## The National Science Bee - Middle and Elementary Divisions 2019-2020 Online Regional Qualifying Exam - Makeup Version

Instructions: Print the Correct Answer in the space provided or leave it blank. Write Neatly!!! Correct answers are worth $\mathbf{2}$ points. Incorrect answers are $\mathbf{- 1}$ point. Questions left blank are worth $\mathbf{0}$ points.

You have 20 minutes to complete this Exam. If you are also taking any other exam(s), you have 40 minutes in which to complete them, and you may do them simultaneously or one after the other.
$\qquad$ 1) Which of the following animals belongs to the class Mammalia?
A) Chameleon
B) Bald Eagle
C) Mongoose D) Jellyfish
2) Which of the following is not a subatomic particle?
A)Molecule
B) Electron
C) Proton
D) Neutron
$\qquad$ 3) Which of the following US states is most likely to be hit by a hurricane?
A) Oregon
B) Colorado
C) Wisconsin
D) Florida
4) Which of these organs of the human body is part of the excretory system?
A) Brain
B) Kidney
C) Lungs
D) Skin
$\qquad$ 5) Cyrrus and Cumulonimbus are two common types of what phenomenon?
A) Precipitation
B) Fronts
C) Cyclones
D) Clouds
$\qquad$ 6) Which of the following is a type of coniferous tree?
A) Red Oak
B) Coconut Palm
C) White Pine D
D) Sugar Maple
7) Which of the following astronomical bodies was demoted to dwarf planet status?
A) Pluto
B) Neptune
C) Jupiter
D) Europa
$\qquad$ 8) A formula to calculate the hypotenuse of a right triangle is named after which mathematician?
A) Pythagoras
B) Euclid
C) Archimedes
D) Fermat
$\qquad$ 9) Isaac Newton and Gottfried Leibniz both invented which branch of mathematics?
A) Geometry
B) Calculus
C) Algebra
D) Statistics
10) Which of these species is currently extinct?
A) Siberian Tiger
B) Dodo
C) Pronghorn
D) Bighorn Sheep
11) An isotope differs from the normal form of an atom by the number of what?
A) Ions
B) Electrons
C) Neutrons
D) Orbitals
12) Which of these countries is home to a hot desert climate?
A) Saudi Arabia
B) Sweden
C) Cuba
D) New Zealand
13) Which of the following is a type of flightless bird?
A) Snow Leopard
B) Monarch Butterfly
C) Venus Flytrap
D) Emu
14) "The set of points in a two-dimensional space equidistant from the same point" is a definition of which shape?
A) Circle
B) Ellipse
C) Cylinder
D) Sphere
$\qquad$ 15) Which of these is an example of a triatomic molecule?
A) Glucose
B) Water
C) Carbon Monoxide D) Methane
16) Which of the following are examples of types of early computers?
A) ENIAC \& UNIVAC
B) Bit \& Byte
C) HTML \& Java
D) Cytoplasm \& Ribosome
17) Which of the following planets is closer to the Sun than Earth is?
A) Venus
B) Mars
C) Saturn
D) Uranus
18) Which of these is an example of a prime number?
A) Nine
B) Ten
C) Eleven
D) Twelve
$\qquad$ 19) Osteoporosis is a disease that directly affects which parts of the body?
A) Bones
B) Muscles
C) Skin
D) Hair
20) What is not one the three main classification groups for rocks?
A) Igneous
B) Sedimentary
C) Composite D) Metamorphic
21) Which operation in mathematics results in a product?
A) Addition
B) Subtraction
C) Multiplication
D) Division
_____22) What system of numbers consisting only of zeros and ones underpins modern computers?
A) Binary
B) Exponents
C) Algebraic
D) Imaginary numbers
23) Which US state is home to the active volcano known as Kilauea?
A) Alaska
B) Wyoming
C) Florida
D) Hawaii
24) What is the boiling point of water in degrees Celsius?
A) 0
B) 32
C) 100
D) 212
25) The temperature of a normal human body is roughly how many degrees Fahrenheit?
A) 25.4
B) 37
C) 98.6
D) 100
26) Which of these planets has no moons?
A) Mercury
B) Mars
C) Uranus
D) Neptune
27) Which element is the second lightest, with atomic symbol He ?
A) Helium
B) Hydrogen
C) Hahnium
D) Oxygen
28) Which of these scientists was a pioneering researcher for her work on DNA?
A) Rosalind Franklin
B) Ada Lovelace
C) Grace Hopper
D) Marie Curie
29) Which layer of the atmosphere is found just above the troposphere and also contains the ozone layer?
A) Stratosphere
B) Magnetosphere
C) Thermosphere
D) Exosphere
30) Which of these was a British scientist who was known for his laws of motion?
A) Johannes Kepler
B) Isaac Newton
C) Tim Berners-Lee
D) Stephen Hawking
31) Studying the beaks of finches helped which scientist to formulate his theory of evolution?
A) Charles Darwin
B) Isaac Newton
C) Thomas Edison
D) Louis Pasteur
32) Which of these is a type of precipitation that commonly occurs when the temperature is around 32 degrees Fahrenheit?
A) Stratus
B) Fog
C) Typhoon
D) Sleet
33) Which division in taxonomy comes between class and family?
A) Kingdom
B) Order
C) Phylum
D) Genus
$\qquad$ 34) Which of the following bones can be found in your leg?
A) Cranium
B) Tibia
C) Radius
D) Coccyx
35) Which of the following places would be a good spot to generate hydroelectricity?
A) Nuclear reactor
B) Wind turbine
C) Waterfall
D) Particle accelerator
36) Juan de Fuca, Pacific and North American are examples of which things that are pieces of the earth's crust?
A) Subduction zones
B) Tectonic plates
C) Rifts
D) Volcanic hotspots
37) Which of the following is an example of a fossil fuel?
A) Wind
B) Sunlight
C) Tides
D) Coal
38) Which of the following is an example of an constellation?
A) Ursa Major
B) Pulsar
C) Astroid
D) Pluto
39) In molecular biology, what does DNA stand for?
A) Duplicate neuron activation
B) Double Negative Allele
C) Deciduous Nut Activation
D) Deoxyribonucleic Acid
40) Approximately how many calories should an adult human consume in a day?
A) 20
B) 200
C) 2,000
D) $2,000,000$
41) $\pi x$ radius squared is the formula to find the area of which shape?
A) Triangle
B) Square
C) Circle
D) Pentagon
42) Which of the following is a type of mammal that lays eggs?
A) Dolphin
B) Squirrel
C) Kangaroo
D) Platypus
$\qquad$ 43) In which US state could you find an alligator living in the wild?
A) Indiana
B) New Jersey
C) Louisiana
D) Vermont
44) Which of the following should not be consumed is somebody is lactose intolerant?
A) Cow's milk
B) Soy beans
C) Lobster
D) Bread
45) Which of the following was an Italian astronomer who was tried by the inquisition for his support of Copernicus's heliocentric theory?
A) Johannes Kepler
B) Tycho Brahe
C) Galileo
D) Ptolemy
___ 46) Which of the following is a part of the body that a human can live without?
A) Liver
B) Heart
C) Brain
D) Appendix
____47) Gregor Mendel was an early geneticist who famously experimented with what type of plant?
A) Cactus
B) Pea plant
C) Venus flytrap
D) Palm tree
48) Which of these animals is an example of a vertebrate?
A) Kagu
B) Shrimp
C) Tarantula
D) Dragonfly
$\qquad$ 49) Which of these elements is one of the halogens?
A) Lithium
B) Neon
C) Argon
D) Chlorine
50) Which of the following was an important invention during the industrial revolution?
A) Steam engine
B) Transistor
C) Archimedes' screw
D) Barometer

