## 2015 SCOP Novice 6

## Round 5

Waleed Ali · Alston Boyd · Brad Fischer · Clare Keenan · Alec Krueger · Mike Laudermith Elissa Pape · Anna Phillips · Allison Salach · Andrew Salij · Kristin A. Strey · Tyler Vaughan Morgan Venkus · Mike Withey · Michael H. Wong

## **Tossups**

1. This author wrote about Old Ben in "The Bear," a short story from his collection *Go Down, Moses*. In one of this man's novels, Darl is sent to an insane asylum and the Bundren family travels to Jefferson, the seat of (\*) Yoknapatawpha [YAWK-nah-pah-TAW-fah] County, to bury their mother, Addie. Another novel by this man concerns Benji, his sister Caddy, and his suicidal brother Quentin Compson. For 10 points, name the author of *As I Lay Dying* and *The Sound and the Fury*.

Answer: William Cuthbert Faulkner

2. One ruler of this country constructed a statue of Buddha using weapons he confiscated in a "sword hunt," and the Dutch established a trading outpost on this country's Dejima island. In order to retain land, defeated generals in this country would commit (\*) seppuku, and one daimyo in this country rose to power after winning the Battle of Sekigahara. For 10 points, name this country in which Tokugawa Ieyasu moved the capital to Tokyo after becoming Shogun.

Answer: State of <u>Japan</u> (accept <u>Nihon</u>-koku or <u>Nippon</u>-koku)

- 3. Gottfried Leibniz wrote a chapter-by-chapter rebuttal to one of this thinker's works. This man proposed that humans are born without innate ideas, and that the mind is a "tabula rasa" or "blank slate" in his (\*) Essay Concerning Human Understanding. For 10 points, name this English philosopher who wrote Two Treatises of Government in which he cited life, liberty, and property as things the government must protect. Answer: John Locke
- 4. Many of these shapes are created due to constructive and destructive interference in a phenomenon named for Newton. Gaseous isotopes are separated through this type of motion, which has acceleration and velocity perpetually orthogonal, with acceleration that always points (\*) inward. Centrifuges move samples along a path with this shape. For 10 points, name this shape whose circumference is equal to twice its radius times pi.

Answer: circles (accept circular paths; accept circular motion; accept rings; do not accept "ellipses")

5. This composer used a B-flat major Harpsichord Suite as the basis for his *Variations and Fugue on a Theme of Handel*, and he began another piece with the text "Blessed are they that mourn." He included the finale "Gaudeamus igitur" in a work written to thank the University of (\*) Breslau for giving him an honorary degree. For 10 points, name this German composer of *A German Requiem* and the *Academic Festival Overture*, whose song "Good evening, good night" is now commonly known as his lullaby.

Answer: Johannes Brahms

6. During this battle, Joseph Hooker ordered the bombardment of Miller's Cornfield, and William French took "Bloody Lane." George McClellan didn't pursue retreating Confederates to Virginia, but the Union victory at this battle gave President (\*) Lincoln the opportunity to issue the Emancipation Proclamation. For 10 points, name this September 17, 1862 battle that ended the invasion of Maryland, the bloodiest single-day battle in American history.

Answer: Battle of **Antietam** (accept Battle of **Sharpsburg**)

- 7. This function appears in the denominator of all Taylor series, and can be approximated by Stirling's formula. The gamma function extends this operation to inputs other than positive integers, and it is defined as the number of (\*) permutations for a number of objects. For 10 points, name the function, which finds the product of all natural numbers of an input value and below, which is designated by an exclamation point. Answer: factorial (accept gamma function until it is read)
- 8. This compound can form the possible carcinogen bromate, but is still widely used in water purification. At ground level, this compound is a pollutant that cracks rubber. This compound is measured in Dobson units and is the subject of the (\*) Montreal protocol, which led to the widespread replacement of CFCs. For 10 points, name this molecule with chemical formula O<sub>3</sub> ["O-3"], which blocks UV rays in an important layer of the atmosphere.

Answer:  $\underline{ozone}$  (accept  $\underline{O}_3$  before mention)

9. Initiates into the priesthood of this religion become Hounsi Kanzo, and may eventually become houngans and mambos. This religion's god is Bondye, who is served by the black tuxedo-wearing spirit of the dead, Baron Samedi. Papa Legba is one of this religion's spirits, known as (\*) lwa [LOH-ah]. This religion is derived from Catholic and Yoruban beliefs and was founded in Haiti. For 10 points, name this religion, which doesn't actually use namesake "dolls."

Answer: Haitian Vodou (accept Voodoo)

10. In a story by this author, Phao replaces Akela after a battle with wild dogs, and in another, Kala Nag is the steed of the title "Toomai of the Elephants." A mongoose defends a family against two poisonous snakes in this man's tale, (\*) "Rikki-Tikki-Tavi," and in another of his stories, Shere Khan is a tiger who threatens the companion of Bagheera and Baloo, a human child named Mowgli. For 10 points, name this English author of *The Jungle Book*.

Answer: Rudyard Kipling

11. In this novel, Constance is poisoned by the former wife of the Comte de la Fère ["fair"], a woman who has a fleur-de-lis [flure-duh-LEE] brand on her shoulder. An affair between Queen Anne and the Duke of Buckingham is almost revealed in this novel by (\*) Milady de Winter, but she is foiled by Aramis, Athos, Porthos, and D'Artagnan [dar-tan-yan]. For 10 points, name this book by Alexandre Dumas about a small group of soldiers who use the motto "one for all and all for one."

Answer: The **Three Musketeers** (accept Les **Trois Mousquetaires**)

12. This man became a "Defender of the Faith" after writing *Defense of the Seven Sacraments*, and Thomas More was executed after refusing to attend the coronation of this man's wife. This king seized land belonging to monasteries, a move supported by the Act of (\*) Supremacy. That act made this man Head of the Church of England, a position he created to annul his marriage to Anne Boleyn. For 10 points, name this English King who was known for his many wives

Answer: King Henry VIII Tudor (prompt on "Henry")

13. The flooding of this river creates seasonal varzea forests. A cliff on Nevado Mismi is the source of this river, which is called the Solimões [soh-lee-MOYSH] until it meets the Rio Negro at Manaus. This river, whose delta nearly reaches (\*) French Guiana, is the namesake habitat for a pink river dolphin. For ten points, name this massive South American river that flows through the largest rainforest on Earth.

Answer: Amazon River (accept Solimões River until mention)

14. This tissue is absent in the class Chondrichthyes [khan-DRIK-thee-eez], and this tissue's epiphyseal plates contain the Haversian canals. Hematopoietic [HEE-mat-oh-poh-YET-ik] stems cells form within long structures made of this tissue, which can suffer (\*) rickets due to a lack of vitamin D or calcium. This tissue is made by osteoblasts and surrounds marrow. For 10 points, name this tissue that makes up the skeletal system.

Answer: bone tissue (accept osseous tissue)

15. This team supposedly gave its rookie quarterback a blank DVD labeled "Gameplan." They traded their head coach in 2002 before losing to that coach in Super Bowl 37, and they controversially used a first round draft pick on kicker (\*) Sebastian Janikowski. The late Al Davis sued the NFL multiple times while owning, for 10 points, what team, whose current players include receivers Michael Crabtree and Amari Cooper, and quarterback Derek Carr?

Answer: Oakland Raiders (accept either city or team name)

16. In Borges's [BOHR-hays's] "The Garden of Forking Paths," Professor Yu Tsun also holds this profession. In a Cooper novel titled after this profession, Harvey Birch is suspected of doing this job for the English, and this occupation finishes a John le Carré novel titled *Tinker*, *Tailor*, *Soldier*, (\*) "this." Ian Fleming wrote about a man with this profession in novels like *Casino Royale*. For 10 points, name this profession held by secret agents like James Bond.

Answer: spy (accept clear equivalents; accept secret agent before it is read)

17. Polydectes ["polly"-dek-teez] ordered the death of this figure, whose blood formed coral reefs when it fell into the sea. This sister of Stheno [s-theh-noh] and Euryale [yoo-ree-ah-lee] was punished for defiling Athena's temple with Poseidon, and her face was pressed into Athena's (\*) Aegis [ee-jiss] shield. Perseus used another shield as a mirror to help avoid this woman's petrifying gaze. For 10 points, name this gorgon, who turned humans to stone with her terrifying face and snake hair.

Answer: Medusa

18. These entities occupy a belt extending nine degrees on either side of the ecliptic and, because of precession, Ophiuchus [oh-FYE-ah-kus] should count as one of them. Bright stars within these objects include Aldebaran, Spica, and Pollux, while (\*) fifteen stars make up the largest example, Virgo. For 10 points, name this collection of twelve constellations, including Taurus, Scorpio, and Pisces, that mark divisions along the Sun's path across the sky and are used for horoscopes.

Answer: zodiacal constellations (prompt on "constellations" before it is read; prompt on "zodiac signs")

19. This man's donation to the American Baptist Education Society led to the founding of the University of Chicago. This man's "Pittsburgh Plan" was criticized by Ida Tarbell, and that plan led to the formation of the National (\*) Refineries Association. After losing a court case against New Jersey, a company owned by this man was broken up under the Sherman Antitrust Act. For 10 points, name this American industrialist who founded Standard Oil.

Answer: John D(avidson) Rockefeller Sr.

20. This artist painted a muddled gray portrait of his wife, Camille, on her deathbed, and painted her holding a parasol in a field in Argenteuil [ahr-zhon-TWEE]. He created a series of paintings of haystacks, and of an arched green (\*) bridge in his garden in Giverny [zhee-vayr-NEE]. He depicted shadowy boats and a low, orange sun over a harbor in a work that named the Impressionist movement. The painter of *Waterlilies* is, for 10 points, what French creator of *Impression, Sunrise*?

Answer: (Oscar-)Claude Monet

## **Bonuses**

1. This woman left Virginia with John Rolfe, but died before she could return home. For 10 points each,

[10] Name this Native American woman, who interacted with the Jamestown settlers. After her conversion to Christianity, this woman took the name Rebecca.

Answer: Pocahontas (accept Matoaka; accept Amonute)

[10] Pocahontas allegedly saved this Englishman from her father's club. However, most historians agree that the event never happened.

Answer: John Smith

[10] Pocahontas' father was this Native American chief who led a namesake tribe.

Answer: Powhatan (accept Wahunsenacawh)

2. The figure on the left of this painting raises his hand in welcome, while his wife stands next to him in green, holding her long skirts over her stomach. For 10 points each,

[10] Identify this masterpiece by Jan van Eyck [yahn van ike], which shows a namesake merchant and his bride. Answer: The **Arnolfini Wedding** (accept The **Arnolfini** (Double) **Portrait**; accept Giovanni **Arnolfini** and His **Bride**; accept any other answer including **Arnolfini** and the suggestion of a wedding or marriage)

[10] This citrus fruit, a symbol of the Medici family, sits under an open window in The Arnolfini Wedding.

Answer: orange

[10] Orange trees appear on the left of this painting by Botticelli, in which the title Roman goddess of beauty rises from the ocean on a seashell.

Answer: The **Birth of Venus** (accept **Nascita di Venere**)

3. The narrator of this novel joins Queequeg and Starbuck aboard the *Pequod*, and tells the reader to "call me Ishmael." For 10 points each,

[10] Name this novel about Captain Ahab's search for the title character, who bit off Ahab's leg.

Answer: Moby Dick; or, The Whale

[10] Moby Dick was written by this American author. John Claggart is accidentally killed by the title character of his novella Billy Budd.

Answer: Herman Melville

[10] Turkey, Nippers, and Ginger Nut are coworkers of the title character of this Melville short story, who responds "I would prefer not to" when asked to work.

Answer: Bartleby, the Scrivener

4. After the Great Upheaval in 1755, the Acadians were expelled to, among other places, this modern-day state. For ten points each,

[10] Name this Gulf Coast state, whose bilingual tradition is maintained by multiple ethnic groups, including the Cajuns.

Answer: Louisiana

[10] This is Louisiana's second most common language, spoken by the settlers who owned it prior to the Louisiana Purchase.

Answer: French

[10] This pidgin language has French and African roots, and is still spoken in Louisiana. The name for this language is also used generally to refer to any language naturally formed from a pidgin.

Answer: Creole

5. This text includes the "Cow" sura, and is divided into ayat. For ten points each,

[10] Name this most holy text of Islam, which recounts Allah's revelations to Muhammad.

Answer: al-Quran

[10] The Quran was revealed to Muhammad by this archangel, who gave a revelation to Mary in Christianity.

Answer: **Jibreel** (accept **Gabriel**)

[10] This other holy text of Islam collects the teachings and sayings of Muhammad and his disciples.

Answer: a Hadith

6. Charles Darwin titled a chapter of his book On the Origin of Species with this term. For 10 points each,

[10] Name this mechanism of evolution, whereby the individuals most fit for an environment survive and reproduce. Darwin used this term to explain the enormous variety of finch species on the Galapagos Islands.

Answer: natural selection

[10] Darwin classified the Galapagos finches based on this organ, which is used for cracking seeds, digging into cacti, or hunting insects in various species.

Answer: **beak**s

[10] Finches' beaks are an example of this kind of evolutionary structure; the beaks are descended from a feature of a common ancestor, but are used for different purposes. The wing of a bat, the flipper of a whale, and the arm of a human are also this type of structure.

Answer: **homologous** structure (accept word forms like **homology**)

7. This leader was attacked and denounced in the "Secret Speech." For 10 points each,

[10] Name this ruler, who outmaneuvered Leon Trotsky to succeeded Vladimir Lenin. This man led his country through World War II.

Answer: Joseph Stalin (accept Ioseb Dzhugashvili)

[10] The "Secret Speech" was given by this successor to Stalin. During a meeting with the United Nations, this leader allegedly banged his shoe on a table in protest.

Answer: Nikita Sergeyevich Khrushchev

[10] Both Stalin and Khrushchev were leaders of this communist state, whose last leader was Mikhail Gorbachev.

Answer: <u>United Soviet Socialist Republics</u> (accept <u>Soviet Union</u>; accept <u>CCCP</u>)

8. This author wrote, "The ship has weather'd every rack, the prize we sought is won" in one of his elegies for Abraham Lincoln. For 10 points each,

[10] Identify this American poet, whose poem "Crossing Brooklyn Ferry" begins "Flood-tide below me!" This author of "O Captain! My Captain!" spent much of his life revising his collection *Leaves of Grass*.

Answer: Walter "Walt" Whitman Jr.

[10] Like "O Captain! My Captain!", this Walt Whitman poem is an elegy for Abraham Lincoln. The narrator speaks of a "western fallen star" in the "moody, tearful night."

Answer: When Lilacs Last in the Doorvard Bloom'd

[10] In this fifty-two-part Walt Whitman poem, the narrator sounds his "barbaric yawp over the rooftops of the world." This long poem begins, "I celebrate myself, and sing myself."

Answer: **Song of Myself** 

- 9. This quantity measures the average kinetic energy of particles in a substance. For 10 points each,
- [10] Name this quantity measured by the Celsius and Kelvin scales that is based on the thermal motion of a substance.

Answer: absolute  $\underline{\text{temperature}}$  (accept  $\underline{\mathbf{T}}$ )

[10] This law of thermodynamics states that heat will not flow spontaneously from a colder body to a warmer one, unless work is performed on the system. In other words, heat transfers in a closed system always produce an increase in entropy.

Answer: **second** law of thermodynamics

[10] In a famous thought experiment, this scientist posited a demon which allows only fast molecules to traverse a door, decreasing the entropy of a closed system and so violating the second law of thermodynamics.

Answer: James Clark Maxwell

- 10. This video game recently replaced Peter Dinklage with Nolan North. For 10 points each,
- [10] Name this "shared-world shooter" whose third expansion, *The Taken King*, was released in September 2015.

Answer: **Destiny** 

[10] Destiny is a game created by this company. This company also created *Halo* and later lost the rights to *Halo* to 343 Industries.

Answer: **Bungie**, Inc

[10] 343 Industries was formed by this parent company after this company split with Bungie in 2007. This company was founded by Paul Allen and Bill Gates.

Answer: Microsoft Studios

- 11. Two Hittite spies were tortured in the prelude to this battle, and one side in this battle was commanded by Muwatallis II. For 10 points each,
- [10] Name this 1274 BCE battle in which the Ra and Ptah divisions contributed to the largest chariot battle in history.

Answer: Battle of **Kadesh** 

[10] The Battle of Kadesh was won by this empire. During the battle, this empire's troops were commanded by a pharaoh.

Answer: Egyptian Empire

[10] The commander of the Egyptian forces for the Battle of Kadesh was this pharaoh, the husband of Nefertiti who ordered the construction of Abu Simbel.

Answer: Ramses II (prompt on "Ramses;" accept Ramses the Great; accept Ozymandias)

- 12. This style of music's popularity in the 1920s helped lead to a raucous "Age" named for it. For 10 points each.
- [10] Name this American musical genre, played by trumpeter Louis Armstrong and pianist Duke Ellington. Answer: iazz

[10] Jazz is often decried as musicians just "making it up," but a lot of talent and technical practice is required to be good at this process of immediate musical composition.

Answer: **improvisation** (word forms)

[10] Jazz makes heavy use of this technique, the shifting or breaking of the natural flow of the rhythm by placing accents on offbeats or other unusual places. Backbeats are an example of this technique.

Answer: **syncopation** (accept word forms like **syncopate**d rhythm)

- 13. This theorem was proven by James Garfield in 1876 and by its namesake, a Greek philosopher and mathematician, millennia earlier. For 10 points each,
- [10] Name this theorem comparing the lengths of the sides of right triangles. The corresponding formula is usually stated as "a squared plus b squared equals c squared."

Answer: **Pythagorean** Theorem (accept **Pythagorean** Formula)

[10] Garfield's proof of the Pythagorean Theorem involves a particular arrangement of two copies of a right triangle with a line segment connecting two vertices, forming one of these specific four-sided shapes.

Answer: trapezoid (prompt on "quadrilateral")

[10] Garfield's proof involves the computation "quantity a plus b, quantity squared, equals a squared plus 2 times a times b plus b squared"; that computation can be done using this theorem, which guides the expansion of two-term quantities like "a plus b" that are raised to exponents. Pascal's triangle is often consulted in using this theorem.

Answer: **Binomial** Theorem (accept **Binomial** Formula)

- 14. This item was registered under the name "Eric Hoteham" in 2010, installed in Chappaqua, New York, and maintained by Bryan Pagliano. For 10 points each,
- [10] Name this controversial piece of hardware, which had 32,000 communications deleted from it in potential violation of Federal law.

Answer: Hillary <u>Clinton's</u> personal <u>e-mail</u> <u>server</u> (accept any description of a personal <u>computer</u> on which Hillary <u>Clinton</u> stored work-related <u>e-mails</u>, unless in reference to a machine that couldn't store or transfer e-mails; prompt on partial answers)

[10] Clinton used that personal e-mail server for classified government business while serving in this Cabinet position in charge of American foreign affairs.

Answer: Secretary of **State** (accept descriptions like head of the **State** Department)

[10] Laws forbidding Clinton's conduct did not exist during her tenure, but a November 2014 law means that if this current Secretary of State did similarly, he would face penalties.

Answer: John Kerry

- 15. Porfiry Petrovich investigates this novel's protagonist's murder of a pawnbroker. For 10 points each,
- [10] Name this novel about Rodion Raskolnikov, who justifies killing Alyona Ivanova by saying he wants to be Napoleon.

Answer: Crime and Punishment (accept Prestupleniye i nakazaniye)

[10] This author of Crime and Punishment and The Idiot also wrote a novel about Dmitri, Ivan, and Alyosha.

Answer: Fyodor Mikhailovich **Dostoevsky** 

[10] In another Dostoevsky novel, Smerdyakov shares this relationship with Dmitri, Ivan, and Alyosha Karamazov.

Answer: half-brothers (accept half-siblings)

- 16. When following the scientific method, one of these statements can be tested by performing an experiment. For 10 points each,
- [10] Identify the term for this kind of prediction about the outcome of an experiment or a process in nature. These statements are often written in "If, Then" form.

Answer: <u>hypothesis</u> (accept <u>hypotheses</u>)

[10] When a hypothesis has been repeatedly confirmed by experimentation or observation, it becomes one of these, a well-supported explanation of how nature works. Einstein famously devised one of relativity.

Answer: **theory** 

[10] The process of turning a hypothesis into a theory often involves this type of reasoning, in which specific cases are used to make a general rule. This type of reasoning allowed Kepler to determine the elliptical orbits of planets after observing the movement of Mars.

Answer inductive reasoning (accept induction)

- 17. At the beginning of this play, it is predicted one man will be king but his friend will beget a line of kings. For 10 points each,
- [10] Name this so-called "Scottish Play," a tragedy by Shakespeare about a title Thane of Glamis who, along with his scheming wife, murders his way to the throne, only to be undone by fear and paranoia.

Answer: The Tragedy of **Macbeth** 

[10] In Macbeth, this man is predicted to sire a line of kings. Macbeth suspects this man and his son, Fleance, of plotting against him, so he has this man killed.

Answer: **Banquo** 

[10] The three witches that appear to Macbeth and Banquo at the beginning of the play are known by this name. A rock group in Harry Potter also goes by this name.

Answer: The Weird Sisters

18. This President signed Executive Order 9981 which desegregated the armed forces. For 10 points each,

[10] Name this successor to Franklin Roosevelt whose namesake doctrine provided aid to Turkey and Greece.

Answer: Harry S. Truman

[10] Early in his career, Truman served as a Senator from this state. While in this state, Truman was aided by Tom Pendergast in becoming a Jackson County judge.

Answer: Missouri

[10] During the election of 1948, the Chicago Tribune mistakenly reported that this politician had beaten

Answer: Thomas E(dmund) **Dewey** 

- 19. The connection of living beings to the earth was of great importance to many early religions. Answer the following about mud and dirt, for 10 points each.
- [10] Humans were created from earth, wood, and maize in the *Popol Vuh*, the holy book of this mesoamerican culture that ruled lands south of the Aztec Empire from its capital, Chichen Itza.

Answer: Mayan Empire

[10] In Greek mythology, this titan used mud to create the first humans. This man was later chained to a rock, where an eagle consumed his liver every day.

Answer: **Prometheus** 

[10] In old Jewish folklore, the Maharal of Prague created this animatronic creature out of clay to protect the Prague Ghetto from attacks.

Answer: golem

20. He used a cathode ray tube to conduct groundbreaking research on subatomic particles. For 10 points each, [10] Name this scientist who showed that the beam from a cathode ray tube is negatively charged, establishing the existence of the electron.

Answer: J(oseph) J(ohn) Thomson

[10] Thomson's subsequent model of the atom was given this name as it was thought that the electrons were evenly dispersed in a positive charge, resembling a traditional Christmas dessert.

Answer: **plum pudding** model

[10] Thomson's work on the plum pudding model was conducted in this country at the Cavendish Laboratory of Cambridge University.

Answer: England (accept Great Britain; accept United Kingdom)