

2011 SCOP Novice

Round 10

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TOSSUPS

1. **Leydig cells may form benign tumors that emit this substance. Insects contain ecdysone which is similar to this chemical in humans. A deficiency of this hormone causes andropause. It reduces the risk for (*) osteoporosis and is also used to treat prostate cancer, though can it be used as an anabolic steroid to increase muscle mass. Produced in the testes, for 10 points, name this hormone responsible for male sex characteristics.**

Answer: testosterone

2. **Two creatures of this type drowned Suttungr's [suht-uhn-ger's] father to obtain Kvasir's [k-vah-seer's] remains, and were named Fjalar [fee-YAH-lahr] and Galar [GAH-lahr]. One of these creatures, Hreidmar [h-RYM-dahr], was killed by his son Fafnir [FAAF-neer] for a ring of cursed gold. The Sons of Ivaldi [ee-vahl-dee] are these creatures, who created Skidbladnir [skid-"blade"-neer] and (*) Mjolnir [mee-YAHL-neer]; and Dvalin [d-VAH-lihn] was one of these who was turned to stone by the sun. For 10 points, name this race of subterranean master smiths in Norse mythology.**

Answer: Dwarf (accept Dark Elf or Svartálfar)

3. **Moses Rose is legendarily considered the "coward" of this battle. William Travis was left in sole command because the volunteer leader was bedridden, and Susanna Dickinson was spared to warn others of the defeat. Ending on March 6, 1836 with the deaths of (*) James Bowie, Davy Crockett, and roughly 200 others in a San Antonio mission, for 10 points, name this disastrous battle of the Texas Revolution.**

Answer: Battle of the Alamo

4. **Fictional soldiers in this war include Septimus Smith and Albert Kropp, a friend of Paul Baumer. A poem written during this war ends by decrying "the old Lie," and describes "an ecstasy of fumbling, fitting the clumsy helmets just in time;" that poem is Wilfred Owen's (*) "Dulce et Decorum Est." All Quiet on the Western Front described trench warfare in, for 10 points, what war that created the Lost Generation in the 1910s?**

Answer: World War I (accept the First World War; prompt "The War to End All Wars" or "The Great War")

5. **The last figure painted in this work was Heraclitus, who leans on a marble desk in the foreground, and this painting is framed by vast marble arches. Euclid and Pythagoras sit on steps at the front of the picture, while (*) Plato and Aristotle discuss their philosophies as they walk down a central hall. For 10 points, identify this fresco by Raphael, in which more than forty great thinkers speak together in the title Lyceum.**

Answer: The School of Athens

6. **Tufa is a porous variety of this substance that is also known as travertine. Karst topography develops as this substance is weathered away in water or a weak acid solution. One way it is formed is from the crushed (*) bodies of marine creatures as they are eroded against seashores. Marble is the metamorphosed form of, for 10 points, what sedimentary rock consisting of calcium carbonate?**

Answer: limestone

7. **As chief counsel for the Senate Labor Rackets Committee, this man investigated the Teamsters. In 1964, he was elected Senator from New York, and this former US Attorney General ran for the 1968 Democratic (*) Presidential nomination, campaigning to promote racial equality and end the Vietnam War. For 10 points, name this man who won the California Primary shortly before being shot by Sirhan Sirhan, five years after his brother John's death.**

Answer: Robert Francis Kennedy (accept Bobby Kennedy or RFK; prompt on Kennedy)

8. **In this novel, Tom takes over a job organizing workers when Jim is killed by police. Noah and Connie abandon their family when they can't find work, and Grandma dies as her family enters California. (*) "Rosasharn" nurses a starving man after giving birth to a stillborn baby in this novel about her family's journey out of Oklahoma. For 10 points, name this Great Depression-era novel about the Joad family, a work by John Steinbeck.**

Answer: The Grapes of Wrath

9. **One character in this work sings "Kittens would frighten him," objecting to the name Tiger; later, the main character is told "Let's go see the stars." Rooster and Lily St. Regis feature in this musical's song (*) "Easy Street," which is reprised shortly before Franklin Roosevelt is told to "bet his bottom dollar" on the title day. Featuring the songs "Tomorrow" and "Hard Knock Life," for 10 points, name this musical about a redheaded orphan.**

Answer: Annie (do not accept Little Orphan Annie or Annie Warbucks)

10. **The Kirchhoff [KEER-kawff] equation can be approximated by the Fraunhofer type of this phenomenon, which was observed in Young's double slit experiment. When the observer is close to the obstructing surface, its Fresnel type occurs. When it manifests as (*) scattering, Bragg's law describes this phenomenon in crystals. Huygens' [HOY-ginz'] principle describes every point on a wave front as a source of, for 10 points, what phenomenon of waves bending around obstacles?**

Answer: diffraction (accept word forms)

HALF TIME

11. For operands that represent linear transformations, this operation represents function composition. It will yield the identity if and only if it is performed on a singular operand with its inverse. Unlike its scalar counterpart, this process does not generally (*) commute, and it is only defined if the number of columns of the first operand equals the number of rows of the second operand. For 10 points, name this binary operation on two matrices.

Answer: matrix multiplication (accept matrix product; accept word forms or variations like multiplying matrices; prompt on multiplication or word forms thereof)

12. The Sigsbee Deep is the lowest point in this body of water, and oil is produced in its Bay of Campeche [cam-"peach"-ee]. Rivers that empty into this body of water include the Coosa, Pearl, and Sabine, and cities on its shore include Tampico, Veracruz, and (*) Corpus Christi. Home to Galveston Island and the end of the Rio Grande and Mississippi River, for 10 points, name this site of the 2010 Deepwater Horizon oil spill.

Answer: Gulf of Mexico

13. It states that no one should call his brother "raca." It contains an injunction to "let your yes be yes" and recommends that if asked to go with a person one mile, to "go with him two." Elsewhere, it makes a distinction between narrow and wide gates. It is the source of the (*) Lord's Prayer and the Golden Rule. For 10 points, name this speech from the book of Matthew containing the Beatitudes, that begins "Blessed are the poor in spirit."

Answer: Sermon on the Mount

14. One study of this concept paid subjects either one dollar or twenty dollars to recommend the boring task of turning pegs. This term was coined in *When Prophecy Fails* by Leon Festinger, who noted that cultists who believed the world would end on a certain date had (*) increased faith in the world's end after the predicted date had passed. For 10 points, name this psychological issue in which a person holds conflicting beliefs at the same time.

Answer: cognitive dissonance

15. Debussy wrote his "First" one of these compositions for clarinet and piano. These one-movement works, like Vaughan Williams' *Norfolk* one, do not have a rigid structure. Other examples of this form include a "Spanish" one by Ravel, a set of variations based on (*) Paganini's last Caprice [cah-PREECE] by Rachmaninoff, and a set of nineteen *Hungarian* ones by Liszt. For 10 points, give this musical form, of which George Gershwin composed one in *Blue*.

Answer: rhapsody (accept any of the full titles at any point; in order, they are *First Rhapsody* or *Première rhapsodie*, *Norfolk Rhapsody*, *Spanish Rhapsody* or *Rhapsodie Espagnole*, *Rhapsody on a Theme of Paganini*, *Hungarian Rhapsodies*, and *Rhapsody in Blue*)

16. This event officially set the Curzon Line as the Eastern border of Poland, and also planned to divide Germany into four zones. Codenamed Argonaut, this event saw the United States agree to recognize Mongolian independence in exchange for the (*) Soviet Union agreeing to invade Japan. The last meeting between Churchill, Roosevelt, and Stalin, for 10 points, name this February 1945 meeting held in Ukraine.

Answer: Yalta Conference [accept Crimea Conference]

17. This author wrote about a drunken man who goes to Alloway Kirk and nicknames a witch “cutty sark.” In addition to writing “Tam O’Shanter,” he wrote about a creature “on a lady’s bonnet at church,” and another “on turning her up in her nest with the plough.” He wrote about “The (*) best-laid schemes o’ mice and men” and “my love’s like a red, red, rose.” For 10 points, name this Scottish poet of “To a Louse,” “To a Mouse,” and “Auld Lang Syne.”

Answer: Robert Burns

18. This leader negotiated the handover of the accused Lockerby bombers with Muammar Qaddafi. He was succeeded in his highest post by Thabo Mbeki [TAH-bo uhm-BAY-kee]. He wrote the autobiography *Long Walk to Freedom*, and was held at (*) Robben Island prison for many years. He was released by F. W. de Clerk, and in 1994 he led the African National Congress to its first victory in universal elections. For 10 points, name this first black president of South Africa.

Answer: Nelson Rolihlahla Mandela

19. In the study of these objects, the Miller index defines planes and direction. Van der Waals forces allow their hexagonal shape, while scattering from these objects is described by Bragg’s law. The unit cell of these objects may display the (*) body-centered or face-centered arrangement of atoms. Usually in lattice form with repeating geometric patterns, for 10 points, name these solids which include quartz and table salt.

Answer: crystals

20. Norman Mushari uses the philanthropy of one of this author’s characters to try to prove him insane. *Maniacs in the Fourth Dimension* was written by a character in this author’s novel (*) *Breakfast of Champions*. Besides Eliot Rosewater and Kilgore Trout, he created a character who goes to Tralfamadore and saw the firebombing of Dresden. For 10 points, name this author who wrote about Billy Pilgrim in his novel *Slaughterhouse-Five*.

Answer: Kurt Vonnegut

BONUSES

1. Name some African-American writers, for 10 points each.

[10] This poet wrote “On the Pulse of Morning,” *Just Give Me a Cool Drink of Water ‘fore I Diie*, and “I Know Why the Caged Bird Sings.”

Answer: Maya Angelou (accept Marguerite Johnson)

[10] *A Mercy* is the most recent novel by this current author of *Song of Solomon*, *Beloved*, and *The Bluest Eye*.

Answer: Toni Morrison (accept Chloe Anthony Wofford)

[10] This author focused on issues of race in works like *Go Tell it on the Mountain*.

Answer: James Baldwin

2. He cooked the Salmon of Wisdom for his superior, Finneigeas [FIN-eh-gus]. For 10 points each,

[10] Name this hunter-warrior who receives all the knowledge in the world by sucking on his thumb.

Answer: Fionn mac Cumhaill [fin mah-kool] (accept either underlined portion, be lenient with pronunciation)

[10] According to this country’s Fennian Cycle, Fionn mac Cumhaill [fin mah-kool] is in an eternal slumber but will awaken when this island country is in dire need.

Answer: Ireland (accept Éire, Airlann, Republic of Ireland and/or Northern Ireland)

[10] This other cycle of Irish mythology features the hero Cú Chulainn [koo choo-layn]. It is named for the northern-most province of Ireland.

Answer: Ulster Cycle

3. In this laboratory technique, the mobile phase travels through the stationary phase. For 10 points each,

[10] Name this technique that comes in paper and thin layer varieties, used to separate mixtures.

Answer: chromatography

[10] The mobile phase is this kind of substance that dissolves a solute. Water and ethanol are common examples.

Answer: solvent

[10] In thin layer chromatography, this value refers to the distance traveled by the component, divided by the distance traveled by the solvent. They can indicate relative solubility of compounds in specific solvents, as well as purity.

Answer: retention factor (accept retardation factor or Rf [r sub f])

4. This cook, whose published recipe for English peas consists solely of peas, butter, and heat, was once hit in the face with a ham that "(she) didn't know was bein' thrown." For 10 points each, [10] The namesake of shows such as (*her*) *Home Cooking*, name this chef and purveyor of fat-laden Southern cuisine.

Answer: Paula **Deen**

[10] *Paula Deen's Home Cooking* can be seen on this network, also home to *Chopped* and Rachael Ray's *30 Minute Meals* and *\$40 a Day*.

Answer: **Food Network**

[10] Opposing Rachael Ray on the congeniality-in-cooking spectrum is this host of multiple Fox cooking reality shows, such as *Hell's Kitchen* and *Kitchen Nightmares*.

Answer: Gordon **Ramsay**

5. While in exile, this man fought in Uruguay. For 10 points each,

[10] Name this revolutionary who led the redshirts of the Expedition of the Thousand against the Kingdom of the Two Sicilies.

Answer: Giuseppe **Garibaldi**

[10] With Giuseppe Mazzini and Count Cavour, Garibaldi helped unify this peninsular country in the Risorgimento of the nineteenth century.

Answer: **Italy** (accept Kingdom of **Italy**; or **Italian** Republic)

[10] The first king of unified Italy, Victor Emmanuel II, was previously ruler of the kingdom of Piedmont and this Italian island in the Mediterranean.

Answer: **Sardinia** (accept Kingdom of Piedmont-**Sardinia**; accept those regions in either order; or **Sardigna**; or **Sardegna**)

6. Name some Caribbean religions for 10 points each.

[10] In Haiti, Loa [low-ah] are servants to Bondyè [BOND-yay], the supreme god in this religion associated with zombies and, in the New Orleans variety, namesake dolls.

Answer: **Voo-doo** or **Vodou**

[10] This religion reveres Haile Selassie [HAY-lee seh-LAH-see] as a manifestation of Jesus Christ, and a representation of the almighty Jah.

Answer: **Rastafarianism** or **Rastafari Movement**

[10] This religion is derived from a mixture of Yoruban and Catholic beliefs. This religion's chief god, Olorun [oh-loh-roon], interacts with humanity through orishas [oh-REE-shahs].

Answer: **Santería** or La **Regla Lucumi**

7. This Master of the Horse under Julius Caesar and member of the Second Triumvirate went to Alexandria in 41 BCE. For 10 points each,

[10] Name this Roman general and politician, the lover of Cleopatra.

Answer: Marc **Antony** (accept Marcus **Antonius**)

[10] The Second Triumvirate consisted of Antony, Lepidus, and this adopted son of Julius Caesar, who fought a civil war against Antony and Cleopatra in 31 BCE and became the first Emperor of Rome.

Answer: **Octavian** (accept **Augustus** Caesar or Gaius **Octavius** Thurinus)

[10] This decisive naval battle saw Antony and Cleopatra soundly defeated, leading Octavian to take the name Augustus Caesar.

Answer: Battle of **Actium**

8. For 10 points each, answer the following about statistics.

[10] Contrasted with the alternate hypothesis, this statement is assumed by a statistical test in the hopes of finding evidence to reject it. If the test does not produce that evidence, this statement is not rejected.

Answer: **null** hypothesis (accept **H0** [**H** sub **zero**, **H** sub **nought**, or **H** sub **“oh”**])

[10] A statistical test calculates data from one of these subsets of the population. Generally speaking, as *n*, or the size of this entity, increases, the accuracy of a statistical test increases.

Answer: **sample**

[10] The empirical rule states that 68% of a normally distributed population will lie within one of these measurements from the mean. It is the square root of the variance.

Answer: sample **standard deviation**

9. This play was adapted into the musical *My Fair Lady*. For 10 points each,

[10] Identify this play, in which Professor Henry Higgins helps Eliza Doolittle improve her speech.

Answer: **Pygmalion**

[10] *Pygmalion* is by this playwright of *Man and Superman*.

Answer: George Bernard **Shaw**

[10] This play by Shaw concerns the title Salvation Army officer and her family, including Lady Britomart and Andrew Undershaft.

Answer: **Major Barbara**

10. Artists often paint portraits of multiple people. For 10 points each,

[10] This double portrait was painted by Grant Wood. It depicts Wood's dentist holding a pitchfork and standing next to his sister, while a farm house in the title style stands in the background.

Answer: **American Gothic**

[10] This painting by Jan van Eyck [yahn van “ike”], features the title newlyweds standing beside a bed. A pair of shoes lie on the bottom right of this painting while a small dog stands in front of the couple.

Answer: The **Arnolfini Wedding** (there is no definitive title for this work. accept **Arnolfini Marriage**, **Arnolfini Portrait**, Giovanni **Arnolfini and His Bride**, or anything that demonstrates knowledge that Giovanni Arnolfini is getting married, up to and including “**Arnolfini** Gettin’ **Hitched**, Dat Playa”)

[10] This Dutch artist painted a group of spectators looking over an anatomist's shoulder in *The Anatomy Lesson of Doctor Nicolaes Tulp* and painted the company of Franz Banning Cocq in *The Night Watch*.

Answer: **Rembrandt** Harmenszoon van Rijn

11. For 10 points each, name these member nations of OPEC, the Organization of Petroleum Exporting Countries.

[10] This Islamic nation is OPEC's largest exporter of petroleum and has a standing policy against production limits. Its capital is Riyadh [ree-YADD].

Answer: Kingdom of **Saudi Arabia**

[10] This South American nation produces most of its oil around Lake Maracaibo. The oil company CITGO is owned by this country, which is led by Hugo Chavez.

Answer: Bolivarian Republic of **Venezuela**

[10] This African OPEC nation ships most of its oil out of Port Harcourt. Most of its oil reserves are in the Gulf of Guinea.

Answer: Federal Republic of **Nigeria**

12. The Reynolds number is the ratio of inertial forces to these types of forces. For 10 points each,

[10] Give this property that refers to a substance's internal friction, or resistance to flow.

Answer: **viscosity**

[10] This type of substance has no resistance to stress; thus, its viscosity is zero. It also has infinite thermal conductivity.

Answer: **superfluids** (accept word forms)

[10] The 4 isotope of this element is a relatively common superfluid, and the nuclei thereof are also called alpha particles..

Answer: **Helium-4** (accept 4-**He**)

13. This author described the is-ought problem of ethical debate in *A Treatise of Human Nature*. For 10 points each,

[10] Name this Scottish philosopher, who revised that work into *An Enquiry Concerning Human Understanding*.

Answer: David **Hume**

[10] The tenth section of *An Enquiry Concerning Human Understanding* is about these supernatural events, noting that, because many religions claim to explain these events differently, the religions must be false.

Answer: "Of **Miracles**"

[10] Another Scottish thinker, this economist introduced the concept of the "invisible hand" guiding the market in *The Wealth of Nations*.

Answer: Adam **Smith**

14. For 10 points each, answer the following about short stories.

[10] Tessie Hutchinson "wins" the title game of chance in this Shirley Jackson short story; as a result, she's stoned to death as a harvest sacrifice.

Answer: The **Lottery**

[10] "The Library of Babel," collected in this Argentinian author's *Ficciones*, describes a series of hexagonal rooms containing books with every combination of characters imaginable.

Answer: Jorge Luis **Borges**

[10] This Saki short story describes a scene in a Carpathian forest where two feuding men are trapped under a tree. They resolve their difference before the title creatures--a pack of wolves--arrive.

Answer: The **Interlopers**

15. In this operetta, Adele's "Laughing Song" follows the re-introduction of Adele to Eisenstein, who is attending the ball instead of going to jail. For 10 points each,

[10] Name this operetta, in which Falke gets revenge on Eisenstein after being abandoned drunk in a tree dressed as the title creature.

Answer: *Die* **Fledermaus** [dee FLEE-"dare"- "mouse"] (accept *The* **Bat**)

[10] This Austrian composer of *Die Fledermaus* is better known as "The Waltz King" for works like *The Blue Danube Waltz*.

Answer: **Johann Baptist Strauss II** (or Jr. or "the Younger")

[10] Strauss wrote two polkas titled for this method of playing stringed instruments by plucking the strings.

Answer: **Pizzicato** (accept **Pizzicato Polka**)

16. The 1768 Treaty of Fort Stanwix established a boundary for the land of this group, which included the Mohawk and Oneida tribes. For 10 points each,

[10] Name this confederation of five - later six - Native American tribes, known as the People of the Longhouse.

Answer: **Iroquois** Confederation (accept **Iroquois** League; prompt **Five Nations** or **Six Nations**)

[10] The Treaty of Fort Stanwix was an adjustment of this earlier, largely-ignored edict that forbade British settlers from settling west of the Appalachian Mountains.

Answer: Royal **Proclamation of 1763**

[10] The Proclamation of 1763 was a British attempt to handle frontier conflicts in lands they acquired in the 1763 Treaty of Paris, which ended this war. The Iroquois fought this war alongside the British.

Answer: **French and Indian** War (accept **Seven Years'** War)

17. This planet's moon Triton has a retrograde orbit. For 10 points each:

[10] Name this farthest planet from the sun, home to the Great Dark Spot.

Answer: **Neptune**

[10] Neptune's gravity causes orbital resonances in this region beyond Neptune's orbit. This region is thought to be the source of short-period comets.

Answer: Edgeworth-**Kuiper** [KAI-pur] **belt**

[10] This region that lies farther out from the Kuiper Belt is thought to be the source of long-period comets.

Answer: Öpik-**Oort cloud**

18. In one of her works, Clarissa hosts a dinner party. For 10 points each,

[10] Name this author of *Jacob's Room*, *Orlando* and *A Room of One's Own*, who wrote about Peter Walsh, Elizabeth, and Richard in *Mrs. Dalloway*.

Answer: Virginia **Woolf**

[10] Woolf also wrote this novel, in which the Ramsays invite Lily Briscoe and Charles Tansley to their vacation home, where James and Cam finally make the titular journey.

Answer: **To the Lighthouse**

[10] One of Woolf's contemporaries was this man, the author of *Sons and Lovers* and *Lady Chatterley's Lover*.

Answer: D(avid) H(erbert) **Lawrence**

19. Passive forms of this process include facilitated diffusion. For 10 points each,

[10] Name this process whose active form consumes ATP to move molecules across a membrane

Answer: cellular **transport**

[10] This process refers to the movement of a solvent, such as water, across a semi-permeable membrane. For instance, water may move across a membrane from a hypotonic to a hypertonic solution.

Answer: **osmosis**

[10] In the neurons, pumps help maintain resting potential by movement of the ions of these two elements. It moves 3 of one ion out in exchange for 2 of the other ions, working through active transport.

Answer: **sodium** and **potassium** (accept in either order)

20. Prior to this battle, the U.S. had broken the JN-25 code. For 10 points each,

[10] Name this 1942 World War II battle that resulted in the sinking of four Japanese carriers and the loss of only one U.S. carrier.

Answer: Battle of **Midway**

[10] This man led a namesake air raid on Japan shortly after Pearl Harbor. His raid was a major boost to American morale, and Midway was part of Japan's response to his raid.

Answer: James Harold "Jimmy" **Doolittle** (accept **Doolittle** Raid)

[10] The battle for this island, home to three Japanese air fields, saw the raising of an American flag on top of its Mount Suribachi.

Answer: (Battle of) **Iwo Jima**