

# FINAL ANSWER KEY

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Question1:-The social reformer who wrote Soundaralahari

- A:-Sree Narayana Guru
  - B:-Sankaracharya
  - C:-Vivekananda
  - D:-Chattampi Swamikal
- Correct Answer:- Option-B

Question2:-The movement started against the administrative reforms introduced in Travancore in 1932

- A:-Nivarthana Agitation
  - B:-Malayalee Memorial
  - C:-Ezhava Memorial
  - D:-Channar Agitation
- Correct Answer:- Option-A

Question3:-Barrister G.P. Pillai is associated with

- A:-Malayalee Memorial
  - B:-Ezhava Memorial
  - C:-Nivarthana Agitation
  - D:-Channar Agitation
- Correct Answer:- Option-A

Question4:-Kumaran Asan's Veena Poovu was published for the first time in

- A:-Malayalee
  - B:-Yukthivadi
  - C:-Kesari
  - D:-Mitavadi
- Correct Answer:- Option-D

Question5:-Which woman leader of Travancore organized the Female Volunteer Corps called Desasevika Sangham?

- A:-A.V. Kuttimalu Amma
  - B:-Arya Prabhu
  - C:-Accamma Cherian
  - D:-Anna Chandy
- Correct Answer:- Option-C

Question6:-The first woman to be the Chairperson of State Bank of India

- A:-Kiran Mazumdar
  - B:-Arundhati Chatterjee
  - C:-Indra Nooyi
  - D:-Arundhati Bhattacharya
- Correct Answer:- Option-D

Question7:-Who is the author of 'From earth to the Moon'?

- A:-Edwin Aldrin
  - B:-Jules Verni
  - C:-Neil Armstrong
  - D:-Rakesh Sharma
- Correct Answer:- Option-B

Question8:-Storting is the name of the Parliament in

- A:-Denmark
  - B:-Jordan
  - C:-Norway
  - D:-Switzerland
- Correct Answer:- Option-C

Question9:-The recipient of Ezhuthachan Award 2017

A:-Sachidanandhan  
B:-M.K. Sanu  
C:-M.T. Vasudevan Nair  
D:-C. Radha Krishnan  
Correct Answer:- Option-A

Question10:-National Food Security Act was passed by Indian Parliament in the year

A:-2012  
B:-2013  
C:-2014  
D:-2015

Correct Answer:- Option-B

Question11:-The concept of school complex was first started in \_\_\_\_\_.

A:-Kerala  
B:-Rajasthan  
C:-Karnataka  
D:-Gujarat

Correct Answer:- Option-B

Question12:-Father of Psychoanalysis is

A:-Jerome S. Bruner  
B:-Albert Bandura  
C:-Sigmund Freud  
D:-B.F. Skinner

Correct Answer:- Option-C

Question13:-If a teacher happens to commit a mistake in class, what is the right choice he/she has to take?

A:-avoid it  
B:-admit it  
C:-justify it  
D:-none of these

Correct Answer:- Option-B

Question14:-Close-ended type questions are questions provided with

A:-agree-disagree answers  
B:-yes or no answers  
C:-multiple type answers  
D:-no answers

Correct Answer:- Option-B

Question15:-You are adopting variety of tasks to ensure each and every students learning. Which theory would influence you more?

A:-Piaget's cognitive development theory  
B:-Gardner's multiple intelligence theory  
C:-Vygotsky's socio-cultural theory  
D:-Kurt Lewin's field theory

Correct Answer:- Option-B

Question16:-A researcher does not fix the ultimate size of the sample in advance but determines according to mathematical decisions on the basis of information yielded as data collection progresses. This is technically called

A:-Systematic sampling  
B:-Random sampling  
C:-Sequential sampling  
D:-Quota sampling

Correct Answer:- Option-C

Question17:-Validity of a research can be ensured by

1. avoiding the extraneous variables
2. taking the true representation sample of the population
3. stratified sample
4. only field study

A:-(1) and (3) correct  
B:-(1) and (4) correct

C:-(1), (2) and (3) correct

D:-(1) and (2) correct

Correct Answer:- Option-D

Question18:-Rearrange the following in appropriate order :

1. Formulating hypothesis
2. Data analysis and interpretation
3. Developing research questions
4. Preparation of the report

A:-1, 2, 3, 4

B:-1, 3, 2, 4

C:-2, 1, 3, 4

D:-3, 1, 2, 4

Correct Answer:- Option-D

Question19:-Which of the following is not a characteristic of action research?

- i. Results are generalizable
- ii. Hypotheses were tested
- iii. Developed a theory
- iv. Data were qualitative

A:-i, ii and iii

B:-i, ii and iv

C:-i, iii and iv

D:-ii, iii and iv

Correct Answer:- Option-A

Question20:-The research ethics means

A:-the quality of the research

B:-proved a particular point intentionally

C:-the quantity of the research

D:-all of the above

Correct Answer:- Option-A

Question21:-Which of the following is not a salient feature of Indian Constitution?

A:-Single citizenship

B:-Presidential system

C:-Fundamental rights

D:-Judicial review

Correct Answer:- Option-B

Question22:-Economic and social planning is a subject included in the

A:-Concurrent list

B:-State list

C:-Residuary powers

D:-Union list

Correct Answer:- Option-A

Question23:-Article 19 (1) (c) of the Indian Constitution is related to

A:-Right to assemble peaceably and without arms

B:-Right to freedom of speech and expression

C:-Right to reside and settle in any part of the territory of India

D:-Right to form associations or unions

Correct Answer:- Option-D

Question24:-The UPSC have on July 19, 2000 constituted a committee to review the existing scheme of civil service examination under the chairmanship of \_\_\_\_\_.

A:-Prof. Y.K. Alagh

B:-Dr. B.P. Mathur

C:-Prof. M. Anandkrishnan

D:-Shri. P.C. Hota

Correct Answer:- Option-A

Question25:-Which of the following constitution amendment act is related with the disqualification of a member of either House of Parliament on the grounds of defection from his party?

- A:-The Constitution 50th Amendment Act
- B:-The Constitution 52nd Amendment Act
- C:-The Constitution 54th Amendment Act
- D:-The Constitution 56th Amendment Act

Correct Answer:- Option-B

Question26:-"Record" is defined under \_\_\_\_\_ of the Right to Information Act, 2005.

- A:-Section 2(a)
- B:-Section 2(f)
- C:-Section 2(h)
- D:-Section 2(i)

Correct Answer:- Option-D

Question27:-The day on which the Protection of Children from Sexual Offences Act, 2012 received the assent of the President of India

- A:-11th June 2012
- B:-19th June 2012
- C:-26th June 2012
- D:-29th June 2012

Correct Answer:- Option-B

Question28:-The National Commission for Women shall consist of

- A:-A Chairperson, four other members and a member secretary
- B:-A Chairperson, six other members and a member secretary
- C:-A Chairperson, three other members and a member secretary
- D:-A Chairperson, five other members and a member secretary

Correct Answer:- Option-D

Question29:-Which of the following programme was introduced to assist the poor families living below the poverty line in rural areas for taking up self employment?

- A:-Pradhan Mantri Gramodaya Yojana
- B:-Sampoorna Grameen Rozgar Yojana
- C:-Swarnjayanti Gram Swarozgar Yojana
- D:-Jawahar Gram Samridhi Yojana

Correct Answer:- Option-C

Question30:-Chairperson and every member of the state food commission shall hold office for a term not exceeding \_\_\_\_\_.

- A:-Five years
- B:-Three years
- C:-Six years
- D:-Four years

Correct Answer:- Option-A

Question31:-Hopanoids are present in which part of bacterial cell?

- A:-Cell membrane
- B:-Cell wall
- C:-Cytoplasm
- D:-Nucleoid

Correct Answer:- Option-A

Question32:-Standard reference text for bacterial classification

- A:-Baltimore's classification
- B:-Zimmer's catalogue
- C:-Bergey's manual
- D:-Bentham and Hooker's classification

Correct Answer:- Option-C

Question33:-Volutin granules can be demonstrated by which of the following staining methods?

- A:-Gram's staining
- B:-LPCB
- C:-Acid fast staining
- D:-Albert's stain

Correct Answer:- Option-D

Question34:-Which one of the following is a test for diagnosis of typhoid?

- A:-ASO test
- B:-Widal test

C:-VDRL test

D:-TPHA test

Correct Answer:- Option-B

Question35:-The temperature and holding period for routine autoclaving are

A:-`160^(@)C` for 1 second

B:-`121^(@)C` for 15 minutes

C:-`115^(@)C` for 10 minutes

D:-`130^(@)C` for 15 seconds

Correct Answer:- Option-B

Question36:-Which of the following staining techniques is used to demonstrate Spirochaetes in tissues?

A:-Malachite green stain

B:-Acid fast staining

C:-Fontana's stain

D:-LPCB stain

Correct Answer:-**Question Cancelled**

Question37:-The term Iatrogenic infection is also known as

A:-Physician induced infection

B:-Subclinical infections

C:-Hospital acquired infection

D:-Blood borne infection

Correct Answer:- Option-A

Question38:-\_\_\_\_\_ is a major component of biogas.

A:-Alkane

B:-Butane

C:-Ethane

D:-Methane

Correct Answer:- Option-D

Question39:-Phenyl acetic acid added to the fermentation media for penicillin production is a

A:-Inducer

B:-Inhibitor

C:-Precursor

D:-Mordant

Correct Answer:- Option-C

Question40:-Baffles are used in fermenters for providing

A:-Acidification

B:-Agitation

C:-Antifoam

D:-None of the above

Correct Answer:- Option-B

Question41:-You are provided with a sputum sample of a suspected case of tuberculosis. The smear prepared with the sample is stained with which of the following staining methods.

A:-Lactophenol Cotton Blue stain

B:-Albert's stain

C:-Fontana's stain

D:-Ziehl-Neelsen stain

Correct Answer:- Option-D

Question42:-Numerical taxonomy is otherwise called as \_\_\_\_\_.

A:-Adansonian classification

B:-Molecular classification

C:-Adamson classification

D:-None of the above

Correct Answer:- Option-A

Question43:-Carboxysomes is the site fore which of the following reactions?

A:-Nitrogen fixation

B:-`CO<sub>2</sub>` fixation

C:-Reduction of `CO<sub>2</sub>`

D:-None of the above

Correct Answer:- Option-B

Question44:-String test is used to identify which of the following bacteria?

- A:-Vibrio spp.
- B:-Salmonella typhi
- C:-E. coli
- D:-Shigella sp.

Correct Answer:- Option-A

Question45:-Cholera red reaction is due to which of the following?

- A:-Methyl red and VP test
- B:-Indole and Methyl red test
- C:-Indole and nitrate reduction test
- D:-Urease and nitrate reduction test

Correct Answer:- Option-C

Question46:-DPT is used for protection against

- A:-Dysentery, polio and tetanus
- B:-Diarrhoea, pyrexia and tetanus
- C:-Diphtheria, polio and tetanus
- D:-Diphtheria, whooping cough and tetanus

Correct Answer:- Option-D

Question47:-Which of the following is called 'the millionaire molecule'?

- A:-IgM
- B:-IgE
- C:-IgA
- D:-IgD

Correct Answer:- Option-A

Question48:-Bence Jones protein is associated with which of the following diseases?

- A:-Jaundice
- B:-Multiple myeloma
- C:-Diabetes
- D:-Mycotic infections

Correct Answer:- Option-B

Question49:-Weil-Felix test is used for the diagnosis of which of the following diseases?

- A:-Tetanus
- B:-Tuberculosis
- C:-Typhus fevers
- D:-Typhoid fever

Correct Answer:- Option-C

Question50:-Smallest unit of antigenicity is known as \_\_\_\_\_.

- A:-Antigen
- B:-Antibody
- C:-Haptens
- D:-Epitope

Correct Answer:- Option-D

Question51:-Pasteurization is defined as \_\_\_\_\_.

- A:-Heating to 62.8°C for 30 seconds
- B:-Heating to 68.1°C for 80 seconds
- C:-Heating to 71.7°C for 15 seconds
- D:-Heating to 82.5°C for 10 minutes

Correct Answer:- Option-C

Question52:-Hybridomas can be isolated using which of the following media?

- A:-Hypoxanthine-Aminopterin-Thymidine medium
- B:-Eagle's Minimum Essential Medium
- C:-Murashige and Skoog medium
- D:-Hypoxanthine-Aminoglycoside-Thymine medium

Correct Answer:- Option-A

Question53:-Shingles is caused by reactivation of which of the following viruses?

- A:-Rubella virus
- B:-Varicella Zoster virus
- C:-Shope Fibroma virus
- D:-Respiratory Syncytial virus

Correct Answer:- Option-B

Question54:-Lyophilization is otherwise called

- A:-Freeze thawing
- B:-Freeze etching
- C:-Freeze fracturing
- D:-Freeze drying

Correct Answer:- Option-D

Question55:-Which one of the following is a capsulated pathogenic yeast?

- A:-Schizosaccharomyces pombe
- B:-Aspergillus flavus
- C:-Saccharomyces cerevisiae
- D:-Cryptococcus neoformans

Correct Answer:- Option-D

Question56:-Penicillin is an example for a \_\_\_\_\_.

- A:-Aminoglycoside
- B:-Polyene antibiotic
- C:- $\beta$ -lactam antibiotic
- D:-Polypeptide antibiotic

Correct Answer:- Option-C

Question57:-Gram stained smear a of CSF sample shows the presence of gram negative diplococci. Which one of the following the organisms is most likely to be isolated from the sample?

- A:-N. gonorrhoeae
- B:-N. meningitidis
- C:-Streptococcus pneumoniae
- D:-Streptococcus pyogenes

Correct Answer:- Option-B

Question58:-Nitrogen fixing symbiotic organism present in the leaves of Azolla is

- A:-Anabaena
- B:-Aulosira
- C:-Azospirillum
- D:-Rhizobium

Correct Answer:- Option-A

Question59:-Denitrification refers to which of the following processes?

- A:-Production of ammonia from amino acids
- B:-Conversion of nitrogen to ammonia
- C:-Conversion of nitrates to nitrogen
- D:-Conversion of ammonia to nitrate

Correct Answer:- Option-C

Question60:-Which one of the following is considered to be an indicator of water pollution?

- A:-N. gonorrhoeae
- B:-E. Coli
- C:-Haemophilus influenzae
- D:-Streptococcus pyogenes

Correct Answer:- Option-B

Question61:-Phosphatase test is used to test the efficacy of which of the following processes?

- A:-Pasteurization
- B:-Canning
- C:-Cold sterilization
- D:-None of the above

Correct Answer:- Option-A

Question62:-Which of the following is not used for disinfection of water?

- A:-Chlorine
- B:-Ultra violet rays
- C:-Ozone
- D:-Mercuric chloride

Correct Answer:- Option-D

Question63:-Botulinum toxin acts by which of the following mechanism?

- A:-Exerts its effects on the cyclic AMP system
- B:-Causes lysis of RBC's
- C:-Blocks the release of acetylcholine, at the neuromuscular junction

D:-Transfer of ADP-ribose to elongation factor-2, inhibiting protein synthesis

Correct Answer:- Option-C

Question64:-Which of the following is considered to be the optimum temperature range for the growth of psychrophiles?

A:-20-37°C

B:-80-110°C

C:-45-65°C

D:-0-15°C

Correct Answer:- Option-D

Question65:-Which of the following is not used for the cultivation of viruses?

A:-Cell cultures

B:-Blood agar

C:-Animals

D:-Embryonated eggs

Correct Answer:- Option-B

Question66:-Citric acid production is done with the help of which of the following

A:-Aspergillus niger

B:-Aspergillus flavus

C:-Penicillium chrysogenum

D:-Sacharomyces cerevisiae

Correct Answer:- Option-A

Question67:-Which of the following methods is used to demonstrate antibiotic sensitivity?

A:-Roll tube technique

B:-Slide Culture technique

C:-Stokes' method

D:-Standard Plate count

Correct Answer:- Option-C

Question68:-Strain improvement for industrial fermentation can be achieved by which of the following methods

A:-Parasexual hybridization

B:-UV mutagenesis

C:-Protoplast fusion

D:-All of the above

Correct Answer:- Option-D

Question69:-Downstream process is used for

A:-Extraction of product

B:-Preparation of media

C:-Sterilization of media

D:-None of the above

Correct Answer:- Option-A

Question70:-Hiss's serum water medium is used to study fermentation reactions in case of which of the following bacteria?

A:-Staphylococcus aureus

B:-Streptococcus pneumoniae

C:-E. Coli

D:-Salmonella typhi

Correct Answer:- Option-B

Question71:-The colonies of E. coli growing on EMB agar appear as \_\_\_\_\_.

A:-Dark centered colonies with green metallic sheen

B:-Pink coloured colonies with dark centres

C:-Yellow coloured colonies

D:-Blue colonies

Correct Answer:- Option-A

Question72:-Flagella seen in Vibrio cholerae can be described as \_\_\_\_\_.

A:-Peritrichous flagella

B:-Bipolar

C:-Lophotrichous

D:-Single polar flagellum

Correct Answer:- Option-D

Question73:-Which of the following descriptions best suits a mycorrhizae?

A:-Symbiotic association between a fungus and an algae

B:-Symbiotic association between an actinomycete and fungus



C:-Symbiotic association between a fungus and roots of a vascular plant

D:-None of the above

Correct Answer:- Option-C

Question74:-Nisin is defined as which one of the following?

A:-Nucleotide, toxic to nerves

B:-Peptide, lantibiotic used as food preservative

C:-Carbohydrate with antimicrobial properties

D:-None of the above

Correct Answer:- Option-B

Question75:-The ratio of the water vapour pressure of food substrate to the vapour pressure of pure water at the same temperature is known as \_\_\_\_\_.

A:-Water activity

B:-Water pressure

C:-Partial pressure of water

D:-None of the above

Correct Answer:- Option-A

Question76:-Azotobacter is

A:-a plant pathogenic bacteria

B:-used for production of acetic acid

C:-free living bacteria which can fix nitrogen

D:-none of the above

Correct Answer:- Option-C

Question77:-Secondary metabolites are produced during which phase of growth cycle of a microbe?

A:-Log phase

B:-Stationary phase

C:-Lag phase

D:-None of the above

Correct Answer:- Option-B

Question78:-The term 12D treatment refers to which of the following processes?

A:-Process which destroys psychrophilic bacteria

B:-Heat treatment sufficient to kill 12 bacteria

C:-12 different treatments used to preserve food

D:-a  $10^{12}$  reduction in *C. botulinum* endospores

Correct Answer:- Option-D

Question79:-Which one of the following reactions is considered to be undesirable in the process of wine-making?

A:-Conversion of glucose to pyruvic acid

B:-Conversion of ethanol to acetic acid

C:-Conversion of sucrose to ethanol

D:-All of the above

Correct Answer:- Option-B

Question80:-You have isolated a non-motile gram-positive cell with no visible nucleus. This cell will definitely possess which of the following?

A:-Ribosome

B:-Lysosome

C:-Mitochondria

D:-Golgi complex

Correct Answer:- Option-A

Question81:-Spirochaetes move with the help of which of the following?

A:-pseudopodia

B:-peritrichous flagella

C:-axial filaments

D:-pili

Correct Answer:- Option-C

Question82:-Branching filamentous bacteria are known as \_\_\_\_\_.

A:-Archaeobacteria

B:-Agaricus

C:-Aspergillus

D:-Actinomycetes

Correct Answer:- Option-D

Question83:-Leprosy is known as

- A:-Lancefield disease
  - B:-Hansen's disease
  - C:-Addison's disease
  - D:-Leeuwenhoek's disease
- Correct Answer:- Option-B

Question84:-The Ghon complex, a lesion in the lung and regional lymph node is found in which of the following diseases?

- A:-Primary tuberculosis
  - B:-Tuberculoid leprosy
  - C:-Pneumonia
  - D:-Influenza
- Correct Answer:- Option-A

Question85:-Bile esculin test is used to distinguish which of the following bacteria?

- A:-Pneumococci
  - B:-Group B streptococci
  - C:-Staphylococci
  - D:-Group D streptococci
- Correct Answer:- Option-D

Question86:-Which of the following is a predatory bacteria?

- A:-Streptomyces
  - B:-Bacillus
  - C:-Bdellovibro
  - D:-Pseudomonas
- Correct Answer:- Option-C

Question87:-Kauffmann-White Scheme is used for serotyping of which of the following bacteria?

- A:-Salmonella
  - B:-Shigella
  - C:-Streptococcus
  - D:-Vibrio
- Correct Answer:- Option-A

Question88:-MacConkey's agar is a

- A:-differential medium
  - B:-selective and differential medium
  - C:-selective medium
  - D:-enriched medium
- Correct Answer:- Option-B

Question89:-Physiologically and metabolically uniform cell population is obtained during which of the following phases of growth

- A:-Death phase
  - B:-Stationary phase
  - C:-Log phase
  - D:-Lag phase
- Correct Answer:- Option-C

Question90:-Which of the following methods is used to sterilise L-J medium?

- A:-Pasteurization
  - B:-Autoclaving
  - C:-Hot-air oven
  - D:-Inspissation
- Correct Answer:- Option-D

Question91:-Malaria is caused by which of the following?

- A:-Macromonas
  - B:-Micrococcus
  - C:-Paramecium
  - D:-Plasmodium
- Correct Answer:- Option-D

Question92:-Rabies is caused by

- A:-Rickettsia
- B:-Rhabdovirus
- C:-Rubella virus

D:-Rotavirus

Correct Answer:- Option-B

Question93:-Candida albicans does not show which the following characteristics?

A:-Budding Gram positive cells

B:-Reynolds-Braude phenomenon

C:-Tuberculate spores

D:-Pseudomycelia

Correct Answer:- Option-C

Question94:-When an infective female Anopheles mosquito bites a human being which of the following is introduced into the human body?

A:-Sporozoites

B:-Signet ring stage

C:-Gametocytes

D:-Merozoites

Correct Answer:- Option-A

Question95:-Which of the following is not usually used for cultivation of fungi?

A:-Cell culture

B:-SDA

C:-PDA

D:-Rose Bengal Agar

Correct Answer:- Option-A

Question96:-Characteristic intracytoplasmic inclusion bodies associated with rabies virus infection is known as \_\_\_\_\_.

A:-Guarnieri bodies

B:-Negri bodies

C:-Bollinger bodies

D:-Cowdry type a inclusions

Correct Answer:- Option-B

Question97:-Which of the following tests are used as confirmatory test for diagnosis of HIV infection?

A:-Whey agglutination test

B:-VDRL test

C:-Widal test

D:-Western Blot

Correct Answer:- Option-D

Question98:-Eijkman test is carried out at which the following temperatures?

A:-37°C

B:-25°C

C:-44°C

D:-54°C

Correct Answer:- Option-C

Question99:-Otomycosis refers to infection of which part of the body?

A:-thigh

B:-ear

C:-eye

D:-throat

Correct Answer:- Option-B

Question100:-Which of the following is used for determination of efficacy of moist-heat sterilisation?

A:-spores of Bacillus cereus

B:-cells of Salmonella typhi

C:-cells of clostridium tetani

D:-spores of Bacillus stearothermophilus

Correct Answer:- Option-D