2015 SCOP Novice 6

Round 8

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

Tossups

- 1. After the death of this man, his son Ellac was killed at the Battle of Nedao. This ruler clashed with Theodoric I and Aetius at the Catalaunian Plains, and this ruler may have died from a nosebleed after marrying Ildico. (*) Leo I convinced this brother of Bleda to cease his invasion of Italy, which started after Honoria sent this man her ring. For 10 points, name this loser at Chalons, a "Scourge of God" who led the Huns. Answer: Attila the Hun
- 2. One of this composer's works includes tubular bells during the break strain. Another of his works counters trombones and tubas with a trio featuring piccolos, and was honored by Congress in 1987. His (*) "Washington Post" earned this director of the US Marine Band the nickname the "March King." For 10 points, name composer of the "Liberty Bell," whose "The Stars and Stripes Forever" is America's National March. Answer: John Philip Sousa
- 3. IGCC primarily uses this mineral to produce syngas, and it was mostly produced in the Mississippian and Pennsylvanian periods. Release of sulfur from this mineral is a key cause of acid rain, and its rank goes from (*) lignite to anthracite. Often extracted by removing mountain tops, for 10 points, name this sedimentary rock made of fossilized carbon that is mined throughout the Appalachians.

Answer: **coal** (accept specific forms such as **anthracite** or **lignite** until their names are read)

4. This scientist examined exhaustion and confusion as possible causes of transmarginal inhibition. He won a Nobel prize in medicine for his work regarding animal digestive systems. BF Skinner's "operant conditioning" is often contrasted with this scientist's namesake (*) conditioning, also called "classical conditioning." For 10 points, name this Russian psychologist who examined dog's salivation in response to stimuli such as the ringing of a bell.

Answer: Ivan Petrovich Pavlov

5. This man ordered the construction of a war memorial named Valley of the Fallen. After the death of Jose Sanjurjo, this man became the sole leader of rebel forces. During the Rif War, this military officer led his country's (*) "Foreigners Brigade," and in another conflict, forces under this man were supported by the Condor Legion. For 10 points, name this general who ordered the bombing of Guernica, a dictator of Spain who ruled until 1975.

Answer: Francisco Franco Bahamonde

6. This author wrote memoirs of her parents called *Fighting Angel* and *The Exile*. This author wrote a trilogy that includes *Sons* and *A House Divided*, and whose first book tells the story of the once-wealthy O-Lan and her husband, (*) Wang Lung. Life in a missionary family in China inspired, for 10 points, what American author of *The Good Earth*?

Answer: Pearl S(eidenstricker) Buck

7. This type of charge is always perceived in groups of two or three. The temperature of a black body can be determined by measuring this property with a spectroradiometer. In the subtractive model of this property, the (*) three primary types will cancel each other out, and light varies in this property from four hundred to seven hundred nanometers. For 10 points, name this property separated by prisms, that can be red, blue, or green.

Answer: color

8. This character decides to die in Colonus in one work. In another work, he was found as a baby on Kithairon with a "spike through his feet", and was raised by King Polybus of Corinth. In a play named for this man, (*) Creon describes how this father of Polynices ["polly"-nye-seez] and Antigone [an-TIH-guh-nee] answered the Sphinx's riddle, saving the city of Thebes. For 10 points, name this husband of Jocasta, who killed his father and married his mother.

Answer: **Oedipus**

- 9. Taiwo and Kehinde are names for these people in Yoruba culture, which builds Ibeji for deceased ones and considers these groups sacred. Figures with this relationship, named Hunahpu and Xbalanque, destroyed Xibalba [shee-BOL-bah]. The Dioscuri, whose names are (*) Castor and Pollux, have this relation and make up the constellation Gemini. A she-wolf suckled a pair of these children who founded Rome. For 10 points, name this familial relation between Mayan "Hero" ones and between Romulus and Remus. Answer: twins (prompt on broader answers, such as "siblings" or "brothers and sisters")
- 10. After being summoned in *Hearthstone*, Nat Pagle says he can wait while performing this action "all day." Using a Sonar Potion in *Terraria* provides a buff for this activity, and performing this action on the edges of the map has a chance to obtain the Reaver (*) Shark. In *The Sims 3*, this skill is enhanced by the Angler trait. Players can use an old rod to perform, for 10 points, what action, which can result in battles with Magikarp?

Answer: <u>fish</u>ing (accept <u>angling</u> until it is read; prompt on "angling" after it is read)

11. Within this structure, one metabolic process begins by formation of acetyl-CoA from pyruvate and reduces NAD⁺ ["N-A-D plus"] to NADH. This structure has unique maternal DNA, suggesting an endosymbiotic origin. This organelle contains (*) cristae surrounding its matrix where the Krebs cycle is performed. For 10 points, name this organelle where the electron transport chain yields great amounts of ATP energy, the "powerhouse" of the cell.

Answer: mitochondrion (accept mitochondria)

12. A controversial "Isleworth" version of this painting includes two flanking columns in the foreground. A sfumato view of a winding road provides the backdrop for this portrait, whose subject may be the wife of Francesco (*) Giocondo. The subject's hands are folded on the arm of her wooden chair; she wears a veil over her dark hair and has no visible eyebrows. For 10 points, name this painting by Leonardo da Vinci of a woman with a mysterious smile.

Answer: Mona Lisa (accept La Gioconda before "Giocondo" is read)

13. During this battle, Omar Bradley was detained after correctly stating that the capital of Illinois was Springfield. Joachim Peiper executed a group of American POWs during this battle's Malmedy Massacre. When asked to surrender during this battle, an American general defending (*) Bastogne responded "Nuts!" For 10 points, name this World War II battle named for the dent created in Allied lines.

Answer: <u>Battle of the Bulge</u> (accept Operation <u>Watch on the Rhine</u>; accept <u>Battle of the Ardennes</u> or <u>Ardennes Counteroffensive</u>; accept Unternehmen <u>Wacht am Rhein</u> or <u>Bataille des Ardennes</u>)

14. The maximum number of roots with this property is equal to a polynomial's number of sign changes, according to Descartes' Rule. If a derivative has this property at a point, the function is (*) increasing at that point. The fundamental theorem of arithmetic implies that, other than one, all integers with this property are either primes or the products of prime numbers. The natural numbers all have, for 10 points, what property, sometimes denoted by a plus sign, indicating that they greater than zero?

Answer: **positive**

15. In a story in this collection, Absalon burns Nicholas's rear end after Nicholas woos Alison. In another story in this collection, one of King Arthur's knights is charged with discovering what women want. Two nuns and a pardoner are part of a group in the (*) Tabard Inn who hear the stories told by a Knight, a Miller, and the Wife of Bath. For 10 points, name this Middle English poem about travelers on their way to the title shrine.

Answer: The **Canterbury Tales**

16. This substance is used in the Shinto ritual Misogi, and the use of this substance in Islam is required after giving birth in the practice of Ghusl. In Hinduism, believers use this substance for purification by visiting the (*) Ganges. In Christianity, Moses drew this substance from a stone, and God used this substance to cleanse the earth during Noah's time. For 10 points, name this wet substance used to baptize Christians.

Answer: water

17. This city is home to the Po Lin Monastery and is connected to its airport on Chek Lap Kok Island by the Lantau Link, which includes the Tsing Ma Bridge. The Peak Tram is featured on this city's currency, which is more common in Macau than Macau's own currency. The Bank of (*) China Tower is in, for ten points, what city on Victoria Harbor, a Special Administrative Region of China that was a British colony until July 1997?

Answer: **Hong Kong**

18. One example of these species, cobalt-60, is the major radiation source for cancer therapy. The extra mass in heavy water comes from deuterium, a hydrogen example of these atoms. Another example of these elements is denoted (*) "fourteen" and is used in carbon dating, and the atomic mass reported on a periodic table is a weighted average of these chemical variants. For 10 points, what is the name given to elements with the same number of protons but differing numbers of neutrons?

Answer: isotopes

19. In a novel by this man, Helen Ferguson criticizes the protagonist for having an affair with a nurse. Hitmen Max and Al target Ole Anderson in this author's "The Killers." This author of the Nick Adams stories created World War I ambulance driver (*) Frederic Henry, who falls in love with Catherine Barkley, in A Farewell to Arms, and wrote about a character who goes eighty-four days without catching a fish, Santiago in a novella. For 10 points, name this author of The Old Man and the Sea.

Answer: Ernest Miller Hemingway

20. During this man's administration, America paid Tripoli \$60,000 after the capture of the USS *Philadelphia*. Along with James Madison, this man authored the Kentucky and Virginia Resolutions, and this man banned exports from the United States with the (*) Embargo Act. After purchasing land from Napoleon, this inhabitant of Monticello ordered Lewis and Clark to explore the Louisiana Purchase. For 10 points, name the third President of the United States.

Answer: Thomas **Jefferson**

Bonuses

1. This god was dropped from Mount Olympus shortly after his birth because his mother was so horrified by his looks. For 10 points each,

[10] Name this Greek god of smithing who was permanently crippled by his fall from Olympus even though he was caught by a nymph.

Answer: **Hephaestus** (do not accept **Vulcan**)

[10] This nymph found and raised Hephaestus. She later gave birth to Achilles, and dipped all but his ankle in the river Styx in hopes of providing him with invincibility.

Answer: Thetis

[10] After he returned to Olympus, Hephaestus married this unfaithful goddess of love. Hephaestus trapped Ares and this goddess together with a golden net.

Answer: **Aphrodite** (do not accept **Venus**)

2. Charles Dickens liked telling stories about orphans almost as much as Disney does. Name some of his works about orphans, for 10 points each.

[10] The title orphan of this Dickens work asks for more gruel before he is adopted by Fagin, who makes him pick pockets with the Artful Dodger in this novel.

Answer: Oliver Twist

[10] The criminal Abel Magwitch becomes the patron of the orphan boy Pip in this work. Pip eventually wins the love of Estella, Miss Havisham's ward, in this novel.

Answer: **Great Expectations**

[10] In this semi-autobiographical novel, the title orphan is taken in by his aunt, Betsey Trotwood, and falls in love with Little Em'ly and Dora Spenlow.

Answer: The Personal History, Adventures, Experience and Observation of **David Copperfield** the Younger of Blunderstone Rookery, Which He Never Meant to Publish on Any Account

3. This network stretched from the South to Canada. For 10 points each,

[10] Name this network of safehouses whose "conductors" transported slaves to freedom.

Answer: The Underground Railroad

[10] This slave nicknamed "Minty" led over ten groups through the Underground Railroad. During the trip, she allegedly threatened any slaves that tried to return to the South.

Answer: Harriet **Tubman** (accept Araminta **Ross**)

[10] Another conductor on the Underground Railroad was this African-American abolitionist who wrote My Bondage and My Freedom.

Answer: Frederick <u>Douglass</u> (accept Frederick Augustus Washington <u>Bailey</u>)

- 4. This peninsula's Gold Coast includes Tijuana, just across an international border from Chula Vista, and its south includes Cabo San Lucas. For 10 points each,
- [10] Name this peninsula, separated from the mainland by the Gulf of California.

Answer: **Baja California**

[10] Baja California includes two of this North American country's states. The definition of Central America begins at this country's border with Guatemala.

Answer: Mexico

[10] Tijuana and Chula Vista are part of an international urban area with this second-most populous California

city.

Answer: San Diego

- 5. For 10 points each, give the following about the letter B in mathematics.
- [10] Linear equations are often written in y equals m x plus b form; the m represents the slope of the line, while the b represents this value.

Answer: **<u>y-intercept</u>** (accept descriptions that describe "the y-coordinate of the point where the line crosses the y-axis" or "the y-coordinate of the line at the point where x equals 0")

[10] As it's commonly written, b is squared then subtracted by 4 times a times c in the discriminant of this formula, which will find the roots of a certain type of polynomial function.

Answer: quadratic formula

[10] Two times the sine of angle B times the cosine of angle B can be simplified into this single trigonometric expression, using a double angle identity.

Answer: **sine** of **two** times **B**

- 6. Answer the following about some twentieth-century American artists, for 10 points each.
- [10] This American realist painted the cafe scene *Chop Suey* and a brightly-lit diner on a darkened street in his work *Nighthawks*.

Answer: Edward Hopper

[10] This woman is considered the Mother of American Modernism. She painted many landscapes of New Mexico that often featured cow skulls.

Answer: Georgia O'Keeffe

[10] O'Keefe was married to Alfred Stieglitz [STEE-glitz], who worked in this artistic medium to create images like *The Steerage*, a still picture of a crowded ship created with a camera.

Answer: **photography** (accept equivalents such as "taking **photographs**")

- 7. For 10 points each, name the following about politicians who like getting hit in the face.
- [10] Name this Filipino politician who founded the People's Champ movement while holding multiple world championship boxing titles. He lost to an undefeated boxer in "The Fight of the Century."

Answer: Manny **Pacquiao** (Prompt on "Pac-man")

[10] In a charity boxing match, this 2012 Republican U.S. presidential candidate and former governor of Massachusetts lasted two rounds against Evander Holyfield.

Answer: (Willard) Mitt Romney

[10] Known by his professional name of Dr. Ironfist, Vitali Klitschko is the mayor of this Ukrainian capital city, in which a Russian-inspired revolution took place in 2014.

Answer: Kiev

8. This galaxy takes its name from a bright patch of light in the night sky. For 10 points each,

[10] Name this spiral galaxy, which contains our Solar System.

Answer: Milky Way Galaxy

[10] This spiral galaxy, the nearest large galaxy to the Milky Way, is located 2.2 million light years away and is expected to collide with the Milky Way in 5 billion years.

Answer: Andromeda Galaxy (accept Messier 31, M31, or NGC 224)

[10] The Milky Way and Andromeda are a part of this larger group of fifty-four galaxies. This group is part of the Laniakea [lah-NEE-uh-KAY-uh] Supercluster.

Answer: Local Group

9. This short story first appeared in *The Sketchbook of Geoffrey Crayon*, alongside "The Legend of Sleepy Hollow." For 10 points each,

[10] Identify this short story, whose title character is perplexed by a portrait of George Washington after waking up from a twenty-year nap in the Catskills.

Answer: Rip van Winkle

[10] This American author wrote "The Legend of Sleepy Hollow" and "Rip van Winkle."

Answer: Washington Irving

[10] Washington Irving published *A History of New York* under the name of this fictional dutch historian. Irving also claimed that this historian wrote "Rip van Winkle."

Answer: Diedrich Knickerbocker

10. Despite their best efforts, it seems nobody can obtain peace in Europe. For 10 points each,

[10] Name this Klemens von Metternich-led conference in an Austrian city that attempted to create lasting peace in Europe during the aftermath of the Napoleonic Wars.

Answer: Congress of Vienna

[10] Another attempt to end conflict in Europe was this treaty which ended World War I. Unfortunately, this treaty's "war guilt" clause directly led to World War II.

Answer: Treaty of Versailles

[10] In line with the Treaty of Versailles, several nations united together to form this precursor to the United Nations. However, without the United States, this organization lacked any real power.

Answer: **League of Nations**

11. The symbol for an inductor resembles a coiled wire on the diagrams for these entities. For 10 points each,

[10] Name these closed loops through which electric current can flow. These paths may be arranged in series or in parallel.

Answer: circuits

[10] For a parallel circuit, the equivalent amount of this quantity is found by summing the reciprocal of each component's value and then taking the reciprocal of the total. This quantity is equal to voltage divided by current according to Ohm's law.

Answer: resistance

[10] This generalized form of resistance is applied to alternating current circuits where it is expressed as a complex number, combining resistance with reactance.

Answer: impedance

- 12. Answer some questions about colorful literary knights, for 10 points each.
- [10] Under a spell cast by Morgan Le Fay, the Green Knight attempts to behead this man, King Arthur's nephew, in a Middle English poem.

Answer: Sir **Gawain** [GAH-wan] (be lenient with pronunciation)

[10] In this novel by Sir Walter Scott, the title knight fights for the love of Lady Rowena and is saved several times by a mysterious Black Knight, who is later revealed to be King Richard I.

Answer: Ivanhoe

[10] This man fights the Knight of the White Moon but is quickly vanquished. In a more famous incident, he tilts at windmills, mistaking them for giants.

Answer: Don <u>Quixote</u> de la Mancha (also accept Alonso <u>Quixano</u> de la Mancha; accept "of la Mancha" in place of "de la Mancha" in either answer)

- 13. During this trial, the plaintiffs were asked to identify which dolls they found ugly. For 10 points each,
- [10] Name this court case that overturned Plessy v. Ferguson and allowed the integration of schools.

Answer: **Brown v. Board** of Education of Topeka

[10] Chief Justice Earl Warren ordered the court's order to be completed at this pace. The vagueness of this order led to many schools staying segregated in the name of gradual integration.

Answer: With All **Deliberate Speed**

[10] Justice Earl Warren was also the namesake of the Warren Commission, a body that investigated this event. His investigation into this event determined that Lee Harvey Oswald acted alone.

Answer: <u>assassination of John Fitzgerald Kennedy</u> (accept <u>assassination of JFK</u> or similar answers; prompt on "assassination of Kennedy" or similar answers)

- 14. This value increases when a solute is added to a solvent. For 10 points each,
- [10] Give this transition value where liquid becomes a vapor. For pure water at atmospheric pressure, the temperature for this value is 100 degrees Celsius.

Answer: **boiling point**

[10] Boiling point and vapor pressure are examples of this type of property, which depends on the ratio of solute to solvent and not on the properties of the chemicals themselves.

Answer: **colligative** properties

[10] The number of particles used to calculate changes due to colligative properties is named after this Dutch scientist. His namesake factor, symbolized lowercase i, notes how ionic compounds dissociate in solution.

Answer: Jacobus Henricus van't Hoff factor

- 15. For 10 points each, answer the following about recent political scandals.
- [10] This real estate tycoon and reality TV star claimed that the Mexican government is pushing the "worst elements" into the United States, leading numerous countries to withdraw from his Miss Universe pageant.

Answer: Donald John **Trump**

[10] Like Hillary Clinton, this Governor of Wisconsin dealt with an e-mail scandal; his concerned illegal contributions before and during his 2012 recall election. He withdrew from the race in September 2015.

Answer: Scott Kevin Walker

[10] Aaron Schock, a representative from this state, resigned in 2015 after misusing taxpayer dollars on a Downton Abbey-style renovation of his office. Another representative from this state, Jesse Jackson, Jr., resigned in 2012 and served one and a half years in prison for fraudulent use of campaign money.

Answer: Illinois

16. Dab-Dab is one of these animals in The Story of Doctor Dolittle. For 10 points each,

[10] Name this type of bird. In a Norwegian play, Hedvig is told to shoot one of these birds, and an "ugly" one of these turns into a swan in a Hans Christian Andersen fairy tale.

Answer: <u>duck</u>s (accept <u>duckling</u>s; accept The <u>Wild Duck</u>)

[10] This Norwegian playwright of *Ghosts* wrote *The Wild Duck*, as well as a play in which Nora Helmer is blackmailed.

Answer: Henrik **Ibsen**

[10] Henrik Ibsen wrote this play about Nora Helmer, who is blackmailed by Krogstad and eventually abandons the title home.

Answer: A **Doll's House** (accept Et **dukkehjem**)

17. For 10 points each, give the following about the "Mighty Handful."

[10] Mily Balakirev led the Mighty Handful at meetings in St Petersburg in this home nation of the Handful.

Answer: **Russia**n Empire (do not accept **USSR**)

[10] This member of the Mighty Handful described the transformation of Guidon in his *The Tale of Tsar Saltan*, which includes the Flight of the Bumblebee.

Answer: Nikolai Andreyevich Rimsky-Korsakov

[10] This other member of the Mighty Handful was inspired by Viktor Hartmann paintings, like "The Great Gate of Kiev" and "The Hut on Fowl's Legs," for his *Pictures at an Exhibition*.

Answer: Modest Pyotrovich Mussorgsky

18. This leader replaced Gaius Suetonius Paulinus, expecting his retribution against the Iceni after Boudica's revolt would be too harsh. For ten points each,

[10] Name this Roman emperor who supposedly fiddled during the Great Fire of Rome.

Answer: Nero

[10] Nero launched the first Roman war against these people, including the radical Zealots, in 66 CE; in that war, Vespasian invaded Galilee.

Answer: <u>Jew</u>ish people

[10] Nero's death in 68 led to this period, in which Galba, Otho, and Vitellius were unable to hold onto power. Vespasian returned from Judaea at the end of this period.

Answer: **Year of the Four Emperors** (prompt on "69 CE")

- 19. This biblical figure refuses to lose his faith, even when he loses everything, saying "the Lord gave and the Lord has taken away." For 10 points each,
- [10] Name this man. In his namesake book of the Bible, God tests this man's faith by destroying everything he has.

Answer: **Job**

[10] This figure challenged God to test Job's faith. This fallen angel, once called Lucifer, is also credited with tempting Eve in the Garden of Eden in the form of a serpent.

Answer: <u>Satan</u> (accept the <u>devil</u>; accept <u>Beelzebub</u>; accept ha<u>Satan</u> or <u>Shaitan</u>; accept common names such as <u>Prince of Darkness</u>)

[10] These many friends visit Job during his suffering. Noah had this number of sons, and this is the number of parts in the Christian God.

Answer: three

- 20. Examples of this biochemical grouping include sugars. For 10 points each,
- [10] Name this group of macromolecules, a major energy source for cells, whose members have a ring structure containing only carbon, hydrogen, and oxygen.

Answer: carbohydrate (accept any variation of saccharide)

[10] A common example of a carbohydrate is this sugar, also known as dextrose, with formula $C_6H_{12}O_6$. It is found in chains as starch in plants and glycogen in animals.

Answer: glucose

[10] This nitrogenous derivative of glucose is found in the exoskeletons of crustaceans and in fungal cell walls.

Answer: chitin