## 2020 SCOP A

## Round 11

Brad Fischer • Mike Laudermith • Kristin Strey • Tyler Vaughan

## **Tossups**

(1) This country was led by a "Burning Spear" who was succeeded by Daniel arap Moi. After this country gained independence from Britain, it fought the Shifta War with a separatist group hoping to split from this country to join (\*) Somalia. Ethiopia shares Lake Turkana with this country, whose current president is the son of this country's first president, Jomo. For ten points, name this East African country, whose largest city is Mombasa, and which is governed from Nairobi by Uhuru Kenyatta.

ANSWER: Kenya (accept Republic of Kenya; accept Jamhuri ya Kenya)

(2) The Argand diagram represents these numbers in two dimensions. The fundamental theorem of algebra notes that a polynomial with these numbers as coefficients has these numbers as its roots. Adding one of these numbers to its (\*) conjugate will give a real number. The letter "C" represents, for ten points, what numbers that are an extension of the real and imaginary numbers and can be written in "a plus b i" form?

ANSWER: **complex** numbers (accept **C** before mentioned)

(3) A group of cells called the "SA this" generate the impulse for heart contraction, and this term also names points on a cladogram where shared ancestors would exist. These areas "of Ranvier" are (\*) gaps in an axon's myelin sheath. Other organs with this name swell when B and T cells proliferate due to infection or cancer. For ten points, give this term for the leaf attachment point on a stem or the lymph glands found in the neck and armpits.

ANSWER: nodes (accept SA nodes; accept nodes of Ranvier; accept lymph nodes)

(4) This work enumerates twelve rights of a sovereign, and describes four causes of ignorance in a section titled "Of the Kingdom of Darkness." This work claims that there is no *summum bonum*, or universal good, but supports the establishment of a "Christian (\*) Commonwealth" to escape a "war of all against all," a state of nature that makes life "nasty, brutish, and short." For ten points, name this work in which Thomas Hobbes defends the English monarchy, titled for a biblical monster.

ANSWER: Leviathan or The Matter, Forme, and Power of a Commonwealth Ecclesiasticall and Civil

(5) A woman in this play lies to Kristine Linde that she got money for a trip to Italy from a former admirer, and turns down Dr Rank's romantic advances after dancing the tarantella at a party. This play's protagonist is blackmailed by (\*) Krogstad for forging her father's signature on a loan document, and ends this play by shutting the door on her husband, Torvald. For ten points, name this play by Henrik Ibsen in which Nora Helmer feels like she's trapped in the title child's toy.

ANSWER: A Doll's House (accept Et dukkehjem)

(6) Planck's constant is divided by this quantity to find a particle's wavelength in the de Broglie [duh broy] relation. In Noether's theorem [nuh-tuh's theorem], this quantity is conserved as a result of translational invariance. Impulse is a change in this quantity, which is (\*) conserved in collisions. According to Newton's second law, force is the time derivative of this quantity. For ten points, name this quantity, symbolized p, which is equal to mass times velocity.

ANSWER: momentum (accept linear momentum; prompt on "p" before it is read)

(7) This artist painted the heads of five cherubs with colorful wings on an aureole behind Jesus, Mary, and John the Baptist in the Apostolic Palace. This artist's (\*) *Disputation of the Holy Sacrament* is in a set of Vatican rooms nicknamed for this artist, across from his painting in which Euclid, Ptolemy, and other thinkers talk amongst themselves as Plato and Aristotle walk toward the viewer. For ten points, name this Italian Renaissance artist of *The School of Athens*.

ANSWER: Raphael Sanzio da Urbino

(8) This poem's title character is welcomed by Queen Wealhtheow [WAYL-thay-oh] at a feast where he describes a swimming match against Breca. In this poem, Unferth gives his sword, (\*) Hrunting, to the title hero, who is called by King Hrothgar to defend his mead-hall, Heorot [HAY-oh-roht], from a monster. For ten points, name this Old English epic poem about a hero who dies fighting a dragon years after he rips off the arm of the monster Grendel.

ANSWER: Beowulf

(9) This religion's believers hold Nyabingi meetings to celebrate Grounation Day and promote their Livity by following the I-tal ["eye"-tall] diet. Bobo Ashanti is one of the "mansions" of this religion, whose adherents hope to separate from Babylon, the (\*) western world, by gathering in Zion. This religion's believers honor Haile Selassie as the Lion of Judah by wearing dreadlocks. For ten points, name this Afrocentric religion known for its use of ceremonial ganja and its widespread practice in Jamaica.

ANSWER: **Rasta**fari (accept word forms like **Rastafarian**ism)

(10) This city is home to the Institute for Advanced Study, where Albert Einstein worked after moving to the US. Hugh Mercer was mortally wounded during a Revolutionary War battle over this city that took place a week after (\*) Washington surprised the Hessians by crossing the Delaware River. Since 1945, this college town has been its state's governor's residence, rather than the state capital of Trenton. For ten points, name this town that is home to New Jersey's only Ivy League university.

**ANSWER: Princeton** 

(11) This deity was followed by Agave, and rewarded Midas for his kindness to this deity's mentor, Silenus. This deity carried the thyrsus and led the maenads, who tore apart King Pentheus for wronging this god. After (\*) Semele was tricked into seeing this god's father in his full glory, this god was sewn into the thigh of Zeus, making him "twice-born." For ten points, name this Greek god of divine inspiration and wine.

ANSWER: Dionysus (accept Bacchus)

(12) Under this document's sixty-first clause, one side was allowed to seize a signatory's land and castles if he did not comply with their demands. This document was drafted by Stephen Langton, the Archbishop of Canterbury, in an attempt to prevent the First (\*) Barons' War. This document was signed at Runnymede, a swamp near Windsor Castle. For ten points, name this "great charter" signed by King John in 1215 which established basic rights in England.

ANSWER: Magna Carta (accept Great Charter of Freedoms before "great charter" is read)

(13) Gibbs described this quantity as "mixed-up-ness" that remains after a system's macroscopic properties are considered. This state function is equal to the natural logarithm of the number of microstates times (\*) Boltzmann's constant. This quantity can only be zero for a perfect crystal at zero kelvin. According to the second law of thermodynamics, this quantity cannot spontaneously decrease. S symbolizes, for ten points, what thermodynamic quantity, the measure of a system's disorder?

ANSWER: entropy (prompt on "S" before it is read)

(14) In this novel, a nobleman nicknames a policeman "Achilles" and says that he is "going to America" before shooting himself in the head. This novel's protagonist is taunted by Svidrigaïlov [s-vih-drih-gah-ih-lawv] and pursued by Porfiry Petrovich, who tries to get him to confess. In this novel, the prostitute (\*) Sonya follows the protagonist to Siberia, where he is sent after the death of a pawnbroker and her sister. For ten points, name this Fyodor Dostoevsky novel in which Raskolnikov murders a pawnbroker and is sent to prison to atone.

ANSWER: Crime and Punishment (accept Prestupléniye i nakazániye)

(15) While playing this position, Edgar Martinez pushed the Mariners to the championship series with a play called "The Double." This position can be lost in a game if the player occupying it is included in a double switch or is made a (\*) position player. After the 2020 Summer Camp, the MLB's new season added this offensive [AW-fen-siv] position to the National League, which had previously forced all pitchers to bat. For ten points, name this position in baseball, a player whose only job is to bat.

ANSWER: <u>designated hitter</u> (accept <u>D.H.</u>; prompt on "hitter;" prompt on "batter" before "bat" is read; do not accept "pinch-hitter")

(16) This composer's first piano concerto may have been written for Clara Schumann, and his first symphony was nicknamed "Beethoven's tenth." This composer wrote a piece contrasting his (\*) *Tragic Overture* upon receiving an honorary degree from the University of Breslau, and quoted the Luther Bible to memorialize his mother in his *German Requiem*. For ten points, name this composer of the *Academic Festival Overture* and a renowned *Lullaby*.

ANSWER: Johannes Brahms

(17) This body of water's southern shore contains the Cotentin Peninsula. The northeastern boundary of this body of water is between the Walde Lighthouse and Leathercoat Point, where this body meets the (\*) North Sea. Since 1994, a train line between Coquelles and Folkestone has traveled under this body of water, reducing the traffic carried by ferries between Calais and Dover. For ten points, name this body of water between France and the United Kingdom.

ANSWER: English Channel (accept La Manche)

(18) A character created by this author is "salao" after an 84-day dry spell, and is forced to bring his cargo home to Cuba without his assistant, Manolin. A novel by this author describes Jake Barnes and Lady Brett Ashley as part of a (\*) "Lost Generation." Frederic Henry has an affair with Catherine Barkley in a novel by this author inspired by his own time as a World War I ambulance driver. For ten points, name this American author of *The Old Man and the Sea, The Sun Also Rises*, and *A Farewell to Arms*.

ANSWER: Ernest Hemingway (accept Ernest Miller Hemingway)

(19) This physical structure supports Loki's Castle, a group of "black smokers" that rise through this structure. In this structure, clathrate hydrates can form from cold seeps, and sections of it contain manganese nodules. This structure and the area immediately above it form the (\*) benthic zone, and it lines the bottom of abyssal plains, where chemo-synthetic microbes, tube worms, and corals are supported by hydrothermal vents that open through this structure. For ten points, name this underwater area at the very bottom of oceans.

ANSWER: ocean <u>floor</u> (accept sea <u>floor</u>; accept sea<u>bed</u>; accept <u>benthic</u> zone before it is read; accept descriptions of the <u>bottom of the oceans</u> before it is read; prompt on "oceans" or "seas" before "oceans" is read)

(20) During this trial, James Buchanan pressured Robert Cooper Grier to agree with the Southern majority. The majority opinion in this case, written by Roger Taney [taw-nee] claimed that there was an "impassable barrier" between white and (\*) Black Americans. This case's plaintiff claimed that his time spent in Illinois should have rendered him free from bondage under John Sandford. For ten points, name this 1857 court case in which the namesake slave was denied US citizenship.

ANSWER: Dred Scott v. Sandford