

2019 SCOP Novice 10

Round 10

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Tossups

(1) **This country's armored cavalry officers wore wings on their backs in the seventeenth century, when it was unified with Lithuania. During the reign of Augustus the Strong, Catherine the Great increased Russian control of this country. Three eighteenth century (*) partitions divided this country between its neighbors Austria, Prussia, and Russia. For ten points, name this European country south of the Baltic Sea that was invaded by Nazi Germany to start World War II.**

ANSWER: Kingdom of Poland (accept Poland-Lithuanian Commonwealth; accept Republic of Poland)

(2) **The protagonist of one of this author's novels is nicknamed "Blessed" after he kills Jim Hall in defense of Judge Scott. This author created One Eye, who dies defending his family from a lynx, leaving Kiche alone with her remaining (*) puppy in wild Yukon Territory. In another novel by this author, Buck is kidnapped and sent to Alaska, where he becomes known as a "Ghost Dog" after joining a wolf pack. For ten points, name this author of *White Fang* and *The Call of the Wild*.**

ANSWER: Jack London (accept John Griffith Chaney London)

(3) **In 1942, this country raised war funds by carrying out "If Day," a simulated Nazi occupation. This country's four divisions of troops were supported by the British at the Battle of Vimy Ridge in World War I, and its Queen's Own Rifles landed on Juno Beach during the (*) D-Day invasion. An eastern city in this country was obliterated by the 1917 explosion of the SS *Mont Blanc*. The Halifax explosion killed roughly two thousand people in, for ten points, what country's province of Nova Scotia?**

ANSWER: Canada

(4) **Several diseases of this organelle present with "ragged red" fibers in muscle tissue. The endosymbiotic theory of this organelle's origin claims that it was a bacteria that had been engulfed by a larger cell. This organelle's inner membrane increases the surface area available for chemical reactions to occur by (*) folding over itself. The electron transport chain synthesizes ATP in, for ten points, what cell organelle that is commonly referred to as the powerhouse of the cell?**

ANSWER: mitochondria (accept mitochondrion)

(5) **This band took its name from a 1953 Aldous Huxley book about Huxley’s psychedelic experiences. A song by this band, written by guitarist Robby Krieger, says “Try now we can only lose / And our love become a funeral pyre.” This band’s self-titled album included the song (*) “Break on Through (To The Other Side)” as well as a terrifying, twelve-minute long track called “The End.” Jim Morrison fronted, for ten points, what band behind the 1967 hit “Light My Fire?”**

ANSWER: The Doors

(6) **A scholar of this religion questioned whether he actually dreamed he was a butterfly, or whether he was a butterfly dreaming of being a man. One important concept in this religion is wu wei [woo way], or action through inaction. This religion’s primary text, whose title translates to “The Book of the (*) Way,” was written by its founder, Laozi [lah-oh-tsoh]. Duality is represented by the yin and yang in, for ten points, what Chinese religious philosophy that developed after Confucianism?**

ANSWER: Taoism (accept Daoism)

(7) **After the mother of a child lynched in this state insisted on an open-casket funeral, *Jet* magazine published a gruesome photograph of Emmett Till’s badly mutilated corpse. Civil rights protesters fought for desegregated beaches in three “wade-ins” in this state’s city of (*) Biloxi. During the March Against Fear, demonstrators walked from Memphis, Tennessee, directly south to this state’s capital to protest racism. For ten points, name this US state whose capital is Jackson.**

ANSWER: Mississippi

(8) **In a play by this author, Mrs Erlynne claims to own the title object to protect her daughter’s reputation. Miss Prism accidentally leaves a baby in a handbag in another play by this author of (*) *Lady Windemere’s Fan*. In a play by this man, Lady Bracknell forbids Gwendolen Fairfax’s marriage, and Algernon and Jack both pretend to have the title name. For ten points, name this witty Irish playwright of *The Importance of Being Earnest*.**

ANSWER: Oscar Wilde (accept Oscar Fingal O’Flahertie Wills Wilde)

(9) **This landmass is hypothesized to be the fourth of its kind, following Columbia, Rodinia, and Pannotia. Alfred Wegener named this landmass, which surrounded the Tethys Sea. Mesosaurus fossils on the coasts of Brazil and (*) Namibia provide evidence for this landmass, which included regions that became Laurasia and Gondwana at the end of Mesozoic Era. For ten points, name this supercontinent that broke apart tens of millions of years ago and whose name means “all Earth.”**

ANSWER: Pangaea

(10) **This artist painted rows of lights reflected on a dark wall behind a woman drinking coffee alone in *Automat*, which was modeled by his wife, Jo. This artist painted long shadows on an empty town street in *Early Sunday Morning*, and was inspired by a Greenwich Village (*) diner for a painting that includes an advertisement for Phillies Cigars, in which two men and a woman in red sit at a counter topped with silver canisters. For ten points, name this American artist of *Nighthawks*.**

ANSWER: Edward Hopper

(11) **This type of substance was first described after an experiment using a Crookes tube, an early cathode ray tube, that produced a glow discharge. The aurora borealis exists in this phase, in which balanced amounts of electrons and ions create a (*) highly conductive, but electrically neutral, state. This phase is believed to be the most common in the universe, since it is found in stars. For ten points, name this “fourth” phase of matter that possesses much more energy than solids, liquids, or gases.**

ANSWER: plasmas (accept cathode rays before “cathode ray” is read)

(12) **A character in this novel perfectly performs the “Waves of the Blue Sea” dance at a maple festival, where he writes poetry to a courtier who looks like his deceased mother, angering his wife, Aoi [ah-oh-ee]. This novel’s protagonist is exiled to Suma after having an affair with his half-brother’s concubine, and “[Vanishes] Into the Clouds” in a blank chapter that signifies his death. The (*) Heian-era [hay-ahn era] courtier, Lady Fujitsubo [foo-jee-tsoo-boh], and her niece are pursued by the title “shining prince” of, for ten points, what early Japanese novel by Lady Murasaki [moo-rah-sah-kee]?**

ANSWER: The Tale of Genji (accept Genji Monogatari)

(13) **This person’s image was financially exploited by a startup company called We Don’t Have Time, whose non-profit wing she had previously volunteered for. In August 2019, a solar-powered yacht brought this person to New York City for a (*) UN summit. “Unite behind the science” is part of the message delivered to politicians during this person’s strike from school. For ten points, name this teenaged Swedish climate change activist.**

ANSWER: Greta Thunberg

(14) **In 1926, a library in Turin collected dozens of previously lost volumes of this composer’s work. J.S. Bach arranged an A minor concerto for four harpsichords from a B minor concerto by this composer for four violins. This composer compiled twelve other concertos, including ones nicknamed “The Sea Storm,” “The Hunt,” and “La (*) primavera,” into a collection whose opening quartet is most famous. For ten points, name this Italian Baroque composer of *The Four Seasons*.**

ANSWER: Antonio Vivaldi (accept Antonio Lucio Vivaldi)

(15) **In the 1830s, the US and UK fought over this state’s border in the bloodless Aroostook War. Bowdoin College was founded in this state in 1794 in Brunswick. This state’s other cities include Lewiston and Bangor. Despite sharing no border, this state was part of (*) Massachusetts until 1820. The Webster-Ashburton Treaty decided the border between Canada’s New Brunswick and, for ten points, what northernmost state in New England whose capital is Augusta?**

ANSWER: Maine

(16) **One of these objects named for Karl Menger loses seven twenty-sevenths of its volume with each successive cut. Other examples of these objects include the Sierpinski triangle, in which the center of an equilateral triangle is (*) removed to create three new equilateral triangles, each of whose centers is similarly removed, starting an infinite process. The Mandelbrot set is, for ten points, what type of image that resembles itself at intense zooming levels?**

ANSWER: fractals (prompt on “sponge” or “Menger sponge” before “Sierpinski triangle” is read)

(17) **The Rök stone describes one of these mythical figures, Gunnr, riding a wolf, although these figures are more commonly depicted with wings. One of these figures was rescued from a ring of fire by Siegfried, who cut off her armor.** (*) Brunhilde was one of these daughters of Odin, who were often described as “shield-maidens.” For ten points, name these divine women who, in Germanic mythology, carried the souls of dead warriors to the afterlife.

ANSWER: Valkyries (accept shield-maiden before it is read)

(18) **In this man’s highest post, he wrote a *Report on Manufactures* and four *Reports on Public Credit*, but his political career ended after he revealed his affair with Maria Reynolds. This man worked with John Jay and James (*) Madison on the Federalist Papers, and he died after an early morning incident near Weehawken, New Jersey. For ten points, name this American founding father and first Treasury Secretary who was killed in an 1804 duel with Aaron Burr.**

ANSWER: Alexander Hamilton

(19) **A hypergolic substance undergoes this process without an external energy source. Antoine Lavoisier [ann-twan la-vwah-see-ay] proved that this reaction does not involve the release of phlogiston. Hydrocarbons produce water and carbon (*) dioxide by this reaction. Hay piles can experience a spontaneous type of this reaction, which requires spark plug ignition in engines. For ten points, name this process of combining with oxygen to release heat, a reaction commonly known as burning.**

ANSWER: combustion (accept word forms; accept ignition before it is read; accept burning before it is read; prompt on “fire”)

(20) **In *King Lear*, the Duke of Albany scornfully says that Goneril and Reagan are these animals, and “not daughters” to the king, and Macbeth begs Banquo’s ghost to appear as a “Hyrcean” one of these animals. One of these animals is asked “did he who made the (*) Lamb make thee?” in a William Blake poem about this animal “burning bright / in the forests of the night.” For ten points, name this big cat, a stuffed one of which has a misspelled name and loves bouncing in A.A. Milne’s *Winnie-the-Pooh*.**

ANSWER: tigers (accept The Tyger; accept Tigger after “bouncing” is read)

Bonuses

(1) In 1956, Chien-Shiung Wu organized a crucial experiment in nuclear physics. Her work was not rewarded with a Nobel Prize, but the two men who theorized the work she tested were honored. For ten points each,

The Wu experiment surprisingly determined that parity was not conserved by this fundamental force, unlike the other three forces: gravity, the electromagnetic force, and the strong force.

ANSWER: weak (nuclear) force (accept weak interactions)

The weak force is responsible for the beta type of this radioactive process, in which a nucleus emits radiation and loses energy. The rate at which this process occurs is often measured in half-lives.

ANSWER: radioactive decay

The Wu experiment studied beta decay in the sixty isotope of this element, whose atomic symbol is Co [spell it]. This metal produces several important blue pigments.

ANSWER: cobalt-60

(2) This jazz musician's style of rapid-fire playing was described as "sheets of sound." For ten points each,

Name this jazz musician behind the albums *Giant Steps* and *A Love Supreme*. He also played on trumpeter Miles Davis' album *Kind of Blue*.

ANSWER: John Coltrane (accept John William Coltrane)

Coltrane played the tenor variety of this reed instrument that is common in jazz bands.

ANSWER: saxophone (accept tenor saxophone)

This earlier saxophonist, known as "Bird," pioneered the rapid style of bebop jazz with songs like "Ornithology" and "Yardbird Suite."

ANSWER: Charlie "Bird" Parker Jr (accept Charles Parker)

(3) A literary character described as the "greatest philosopher of the whole world" claims that this disease is a "necessary ingredient in the best of worlds," because if Christopher Columbus' men hadn't brought it back from America, he also wouldn't have brought back chocolate. For ten points each,

Name this sexually transmitted disease that afflicts Doctor Pangloss in a 1759 satirical novel.

ANSWER: syphilis

Doctor Pangloss advises the title character of this satirical novel by Voltaire that "all is for the best" because we live in the "best of all possible worlds."

ANSWER: Candide, or Optimism (accept Candide, ou l'optimisme)

In the novel, Candide reunites with the syphilitic Pangloss and is shocked to find that this part of his face has been eaten away by the disease. In the opening chapter of *Candide*, Pangloss explains his optimistic philosophy by claiming that spectacles exist because this body part was formed to hold them up.

ANSWER: nose

(4) This agreement calls for all countries “in a position to do so” to continue providing financial support to developing nations attempting to reduce greenhouse gas emissions. For ten points each,

Name this 2015 international environmental agreement. In 2017, Donald Trump announced the United States would no longer participate in this agreement.

ANSWER: Paris Agreement

Prior to the Paris Agreement, the most powerful international treaty regarding climate change was this 1997 protocol, which the U.S. has not signed. This protocol, which is named for a Japanese city, was amended in 2012.

ANSWER: Kyoto Protocol

This 2012 amendment to the Kyoto Protocol, named for Qatar’s capital, redefined reduction goals for participating countries.

ANSWER: Doha Amendment

(5) One concept in this field is a zero-sum situation, in which whatever is gained by some participants is lost by some others. For ten points each,

Name this field of math that is concerned with building logical strategies in hypothetical problems, like the Stag Hunt, and in less hypothetical problems, like checkers and chess.

ANSWER: game theory

Game theory textbooks often open with this game, in which two people run or drive at each other until they either collide or one person turns away and loses.

ANSWER: chicken

Another famous problem in game theory is a “dilemma” involving two of these people, who can choose either to betray each other or to stay silent.

ANSWER: prisoners (accept prisoner’s dilemma)

(6) Tiresias is a very busy character in Greek mythology. For ten points each, answer some questions about his experiences.

After he struck a pair of snakes, Hera turned Tiresias into one of these people. Tiresias displeased Hera again when he settled an argument between her and Zeus by admitting that these people enjoyed sex more than men.

ANSWER: woman (accept equivalents like female or girl)

Depending on the myth, either Zeus gave this gift to Tiresias as a reward for supporting his argument against Hera, or Athena gave Tiresias this ability. The god Apollo governed this skill, which he also gave to Cassandra.

ANSWER: prophecy (accept descriptions like predicting the future; accept equivalents)

Later in his life, Tiresias told this man to allow Antigone [an-tih-goh-nee] to bury her brother rather than imprison her for it. Though he refuses at first, this king of Thebes eventually agrees.

ANSWER: Creon

(7) The “AXE method” is used in making predictions with this model, whose geometries include octahedral and trigonal bipyramidal molecules. For ten points each,

Name this theory that predicts the geometry of a molecule from the number of lone pairs and bonded atoms surrounding the central atom.

ANSWER: Valence Shell Electron Pair Repulsion theory (accept VSEPR [VES-per] theory; accept Gillespie-Nyholm theory)

VSEPR theory predicts that carbon dioxide takes this shape, in which there are one hundred eighty degree angles between the central carbon atom and each of the oxygen atoms.

ANSWER: linear (accept descriptions related to being in a straight line)

Some molecules aren’t predicted perfectly by VSEPR theory. One such molecule is a gas containing six atoms of fluorine and one atom of this noble gas with symbol Xe [spell it].

ANSWER: xenon (accept xenon hexafluoride)

(8) The last commercial use of this technology in America took place in 2006, ending Western Union’s century and a half in that business. For ten points each,

Name this communication technology in which written messages are sent via codes transmitted long distances along wires.

ANSWER: wired electric telegrams (accept telegraphs; accept word forms, like telegraphy)

The electric telegraph was popularized in America by Alfred Vail and this nineteenth century inventor, who co-developed the technology and a popular code used to send telegraphs that codes letters as dots and dashes.

ANSWER: Samuel Morse (accept Samuel Finley Breese Morse)

When writing telegraph messages through Western Union, punctuation usually cost extra money; this four letter word was free and traditionally used instead of a period to end a sentence.

ANSWER: STOP

(9) This author wrote that he could “[smuggle] any amount of theology [...] into people’s minds under cover of romance,” and tried to do just that in works like *The Space Trilogy* and *The Great Divorce*. For ten points each,

Name this English author of Christian-influenced science fiction and fantasy novels like *Out of the Silent Planet* and *The Voyage of the Dawn Treader*.

ANSWER: C.S. Lewis (accept Clive Staples Lewis)

Lewis allegorized the sacrifice of Jesus with the death and resurrection of the lion Aslan in this fantasy series that includes *The Voyage of the Dawn Treader* and *The Lion, the Witch, and the Wardrobe*.

ANSWER: The Chronicles of Narnia

Lewis was more overt about the religious core of this novel, which takes the form of written messages from a demon trying to help his nephew draw a man away from Christianity.

ANSWER: The Screwtape Letters

(10) An oracle claimed that whoever unraveled this object was destined to become the ruler of all of Asia. For ten points each,

Name this notoriously difficult ancient puzzle that was legendarily solved when a ruler cut it in half with a sword.

ANSWER: **Gordian Knot** (prompt on “knot”)

This young ruler of Macedon and son of Philip II cut the Gordian Knot with his sword. This proved the oracle correct, since this man went on to build one of the largest ancient empires.

ANSWER: **Alexander the Great** (accept **Alexander III** of Macedon; prompt on “Alexander”)

Alexander founded and names numerous cities in his conquered lands, including Alexandria on the Nile River delta in what is now this country.

ANSWER: Arab Republic of **Egypt**

(11) These people were the target of a law issued by King Ahasuerus [ah-ha-sway-russ] at the request of Haman, an angry Persian official who hated one of these people named Mordecai. For ten points each,

Name this ethnic-religious group. These people were saved when Mordecai’s cousin, a beautiful queen, persuaded the king to amend the law by revealing she was a member of this religious group.

ANSWER: **Jewish** people (accept word forms like **Jews** or **Judaism**)

The victory of Mordecai and his cousin over Haman is celebrated on this Jewish holiday, named for Haman’s casting of lots to decide what he thought would be the day of the Jews’ destruction.

ANSWER: **Purim**

This Persian queen, the wife of King Ahasuerus and cousin of Mordecai, is the namesake of the scroll and biblical book that describe the events celebrated on Purim.

ANSWER: **Esther** (accept Book of **Esther**; accept Scroll of **Esther**)

(12) The United States has a reputation for athletic excellence on the world stage. Answer the following about American sports teams, for ten points each.

In 2019, Carli Lloyd, Alex Morgan, and Megan Rapinoe [rah-PEE-noh] helped the US become the first country to capture four FIFA Women’s World Cups in this sport.

ANSWER: **soccer** (accept association **football**; do not accept “American football”)

Kendall Coyne Schofield captains the US women’s national team in this sport, which won its fifth consecutive world championship in April 2019 with a controversial shootout win over Finland. Two of this sport’s other traditional powerhouses, Canada and Russia, met in the bronze medal game.

ANSWER: ice **hockey**

In contrast, the US men’s basketball team took an astonishingly low seventh place in the 2019 FIBA World Cup, losing to France and this country in the playoffs. This country’s national team is led by Bogdan Bogdanovic [bog-don-oh-vitch] and Nikola Jokic [joh-kitch].

ANSWER: Republic of **Serbia**

(13) This painting's reddish sky may have been inspired by the brilliant sunsets that affected western Europe after the eruption of Krakatoa. For ten points each,

Name this painting, in which a person stands near a railing on a hill overlooking Oslo Harbor, holding their hands to their head and opening their mouth to let out the title expression of horror.

ANSWER: The Scream (accept Skrik; accept Der Schrei der Natur or The Scream of Nature; accept Shriek; accept The Cry)

The Scream is by this Norwegian artist, whose *Frieze of Life* series includes a painting that shows the effect of his sister's death on his family, *Death in the Sickroom*.

ANSWER: Edvard Munch

Munch's painting *Love and Pain*, another work from the *Frieze of Life*, has been informally given this title. In the painting, a red-haired woman bends over a pale-faced man, and seems to be feeding from him like this title creature.

ANSWER: Vampire (accept vampires)

(14) In a novel by this author, the unnamed narrator escapes from the communist Brotherhood and the fanatical Ras the Exhorter, but barely escapes from a riot instigated by Ras when he returns to New York. For ten points each,

Name this American author of *Invisible Man* and *Juneteenth*.

ANSWER: Ralph Ellison (accept Ralph Waldo Ellison)

Ellison's work is often classified among the writers of the Black Arts Movement, and as part of the African-American artistic "Renaissance" named for this New York neighborhood.

ANSWER: Harlem Renaissance

The Black Arts Movement was founded by a follower of this man, whose black nationalism is evoked by the speeches of Ras the Exhorter in *Invisible Man*. This man's *Autobiography* was co-written with Alex Haley before this man was assassinated in 1965, three years before the assassination of Martin Luther King, Jr.

ANSWER: Malcolm X ["X"] (accept Malcolm Little)

(15) The Meselson-Stahl experiment proved that replication of this molecule is semi-conservative. For ten points each,

Name this nucleic acid that stores the genetic information of cells. Rosalind Franklin was key in discovering this substance's double helix shape.

ANSWER: DNA (accept deoxyribonucleic acid)

When DNA is replicated, there is a continuous leading strand and a lagging strand made of these short pieces that must later be joined together.

ANSWER: Okazaki fragments

Okazaki fragments, like all DNA, are built from these subunits that consist of a sugar, a phosphate group, and a base like guanine or cytosine.

ANSWER: nucleotides (do not accept or prompt on "nucleosides")

(16) This structure was initially derided as a “Folly” and a “Big Ditch,” but it greatly reduced transport costs between the Atlantic Ocean and inland United States. For ten points each,

Name this massive engineering project built between 1817 and 1825. It allowed ships to transport goods from the Hudson River directly to the Great Lakes.

ANSWER: Erie Canal

The Erie Canal is located in this state, connecting its city of Buffalo to its capital, Albany.

ANSWER: New York

Shipping was also made more efficient by the steamboat, the creation of this early American inventor.

ANSWER: Robert Fulton

(17) This philosopher answered the question “What is Enlightenment?” with “man’s emergency from his self-incurred immaturity” in a 1784 essay. For ten points each,

Name this Prussian thinker who influenced centuries of philosophers with his *Critique of Pure Reason* and *Critique of Practical Reason*.

ANSWER: Immanuel Kant

Kant argued that the most “dishonorable” type of immaturity was forced on people by this type of institution if it was committed to an “unalterable set of doctrines.” Kant continued to criticize the rigid hierarchy of this institution in his *Religion Within the Bounds of Bare Reason*.

ANSWER: the Christian church (accept any additional information, such as the Protestant and/or Catholic church)

Many of Kant’s arguments against the church were rooted in complaints about its unwillingness to change, rather than a philosophical argument against the existence of God. Scholars argue that Kant held this view, separate from atheism, that claims it is impossible to know whether God exists.

ANSWER: agnosticism (accept word forms, like agnostic)

(18) European colonizing forces built a pair of modern African capital cities as far inland on this river as ships could sail from the Atlantic. For ten points each,

Name this African river that is shorter than the Nile and longer than the Niger. A pair of neighboring central African countries share the name of this river; one styles itself a Republic and the other a Democratic Republic.

ANSWER: Congo River

The Congo River flows between the capital cities of the Democratic Republic of the Congo and the Republic of the Congo. Name either capital city.

ANSWER: Kinshasa and/or Brazzaville

The French built Brazzaville, and this other European country built Kinshasa, which was originally named Leopoldville. King Leopold II owned the Congo Free State and exploited its citizens for labor while ruling from its capital, Brussels.

ANSWER: Kingdom of Belgium

(19) Although fanfiction dates back to the times of Milton and Cervantes, its recent proliferation has given modern authors wildly different opinions on it. For ten points each,

Twitter jerk and homophobe Orson Scott Card has published fanfiction based on the works of Asimov and Shakespeare, but hates when people write fanfiction about his novels, like this one in which Andrew Wiggin is trained to command troops in a future war against insect-like alien fleets.

ANSWER: Ender's Game

This author of *Interview with the Vampire* and other *Vampire Chronicles* became notorious in the early 2000s for her fans by mail and at their workplaces for writing fanfiction based on her works.

ANSWER: Anne Rice (accept Anne O'Brien Rice)

This English author has won Hugo awards for his Sherlock Holmes fanfiction, as well as for original novels like *Coraline* and *American Gods*. This man encourages authors of fanfiction, including those who write works based on *Good Omens*, which this man wrote with his close friend Terry Pratchett.

ANSWER: Neil Gaiman [gay-mun] (accept Neil Richard MacKinnon Gaiman)

(20) The two *Viking* probes were launched in the 1970s to study this planet. For ten points each,

Name this "Red Planet." One of the *Viking* probes sent an exciting, but false, positive test indicating metabolic processes in this planet's iron-rich soil.

ANSWER: Mars

Martian soil includes several elements vital for life, including this alkaline earth metal with chemical symbol Mg [spell it].

ANSWER: magnesium

Unfortunately for those who hope to find life on Mars, its soil is highly toxic, primarily due to the presence of compounds containing this chlorine-based ion whose chemical formula is ClO_4^- ["C L", "O four", minus].

ANSWER: perchlorate