



WBSCS 2022



SCIENCE



2 HOURS

MARATHON



06: 00 PM



18 JUNE 2022



1. BAUXITE IS AN ORE OF

- A) IRON
- B) ALUMINIUM
- C) MERCURY
- D) COPPER



2. EVERY FOOD CHAIN IN THE ECOSYSTEM BEGINS WITH..... WHICH ARE THE ORIGINAL SOURCE OF FOOD.

- (A) SAPROPHYTES
- (B) PARASITES
- (C) PRODUCERS
- (D) HERBIVORES



3. WHICH AMONG THE FOLLOWING IS A CORRECT FULL FORM FOR DDT?

- (A) DICHLORO DIPHENYL TRICHLORO ETHANE
- (B) DICHLORO DIPHENYL TETRA CHLORO ETHANE
- (C) DICHLORO DECAPHENYL TRICHLORO ETHANE
- (D) DICHLORO DIETHYL TRICHLORO ETHANE



4. MENDEL CONDUCTED HIS FAMOUS BREEDING EXPERIMENTS BY WORKING ON:-

- (A) DROSOPHILA
- (B) ESCHERICHIA COLI
- (C) PISUM SATIVUM
- (D) ALL OF THESE



5. WHAT IS THE AVERAGES RATE OF THE HEART BEATS (PER MINUTE) IN AN ADULT?

- A. 60
- B. 72
- C. 84
- D. 96



6. WHICH OF THE FOLLOWING IS THE VOLUME OF THE URINE PRODUCED IN AN ADULT HUMAN EVERY 24 HOURS?

- A. 1 LITRE
- B. 1.5 LITRES
- C. 3.0 LITRES
- D. 5.0 LITRES



7. IN THE HUMAN BODY, THE BLOOD ENTERS THE AORTA OF THE CIRCULATORY SYSTEM FROM THE:

- A. LEFT ATRIUM**
- B. LEFT VENTRICLE**
- C. RIGHT ATRIUM**
- D. RIGHT VENTRICLE**



8. WHICH ONE OF THE FOLLOWING PLANT NUTRIENTS IS NOT SUPPLEMENTED IN THE SOIL FOR GROWING LEGUMES?

- A. NITROGEN**
- B. POTASSIUM**
- C. PHOSPHORUS**
- D. NONE OF THESE**



9. WHO AMONG THE FOLLOWING DISCOVERED THE ANTI-RABIES VACCINE?

- A. EDWARD JENNER
- B. JAMES LIND
- C. LOUIS PASTEUR
- D. ROBERT KOCH



10. WHAT IS THE PH VALUE OF PURE WATER?

A. 6.4

B. 6.6

C. 7

D. 7.4



**11. WHICH OF THE FOLLOWING IS CALLED
PHILOSOPHER'S WOOL?**

- A. ZINC BROMIDE**
- B. ZINC NITRATE**
- C. ZINC OXIDE**
- D. ZINC CHLORIDE**



**12. IN THE PROCESS OF ELECTROLYSIS
OXIDATION OCCURS AT:**

- A. CATHODE
- B. ANODE
- C. BOTH OF THESE
- D. NONE OF THESE



13. IN THE GALVANIC CELL, THE PROCESS TAKES PLACE IS:

A. TRANSFORMATION OF THE ELECTRICAL ENERGY INTO THE CHEMICAL ENERGY

B. TRANSFORMATION OF THE CHEMICAL ENERGY INTO THE ELECTRICAL ENERGY

C. TRANSFORMATION OF LIGHT ENERGY INTO THE ELECTRICAL ENERGY

D. TRANSFORMATION OF ELECTRICAL ENERGY INTO THE LIGHT ENERGY



14. WHICH OF THE FOLLOWING IS THE HEAVIEST METAL?

A. SILVER

B. GOLD

C. MERCURY

D. PLATINUM



15. WHICH OF THE FOLLOWING IS THE LIGHTEST METAL?

A. MAGNESIUM

B. ALUMINIUM

C. PLATINUM

D. LITHIUM



16. THE MAIN ORE OF THE MERCURY IS:

- A. CINNABAR
- B. PYRITE
- C. BAUXITE
- D. PYROLUSITE



17. THE ELEMENT RADIUM WAS EXTRACTED FROM:

- A. LIME STONE
- B. PINCH BLEND
- C. RETILE
- D. HAEMATITE



**18. THE FLORAL PART THAT RECEIVES POLLEN -
GRAINS DURING POLLINATION IS**

- (A) OVARY**
- (B) STYLE**
- (C) STIGMA**
- (D) OVULES**



19. THE BACK PART OF THE MOON IS ALWAYS CALM AND DARK WHICH IS CALLED:

- A. SEA OF TRANQUILLITY**
- B. OCEAN OF STORMS**
- C. BOTH OF THESE**
- D. NONE OF THESE**



**20. THE SKY APPEARS BLACK FROM THE MOON
BECAUSE OF :**

- A. LACK OF ATMOSPHERE
- B. LACK OF CLOUD
- C. LACK OF OXYGEN AND CO₂
- D. NONE OF THESE



21. WHAT PORTION OF THE MOON IS VISIBLE FROM THE EARTH'S SURFACE?

A. 47%

B. 34%

C. 21%

D. 41%



22. WHERE IS VIKRAM SARABHAI SPACE CENTRE?

- (A) THIRUVANANTHAPURAM
- (B) ODISHA
- (C) KERALA
- (D) ANDHRA PRADESH



23. WHICH DEVICE IS USED TO MEASURE THE DEPTH OF SEAS AND OCEANS?

- A. GRAVOMETER
- B. FATHOMETER
- C. GYROSCOPE
- D. DILATOMETERS



24. NAME AN INSTRUMENT USED TO MEASURE THE SOUND WAVES INSIDE THE WATER?

- A. COMOGRAPH**
- B. DICTAPHONE**
- C. CRESCOGRAPH**
- D. HYDROPHONE**



**25. NAME A DEVICE USED TO MEASURE
ATMOSPHERIC HUMIDITY?**

- A. HYGROMETER
- B. GRAVOMETER
- C. AVOMETER
- D. CALORIMETER



26. WHICH DEVICE IS USED TO DETECT AND MEASURE THE PURIFICATION OF THE MILK?

- A. MICROPHONE
- B. HEART LUNGS MACHINE
- C. GANONG RESPIRATORY
- D. LACTOMETER



27. WHAT DO WE CALLED WHEN THE SOUND OF FREQUENCY WILL BE BELOW 20 HZ?

- A. AUDIO SOUNDS**
- B. INFRASONIC**
- C. ULTRASONIC**
- D. SUPERSONICS**



28. WHY IMPURITIES ARE ADDED TO A SEMI-CONDUCTOR?

- A. TO INCREASE ITS LIFE
- B. TO ENABLES IT TO WITHSTAND HIGHER VOLTAGES
- C. TO INCREASE ITS ELECTRICAL CONDUCTIVITY
- D. TO INCREASE ITS ELECTRICAL RESISTIVITY



29. WHICH OF THE FOLLOWING STATEMENT (S) IS/ARE CORRECT ABOUT THERMAL EXPANSION

- A. THE CHANGE IN TEMPERATURE OF A BODY CAUSES EXPANSION OR CONTRACTION OF THAT BODY.**
- B. MOST OF THE SUBSTANCES EXPAND ON HEATING AND CONTRACT ON COOLING.**
- C. BOTH A & B**
- D. NONE OF THE ABOVE**



30. CONSIDER THE FOLLOWING STATEMENT (S) REGARDING CONDUCTORS

I. CONDUCTORS ARE MATERIALS THAT PERMIT ELECTRONS TO FLOW FREELY FROM PARTICLE TO PARTICLE.

II. CONDUCTORS ARE MATERIALS THAT PERMIT ELECTRONS TO FLOW FREELY FROM ATOM TO ATOM.

WHICH IS/ARE CORRECT STATEMENT (S) IS/ARE CORRECT?

A. ONLY I

B. ONLY II

C. BOTH I & II

D. ALL OF THE ABOVE



31. WHAT ARE THOSE ANIMALS CALLED WHICH EAT BOTH PLANTS AND ANIMALS?

- A. OMNIVORES
- B. HERBIVORES
- C. CARNIVORES
- D. DECOMPOSERS



32. A GROUP OF GLANDS WHICH PRODUCE VARIOUS HORMONES IS CALLED:

- A. RESPIRATORY SYSTEM
- B. EXCRETION
- C. ENDOCRINE SYSTEM
- D. CENTRAL NERVOUS SYSTEM



33. WHAT ARE HETEROTROPHS, MOSTLY BACTERIA AND FUNGI, WHEN OBTAIN FOOD BY BREAKING DOWN SUBSTANCES IN DEAD PROTOPLASM ARE CALLED:

- A. OMNIVORES
- B. HERBIVORES
- C. DECOMPOSERS
- D. CARNIVORES



34. WHICH ONE OF THE FOLLOWING WAVES ARE USED BY THE COMMON TV REMOTE CONTROL?

A. RADIO WAVES

B. LASERS

C. INFRARED WAVES

D. ULTRASONIC WAVES



35. WHICH BACTERIA IS RESPONSIBLE FOR THE FORMATION OF CURD?

A. LACTIC ACID BACTERIA

B. LACTOBACILLUS ACIDOPHILLUS

C. LACTOBACILLUS AUREUS

D. BACILLUS RADICICOLA



36. WHICH ONE OF THE FOLLOWING BACTERIA PRESENT IN THE SOIL PRODUCES A PECULIAR SMELL IF IT RAINS ON PERCHED SOIL?

- A. STREPTOMYCETES**
- B. STAPHYMYCETES**
- C. DIPLOMYCETES**
- D. MICROCOCCUS**



37. IN POORLY VENTILATED BUILDINGS WHICH ONE OF THE FOLLOWING INERT GASES CAN BE ACCUMULATED?

A. HELIUM

B. NEON

C. ARGON

D. RADON



38. HONEY IS SWEETER THAN CANE SUGAR OR CORN SYRUP. WHICH ONE OF THE FOLLOWING CARBON SUGARS IS RESPONSIBLE FOR THIS?

A. DEXTROSE

B. LEVULOSE

C. SUCROSE

D. FRUCTOSE



39. NAME AN ENZYME THAT IS DERIVED FROM THE STOMACHS OF YOUNG RUMINANT ANIMALS AND ALSO USED IN DAIRY INDUSTRY TO PRODUCE CHEESE?

- A. TRYPSIN
- B. PEPSIN
- C. LIGNINASE
- D. RENNIN



40. NAME AN ENZYME THAT DIGESTS FAT?

A. LIPASE

B. SUCRASE

C. MALTASE

D. FRUCTOSE



41. WHAT IS THE GRAVITATIONAL FORCE EXERTED ON A MASS, CALLED?

- A) STRESS
- B) INERTIA
- C) WEIGHT
- D) WORK



42. FREEZING POINT OF WATER IS

- A) 40° F
- B) 42° F
- C) 34° F
- D) 32° F



43. BOILING POINT OF WATER IS

A) 210°F

B) 212°F

C) 214°F

D) 208°F



44. WHAT ARE STARS PRIMARILY MADE OF?

- A) OXYGEN AND HYDROGEN
- B) HYDROGEN AND CARBON
- C) HYDROGEN AND HELIUM
- D) OXYGEN AND HELIUM



45. WHAT IS THE PROCESS OF SLOW COOLING OF HOT GLASS CALLED?

- A) ANNEALING
- B) HUMID
- C) CONDENSATION
- D) DECANTATION



46. WHEN TWO LIQUIDS DO NOT MIX WITH EACH OTHER TO FORM A SOLUTION, WHAT IS IT CALLED?

A) SOLVENT

B) SOLUTE

C) IMMISCIBLE

D) DECANTATION



47. ONCOLOGY IS ASSOCIATED WITH TREATMENT OF

- A) OSTEOPOROSIS
- B) DIABETES
- C) CANCER
- D) RENAL FAILURE



48. THE INSTRUMENT USED TO EXAMINE A PERSON'S DIGESTIVE TRACT IS CALLED

- A) OSCILLOSCOPE
- B) MICROS COPE
- C) ENDOSCOPE
- D) RADIOGRAPH



49. ATMOSPHERE OF VENUS MOSTLY CONTAINS WHICH OF THE FOLLOWING GASES?

- A) NITROGEN
- B) HYDROGEN
- C) OXYGEN
- D) CARBON DIOXIDE



50. LEPROSY IS ALSO KNOWN AS

- A) ANGINA
- B) HANSEN'S DISEASE
- C) GAUCHER DISEASE
- D) HODGKIN DISEASE



**51. THE GLAND IN THE HUMAN BODY WHICH
SECRETES BOTH ENZYMES AND HORMONES IS:**

- A) LIVER
- B) PANCREAS
- C) SALIVARY GLAND
- D) PITUITARY



52. RETINOL IS MAINLY RELATED TO

- A) VITAMIN A
- B) VITAMIN B
- C) VITAMIN C
- D) VITAMIN D



53. IS USED AS A STABILIZER IN ICE CREAM.

A) GELATIN

B) SUGAR

C) MILK

D) STRAWBERRY



54. THE DISEASE CIRRHOSIS AFFECTS WHICH ORGAN IN THE BODY?

- A) BRAIN
- B) LIVER
- C) HEART
- D) KIDNEY



55. WHAT PLANT HAS THE SCIENTIFIC NAME SOLANUM TUBEROSUM?

- A) POTATO
- B) TOMATO
- C) PUMPKIN
- D) ONION



56. 'GALLON' IS COMMONLY USED

- A) TO REFER TO SPEED.
- B) TO REFER TO A CONTAINER.
- C) AS A MEASURE OF VOLUME
- D) TO EXPRESS CONTAINERS IN TERMS OF BARREL



57. WHAT WILL HAPPEN TO A PERSON'S WEIGHT WHEN HE IS IN A MOVING ELEVATOR?

A) INCREASE

B) DECREASE

C) WEIGHT WILL NOT CHANGE

D) MAY INCREASE OR DECREASE



58. WHERE IN THE HUMAN BODY CAN YOU FIND THE ISLETS OF LANGERHANS?

- A) SMALL INTESTINE
- B) PANCREAS
- C) STOMACH
- D) HEART



**59. MIRAGES ARE FORMED PRIMARILY DUE TO
_____ OF LIGHT.**

- A) REFLECTION**
- B) DIFFUSION**
- C) REFRACTION**
- D) RADIATION**



**60. TRANSPORTATION OF WATER AND MINERALS
IN A PLANT IS CONDUCTED BY ?**

- (A) STEM
- (B) ROOTS
- (C) XYLEM
- (D) PETIOLE



61. WHO COINED THE WORD ENZYME?

- A. WILHELM KUHNE
- B. ALFRED RUSSEL
- C. ROBERT KOCH
- D. ROSALIND FRANKLIN



62. NAME AN ENZYME WHICH IS NOT PROTEINACEOUS IN NATURE?

- A. CELLULASES
- B. XYLANASES
- C. RIBOZYME
- D. PEPTIDIASE



63. 1 BYTE IS EQUAL TO:

A) 2 BITS

B) 8 BITS

C) 16 BITS

D) 32 BITS



64. THE UNIT USED INTERNATIONALLY FOR MEASURING THE VOLUME OF CRUDE OIL IS:

A) LITRE

B) GALLON

C) BARREL

D) US GALLON



65. A BARREL OF CRUDE OIL IS EQUAL TO:

1) 42 US GALLON

2) 159 LITRE

3) 100 LITRE

4) 25 US GALLON

A) ONLY 1

C) 1 AND 2 ONLY

B) ONLY 2

D) ONLY 3 AND 4



66. 18 CARAT GOLD IS:

- A) 50% GOLD AND 50% IMPURITY**
- B) 75% GOLD AND 25% IMPURITY**
- C) 100% GOLD**
- D) 60% AND 40% IMPURITY**



67. IN WHICH OF THE FOLLOWING INDUSTRIES IS MICA USED AS A RAW MATERIAL?

A) ELECTRICAL

B) IRON AND STEEL

**C) TOYS
POTTERY**

D) GLASS AND



68. WHICH OF THE FOLLOWING VITAMINS IS CALLED A WATER-SOLUBLE VITAMIN?

- (A) VITAMIN A
- (B) VITAMIN D
- (C) VITAMIN C
- (D) VITAMIN K



69. EXCESSIVE INTAKE OF CALCIUM IN OUR DIET RESULTS IN _____.

- (A) STROKE**
- (B) DIARRHOEA**
- (C) CONSTIPATION**
- (D) KIDNEY STONES**



70. NIGHT BLINDNESS IS CAUSED DUE TO THE DEFICIENCIES OF _____.

- (A) VITAMIN A
- (B) VITAMIN B
- (C) VITAMIN C
- (D) VITAMIN E



ALL THE BEST FROM MAHENDRAS FAMILY

THANK YOU

महेन्द्रा परिवार की ओर से सभी को शुभकामनाएँ