Academic Bee 1 - Round 2

Regulation Tossups

(1) This city was besieged by Henry Knox during one battle using heavy artillery taken from the recently captured Fort Ticonderoga. During a fight between soldiers and civilians on King Street, Crispus Attucks was shot and killed in this city. During a protest in this city, members of the Sons of Liberty dressed as Mohawk warriors to throw tea into the harbor. A namesake tea party occurred in, for the point, what largest city in Massachusetts?

ANSWER: **Boston**

(2) This novel's protagonist fulfills his wish to go to Cardiff Hill by tricking Ben Rogers into believing he enjoys fence painting. In this novel, Judge Thatcher has McDougal's Cave boarded shut, unknowingly trapping Injun Joe with a stolen treasure which is later given to two boys who live in St Petersburg, Missouri. For the point, name this novel about the title boy's adventures with his friend Huck Finn, written by Mark Twain.

ANSWER: The Adventures of *Tom Sawyer*

(3) This literary character is called by Helen Stoner to Stoke Moran where he discovers a leash and a dish of milk which help him find a deadly "Speckled Band." This character returned in "The Adventure of the Empty House" after "The Final Problem" appeared to kill both this character and his enemy, Moriarty. Doctor Watson assists, for the point, what literary detective created by Sir Arthur Conan Doyle?

ANSWER: **<u>Sherlock Holmes</u>** (accept either underlined name)

(4) A foreign minister from this country sparked the XYZ Affair by demanding bribes from American diplomats. The United States refused to pay their debts to this country after the fall of the monarchy, a move which partially led to the Quasi-War. After an American victory at the Battle of Saratoga, this country assisted the U.S. in the Revolutionary War. For the point, name this country which supported American independence by sending the Marquis de Lafayette to fight the British.

ANSWER: Kingdom of <u>France</u> (accept <u>French</u> First Republic; accept <u>French</u> Republic)

(5) Slaves imported into this country founded the Umbanda religion. Under the Old Republic, this country's politics were dominated by the *Café com leite*, or "Coffee with milk" system. This former Portuguese colony was the site of the establishment of the Estado Novo dictatorship by Getulio Vargas in 1937. For the point, name this South American country where, in 1960, the capital moved from Río de Janeiro.

ANSWER: Federative Republic of <u>Brazil</u> (accept Empire of <u>Brazil</u>; accept United Kingdom of Portugal, <u>Brazil</u>, and the Algarves; accept Republic of the United States of <u>Brazil</u>; accept <u>Old</u> <u>Republic</u> before mentioned)

(6) The first "sandwich" metallocene complex to be synthesized contained this element bonded to two cyclo-penta-diene ligands [[LIH-gunds]]. In one artificial nitrogen fixation process, this element serves as a catalyst for the production of ammonia. This element's "pig" type can oxidize to form rust, and fool's gold is the pyrite of this element. Carbon forms steel in combination with, for the point, what transition metal symbolized Fe [[F-E]]?

ANSWER: Iron

(7) A ballet by this composer includes a dance for the children who live under Mother Ginger's skirt. In a ballet by this composer, 32 fouettes are performed by a ballerina who plays both Odile [[oh-DEEL]] and Odette. In another work by this composer, "God Save the Tsar" swells over "La Marseillaise" [[mar-say-EHZ]] while cannons are heard. For the point, name this Russian composer of ballets like *The Nutcracker* and *Swan Lake*, who depicted Napoleon's invasion of Russia in his *1812 Overture*.

ANSWER: Pyotr Ilyich Tchaikovsky

(8) The island of Blois Blanc [[BLWAH BLONK]] within this body of water was ceded by the Chippewa nation in the Treaty of Greenville. The prehistoric Alpena-Amberley Ridge crossed this lake, connecting modern Ontario to the Lower Peninsula. This lake is separated from Lake Michigan by the Straits of Mackinac [[MAK-ih-naw]]. For the point, name this second-largest Great Lake which is split between Michigan and Ontario.

ANSWER: Lake <u>Huron</u>

(9) The mythical Vánagandr is one of these animals and is destined to be killed by Vitharr at the end of the world. An animal of this type was bound by Gleipnir, and at Ragnarok an animal of this type is destined to kill Odin. An animal of this type, one of the three children of the giant Angrbotha and the god Loki, bit off the hand of Tyr [[TEER]], the god of war. Fenrir is an enormous one of, for the point, what kind of large, typically wild, canine?

ANSWER: Grey **wolf** (accept Fenris(ulfr) **wolf**; accept Fenrir's [a]wolf; accept <u>Canis lupus</u>; prompt on "dog," "canine," or similar answers)

(10) One of this country's major feminist voices is the author of *The Female Eunuch*, Germaine Greer, and this country's only winner of the Nobel Prize in Literature did so in 1973, Patrick White. This country is the setting of books by Doris Pilkington and Peter Carey, including *Follow the Rabbit-Proof Fence*, which describes the Stolen Generation of this country's aboriginal peoples. For the point, name this Oceanic country governed from Canberra.

ANSWER: Commonwealth of Australia

(11) James Chadwick discovered these particles by observing how boron interacted with alpha radiation. Along with an electron neutrino, one of these particles is produced by electron capture. These particles are made out of two down quarks and one up quark. Gluons bind these particles to protons. For the point, name these neutrally-charged particles which make up the nucleus with protons.

ANSWER: <u>Neutron</u>s

(12) In a 2020 speech given at the Chase Center, this man said, "To everything there is a season: a time to build, a time to reap, and a time to sow and a time to heal. This is the time to heal." This man created a "Special" office of Envoy for Climate and made John Kerry the first person to hold that office. For the point, name this former vice president from Delaware, the 46th US president.

ANSWER: Joseph "Joe" <u>**Biden**</u>, Jr.

(13) The Kepler is a version of this specific type of shape whose sides are in the form a, ar, ar^2 . These specific shapes will always have one leg that coincides with the altitude. The area of this specific shape can be simplified to $\frac{1}{2}$ times a times b. Cutting a square along its diagonal will always yield two identical copies of this specific shape. For the point, name this type of three-sided shape with one angle of 90 degrees.

ANSWER: **<u>Right</u>**-angled **<u>triangle</u>** (accept **<u>Pythagorean triangle</u>**)

(14) An example of this type of work from the ballet *Les Sylphides* [[LAY seel-FEED]] is called "Grande" and "Brilliante," and is by a composer who wrote another of these works after seeing a dog chasing its tail. Works of this type, including ones nicknamed "Emperor" and "Minute," were written by Chopin and by the "king" of this genre of dance, Johann Strauss, Jr. For the point, name this style of Viennese ballroom dance, one of which describes the "Beautiful Blue Danube," traditionally written in 3/4 [[three-four]] time.

ANSWER: <u>Waltz</u>

(15) In a novel by this author, Azelma and the Thenardier [[teh-nar-dee-AY]] family target an ex-convict who adopts the girlfriend of Marius Pontmercy. In another novel by this author, Archdeacon Frollo [[FRAH-low]] executes Esmeralda, who was switched as a baby with the bellringer of a Paris cathedral. For the point, name this French author who created Jean Valjean and Quasimodo in the novels *Les Miserables* and *The Hunchback of Notre Dame*.

ANSWER: Victor Hugo

(16) Under this leader's rule, the only legal trade union was the Vertical Syndicate. This leader sent the Blue Division to assist Nazi forces on the Eastern Front. German and Italian air forces bombed the city of Guernica [[GEHR-nih-kuh]] at the behest of this leader. This leader of the Falange Party defeated the Republicans for control of his country. For the point, name this fascist dictator who was succeeded by Juan Carlos I as head of state of Spain.

ANSWER: Francisco Franco

(17) These cells convert carbon dioxide to bicarbonate using carbonic anhydrase. Howell-Jolly bodies form in these cells through the accumulation of DNA. One disorder causes these cells to take on a "sickle" shape, causing anemia. These cells get their namesake color from the presence of iron-rich hemoglobin. For the point, name these blood cells which carry oxygen through the body.

ANSWER: **<u>Red</u>** blood cells (accept <u>**Erythrocyte**</u>s; prompt on "blood cells")

(18) A scholar from this nation wrote that "Culture, like an individual, is a more or less consistent pattern of thought and action." Another anthropologist from this nation was encouraged by Franz Boas to study the upbringing of children in Samoa. Another scientist from this nation studied gorillas in the forests of Rwanda and wrote *Gorillas in the Mist*. For the point, name this homeland of anthropologists Ruth Benedict and Margaret Mead, and primatologist Dian Fossey.

ANSWER: <u>U</u>nited <u>S</u>tates of America (accept <u>USA</u>; accept <u>America</u>)

(19) Putting a hole in this 3D shape forms something equivalent to a torus, and this shape is made by graphing "x-squared plus y-squared plus z-squared equals r-squared." Lines in a non-Euclidean geometry named for this shape are geodesics or great circles, and examples of those include meridians. With a surface area equal to "four pi r squared" and a volume equal to "four thirds pi r cubed," for the point, name this solid that is the three-dimensional version of a circle.

ANSWER: 2-**Sphere**

(20) This ritual is the subject of the first of the Luminous Mysteries in which believers reflect on the descent of the Holy Spirit in the form of a dove. Evangelical denominations require a "believer's" form of this ritual which can only be performed on adults. This ritual was performed on Jesus by his cousin, John, in the Jordan River. For the point, name this ritual in which water is used to consecrate a Christian baby or adult to God.

ANSWER: **<u>Baptism</u>** (accept word forms such as <u>**Baptizing**</u>; accept <u>**Christen**</u>ing; accept Believer's <u>**Baptism**</u>; accept Credo<u>**baptism**</u>)

(21) A character in this novel is found weeping over the protagonist while aboard the ship of Robert Walton, to whom he confesses the murder of Henry Clerval. In this novel, Elizabeth Lavenza is killed by her husband's creation, who is angered when Victor refuses to build a wife for him. For the point, name this early science fiction novel about the title doctor's attempt to create new life, written by Mary Shelley.

ANSWER: Frankenstein; or the Modern Prometheus

(22) Products made from this crop were the target of an attempted boycott by William Wilberforce due to the use of slave labor in its cultivation. This crop, sometimes called "white gold," was partially supplanted by a type of beet grown in Europe and mainland America. For the point, name this crop which formed the basis of the colonial economy of the Caribbean, where it was used to make rum and molasses.

ANSWER: <u>Sugarcane</u> (prompt on "Sugar")

(23) This substance can be classified as a gelisol or a spodosol when found in permafrost or forests. A yellow type of this substance is moved by wind or glaciers and is called loess [[LOW-ess]]. Layers of this substance are called horizons and form via pedo-genesis. This substance contains humus [[HYOO-muss]], decomposed organic material, and can be classified as sand, silt, or clay. For the point, plants grow in what substance that is often found on the ground?

ANSWER: **<u>Soil</u>** (accept reasonable equivalents such as **<u>Dirt</u>**)

(24) Historical Bantustans in this nation include that of the Tswana and Venda tribes. This nation's first prime minister, Louis Botha, names a lark found in its Highveld region. This nation's historic gem mining industry is centered on the city of Kimberley in the Northern Cape. For the point, name this home to the Xhosa and Zulu nations, known for having three capitals, including Cape Town and Pretoria.

ANSWER: Republic of South Africa

(25) One of these objects sits on a windowsill in Albrecht Dürer's *Saint Jerome in His Study*, seemingly watching over a lion and a lamb. Another of these objects, a symbol of death, is stretched along the floor in Hans Holbein's *The Ambassadors*. One of these objects belonging to a ram floats in the sky with a hollyhock in a painting created at Ghost Ranch, New Mexico. Georgia O'Keeffe frequently painted, for the point, what bones which were once inside the heads of cattle or humans?

ANSWER: <u>Skull</u>s (Accept Human <u>skull</u>; accept Ram's <u>skull</u>; accept Cattle <u>skull</u>; prompt on "cranium") (26) A denomination of this major religion, *Smarta*, focuses on the principle of *Advaita*, a *vedanta* philosophy based on the teachings of the Upanishads. Other denominations of this religion venerate members of the *tripitaka*, including a destroyer god whose tangled hair is the source of the Ganges River and a preserver god with ten avatars. For the point, name this Indian religion which venerates deities like Shakti, Shiva, and Vishnu.

ANSWER: Hinduism (accept Sanatana dharma)

(27) Signals in these cells can be strengthened through long-term potentiation. Schwann cells and oligodendrocytes produce myelin to cover parts of these cells. Synapses between the dendrites and axon terminals of these cells transfer electrical impulses and neurotransmitters. For the point, name these cells which are the primary components of the nervous system in most animals.

ANSWER: <u>Neuron</u> (accept <u>Nerve</u> cell before "nervous system"; prompt on "nerve cell" after "nervous system")

(28) A character in this novel asks if her doctor will "avenge thyself on the innocent babe" after a public shaming but is reassured that "the Leech" will not admit to being her husband. In this novel, Roger Chillingworth tends to the sick Reverend Arthur Dimmesdale, who dies on a scaffold while announcing that Pearl is his illegitimate daughter. Hester Prynne atones for adultery by wearing a red "A" in, for the point, what Nathaniel Hawthorne novel?

ANSWER: The *Scarlet Letter*: A Romance

(29) The White Citizens' Councils originated in this state, where they organized "segregation academies." The 14-year old Emmett Till was killed in this state after being accused of offending a white woman. In this state, the Confederacy lost control of a key river after being defeated at Vicksburg. For the point, name this state where Byron De La Beckwith assassinated civil rights leader Medgar Evers in Jackson.

ANSWER: <u>Mississippi</u>

(30) The *Mangalyaan* missions are part of India's program to study this body. The first successful flyby of this body was performed by *Mariner 4* in 1965. This body was the target of the *Viking 1* lander, and rovers like *Sojourner, Opportunity*, and *Curiosity* have been used by NASA to study this body. For the point, name this fourth planet from the Sun, sometimes called the "Red Planet."

ANSWER: <u>Mars</u>

Extra Question

(1) These structures are created with a layer of cartilage, and ossein is the primary component of the mineralized matrix of these structures. Resorption of these structures increases blood calcium levels. These structures are affected by rickets, caused by a lack of Vitamin D, and osteoporosis can cause these structures to weaken. The longest one of these structures in humans is the femur. For the point, name these structures which make up the skeleton.

ANSWER: **Bone**s