

2016 OAC Regionals – Round 3

Questions written by Ike Jose and Steven Wellstead

Category Round

American Literature: Name these writers who wrote about John Brown.

Team A: This writer won a Pulitzer Prize for his epic poem *John Brown's Body*. He also wrote the poem "American Names," which contains the line "Bury My Heart at Wounded Knee."

ANSWER: Stephen Vincent **Benet** (BIH-nay)

Team B: Music from the song "John Brown's Body" inspired this author to write "The Battle Hymn of the Republic," since she felt the lyrics to "John Brown's Body" were too violent.

ANSWER: Julia Ward **Howe**

Tossup: This author imagined a time in which the poet will no longer sing of Rome, but rather weep for the title figure, in his speech "A Plea for Captain John Brown." In one of his books, this author describes a "ruddy and lusty" old dame that is likely to outlive all of her children in a chapter entitled "Solitude." In that book by this author, the chapter "Where I Lived, and What I Lived For" details what led the author to spend two years, two months, and two days by the title pond in Maine. Name this American Transcendentalist who wrote *Walden*.

ANSWER: Henry David **Thoreau** (thuh-ROH)

Mathematics: Name the following related to shapes.

Team B: This kind of quadrilateral consists of two pairs of adjacent sides of equal length. These are the most general quadrilaterals in which the diagonals intersect to form right angles.

ANSWER: **kites** [or **deltoids**]

Team A: This shape consists of the part of a circle that is not covered when it is partially overlapped by a second circle.

ANSWER: **crescents**

Tossup: A tiling named for this shape in hyperbolic geometry is para-compact since it has infinite cells. All of the components of a horo-sphere have this shape. A theorem named for this shape states that a set of points ABC ("**A-B-C**") on one line, and a set of points DEF ("**D-E-F**") on another line, can be used to define the Pappus line, which runs through this kind of shape. In this kind of shape, the internal angles sum to 720 degrees. The scuttles of a turtle shell and honeycombs in beehives take the form of this two-dimensional shape. Name this shape with (*) six sides.

ANSWER: **hexagons** [accept **6-gon** before (*)]

World History: Give the following related to the 17th century.

Team A: The birth of James Francis Edward, who was later nicknamed the “Old Pretender”, helped trigger this 17th century event in which the rule of James II of England was ended.

ANSWER: Glorious Revolution [or Bloodless Revolution or Revolution of 1688]

Team B: Filip Fabricius was one of three representatives of Holy Roman Emperor Ferdinand II who were injured during this 1618 event, which sparked the beginning of the Thirty Years’ War.

ANSWER: Second Defenestration of Prague [prompt on “defenestration”]

Tossup: Following this ruler’s death, a system of government known as polysynody (PAH-lee-“sigh”-nuh-dee) was briefly installed. Pope Innocent XI (“the 11th”) butted heads with this ruler, who initiated a war with the Dutch Republic that was ended by the Treaty of Nijmegen (NYE-“megan”). The War of the Grand Alliance was fought against this monarch, who was succeeded by his five year old great-grandson. This king’s ministers included Jean-Baptiste Colbert (zhahn-baa-TEEST kohl-BAYR) and Cardinal Mazarin. Name this 17th and 18th century King of France who was nicknamed the “Sun King” and ruled for 72 years.

ANSWER: Louis XIV (“the 14th”) of France [prompt on “Louis”]

Fine Arts: Name these German composers.

Team B: This composer’s coronation anthem *Zadok the Priest* has been played at every British coronation since it was composed. He also composed *Music for the Royal Fireworks*.

ANSWER: George Frideric Handel or Georg Friedrich Handel

Team A: A novel by Jean Paul inspired *Papillons*, which was a series of piano sketches by this composer of the *Rhenish Symphony*.

ANSWER: Robert Schumann

Tossup: A choral work by this composer sets to music a poem beginning “Ye wander gladly in light” and is called the *Song of Destiny*. This composer’s violin concerto was premiered by Joseph Joachim. A choral work by this composer unusually uses Martin Luther’s translation of the Bible as its source material and ends with a section called “Blessed are the Dead.” This composer’s first symphony was derisively called Beethoven’s Tenth since it resembled it. Give this 19th century composer of *A German Requiem* who is known for a namesake “lullaby.”

ANSWER: Johannes Brahms

Life Science: Answer these questions about a particular biological phenomenon.

Team A: “Tonic labyrinthine” and “gastrocolic” are examples of this kind of biological movement, which is an innate response to a stimulus.

ANSWER: **reflex** action

Team B: One type of stretch reflex that exists is named after this sesamoid (SESS-uh-moyd) bone, which is located near the bottom of a set of four muscles that include the rectus femoris (REK-tis fuh-MOR-iss) and vastus medialis (VAS-tuss mee-dee-AA-liss).

ANSWER: **patella** [accept **patellar** reflex; prompt on “kneecap”]

Tossup: This body part being hit during a reflex test can result in the Babinski sign, which is usually indicated when a portion of this body part known as the hallux points upward. These body parts are affected by tarsal tunnel syndrome. This body part appears in the colloquial name of the skin infection *tinea pedis*, which is often contracted in locker rooms. One end of this body part contains the phalanges (fuh-LAN-jeez) bones, while the other end contains a joint that is at the bottom end of the tibia and fibula. Name this part of the body that contains the ankle and toes.

ANSWER: **feet** or **foot**

World Literature: Answer the following about poetic meter.

Team B: An unstressed syllable followed by a stressed syllable comprises this poetic meter.

ANSWER: **iamb** [or **iambus**; accept **iambic** foot]

Team A: A stressed syllable followed by two unstressed syllables comprises this poetic meter.

ANSWER: **dactyl** [or **dactylic** foot]

Tossup: This poet used anapestic tetrameter in a poem whose last stanza states “and the idols are broke in the temple of Baal.” That poem by this writer begins by describing how “the Assyrian came down like a wolf on the fold.” This author of “The Destruction of Sennacherib (seh-NAA-kuh-rub)” wrote another poem about a person whose “smiles that win” tell of “days in goodness spent.” The first stanza of that poem by this poet describes “tender light which heaven to gaudy day denies.” The title woman of that poem by this author is compared to “the night of cloudless climes and starry skies.” Name this English poet of “She Walks in Beauty” and *Don Juan*.

ANSWER: Lord **Byron** or George **Gordon**

U.S. Government/Economics: Answer the following having to do with investment over long periods of time.

Team A: In the U.S., “closed-end,” “unit investment,” and “open-end” are the three varieties of this type of “fund” that the general public can invest in.

ANSWER: mutual funds

Team B: Mutual funds have a relatively low value for this quality, which is the ability for an asset to be easily converted into cash. It also names a “trap” in which monetary policy does not help growth.

ANSWER: liquidity [accept liquidity trap; accept word forms]

Tossup: In 2010, Turkey allowed companies to issue the “baklava” (BAHK-luh-vuh) types of these tools. The “Brady” type of these were devised by a namesake U.S. investor and often sold to Latin American countries. A rating of BB (“B-B”) or lower characterizes the “junk” type of these tools, which are often used to finance hostile takeovers. In the “bearer” type of these tools, the ownership is not managed by the issuing party. The U.S. often sold “war” ones to finance World War 1 and 2. Name these financial instruments which are often paired with stocks.

ANSWER: bonds [accept baklava bonds or Brady bonds or junk bonds or bearer bonds or war bonds]

Physical Science: Name these materials encountered in physics.

Team B: Neodymium is often used to make an extremely strong form of these objects, whose “para” types include hydrogen consisting of one atom.

ANSWER: magnets [accept paramagnets]

Team A: Light is refracted into its constituent colors using these materials, which consist of a polished surface.

ANSWER: prisms

Tossup: An idealized form of these materials has an infinite value for the relative imaginary permittivity divided by the relative real permittivity. Perfect types of these materials have a constant magnetic flux. BCS (“B-C-S”) theory explains one form of these materials. Pure water is not one of these substances, but the addition of salt makes it one. Gallium is an example of the (*) “semi” type of these materials. Name these materials which allow electricity to pass through them, unlike resistors.

ANSWER: conductors [accept superconductors before (*)]

World Geography: Name these South American nations.

Team A: Mount Chimborazo (cheem-boh-RAH-zoh), whose peak is the one farthest from the center of the Earth, lies within this country whose most populous city is Guayaquil (GWY-ah-keel).

ANSWER: Republic of **Ecuador** [or Republica del **Ecuador**]

Team B: Much of the Altiplano (al-“tee”-PLAH-noh) plateau is within the western end of this landlocked nation, where Lake Poopo (poh-oh-POH) has completely dried up as of December 2015.

ANSWER: Plurinational State of **Bolivia** [or Estado Plurinacional de **Bolivia**]

Tossup: This nation borders a body of water known as the Serpent’s Mouth. The Schomburgk (SHAHM-burk) Line formed the basis for the eastern border of this nation, which claims the disputed Essequibo (ess-eh-KEE-boh) region. A majority of the table-top mountain formations known as tepuis (TAY-pweez) reside in this nation, which contains the world’s highest waterfall. This country, which is the site of Angel Falls, controls much of the Orinoco (oh-rih-NOH-koh) River and surrounds the oil-rich Lake Maracaibo (mah-rah-KYE-boh). Hugo Chavez (OOH-goh CHAH-vez) is a former president of what South American nation whose capital is Caracas?

ANSWER: Bolivarian Republic of **Venezuela** [or Republica Bolivariana de **Venezuela**]

U.S. History: Name these battles involving U.S. troops.

Team B: Horatio Gates was the winning commander at this 1777 battle in upstate New York that included fighting at Freeman’s Farm and Bemis Heights.

ANSWER: Battles of **Saratoga**

Team A: The Battle of El Caney (kah-NAY) took place on the same day as this July 1st, 1898 battle, in which Kettle Hill was captured by the cavalry group known as the Rough Riders.

ANSWER: Battle of **San Juan Hill** [or Battle of **San Juan Heights**]

Tossup: This battle was the subject of the book *Keep the Last Bullet for Yourself*, in which Thomas Bailey Marquis (mar-KEE) proposed that the losing troops committed mass suicide. The Irish mercenary Myles Keogh (KEE-oh) was killed in this skirmish, which is alternatively known as the Battle of (*) Greasy Grass Creek. This battle included American battalions commanded by Frederick Benteen and Marcus Reno. A horse named Comanche (coh-MAN-chee) notably survived this battle, in which Crazy Horse and Sitting Bull teamed up to defeat the 7th Cavalry Regiment. Name this June 1876 battle which included the death of George Custer.

ANSWER: Battle of the **Little Bighorn** River [accept Battle of **Greasy Grass** Creek before (*); prompt on “Custer’s Last Stand”]

Alphabet Round – Letter I

1. **(TWO WORD ANSWER)** – The rise of a dystopian “oligarchy” is chronicled in this novel by Jack London.
2. Instead of using a compiler, some computer programming languages use one of these tools, which translates statements into bytecode directly or some other type of machine code.
3. Duke Ellington once famously stated “You’ve got to find some way of saying it without saying it” to describe this task of continuously creating new music on the spot.
4. The Concordat of Worms ended this medieval “controversy” in which kings and popes disputed over who had the right to appoint Church leaders.
5. Sigmund Freud argued that this act of sexual relations with close family members was one of the few taboos found across all cultures.
6. “Hey!” is an example of this part of speech.
7. Popular resort island that is the third largest of the Balearic Islands.
8. The superposition of two or more electromagnetic waves creates either the “destructive” or “constructive” types of this phenomenon.
9. State that was home to five U.S. vice presidents, including Charles Fairbanks and Dan Quayle.
10. This scribe and designer of Djoser’s pyramid was deified as a god of medicine after his death.
11. This is one of the church modes used in Gregorian Chant, and it is represented by an ascending scale equivalent to the modern C major scale.
12. Prince Myshkin is the epileptic title character of this novel by Fyodor Dostoyevsky.
13. “Structural” and “geometric” are forms of this property of two molecules, in which they have the same chemical composition but different configurations.
14. Figure whose “fall” is depicted in a Pieter Bruegel painting in which a farmer plows a piece of land while the sun sets over a body of water.
15. Moving from the particular to the general is an example of this type of logic, whose “problem” is discussed in a book by Nelson Goodman.
16. Nation which was ruled by the Pahlavi dynasty until it was overthrown in a 1979 revolution.
17. Biblical son of Abraham and Sarah who was nearly sacrificed by his father during a test of faith.
18. Lady Rowena marries this title character and son of Cedric the Saxon at the end of a historical novel by Sir Walter Scott.
19. **(MULTI-WORD ANSWER)** – This portion of the pancreas, which is named for a German scientist, contains alpha and beta cells that secrete insulin and glucagon.
20. **(MULTI-WORD ANSWER)** – Full name of the labor union whose members are known as “Wobblies.”

Alphabet Round – Letter I Answers

1. *The Iron Heel* (TWO WORD ANSWER)
2. interpreter
3. improvisation [accept word forms or improv]
4. Investiture Controversy [or Investiture Contest or Investiturstreit]
5. incest
6. interjection
7. Ibiza
8. interference
9. Indiana
10. Imhotep (im-HOH-tep) [or Immutef or Imuthes]
11. Ionian mode
12. *The Idiot*
13. isomerism
14. Icarus [accept Landscape with the Fall of Icarus]
15. induction or inductive logic
16. Islamic Republic of Iran [or Jomhuri-ye Eslami-ye Iran]
17. Isaac [or Ishaq]
18. Ivanhoe
19. islets of Langerhans (LAHNG-ur-hahnz) (MULTI-WORD ANSWER)
20. Industrial Workers of the World [do not accept “IWW”] (MULTI-WORD ANSWER)

Lightning Round

1. LURE (“lure”) proteins help guide this material. The direction of the elongated furrows on this substance classifies it as either sulcate or colpate. This substance is surrounded by a single layer called an intine and an exterior called an exine. It is created within the microsporangium of the anther. This powdery substance is usually moved along by the wind or an insect such as a bee. Name this substance that allows plants to reproduce and is a common source of springtime allergies.

ANSWER: pollen

2. This sculpture was intended to sit immediately below the *The Three Graces* and next to *Eternal Springtime* and *Adam and Eve* in a group of works inspired by Dante Alighieri (DAH-n-tay ah-lee-gee-“AIR”-ee), who was the model for this sculpture. This piece, which originally was conceived to appear as part of *The Gates of Hell*, features a man resting his elbow on the part of his leg near his knee. Name this sculpture by Auguste Rodin (oh-GOOST roh-DAN) in which the title figure assumes a contemplative pose.

ANSWER: *The Thinker* [Le Penseur or The Poet]

3. This country was briefly ruled by the Pentarchy (“PEN-tar-key”) of 1933 after the ousting of president Gerardo Machado (“hair”-AR-doh muh-CHAH-doh). This nation fought for its independence in the Ten Years’ War. One leader of this country attacked the Moncada (mon-KAH-duh) Barracks on July 26, 1953 to start a revolution that overthrew Fulgencio Batista (“fool”-“HEN”-“see”-oh bah-TEE-stah). That leader was later the target of the U.S.-backed Bay of Pigs invasion. Name this Caribbean nation currently led by Raul (rah-OOL), the brother of Fidel (“fee”-DELL) Castro.

ANSWER: Republic of Cuba [or Republica de Cuba]

4. In George Orwell’s essay “Good Bad Books,” this author’s most famous novel is discussed as the supreme example of a “good bad book.” In that novel by this author, a tracker named Tom Loker traps Eliza and her family, and George Shelby arrives too late to buy the freedom of the title character, who had been beaten to death by the malicious plantation owner Simon Legree. Name this American author who Abraham Lincoln credited with starting the Civil War with her novel *Uncle Tom’s Cabin*.

ANSWER: Harriet Elisabeth Beecher Stowe

5. Texts central to this religion include the *Epistle to the Son of the Wolf* and the *Book of Certitude*, the latter of which sets forth the “Grand Redemptive Scene” of God. Its seat is the Universal House of Justice in Haifa (“HIGH”-fuh), Israel. This religion, which was partly founded by the Bab in the 19th century, maintains that Jesus, Muhammad, Moses, and other religious figures are all messengers of God. Name this syncretic religion which holds that all of mankind is united.

ANSWER: Baha’i (buh-“HIGH”) Faith

6. The height of the phenomena caused by these forces is often estimated using the rule of twelfths. At amphidromic points, these forces have zero amplitude in one of their harmonic constituents. These forces are non-existent during a short period of time known as “slack water.” When this force is at its minimum, the “neap” one occurs, while at its maximum, the “spring” one occurs. Name these forces that cause the Earth’s sea levels to rise and fall.

ANSWER: tides [accept tidal forces]

7. The direct cause of this event originated in the Toluca (toh-LOO-kuh) Valley of Mexico. Throughout this event, Protestants were criticized for utilizing a practice known as “souperism.” John Russell first became prime minister during this event, which prompted Robert Peel to repeal the Corn Laws. The appearance of the *Phytophthora infestans* (FYE-tahf-thor-uh in-FESS-tahnz) water mold triggered what event of the 1840s and 50s which devastated much of a certain crop on Europe’s Emerald Isle?

ANSWER: Irish Potato Famine or Great Irish Famine [or An Gorta Mor (ann GOR-tuh “more”); accept equivalents that include the notion of an Ireland famine or potatoes famine; prompt on “famine” or “great famine”]

8. In one work by this author, Gorgibus tries to get Magdelon and Cathos, the title two “pretentious young ladies,” to marry La Grange and Du Croisy. After the title religious hypocrite of another of his plays is arrested, Orgon tells the audience that Valere and Mariane will be wedded. While playing Argan in his play *The Imaginary Invalid*, this author collapsed on stage and died. Name this French author of plays such as *Tartuffe* (“tar”-TOOF) and *The Misanthrope*.

ANSWER: Moliere (mohl-YAIR) [or Jean-Baptiste Poquelin]

9. This desert is the site of a 156 mile race known as the Marathon of the Sands. This desert, which contains the Ahaggar (ah-HAH-gur) Mountains, was the site of a border dispute that involved the Aouzou ("OW-zoo") Strip. The nomadic Tuareg (TWAH-reg) people reside in this desert, which was the site of trade routes utilized by the Songhai ("SONG-high") Empire. The Sahel (suh-HEL) region is south of this desert, which names a (*) disputed territory controlled by Morocco. Name this large desert of northern Africa.

ANSWER: Sahara Desert [or as Sahra al-Kubra; accept Western Sahara or Sahara Occidental or As-Sahra al-Gharbiyah after (*)]

10. This work's 47th section, "Behold, I tell you a mystery," is sung to a bass ("base") accompaniment. This musical work, whose text was written by Charles Jennens, opens with a "sinfony" for oboes and strings in French overture style and is later followed by the air "Ev'ry valley shall be exalted." Its third part begins with a scene depicting "the promise of eternal life" and features the lyrics "I know my redeemer liveth." Name this 1741 oratorio by George Handel which is named for Jesus Christ.

ANSWER: Messiah, HWV 56

11. The reduction of this quantity equals the product of the ebullio·scopic constant, molality, and the van't Hoff factor; that reduction is thus a colligative property, much like the osmotic pressure. Ethylene glycol is added to gasoline to lower its value for this quantity. Ice cream can be made by "depressing" this quantity, which equals 0° ("zero degrees") Celsius or 32° ("thirty-two degrees") Fahrenheit for water. Name this quantity at which a liquid becomes a solid.

ANSWER: freezing point [or crystallization point or melting point]

12. In one of this author's poems, the speaker tells Cynthia "There is not one, / No, no, not one, / But thee." This author wrote "A thing of beauty is a joy forever" at the beginning of a poem about a title mythical shepherd. He asked "Was it a vision, or a waking dream?" at the end of a poem addressed to a "light-winged dryad ("dry-add") of the Trees." He died at the age of 25 one year before Percy Shelley. Name this British poet who wrote "Endymion" (en-DIM-ee-uhn) and "Ode to a Nightingale."

ANSWER: John Keats

13. One person who took part in this event was killed in the Niihau (NEE-"how") incident. The Hull note was issued prior to this event, which led to the removal of defending commander Husband Kimmel. At the start of this event, one side spoke the code phrase "Tora! Tora! Tora!" The date of this event, in which the USS *Arizona* was sunk, was described as "a date which will live in infamy" by FDR. Name this December 7th, 1941 event which caused the U.S. to enter World War 2.

ANSWER: attack on Pearl Harbor [accept equivalents such as bombing of Pearl Harbor]

14. One species of this genus named *naledi* was discovered in 2013 in a cave in South Africa. One piece of evidence for the multi-regional hypothesis is that the *heidelbergensis* (HYE-dul-bur-GEN-siss) species of this genus was discovered in Africa, Asia, and Europe. The first "useful" species of this genus, *habilis*, may in fact be the same species as Java Man. The *Australo·pithecus* (AW-struh-loh-PITH-uh-kuss) genus is the ancestor of this one. Name this genus of animals whose *sapiens* species contains modern humans.

ANSWER: Homo [accept Homo naledi or Homo heidelbergensis or Homo habilis or Homo sapiens]

15. This artist's painting *Dove With Green Peas* was stolen in a 2010 art heist in Paris. *The Weeping Woman* is among the many works by this artist in which Dora Maar (mar) served as the model. One of his paintings depicts five nude woman, two of whom wear African masks. An elderly and hunched musician was the subject of his painting *The Old Guitarist*, which was created during his Blue Period. *Les Demoiselles d'Avignon* (lay DEM-wah-zell DAH-veen-yawn) was painted by what Spanish artist who co-founded Cubism?

ANSWER: Pablo Ruiz y Picasso

16. The "auxiliary" form of this quantity is symbolized capital H and represents the "free current." This quantity can be computed in terms of a line integral of the electric current using the Biot-Savart (BEE-oh-suh-VAR) Law. This quantity is crossed with the velocity in the Lorentz force. The Tesla is the unit of this quantity, which represents the force a test charge would experience when placed near a magnet. Name this (*) field that is contrasted with its electric counterpart.

ANSWER: magnetic field [accept B-field; accept magnetic or B after (*); prompt on "field"]

17. The narrator of this work travels to Caina (CYE-nuh), where he sees Mordred. Two characters in this work listen to the undecipherable language of Nimrod before leaving Malebolge (mal-uh-BOHL-gay) with the help of the giant Antaeus (an-TAY-uss). Near the end of this work the narrator enters Judecca, where everyone is encased in ice. This poem, which begins on Holy Thursday, features the speaker being led through nine circles by Virgil. Name this poem that is the first part of the Dante's (*) *Divine Comedy*.

ANSWER: Inferno [prompt on "*Divine Comedy*" or "*Divina Commedia*" before (*)]

18. This state was the victor in a battle that claimed the life of Prince Lazar (luh-ZARR) of Serbia. One leader of this country nicknamed "The Thunderbolt," Bayezid I ("BY"-uh-zid "the 1st"), was captured at the Battle of Ankara (AHN-kar-uh) by Tamerlane. Janissaries (JAN-uh-sair-eez) were part of the military force of this empire, which was broken up by the Treaty of Sevres (SEV-ruh) at the end of World War 1. Near the end of its existence, it was known as the "Sick Man of Europe." Name this former Islamic empire centered in modern-day (*) Turkey.

ANSWER: Ottoman Empire [or Devlet-i Aliyye-i Osmaniyye; prompt on "Turkish Empire" or "Turkey" before (*)]

19. An oracle causes this man to disembark from a ship by stepping on top of his shield, thereby ensuring the death of Protesilaus (proh-teh-sih-"LAY"-uss). He was killed by his son Telegonus (teh-LEH-goh-nuss), whose mother was a witch that briefly turned this man's companions into pigs. He and his men tie themselves to the bottom of sheep to escape from the giant cyclops Polyphemus (pahl-ee-"FEE"-muss). Penelope (puh-NEH-luh-pee) is the wife of what Greek hero whose ten year return journey from the Trojan War is the subject of an epic poem by Homer?

ANSWER: Odysseus (oh-DIH-"see"-uss) or Ulysses (yoo-LIH-seez)

20. Some conspiracy theories surrounding this event point to the placement of a pillow found by John Poindexter. Judge Cinderela Guevara has been criticized for the manner in which she determined the cause of this event, which occurred at Cibolo Creek Ranch in Texas. Ted Cruz cited "80 years of precedent" for why President Obama should not fill a vacancy caused by this event. Name this February 2016 event which left only 8 current members on the U.S. Supreme Court.

ANSWER: death of Antonin Gregory Scalia [accept clear knowledge equivalents which mention Scalia and the notion of dying]