

Section 1 - Section 1

Question No.1

4.00

Bookmark

Who discovered Vibrio cholera

- Koch
- Pasteur
- Virchow
- Mechnikov

Question No.2

4.00

Bookmark

Cyclosporine is an immunosuppressive drug given to avoid transplant rejection which acts by

- Inhibition of T cells
- Inhibition of immune system
- Inhibition of B cells
- Inhibition of Complement system

Question No.3

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Bookmark

Same DNA sequence may code for more than one protein by

- RNA splitting
- Alternative Splicing of RNA
- Gene splitting
- Gene splicing

Question No.4

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Bookmark

Long term effects of strep throat can include

- Rheumatic fever
- Encephalitis
- Death
- Glomerulonephritis

Question No.5

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Bookmark

Statements: All tools are books, Some books are pens.

Conclusion:

I. Some tools are pen

II. Some pens are books

- If only conclusion I follows
- If either I or II follows
- If only conclusion II follows
- If neither I nor II follows

Question No.6

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Bookmark

Chromatography is a physical method that is used to separate and analyse _____

- Simple mixtures
- Metals
- Viscous mixtures
- Complex mixtures

Question No.7

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Bookmark

Which is the Ig that first reached the site of infection

- IgE
- IgA
- IgM
- IgG

Question No.8

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Bookmark

The major chemical messenger involved in hypersensitivity is

- Interleukines
- Histamines
- Lymphokines
- Interferons

Question No.9

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Bookmark

Which of the following is useful to stimulate antibody production

- Purified Antigen
- An adjuvant
- A hapten
- Antiserum

Question No.10

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Bookmark

Who developed smallpox vaccine for the first time

- Tautum
- Pasteur
- Jenner
- Koch

Question No.11

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Bookmark

Rancidity in spoiled foods is due to

- Saccharolytic microbes
- Lipolytic organisms
- Toxigenic microbes
- Proteolytic organisms

Question No.12

4.00

Bookmark

Which number replaces the question mark?



- 11
- 9
- 10
- 12

Question No.13

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Bookmark

G- protein linked receptors are transmembrane proteins of:-

- Seven
- Single
- Five
- Three

Question No.14

4.00

Bookmark

Which of the following types of chromatography involves the separation of substances in a mixture over a 0.2 mm thick layer of an adsorbent?

- Gas liquid
- Thin layer
- Paper
- Column

Question No.15

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Bookmark

Tumor inducing plasmids are extensively used in production of:-

- Avirulent phases
- Transgenic plants
- Single cell proteins
- Nitrogen fixing bacteria

Question No.16

4.00

Bookmark

First DNA glycosylase enzyme discovered is

- Methyl Adenine Glycosylase
- Thymine DNA glycosylase
- Uracil DNA glycosylase
- Adenine DNA glycosylase

Question No.17

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Bookmark

The transfer of plasmid from one bacteria to a different strain is a best example for

- Homozygous gene transfer
- Horizontal gene transfer
- Vertical gene transfer
- Heterozygous gene transfer

Question No.18

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Bookmark

The branch of science concerned with classification, especially of organisms

- Taxonomy
- Mycology
- Ecology
- Biology

Question No.19

4.00

Bookmark

SDS PAGE separates proteins by:

- size and native charge
- Zwitter ions
- native charge only
- size only

Question No.20

4.00

Bookmark

The phase which the cells will need time to synthesise the necessary enzymes for its metabolism

- Death phase
- Stationary phase
- Lag phase
- Log phase

Question No.21

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Bookmark

The tracking dye used in SDS PAGE will be

- Anionic
- Cationic
- Non-ionic
- Amphipathic

Question No.22

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Bookmark

The name Protozoa comes from the Greek, meaning

- First -animal
- Fungi
- Algae
- Second-animal

Question No.23

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Bookmark

Which antibody is found in tears

- IgG
- IgA
- IgM
- IgD

Question No.24

4.00

Bookmark

Reproduction in bacteria is carried out by

- Sexual reproduction
- Conjugation
- Binary fission
- Budding

Question No.25

4.00

Bookmark

DNA helicase enzyme involved in base excision repair mechanism is

- DNA helicase I
- DNA helicase II
- DNA helicase IV
- DNA helicase III

Question No.26

4.00

Bookmark

Which of the following bacteria has the lowest 50% infective dose (ID₅₀)

- Campylobacter jejuni*
- Vibrio cholerae*
- Shigella Sonnei*
- Salmonella typhi*

Question No.27

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Bookmark

The Plasmid used by Cohen and Boyer for their transformation experiment was

- E. coli plasmids
- pBR 322
- pSC 101
- PUC 17

Question No.28

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Bookmark

When is electrophoresis not used?

- Separation of proteins
- Separation of nucleic acids
- Separation of amino acids
- Separation of Lipids

Question No.29

4.00

Bookmark

Spectroscopy deals with interaction of electromagnetic radiation with matter. What is the speed of this radiation in vacuum in m/s?

- 5×10^8
- 6×10^8
- 3×10^8
- 7×10^8

Question No.30

4.00

Bookmark

The resolving power of an optical microscope is

- 0.2 nm
- 0.2 μm
- 0.2 \AA
- 0.2 mm

Question No.31

4.00

Bookmark

If 5 men or 8 boys can do a work in 84 days. In how many days can 10 men and 5 boys can do the same work?

- 25
- 28
- 35
- 32

Question No.32

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Bookmark

Who disproved the spontaneous generation by showing that maggots only appear on decaying meat that has been exposed to flies?

- Joseph Lister
- Louis Pasteur
- Robert Koch
- Robert Hooke

Question No.33

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Bookmark

Since the _____ of the motor car, road accidents have increased dramatically.

- inception
- inauguration
- initiation
- advent

Question No.34

4.00

Bookmark

E-test is employed for testing of _____.

- Antibody
- Antibiotics
- Antigen
- Probiotics

Question No.35

4.00

Bookmark

A term is used to describe procedures performed outside of the living organism

- In vitra*
- In vitro*
- In vivo*
- In viva*

Question No.36

4.00

Bookmark

_____ media encourage the growth of an organism present in low numbers.

- Enrichment
- Transport
- Selective
- Differential

Question No.37

4.00

Bookmark

Choose the best antonym of the italicized word.

There are four chapters that are *extraneous* to the structure of the book.

- integral
- important
- relevant
- needful

Question No.38

4.00

Bookmark

Which technique can be used for detection of radioactivity?

- Avidin-streptavidin conjugate
- Liquid scintillation counting
- Biophotometry
- Immuno-precipitation

Question No.39

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Bookmark

Which of the following cell possess poly morphonucleus

- B- cells
- Macrophage
- Erythrocyte
- Neutrophils

Question No.40

4.00

Bookmark

Choose the correct meaning of the italicized idiom.

Those who work by *fits and starts* seldom show good results.

- Rarely
- Regularly
- Irregularly
- Disinterestedly

Question No.41

4.00

Bookmark

All belong to Enteric proteobacteria group except

- Shigella*
- Staphylococcus*
- Salmonella*
- E. coli*

Question No.42

4.00

Bookmark

Rhizopus and *Mucor* belong to

- Zygomycota
- Basidiomycota
- Ascomycota
- Chytridiomycota

Question No.43

4.00

Bookmark

In chromatography, which of the following can the mobile phase be made of?

- Liquid or gas
- Solid or liquid
- Liquid only
- Gas only

Question No.44

4.00

Bookmark

Which of the following structure is absent in Gram positive bacteria

- Murein
- Cell wall
- Teichoic acid
- Outer membrane

Question No.45

4.00

Bookmark

Which of the following is not a type of Spectroscopy?

- X ray
- Sound
- Nuclear magnetic resonance
- Gamma ray

Question No.46

4.00

Bookmark

The major molecule responsible for rejection of transplant is

- Antibodies
- B Cells
- T Cells
- MHC Molecule

Question No.47

4.00

Bookmark

Agar is obtained from:-

- Blue-green algae
- Green algae
- Brown algae
- Red algae

Question No.48

4.00

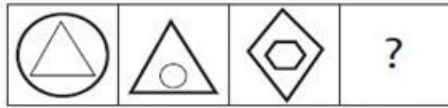
Bookmark

RFLP (Restriction Fragment Length Polymorphism) study is a technique for:-

- Isolating single genes
- Isolating single gene products
- Transferring genes from unrelated species
- Identifying genetic (DNA) homologies

Question No.49

4.00

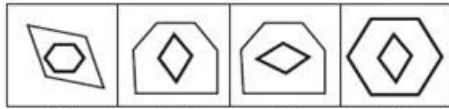
Bookmark 

A

B

C

D



(1)

(2)

(3)

(4)

- 1
- 4
- 3
- 2

Question No.50

4.00

Bookmark

Autoclaving uses _____ to sterilise

- air mixed with steam
- steam and pressure
- short periods of temperature
- chemicals

Question No.51

4.00

Bookmark

What cannot be a reason for using electrophoresis?

- Comparing two sets of DNA
- Organizing DNA by shape of backbone
- Organizing DNA in order we can see
- Organizing DNA fragments from largest to smallest

Question No.52

4.00

Bookmark

Antoni van Leeuwenhoek started out on his pioneering microscope work in

- 1670
- 1675
- 1671
- 1673

Question No.53

4.00

Bookmark

Microorganisms need molecular oxygen in low concentrate called

- Facultative anaerobes
- Aerotolerant anaerobes
- Microaerophiles
- Obligate anaerobes

Question No.54

4.00

Bookmark

If A+B means A is daughter of B,
A-B means A is husband of B
A × B means A is brother of B

From the statement P – Q + R × S, how is Q related to S?

- Niece
- Sister
- Mother
- None of these

Question No.55

4.00

Bookmark

Study the following information carefully and answer the question below it

- (i) There is a group of five persons- A, B, C, D and E
- (ii) One of them is manual scavenger, one is sweeper, one is watchman, one is human scarecrow and one is grave-digger
- (iii) Three of them – A, C and grave-digger prefer tea to coffee and two of them – B and the watchman prefer coffee to tea
- (iv) The human scarecrow and D and A are friends to one another but two of these prefer coffee to tea.
- (v) The manual scavenger is C's brother

Who is a manual scavenger?

- D
- A
- C
- B

Question No.56

4.00

Bookmark

Anoxygenic photosynthesis found in :

- Green plant
- Green bacteria
- Cyanobacteria
- Algae

Question No.57

4.00

Bookmark

Choose the missing term : AZ, GT, MN, ?, YB

- TS
- SX
- KE
- SH

Question No.58

4.00

Bookmark

Which immunoglobulin is the least prevalent

- IgD
- IgE
- IgA
- IgG

Question No.59

4.00

Bookmark

These boys need some new books, _____?

- isn't it?
- do they?
- is it?
- don't they?

Question No.60

4.00

Bookmark

The main product of *Embden-Meyerhof pathway* is

- Citrate
- Phosphate
- Pyruvate
- Nitrate

Question No.61

4.00

Bookmark

He noticed that when lactic acid was produced in wine instead of alcohol, rod-shaped bacteria were always present, as well as the expected yeast cells

- Edward Jenner
- Louis Pasteur
- Robert Kock
- Toshep Lister

Question No.62

4.00

Bookmark

Choose the best antonym of the italicized word.

Many snakes are actually *innocuous*.

- ferocious
- poisonous
- harmful
- deadly

Question No.63

4.00

Bookmark

In recent times, the number of cases of death by poisoning _____ sharply.

- increased
- have increased
- had increased
- has increased

Question No.64

4.00

Bookmark

Process by which antibodies increase activity of phagocytosis of bacteria

- Capsules
- Transposons
- Opsonization
- Conjugation

Question No.65

4.00

Bookmark

A term that describes an organism that feeds on dead and decay inorganic materials.

- saprophyte
- phyton
- phyla
- saprobe

Question No.66

4.00

Bookmark

If in a certain language, GRASP is coded as BMVNK, which word would be coded as CRANE?

- FUDQH
- HWFSJ
- BQZMD
- XMVIZ

Question No.67

4.00

Bookmark

unicellular green alga, sexual reproduction only occurs under adverse conditions

- Euglena*
- Laminaria*
- Trypanosoma*
- Chlamydomonas*

Question No.68

4.00

Bookmark

The majority of microorganisms are:

- Thermophiles
- Mesophiles
- Psychrophiles
- Extreme thermophile

Question No.69

4.00

Bookmark

The microorganisms which must use one or more organic compounds as its source of carbon called

- Autotroph
- Chemotroph
- Heterotroph
- Lithotroph

Question No.70

4.00

Bookmark

Which animals may suffer from foot and mouth disease?

- Cattle and Pigs
- Cattle
- Cattle, Sheep and Pigs
- Cattle and Sheep

Question No.71

4.00

Bookmark

Which of the following is an example of a monosaccharide

- Starch
- Chitin
- Cellulose
- Glucose

Question No.72

4.00

Bookmark

When a solution containing ds DNA is heated above its T_m , the change observed in uv-visible spectra before and after treatment is called _____.

- Hyperchromic shift
- Bathochromic shift
- Hypsochromic shift
- Achromic shift

Question No.73

4.00

Bookmark

Based on the information given answer the following question.

1. In a family of six persons, there are people from three generations. Each has separate professions and they like different colours. There are two couples.
2. Shyam is an Engineer and his wife is not a doctor and she does not like Red colour.
3. Chartered Accountant likes green colour and his wife is a teacher.
4. Manisha is the mother-in-law of Sunita and she likes orange colour.
5. Vimal is the grand father of Tarun and tarun is the Principal and likes black colour.
6. Nyna is the grand daughter of Manisha and she likes blue colour. Nyna's Mother likes white colour.

Which of the following is the correct pair of two couples?

- Shyam-Manisha, Vimal-Sunita
- Cannot be determined
- Tarun-Nyna, Shyam-Sunita
- Shyam-Sunita, Vimal-Manisha

Question No.74

4.00

Bookmark

The term used to describe reactions that break down large molecules, usually coupled to a release of energy.

- Parabolism
- Metabolism
- Catabolism
- Anabolism

Question No.75

4.00

Bookmark

A two digit number is three times the sum of its digits. If 45 is added to it, the digits are reversed. The number is

- 31
- 27
- 32
- 35

Question No.76

4.00

Bookmark

"The micro organism must be capable of being isolated and grown in pure culture" one of

- Flemming 's postulates
- Pasteur 's postulates
- Alexander's postulates
- Koch's postulates

Question No.77

4.00

Bookmark

A microscope is an instrument that:

- Decrease the size of small objects
- Makes faraway objects look closer
- Increase the size of small objects
- Makes small objects appear larger

Question No.78

4.00

Bookmark

Study the following information carefully and answer the question below it:

Aasha, Bhuvnesh, Charan, Danesh, Ekta, Farhan, Ganesh and Himesh are sitting around a circle, facing the centre. Aasha sits fourth to the right of Himesh while second to the left of Farhan. Charan is not the neighbour of Farhan and Bhuvnesh. Danesh sits third to the right of Charan. Himesh never sits next to Ganesh.

Who among the following sits between Ganesh and Danesh?

- Charan
- Ekta
- Aasha
- Bhuvnesh

Question No.79

4.00

Bookmark

Coxiella is a member of the

- Acetic acid bacteria
- Reckettsia
- Spirilla
- Pseudomonads

Question No.80

4.00

Bookmark

An epitope is

- a hapten
- a B-Cell
- The antigen determinant site
- an antibody

Question No.81

4.00

Bookmark

The type of filter used in the Laminar air flow biological cabinet is:-

- High Efficiency Particulate Air filter
- High Efficiency Physiological Air filter
- High Efficiency Primary Air filter
- High Efficiency Physical Air filter

Question No.82

4.00

Bookmark **Statement:** "A Car is required on rent"-An Advertisement**Assumptions:**

I. All types of Vehicles are available on Rent

II. People will respond to the advertisements

- If both I and II are implicit
- If neither I nor II is implicit
- If only assumption I is implicit
- If only assumption II is implicit

Question No.83

4.00

Bookmark

The enzyme photolyase repair the thymine dimer in the DNA by

- Free radical mechanism
- Oxidation mechanism
- Adduct formation
- Direct bond breaking

Question No.84

4.00

Bookmark *Cutaneous* the most common infections found in humans, and are caused by

- Fungi
- Bacteria
- Virus
- Protozoa

Question No.85

4.00

Bookmark

A shift to lower wave number for an absorption in a spectrum corresponds to

- A loss of intensity
- A shift to higher energy
- A shift to lower wavelength
- A shift to lower frequency

Question No.86

4.00

Bookmark

Citrus canker is caused by

- Phytomonas
- Hay bacillus
- Lactobacillus
- Salmonella

Question No.87

4.00

Bookmark

Choose the correct meaning of the italicized idiom.

You cannot throw *dust into my eyes*.

- Hurt me
- Terrify me
- Cheat me
- Abuse me

Question No.88

4.00

Bookmark

Who discovered the Polio vaccine?

- Eli Whitney
- Jonas Salk
- Louis Pasteur
- Konrad Zuse

Question No.89

4.00

Bookmark

Which of the following is not associated with cell cycle?

- DNA polymerases
- Myosins
- CDK
- Cyclins

Question No.90

4.00

Bookmark

Multicellular forms such as moulds have long, branched, threadlike filaments called

- Coenocytic
- Septum
- Mycellium
- Hypha

Question No.91

4.00

Bookmark

Which is the reservoir of Neisseria meningitides

- Salt water
- Domesticated animals
- Human carriers
- Soil

Question No.92

4.00

Bookmark

Choose the best synonym of the italicized word. The prisoners of war signed the document under *coercion*.

- compulsion
- confusion
- security
- supervision

Question No.93

4.00

Bookmark

An absorption in an electronic spectrum is recorded at 17000 cm^{-1} . What does this correspond to in nm?

- 59000 nm
- 5900 nm
- 590 nm
- 59 nm

Question No.94

4.00

Bookmark

Majority of the auto immune disease are

- Macrophage mediated
- Mast cells mediated
- Antibody mediated
- Cell Mediated

Question No.95

4.00

Bookmark

Most microorganisms grow best around pH

- 3
- 7
- 5.5
- 8

Question No.96

4.00

Bookmark

The role of Urea in PAGE separation of DNA is to

- Act as cation
- Act as anion
- Helps to denature DNA
- Provide buffer stability to the gel

Question No.97

4.00

Bookmark

The phenomenon of production of ethanol by yeast cells under high concentration of glucose rather than producing biomass by TCA cycle is described as

- Olivosky's effect
- Simposn's effect
- Warburg effect
- Crabtree effect

Question No.98

4.00

Bookmark

SCID can occur due to the absence of an enzyme

- Phosphorylase
- Thymidine deaminase
- Guanosine deaminase
- Adenosine deaminase

Question No.99

4.00

Bookmark

The activity of AP endonuclease is involved in

- Double strand break repair
- Nucleotide excision repair
- Base excision repair
- Mismatch repair

Which of the following is a macronutrient?

- Iron
- Oxygen
- copper
- Zinc