo 11
64. Which Indian scientist won the Nobel Prize in Physics?
- (A) C. V. Raman
(B) Homi Bhabha
(C) Vikram Sarabhai
(D) Abdul Kalam
65. How many players are there in a hockey team (on field)?
- (A) 9
(B) 10
(C) 11
(D) 12
66. What does HTTP stand for?
- (A) HyperText Transmission Protocol
(B) HyperText Transfer Protocol
(C) High Text Transfer Protocol
(D) High Transmission Text Protocol
67. What is the name of India's first indigenously developed nuclear submarine?
- (A) INS Vikrant
(B) INS Kalvari
(C) INS Chakra
(D) INS Arihant
68. What is the official language of the Indian judiciary?
- (A) Hindi
(B) Sanskrit
(C) English
(D) Urdu
69. Which Indian sportsperson is known as the 'Flying Sikh'?
- (A) P. T. Usha
(B) Milkha Singh
(C) Abhinav Bindra
(D) Kapil Dev
70. Who invented the telephone?
- (A) Thomas Edison
(B) Alexander Graham Bell
(C) Nikola Tesla
(D) James Watt

- 71.** Which country gifted the Statue of Liberty to the USA?
- (A) Germany
(B) Italy
(C) France
(D) Britain
- 72.** Which Indian State has the longest coastline?
- (A) Kerala
(B) Tamil Nadu
(C) Maharashtra
(D) Gujarat
- 73.** Who composed the National song 'Vande Mataram'?
- (A) Rabindranath Tagore
(B) Bankim Chandra Chatterjee
(C) Sarojini Naidu
(D) Subramania Bharati
- 74.** In which year was the first general election held in independent India?
- (A) 1947
(B) 1950
(C) 1951-52
(D) 1955
- 75.** The *Dead Sea Scrolls* were discovered in
- (A) Qumran Caves
(B) Sinai Peninsula
(C) Petra
(D) Negev Desert
- 76.** Who was the first woman ruler of India?
- (A) Razia Sultan
(B) Rani Durgavati
(C) Chand Bibi
(D) Ahilyabai Holkar
- 77.** Who wrote the economic critique, *Poverty and Un-British Rule in India*?
- (A) R. C. Dutt
(B) Dadabhai Naoroji
(C) Gopal Krishna Gokhale
(D) M. G. Ranade
- 78.** Which Mughal emperor assumed the title 'Zinda Pir'?
- (A) Akbar
(B) Aurangzeb
(C) Shah Jahan
(D) Jahangir
- 79.** The Tropic of Cancer passes through how many Indian States?
- (A) 5
(B) 7
(C) 8
(D) 9
- 80.** Mount Kilimanjaro is located in which country?
- (A) Kenya
(B) Tanzania
(C) Uganda
(D) Ethiopia

81. The Great Victoria Desert is located in
(A) South Africa
(B) Namibia
(C) Australia
(D) Argentina
82. Which river is known as the 'sorrow of Bihar'?
(A) Kosi
(B) Ganga
(C) Gandak
(D) Son
83. Who appoints the Chief Election Commissioner of India?
(A) The President
(B) The Prime Minister
(C) The Parliament
(D) The Chief Justice
84. The Directive Principles of State Policy are inspired by
(A) the US Constitution
(B) the Irish Constitution
(C) the British Constitution
(D) the French Constitution
85. The term 'glasnost' is associated with
(A) China
(B) Germany
(C) Soviet Union
(D) Poland
86. Which organization releases the World Economic Outlook report?
(A) World Bank
(B) IMF
(C) WTO
(D) UNCTAD
87. Who discovered the neutron?
(A) James Chadwick
(B) Rutherford
(C) Niels Bohr
(D) J. J. Thomson
88. Kathakali dance belongs to
(A) Karnataka
(B) Kerala
(C) Odisha
(D) Assam
89. Who has the highest number of Grand Slam titles in men's tennis (as of 2024)?
(A) Rafael Nadal
(B) Roger Federer
(C) Novak Djokovic
(D) Andy Murray
90. Olympic Games are held in every
(A) 3 years
(B) 4 years
(C) 5 years
(D) 2 years

91. What is the square root of 2025?

- (A) 45
- (B) 35
- (C) 40
- (D) 50

92. If 12 men can complete a job in 15 days, how many men are needed to complete the same job in 10 days?

- (A) 18
- (B) 20
- (C) 16
- (D) 12

93. What is the simple interest on ₹ 10,000 at 5% p.a. for 3 years?

- (A) ₹ 1,500
- (B) ₹ 1,000
- (C) ₹ 1,200
- (D) ₹ 2,000

94. The sum of the first 20 natural numbers is

- (A) 200
- (B) 210
- (C) 220
- (D) 230

95. A man buys an article for ₹ 250 and sells it for ₹ 300. What is the profit percentage?

- (A) 20%
- (B) 25%
- (C) 15%
- (D) 30%

96. If 40% of a number is 120, what is the number?

- (A) 200
- (B) 250
- (C) 300
- (D) 400

97. Complete the following series :

2, 6, 12, 20, 30, ?

- (A) 48
- (B) 42
- (C) 50
- (D) 40

98. If A is the father of B but B is not the son of A, then what is B to A?

- (A) Daughter
- (B) Brother
- (C) Wife
- (D) Mother

99. In a certain code, FOOD is written as ENNC. How is MEAL written?

- (A) LDZK
- (B) LDBK
- (C) NDZM
- (D) KDBM

100. Pointing to a photograph, a woman says, "He is the son of the only daughter of my father." How is the man related to the woman?

- (A) Brother
- (B) Son
- (C) Nephew
- (D) Grandson

101. What will come next in the following series?

5, 11, 17, 23, ?

- (A) 28
- (B) 29
- (C) 30
- (D) 32

102. If MONDAY is coded as 123456, then SUNDAY is coded as

- (A) 912456
- (B) 678456
- (C) 891256
- (D) 789456

103. Find the odd one out.

121, 144, 169, 196, 225, 242

- (A) 144
- (B) 169
- (C) 242
- (D) 225

104. A is taller than B but shorter than C. D is shorter than B. Who is the shortest?

- (A) A
- (B) B
- (C) C
- (D) D

105. Which number replaces the question mark?

4, 9, 16, ?, 36

- (A) 25
- (B) 23
- (C) 20
- (D) 30

106. A can do a job in 10 days, B in 15 days. If they work together, how long will it take?

- (A) 5 days
- (B) 6 days
- (C) 7 days
- (D) 8 days

107. If 3 pens cost ₹ 45, how many pens can you buy for ₹ 180?

- (A) 9
- (B) 12
- (C) 15
- (D) 18

108. If the ratio of boys to girls is 3:2 and there are 30 boys, how many girls are there?

- (A) 15
- (B) 20
- (C) 25
- (D) 30

109. Find the next number in the following pattern.

2, 4, 8, 16, ?

- (A) 32
- (B) 30
- (C) 28
- (D) 24

110. Find the odd one out.

16, 36, 64, 81, 100

- (A) 64
- (B) 81
- (C) 100
- (D) 36

111. What is the next number in the following series?

1, 1, 2, 3, 5, 8, ?

- (A) 11
- (B) 12
- (C) 13
- (D) 14

112. A man walks 3 km north, then 4 km east. How far is he from the starting point?

- (A) 5 km
- (B) 6 km
- (C) 7 km
- (D) 8 km

113. How many degrees are there in a right angle?

- (A) 45°
- (B) 60°
- (C) 90°
- (D) 120°

114. The product of two numbers is 120 and their LCM is 60. What is their HCF?

- (A) 2
- (B) 4
- (C) 6
- (D) 10

115. How many times do the hands of a clock coincide in a day?

- (A) 22
- (B) 24
- (C) 20
- (D) 12

116. The angle between the hour and the minute hands of a clock at 4 : 20 is

- (A) 10°
- (B) 20°
- (C) 30°
- (D) 40°

117. A train 150 metres long is running at 54 km/h. How much time will it take to cross a platform 150 metres long?

- (A) 10 sec
- (B) 15 sec
- (C) 20 sec
- (D) 25 sec

118. A train passes a platform 100 metres long in 20 sec. If the speed of the train is 54 km/h, find the length of the train.

- (A) 100 m
- (B) 120 m
- (C) 200 m
- (D) 160 m

119. The present age of a father is three times that of his son. After 10 years, the father's age will be twice that of his son. What is the son's current age?

- (A) 10
- (B) 15
- (C) 20
- (D) 30

120. Pick the odd one out.

- (A) 121
- (B) 144
- (C) 169
- (D) 131

121. Pick the odd one out.

- (A) Copper
- (B) Iron
- (C) Mercury
- (D) Gold

122. Pick the odd one out.

- (A) Oxygen
- (B) Nitrogen
- (C) Hydrogen
- (D) Carbon

123. What comes next in the following series?

A, C, F, J, O, ?

- (A) T
- (B) U
- (C) S
- (D) V

124. Which of the following completes the series?

B, D, G, K, P, ?

- (A) R
- (B) T
- (C) U
- (D) V

125. The average of 12, 15, 18, 21 and x is 20. Find x .

- (A) 30
- (B) 32
- (C) 34
- (D) 36

PART—C : DAIRY TECHNOLOGY

(Marks : 100)

Each question carries 2 marks

- 126.** The most desirable pH of whey at the time of cutting during manufacture of cottage cheese is
- (A) 4.6 to 4.7
(B) 5.2 to 5.4
(C) 5.6 to 5.8
(D) 5.0 to 5.1
- 127.** The average yield of ghee residue by direct creamery butter method is
- (A) 3.5–3.7%
(B) 1.6–1.8%
(C) 12.0–12.2%
(D) 7.7–7.9%
- 128.** Which of the following processes is also referred to as ultraosmosis?
- (A) Nanofiltration
(B) Reverse osmosis
(C) Electrodialysis
(D) Gel filtration
- 129.** 'Kachagolla' is a variety of _____ indigenous sweetmeat.
- (A) sandesh
(B) rasogolla
(C) rajbhog
(D) kalajam
- 130.** The HLB number of glycerol mono-stearate emulsifier is
- (A) 3.0
(B) 3.8
(C) 7.5
(D) 11.5
- 131.** Hardness × cohesiveness × springiness is _____ texture attribute.
- (A) chewiness
(B) gumminess
(C) stiffness
(D) fracturability

- 132.** The κ -casein fraction 106 to 169 is referred to as
- para- κ -casein
 - glycomacropeptide
 - gamma-casein 1
 - proteose peptone 3
- 133.** According to FSSAI, low-lactose milk should have less than ____ % lactose.
- 1.0
 - 0.1
 - 0.01
 - 0.5
- 134.** ____ is the chemical constituent primarily responsible for the color of saffron.
- Crocin
 - Cochineal
 - Lutein
 - Alizarin
- 135.** There are seven wavelength ranges in the visible spectrum that coordinate to a different colour. The longest wavelength, at around 620 nm–780 nm with lowest frequency, is for ____ visible colour.
- red
 - yellow
 - green
 - blue
- 136.** ____ is the major component of casein fraction in goat milk, whereas ____ is the major casein in cow milk.
- Kappa-casein, alpha-S1-casein
 - Beta-casein, alpha-S1-casein
 - Alpha-S1-casein, beta-casein
 - Alpha-S1-casein, alpha-S2-casein
- 137.** ____ material has the lowest density (i.e., 0.9) amongst all the major plastics.
- PVC
 - PP
 - LDPE
 - HDPE
- 138.** The calcium content of low calcium co-precipitate is
- 0.5–0.8%
 - 2.5–3.0%
 - 1.5–2.0%
 - 0.15–0.20%
- 139.** The protein content of whey powder is approximately
- 12%
 - 20%
 - 35%
 - 5%

140. Which of the following terms is used to compare two papers with regard to their bursting strength?

- (A) Burst degree
- (B) Burst quotient
- (C) Burst factor
- (D) Burst ratio

141. According to FSSAI, the percent fat in khoa should not be less than

- (A) 20% (on dry matter basis)
- (B) 30% (on dry matter basis)
- (C) 25% (on dry matter basis)
- (D) 40% (on dry matter basis)

142. Which is the key metabolite in citrate fermentation pathway for diacetyl?

- (A) Pyruvate
- (B) Alpha-acetolactate
- (C) Acetate
- (D) Carbon dioxide

143. Laminar flow designates flow of liquids at Reynolds number

- (A) Re 2500 to 3500
- (B) $Re > 5000$
- (C) $Re > 2000$
- (D) $Re < 2000$

144. Which sensation is produced when chemicals present in ingested food, beverages or medications interact with taste receptors located on taste buds in the oral cavity?

- (A) Gustation
- (B) Kinesthetic
- (C) Olfactory
- (D) Chemesthesis

145. The energy required to disintegrate a semi-solid food to a state ready for swallowing is

- (A) gumminess
- (B) adhesiveness
- (C) chewiness
- (D) cohesiveness

146. A catalyst, which is responsible for the production of sunlight-induced oxidized flavour in dairy products, is
- (A) vitamin C
 - (B) riboflavin
 - (C) vitamin B₁₂
 - (D) thiamine
147. A yellow medium soft slicing cheese which is surface ripened with *Brevibacterium linens* is
- (A) feta
 - (B) camembert
 - (C) brick
 - (D) brie
148. In active packaging, which of the following enzymes is used for removal of trace levels of oxygen in food products?
- (A) Superoxide dismutase
 - (B) Sulphydryl oxidase
 - (C) Glucose oxidase
 - (D) Lactoperoxidase
149. Proteose peptone 3 (PP3) has been identified as a protein originating from
- (A) beta-casein
 - (B) whey protein
 - (C) milk fat globule membrane
 - (D) kappa-casein
150. The relative sweetness of lactose when compared to sucrose is
- (A) 40
 - (B) 10
 - (C) 20
 - (D) 70
151. A homogenization technique in which the fluid is forced under high pressure in the reaction chamber and is divided into two jets colliding at 180° at high speed is known as
- (A) ultrasonic homogenization
 - (B) microfluidization
 - (C) high-pressure homogenization
 - (D) high-speed blending device

- 152.** _____ is a reliable index of heat treatment of UHT milk as it is not present in unheated milk and it changes little during storage.
- (A) Lactulose
 - (B) WPNI
 - (C) Lactobionic acid
 - (D) Hydroxymethylfurfural
- 153.** The most abundant saturated fatty acid present in milk fat is
- (A) butyric acid
 - (B) lauric acid
 - (C) stearic acid
 - (D) palmitic acid
- 154.** FSSAI rules came into effect from
- (A) August 2011
 - (B) September 2006
 - (C) February 2015
 - (D) July 2008
- 155.** ISO 22000 is related to
- (A) quality management system
 - (B) food safety management system
 - (C) marketing management system
 - (D) data management system
- 156.** The maximum volume of milk that can be filled in a cylindrical tank having internal diameter of 1 m and height of 1 m will be
- (A) 785 litres
 - (B) 256 litres
 - (C) 316 litres
 - (D) 825 litres
- 157.** Cyclone separator provided with spray dryer removes about 97% to 98% of particles having sizes
- (A) above 20 μ
 - (B) above 10 μ
 - (C) above 5 μ
 - (D) above 2 μ
- 158.** The calorific value of cheddar cheese (per 100 g) is
- (A) 200 kcal
 - (B) 500 kcal
 - (C) 300 kcal
 - (D) 400 kcal
- 159.** A genus of microorganism associated with ripening of Swiss cheese and development of holes is
- (A) *Propionibacterium*
 - (B) *Lactobacillus*
 - (C) *Pediococcus*
 - (D) *Leuconostoc*

- 160.** Aluminium sodium silicate is used as _____ in salt and powder artificial dairy creamer.
- (A) antibacterial agent
 - (B) anticaking agent
 - (C) antistaling agent
 - (D) preservative
- 161.** Cooked flavour in milk is the result of
- (A) lactose protein interaction
 - (B) formation of —SH groups
 - (C) formation of amino groups
 - (D) oxidation of vitamin C
- 162.** α -lactose is obtained when lactose is crystallized at
- (A) $< 93.5^{\circ}\text{C}$
 - (B) 93.5°C
 - (C) $> 93.5^{\circ}\text{C}$
 - (D) 100°C
- 163.** Rosalic acid test is used to detect which type of adulteration in milk?
- (A) Sucrose
 - (B) Carbonates and bicarbonates
 - (C) Salt
 - (D) Pond water
- 164.** Lactulose is incorporated in infant formula to
- (A) increase the intestinal *E. coli*
 - (B) increase the population of lactic acid bacteria
 - (C) increase the calorific value
 - (D) as a prebiotic
- 165.** The level of added sugar in chocolate flavoured milk is around
- (A) 6–7%
 - (B) 8–9%
 - (C) 10–11%
 - (D) 13–14%
- 166.** According to FSSAI requirements, the minimum MSNF in skim milk should be
- (A) 8.5%
 - (B) 8.7%
 - (C) 9.0%
 - (D) 9.1%
- 167.** After antibiotic administration, milk should be withheld from human use for at least
- (A) 120 hours
 - (B) 48 hours
 - (C) 96 hours
 - (D) 72 hours

- 168.** Sweet cream designation implies that the apparent titratable acidity of churning cream does not exceed
- (A) 0.20% lactic acid
 - (B) 0.10% lactic acid
 - (C) 0.18% lactic acid
 - (D) 0.05% lactic acid
- 169.** Which of the following dimensionless numbers is used to optimize speed of agitator of batch pasteurizer?
- (A) Grashof number
 - (B) Reynolds number
 - (C) Neumann number
 - (D) Prandtl number
- 170.** Microwave frequency used for commercial application is
- (A) 915 MHz
 - (B) 2015 MHz
 - (C) 2450 MHz
 - (D) 1500 MHz
- 171.** Central AGMARK Laboratory is situated at
- (A) Chennai
 - (B) Delhi
 - (C) Ahmedabad
 - (D) Nagpur
- 172.** Who is known as the 'Father of White Revolution' in India?
- (A) Dr. M. S. Swaminathan
 - (B) Dr. Verghese Kurien
 - (C) Dr. Subramaniam
 - (D) Dr. A. P. J. Abdul Kalam
- 173.** Operation Flood was launched in India in the year
- (A) 1965
 - (B) 1970
 - (C) 1975
 - (D) 1980
- 174.** In texture profile analysis, the force necessary to attain a given deformation (peak force during first compression cycle) is called
- (A) gumminess
 - (B) hardness
 - (C) cohesiveness
 - (D) chewiness
- 175.** The step at which control can be applied, and is essential to prevent or eliminate a food safety hazard or reduce it to an acceptable level, in respect to HACCP is known as
- (A) critical control point
 - (B) critical limit
 - (C) monitoring
 - (D) operational prerequisite step