## (MS) Academic Bee Round 4

## Regulation Tossups

(1) In this novel, the athletic Rudy becomes known after coloring his body with charcoal before running in the "Jesse Owens incident." Rosa, the mother of the main character in this novel, does household chores for the wealthy families in Molching, and a fighter named Max shelters in the Hubermann's basement. Narrated by Death, for the point, what is this novel about Liesel Meminger's experiences with literature in World War Two by Markus Zusak?

ANSWER: The Book Thief
(2) Researchers theorized that this hominid died falling from a tree, and the small neurocranium and valgus knee present on this hominid's skeleton further promote the theory that bi-pedalism preceded an increase in brain size. This collection of bones was discovered by a team led by Donald Johanson in the Awash Valley in Ethiopia. For the point, what name has been given to this proposed member of the Australopithecus afarensis species that shares a name with a Beatles song?

ANSWER: Lucy (or AL 288-1; accept Dinkinesh; accept "Lucy in the Sky With Diamonds"; prompt on "Australopithecus" before mentioned)
(3) This man depicted Christ healing the sick in an etching known as the Hundred Guilder [[GILL-duh]] Print. One of this man's paintings depicts a group of doctors examining a corpse whose navel forms the letter R. That painting by this man is The Anatomy Lesson of Dr. Nicholaes Tulp. For the point, name this painter of The Night Watch, a master of the Dutch Golden Age.

ANSWER: $\underline{\text { Rembrandt }}$ (accept either underlined portion of Rembrandt Harmenszoon van Rijn)
(4) In a speech, this person lamented "Nobody ever helps me into carriages, or over mud-puddles, or gives me any best place." This person successfully sued for their son, Robert, to be freed from slavery. After converting to Methodism, this person changed their name from Isabella Baumfree. At the Women's Rights Convention in Akron, this formerly enslaved person asked, "I could work as much and eat as much as any man - ain't I a woman?" For the point, name this pioneering abolitionist.

ANSWER: Sojourner Truth (accept Isabella Baumfree before mentioned)
(5) Near this river, Nicolas de Pigage [[pee-ZHAHZH]] constructed a European-style garden mosque with low-quality Arabic orthography that served as the first meeting place of its country's "Islamic Scholar Society." A bridge crossing this river's namesake "Knee" can be found in the city of Dusseldorf. For the point, name this river which forms the border of Germany and France and empties into the North Sea.

ANSWER: Rhine (accept Rhine knee or Rhine's knee)
(6) In a play by this author that is named for a type of bird, a despondent Konstantin Treplyov kills himself after Nina leaves. This author explained the need to remove unnecessary elements from plots with the example of a gun hanging on a wall that must be fired by the end of an act. For the point, name this Russian playwright of The Seagull and The Cherry Orchard.

ANSWER: Anton Chekhov (or Anton Pavlovich Chekhov; accept Chekhov's gun or Chekhov's rifle)
(7) These structures have been defined as an exception for which the Hausdorff dimension exceeds topological space. Examples of these structures include the Sierpinski [[seer-PIN-skee]] carpet and Menger [[MEN-juh]] sponge. These structures demonstrate the infinitely complicated boundary of a set of numbers named for Benoit Mandelbrot [[BENwah MAN-del-braht]]. For the point, identify these intricate structures that self-repeat at each topological level of scale.

## ANSWER: Fractals

(8) The first coins minted for the independent Philippines commemorated this man who was also the first governor of the Ryukyu Islands. This general fled to Australia after losing the Bataan Peninsula, and this general's proposal for nuclear strikes on Manchuria and the Shandong Peninsula contributed to his removal from office. Having accepted Japan's surrender in World War Two, for the point, who was this American Army general who also served during the Korean War.

ANSWER: Douglas MacArthur
(9) This author described a race of Elder Beings who built an ancient civilization with the help of the "shoggoths" in At the Mountains of Madness. The fictional location of Arkham, Massachusetts provides the setting for some of this author's stories, including The Shadow over Innsmouth and The Shadow Out of Time. For the point, name this author of horror stories such as "The Call of Cthulhu [[kuh-THOO-loo]]."

ANSWER: H.P. Lovecraft (or Howard Phillips Lovecraft)
(10) Steven Jones attempted to catalyze this process using muons. Migma was a proposed attempt to accomplish this process in a particle accelerator by directly colliding beams. When supernovas occur, enough energy is released to allow this process to create elements heavier than iron. Stars like the Sun are powered by, for the point, what process of combining atomic nuclei, the opposite of fission?

ANSWER: Nuclear Fusion (accept Fusion Reactor; accept Cold Fusion)
(11) Of one character in this book, John Glenn said, "If she says they're good, then I am ready to go." Two women in this non-fiction best-seller are Dorothy Vaughan and Mary Jackson, the latter of whom became NASA's first Black female engineer. For the point, what book featuring Katherine Johnson by Margot Lee Shetterly is subtitled The American Dream and the Untold Story of the Black Mathematicians Who Helped win the Space Race?

## ANSWER: Hidden Figures

(12) In 1823, this country joined the United Provinces of Central America and formed the Southernmost regions of the nation. This country gained independence in 1838 with the support of local militias, but this country's military was dissolved following a 44-day civil war in 1948. For the point, name this Central American country located south of Nicaragua and north of Panama.

ANSWER: Republic of Costa Rica (or Republica de Costa Rica)
(13) One musician who played this instrument pioneered a style of improvisation known as "Sheets of Sound." That musician who played this instrument recorded the albums $A$ Love Supreme and Giant Steps. Alto and tenor are the main varieties of, for the point, what brass woodwind instrument played by John Coltrane, Bill Clinton, and Lisa Simpson?

ANSWER: Saxophone (accept Alto Saxophone; accept Tenor Saxophone)
(14) The ecotone between this biome and forests contains stunted features called Krummholz [[KRUM-holtz]]. This biome can come in alpine and polar variants and includes vegetation such as mosses and lichens [["LIE"-kens]]. Reindeer and snow owls are usually found in this biome, the biodiversity of which is affected by the melting of permafrost. For the point, name this cold, dry, treeless biome found in the Arctic and Antarctic Circles.

ANSWER: Tundra (accept Alpine Tundra; accept Polar Tundra)
(15) This character notes the "weary, stale, flat, and unprofitable" "uses of the world" in a passage lamenting God's laws against "self-slaughter." Later, this character wonders whether it is nobler to suffer "the slings and arrows of outrageous fortune" in a soliloquy [[suh-LIH-loh-kwee]] beginning "To be, or not to be, that is the question." For the point, name this Danish prince who titles a William Shakespeare tragedy.

ANSWER: Hamlet (accept The Tragedy of Hamlet, Prince of Denmark)
（16）The body of William Kidd was displayed over this body of water to dissuade pirates． Ben Jonson was imprisoned after writing Isle of Dogs，a satire named for a peninsula along this river where Edward III kept his greyhounds．The Great Stink was caused by excessive pollution in this river and led the House of Commons to relocate．For the point，name this English river that flows past Oxford and London．

ANSWER：River Thames［［TEMS］］
（17）This artist depicted an animal shot with nine arrows in the painting The Wounded Deer．This artist also depicted a skyscraper erupting from a volcano in a bathtub－set scene titled What the Water Gave Me．In another work，this artist depicted themselves as two identical sisters connected by their veins．A bus crash inspired，for the point，what Mexican artist of The Broken Column known for her many self－portraits？

ANSWER：Frida Kahlo（or Magdalena Carmen Frida Kahlo y Calderón）
（18）An algorithmic calculation of this value by Wagon and Rabinowitz coined the term ＂spigot［［SPIG－ut］］function．＂This value is sometimes referred to as Archimedes＇s Constant． Because this value is transcendental it is impossible to square a circle with a compass and straightedge．For the point，identify this value，equal to the circumference divided by the diameter，which is usually given as 3.14 ．

ANSWER：Pi（accept Archimedes＇s Constant before mentioned；accept $\mathbf{3 . 1 4}$ before mentioned）
（19）The appearance of this person inspired one side＇s victory at the Battle of Patay．This military figure was jailed in Beaurevoir［［boh－reh－VWAH］］by the Burgundians and later moved to Rouen［［roo－AHN］］to be burned at the stake for wearing men＇s clothes．For the point，identify this French hero of the Hundred Years＇War，a sainted figure known as the ＂Maid of Orleans＂［［ohr－leh－AHN］］．

ANSWER：【oan of Arc（or 【eanne d＇Arc；or Saint 【oan；prompt on the＂Maid of Orleans＂ before mentioned）
（20）A thermal cutoff is a type of this object found in small electronic devices that activates at high temperatures．The Unicode symbol for these devices is a straight line through a rectangle．In modern homes，these devices have been largely replaced by circuit breakers，which can be used multiple times．For the point，name these devices that protect circuits from surges and＂blow＂under high currents．

ANSWER：Fuses（accept specific types such as Thermal Cutoff Fuse）
(21) A monstrous example of these animals was destined to be killed by Odin's son, Vidar, after it had consumed his father. Garm was one of these animals who guarded Hel, while another one of these animals was a child of Loki who bit off the hand of Tyr. Fenrir was one type of, for the point, what lupine mammal associated in various myth systems with the full moon?

## ANSWER: Wolf

(22) A photo showing this man wielding the "Sword of Islam" was an attempt to curry favor with an Islamic colony. Pierre Laval, Ramsay McDonald, and this man formed the Stresa Front to block the German Anschluss [[AHN-shlooss]] of Austria. This man signed the Lateran Treaty and was sanctioned by the League of Nations for invading Ethiopia. For the point, what Fascist served as prime minister of Italy during World War Two?

ANSWER: Benito Mussolini (or Benito Amilcare Andrea Mussolini)
(23) Since 1989, this state and Thailand have recalled each other's ambassadors due to the Blue Diamond Affair. De facto leader of this state Mohammed bin Salman intervened in the neighboring Yemeni Civil War after the ousting of the Hadi government by Houthi rebels. The holy cities of Medina and Mecca are in, for the point, what state whose politics are dominated by the royal Al Saud [[SOWD]] family?

ANSWER: Kingdom of Saudi Arabia (or Al Mamlakah al Arabiyah as Suudiyah)
(24) This number is the average of the first two composite numbers. Adding one to this number gives the value of the smallest perfect number. This is the total number of Platonic solids, and it is the sixth integer in the Fibonacci [[fee-boh-NAH-chee]] sequence when starting at zero. There are this many sides in a polygon whose internal angles sum to 108. For the point, how many sides make up a pentagon?

ANSWER: $\underline{\mathbf{5}}$
(25) This author wrote the essay "On Fairy-Stories" and the article "Beowulf: The Monsters and the Critics." Another work by this author told the tales of Beren and Lúthien and the fall of Numenor. The Silmarillion was created by, for the point, what philologist and Oxford professor who wrote fantasy works such as The Hobbit and The Lord of the Rings?

ANSWER: J.R.R. Tolkien (or John Ronald Reuel Tolkien)
(26) In a war named for these animals, the Dai Viet [[DYE VYET]] used cannons from the neighboring Ming to conquer rival Lan Xang [[LAHN SHAHNG]]. Alexander the Great made various animal sacrifices to the God of Fear the night before the Battle of Gaugamela [[gaw-gah-MEH-lah]] due to having to face a corps of these animals in battle. For the point, identify these animals, which can be found in "Syrian" and "African" varieties.

ANSWER: Elephants (accept White Elephant War; accept Syrian elephant; accept African elephant; prompt on "Pachyderms")
(27) A clay oven is used to make the taboon variety of this food enjoyed in Israel. Another type of this food which is popular in India is often flavored with garlic and is called naan. Due to restrictions on chametz [[huh-METZ]], a particular form of this food called matzo [[MOTT-zuh]] is eaten during Passover. For the point, name this food item that is often buttered and heated to make toast.

ANSWER: Bread (accept Unleavened bread)
(28) Judi Bari led opposition to the production of this commodity in a 1982 dispute between British Columbia and the United States. Chinese traders referred to Hawaii as Tan Heung Sha due to its prominence in this commodity's trade. Objects made of this commodity were called "the King in his glory" by John Muir. The Endangered Species Act was passed to help slow the production of this resource. For the point, name this resource which has been the subject of deforestation debates.

ANSWER: Wood (accept Timber, Lumber, or reasonable equivalents; prompt on "Trees")
(29) Statue of Liberty creator Frédéric Bartholdi sculpted a red sandstone depiction of these animals in the French town of Belfort [[bel-FOHR]]. Two sculpted depictions of these animals named Patience and Fortitude stand outside the New York Public Library. Shishi are sculpted Chinese examples of, for the point, what big cats which are often found "guarding" the entrances to palaces and temples?

ANSWER: Lions (accept Lion of Belfort; accept Chinese Guardian Lions or Imperial Guardian Lions; prompt on "Cat")
(30) An internet company with this name specializes in start-up businesses, focusing on the initial steps needed. George H.W. Bush played this position at Yale where he met Lou Gehrig, who also played this position. In a Bud Abbott and Lou Costello skit, a baseball player named "Who" can be found at this place. For the point, what baseball position, denoted in a scorebook with the number " 3 ," is played by Jose Abreu [[ah-BREH-oo]] and Freddie Freeman?

ANSWER: $\underline{\text { First }}$ base (accept $\underline{\text { First }}$ baseman; accept "Who's on first?")

## Extra Questions

(1) One poem set in this country ends with the line "You're a better man than I am, Gunga Din." A poet from this country published under the name Sun Lion and wrote Gitanjali [[jee-TAHN-jah-lee]]]. Another work in this country features the characters Shere [[SHEER]] Khan and Baloo. For the point, name this South Asian country, the birthplace of Rabindranath [[ruh-BIN-druh-nath]] Tagore [[TAY-gohr]] and the setting of Rudyard Kipling's The Jungle Book.

ANSWER: Republic of India (accept Bharatiya Ganarajya; accept British India)
(2) Cusps of these locations are marked by horns and embayments. When these landforms are covered in stones, they are known as the "shingle" variety, and pink examples of these landforms are created by breaking down corals. Water called "swash" weathers the rocks at these locations, whose sediment is modified by standing waves. For the point, name these sandy landforms where tourists may swim in the ocean.

ANSWER: Beaches (accept Seashores; accept Lakeshores before "ocean" is mentioned; accept Shingle beach; accept Pink beach; prompt on "Coasts", "Waterfront," "Seasides," and similar answers)

