

## **2015 OAC Regionals – Round 2**

Questions written by Ike Jose, Jasper Lee, and Steven Wellstead

### **Category Round**

**American Literature: Name the following authors who wrote coming of age novels.**

Team A: The classic American coming of age novel is what author's *The Catcher in the Rye*?

ANSWER: Jerome David Salinger

Team B: What African-American author of *Native Son* wrote about his years of development in the autobiographical novel *Black Boy*?

ANSWER: Richard Nathaniel Wright

Tossup: This author's first novel is a coming of age novel that ends with Monsignor (mohn-SEEN-yor) Darcy dying and Rosalind Connage breaking up with Amory Blaine. Another novel by this author, which fictionalizes his relationship with Zelda Sayre, describes the dissolving marriage of actress Nicole Warren and psychologist Dick Diver. This author of *This Side of Paradise* and *Tender is the Night* wrote another novel whose characters include the golf cheat Jordan Baker, as well as the adulterers Myrtle Wilson and Tom Buchanan. Name this author of the Jazz Age who is best known for *The Great Gatsby*.

ANSWER: Francis Scott Key Fitzgerald

**Mathematics: Pencil and paper ready. You will have 30 seconds for each team question.**

Team B: Solve for x and y in the following equations:  $6x + 2y = 26$  ("six x plus two y equals twenty-six") and  $4x + 3y = 19$  ("four x plus three y equals nineteen").

ANSWER:  $x = 4$  and  $y = 1$  [accept in either order; prompt on answers that do not specify "x" or "y"]

Team A: Solve for x and y in the following equations:  $4x + 12y = 36$  ("four x plus twelve y equals thirty-six") and  $x + y = 5$  ("x plus y equals five").

ANSWER:  $x = 3$  and  $y = 2$  [accept in either order; prompt on answers that do not specify "x" or "y"]

Tossup: **Pencil and paper will not be necessary.** This is the shape of the matrix that is generated when using Gaussian elimination to solve systems of linear equations. One of these shapes is inscribed into a circle by Thales' (THAY-leez-iz) theorem. The area of one of these shapes can be determined by halving the magnitude of the cross product of two vectors. The inequality named for these objects is proven by using the Cauchy-Schwartz (koh-SHEE shwartz) inequality and states that one of their sides must be shorter than the other two. Equilateral, isosceles, and scalene are the three major classifications of what three sided polygons?

ANSWER: triangles

**World History: Name these nations.**

Team A: Current U.N. Secretary-General Ban Ki-moon hails from this Asian nation which is separated from its northern neighbor by a demilitarized zone at the 38th parallel.

ANSWER: South Korea [or Republic of Korea or ROK or Taehan-min'guk or Han'guk; prompt on “Korea”; do not accept “North Korea” or “Democratic People’s Republic of Korea”]

Team B: The 1903 Hay-Banau-Varilla Treaty was signed between the U.S. and this Central American nation less than a month after it declared independence from its southern neighbor, Colombia.

ANSWER: Republic of Panama [or Republica de Panama]

Tossup: In this nation, the Muldergate Scandal led to the resignation of Prime Minister B.J. Vorster. Prior to independence, one coalition in this nation advocated for equality with the Freedom Charter. Notable activists within this nation included Steve Biko and a man whose conviction at the Rivonia Trial led to his imprisonment on Robben Island. Formed out of the union of four British colonies, including Natal and Transvaal, this nation was the home of both Desmond Tutu and F.W. de Klerk, each of whom were given Nobel Peace Prizes for their fight against apartheid. Name this African nation once ruled by Nelson Mandela.

ANSWER: Republic of South Africa [prompt on “RSA”]

**Fine Arts: Name these nicknamed symphonies.**

Team B: This symphony by Joseph Haydn (“HIGH”-din) earned its nickname from a sudden fortissimo chord that is placed in its Andante second movement, which may have been intended to wake people up.

ANSWER: Symphony No. 94 in G major, “Surprise” [accept either underlined portion; accept mit den Paukenschlag]

Team A: This symphony, the eighth by Schubert, contains only two completed movements.

ANSWER: Unfinished Symphony [or Unvollendete]

Tossup: In writing this symphony, the composer originally intended to have the audience guess the programme to it, leading him to call it “A Programme Symphony” before it was performed. In the middle of its first movement, the bassoon ends a phrase on a dynamic marking of *pppppp* (“P” “P” “P” “P” “P” “P”). This symphony’s second movement, written in 5/4 (“five” “four”) time, has been called a “limping waltz.” Due to its nickname and the slow ending to this symphony, this piece is sometimes referred to as the composer’s “suicide note,” as nine days after it premiered, the composer died of cholera. Name the last symphony composed by Peter Tchaikovsky (chy-KOFF-skee).

ANSWER: Symphony No. 6 in B minor, “Pathetique” (paa-theh-TEEK) [accept either underlined portion]

**Life Science: Name these animal phyla.**

Team A: This phylum consists of flatworms; notable members include tapeworms, planarians, and turbellaria.

ANSWER: Platyhelminthes (pla-tee-hel-MIN-theez)

Team B: Sea cucumbers and sea urchins are part of this phylum, which have a water vascular system and radial symmetry.

ANSWER: Echinodermata (ih-KYE-no-der-MAH-tuh) or echinoderms

Tossup: A group of organisms within this phylum undergo retrogressive metamorphosis when shifting from a larval form to a mature form, thus becoming sessile. Some organisms in this phylum have a mucus-producing organ called the endostyle. Sea squirts and lancelets belong to this phylum. One of this phylum's characteristic aspects is the formation of pharyngeal (fuh-RIN-gee-uhl) slits. Along with Echinodermata, this phylum's members develop the anus before the mouth during gastrulation, and are thus classified as Deuterostomes. All members of this phylum possess a notochord, which, in its more advanced organisms, develops into a spine. Name this phylum which contains all vertebrates.

ANSWER: Chordata or chordates

**English / World Literature: Name the following related to William Shakespeare.**

Team B: Antonio is the title character of what play by William Shakespeare that includes a moneylender named Shylock?

ANSWER: *The Merchant of Venice*

Team A: What play by William Shakespeare includes Goneril [GAHN-er-uhl] and Regan, who are two ungrateful daughters of the title character?

ANSWER: *The Tragedy of King Lear*

Tossup: This writer imagined a fictional sister of William Shakespeare who is denied the opportunity to write because she lacks "a room of one's own." This author wrote about six friends, including Bernard and Neville (neh-VUHL), who soliloquize on the nature of life, in an experimental work in which the theme of water provides a backdrop. Lily Briscoe visits the Ramsays (RAM-seez), who live on the Isle of Skye, in a book by this author named for a sea-side structure that Mr. Ramsay wishes to visit. Name this author of the Bloomsbury Group who penned *The Waves* and *To the Lighthouse*.

ANSWER: Adeline Virginia Woolf [accept Virginia Stephen]

**American Government / Economics: Name these amendments to the U.S. Constitution.**

Team A: Ratified in 1961, this amendment gave citizens of the District of Columbia the ability to vote in presidential elections by granting Washington D.C. members in the Electoral College.

ANSWER: 23rd Amendment

Team B: Ratified in 1913, this amendment allows for the direct election of U.S. Senators, who had previously been chosen by state legislatures.

ANSWER: 17th Amendment

Tossup: Joseph McKenna argued that this amendment had an “expansive and vital character” in the majority opinion for *Weems v. United States*. Since the 1958 case *Trop v. Dulles*, the “evolving standards of decency” test has been applied in cases dealing with this amendment, which, along with the 14th amendment, was at the center of a 1972 case involving William Furman. In the case *Gregg v. Georgia*, the Supreme Court ruled that this amendment was not automatically violated by sentences involving the death penalty. Name this Bill of Rights amendment which outlaws “excessive bail, “excessive fines,” and “cruel and unusual punishments.”

ANSWER: 8th Amendment

**Physics: Name these scientists.**

Team B: What Swedish astronomer gives his name to a scale that is defined by adding -273.15 units to the Kelvin scale?

ANSWER: Anders Celsius

Team A: What German physicist, known for proving the existence of electromagnetic waves, gives his name to the SI unit of frequency?

ANSWER: Heinrich Rudolf Hertz

Tossup: Like the hertz, this scientist’s namesake SI derived unit has units of inverse seconds. This man’s father discovered that light changes the voltage of a material in the photovoltaic effect. This scientist’s greatest discovery involved salts that emitted rays; those rays were captured on photographic plates. He was awarded a Nobel Prize in Physics along with Pierre and Marie Curie (“CURE”-ee) for his discovery of radioactivity in uranium. Name this scientist who gives his name to the SI unit of radioactivity, which is abbreviated “Bq” (“B” “Q”).

ANSWER: Antoine Henri Becquerel

**Geography: Name these African nations.**

Team A: The western terminus of the Atlas Mountains is in this nation that is directly to the north of the territory of Western Sahara, over which this nation disputes ownership.

ANSWER: Kingdom of **Morocco** [or al-Mamlakah al-**Maghribiyah**]

Team B: The southwestern shores of Lake Chad border what largest oil-producing nation in Africa that is directly north of the Bight of Biafra, an arm of the Gulf of Guinea.

ANSWER: Federal Republic of **Nigeria**

Tossup: The extreme north part of this nation contains colorful hot springs within a volcanic crater named Dallol, which is within the Danakil Depression and recognized as having the hottest average temperature in the world. UNESCO established a World Heritage Site at the ancient ruins of its city of Axum (AHK-soom). The north end of Lake Turkana is controlled by this nation, as is all of Lake Tana, which is the source of the Blue Nile River. It disputes a border with its northern neighbor, Eritrea, which gained independence from this nation. Sudan, South Sudan, Kenya, Djibouti (jih-BOO-tee), and Somalia also share borders with what East African nation whose capital is Addis Ababa?

ANSWER: Federal Democratic Republic of **Ethiopia** [or **Ityop'iya** Federalawi Demokrasiyawi Ripeblik]

**American History: Name these 19th century events.**

Team B: Fort Clatsop was constructed in 1805 as part of this expedition, during which Sacagawea aided in the exploration of lands recently acquired by the U.S. in the Louisiana Purchase.

ANSWER: **Lewis and Clark** expedition [accept similar answers mentioning Meriwether **Lewis** and William **Clark**; accept **Corps of Discovery** expedition]

Team A: This event, the participants in which were often referred to as 49ers, was set off by the 1848 discovery of a certain commodity by James Marshall at Sutter's Mill.

ANSWER: **California Gold Rush** [prompt on "gold rush"]

Tossup: One man injured during this event later killed his wife, Clara Harris, while serving as a U.S. Consul; that man was Henry Rathbone. The target of this event died at the Peterson House. Mary Surratt became the first woman to be executed by the U.S. government following this event, which occurred on the same night that Lewis Powell attempted to kill Secretary of State William Seward. Doctor Samuel Mudd was jailed for treating the broken leg of its perpetrator, who shouted "Sic semper tyrannis" after jumping onto the stage during a showing of the play *Our American Cousin*. Name this 1865 event carried out at Ford's Theater by John Wilkes Booth.

ANSWER: **assassination** of Abraham **Lincoln** [accept **killing** of Abraham **Lincoln**, or other equivalents; prompt if Lincoln is not mentioned]

### Alphabet Round – Letter G

1. **(TWO WORD ANSWER)** – This term refers to a densely packed region of stars, usually part of a galaxy's core that are bound by gravity.
2. Organization co-founded in 1867 by Oliver Kelley to serve as an advocacy group for farmers.
3. Set of three piano pieces by Erik Satie, which were named after Ancient Greek festivals.
4. **(MULTI-WORD ANSWER)** – Per and Beret Hansa are the primary characters of this 1924 novel by Ole Rolvaag.
5. This African-American suspect was killed on July 17th, 2014 after he was put into a chokehold by the NYPD. The grand jury chose not to indict the officer responsible for his death.
6. **(TWO WORD ANSWER)** – Object from Greek mythology which was the focus of a quest by Jason and the Argonauts.
7. In ballet, this term refers to a movement in which a leg is brushed outward, which then takes the weight while the second leg is brushed in to meet it.
8. Liberal 19th century British prime minister who was the primary political rival of Benjamin Disraeli.
9. **(MULTI-WORD ANSWER)** – Formula that gives the number of degrees of freedom for a substance based on the number of distinct species and phases that exist.
10. This aristocratic family has been engaged in a blood feud with the Shepherdsons in *The Adventures of Huckleberry Finn*.
11. This Princeton anthropologist borrowed a term from Gilbert Ryle to describe the act of describing a cultural act and all of its sociological implications, which he termed "thick description."
12. **(TWO WORD ANSWER)** – Ionizing radiation can be detected using this type of device, which is sometimes named for Walther Muller. Radioactive materials are often detected using it.
13. 18th century English artist best known for his portrait painting titled *The Blue Boy*.
14. Argentine-born Cuban revolutionary leader who was executed in 1967 by Bolivian soldier Mario Teran.
15. Large Asian desert located within China and Mongolia.
16. **(TWO WORD ANSWER)** – Although it focuses on Harry Bertram and Dirk Hatteraick, this novel by Sir Walter Scott is named for an astrologer who predicts Harry Bertram's future.
17. Biblical garden where Jesus was arrested just prior to his crucifixion.
18. Digestive organ found in animals such as birds that is used to mechanically grind up food.
19. **(TWO WORD ANSWER)** – Term used for the collection of legislative programs overseen by Lyndon B. Johnson.
20. Francois Rabelais created this literary giant, the father of Pantagruel, who, in one episode, puts a bunch of people in a salad and eats them.

### Alphabet Round – Letter G Answers

1. globular cluster (TWO WORD ANSWER)
2. The Grange [accept The National Grange of the Order of Patrons of Husbandry]
3. *Three* Gymnopedies or *Trois* Gymnopedies
4. Giants in the Earth (MULTI-WORD ANSWER)
5. Eric Garner
6. golden fleece (TWO WORD ANSWER)
7. glissade (glee-SAHD)
8. William Ewart Gladstone
9. Gibbs phase rule (MULTI-WORD ANSWER)
10. Grangerfords
11. Clifford James Geertz
12. Geiger-Muller Counter (TWO WORD ANSWER)
13. Thomas Gainsborough
14. Ernesto “Che” Guevara
15. Gobi Desert or Govi Desert or Gebi Desert
16. Guy Mannering (TWO WORD ANSWER)
17. Gethsemane (geth-SEM-uh-nee)
18. gizzard
19. Great Society (TWO WORD ANSWER)
20. Gargantua

### Lightning Round

1. This man was the founder of an Ambulance Corps (“core”) that served as stretcher-bearers during the Second Boer War. He signed a pact with Lord Irwin in an effort to end a tax that was the subject of a protest journey to the city of Dandi (DUN-dee) known as the Salt March. This advocate of a non-violent resistance known as *satyagraha* was assassinated by Nathuram Godse (NAW-too-rahm GAWD-say) in 1948. Name this fighter for Indian independence who is known by the title Mahatma.

ANSWER: Mahatma **Gandhi** [or Mohandas Karamchand **Gandhi**]

2. These thyreophorans (thigh-ree-oh-FOR-ans) were discovered by Othniel Marsh during the so-called Bone Wars with Edward Cope. In fact, Othniel Marsh suspected that they had a second brain. One of their defensive weapons is the thagomizer, a series of spikes that can be found on their tails. These (\*) dinosaurs are named for the seventeen dermal structures that protrude from their back. Name these herbivorous dinosaurs known for the giant plates that run along their spines.

ANSWER: **stegosaurus** [prompt on “dinosaurs” before (\*)]

3. In ancient times, this structure housed an idol of Hubal, a god who was venerated by tossing arrows at him. The *qibla* (KIB-luh) is formally defined using this structure as a reference point. A black stone that is a component of this structure supposedly dates back from the time of Adam and Eve. During the *tawaf* (tuh-WAHF), it is necessary to walk around this structure seven times. Name this most sacred site in Islam, a black, cubical structure at the center of The Grand Mosque in Mecca.

ANSWER: **Kaaba** (KAH-bah) [or al-**Ka’aba**]

4. This work’s narrator is visited by the “Poet”, who is suspected to be Ellery Channing, in the chapter “Brute Neighbors.” In its chapter “The Village”, the narrator is sent to jail for not paying a poll tax. Its first chapter, “Economy”, discusses the cost of materials needed to build a house near the title pond. Name this piece of nature writing which describes “life in the woods” and was authored by Henry David Thoreau.

ANSWER: **Walden**; or, *Life in the Woods*

5. A death that occurs during the commission of one of these events is not considered murder according to a rule named for these acts and manslaughter. They are classified as non-indictable (non-in-DITE-uh-bul) and are typically punishable by a year or less in prison. These crimes include such things as public intoxication, vandalism, and petty theft. Name these crimes which are more serious than infractions but much less serious than felonies.

ANSWER: **misdemeanors** [do not accept or prompt on “felonies” or “crimes”]

6. After an attempt to marry off his oldest legitimate son was rebuffed, this ruler led a military campaign known as the “Rough Wooing.” Robert Aske (ask) led the Pilgrimage of Grace against this leader, who oversaw passage of the Act of Supremacy which established the Church of England. This ruler fathered his successor, Edward VI (the sixth), with Jane Seymour after ending marriages with Catherine of Aragon and Anne Boleyn (boh-LIN). Name this England king who had six wives.

ANSWER: **Henry VIII** (the eighth) of England [prompt on “Henry”]

7. The mathematical formulation of this principle involves finding a condition in which all isothermal processes are isentropic. This statement is sometimes known as (\*) Nernst’s heat theorem since Walter Nernst first discovered that it is impossible for an isotherm to reach a certain state in a finite number of steps. It states that the entropy of a perfect crystal at absolute zero is zero. Name this law that establishes the impossibility of a substance at absolute zero.

ANSWER: **third law of thermodynamics** [or **3rd law of thermodynamics**; prompt on partial answer; prompt on “Nernst’s heat theorem” before (\*)]

8. One sculpture by this artist features a blind-folded man since the source of the Nile was not known at the time. This artist depicted the Ganges, the Nile, the Danube, and the Rio de la Plata in *The Fountain of the Four Rivers*. In another of his sculptures, which resides in the Cornaro Chapel, an angel uses an arrow to pierce the heart of the title Carmelite nun. Name this Baroque sculptor who created *The Ecstasy of St. Teresa*.

ANSWER: Gianlorenzo **Bernini** (“john”-loh-REN-zoh bair-NEE-nee) [or Giovanni Lorenzo **Bernini**]



9. One character in this novel, Helene, dies from an overdose of abortion medication. Another character in this novel uses numerical divination to affirm his belief that a certain general is the Antichrist. The Bezukov and Rostov families are depicted in this novel, which opens at a soiree (swarr-AY) thrown by Anna Scherer. Name this very long novel that depicts Russian life during the Napoleonic invasion of Russia and was written by Leo Tolstoy.

ANSWER: War and Peace [or Voyna I Mir]

10. The base of this peninsula contains the Terminos Lagoon, and it is also the site of the UNESCO biosphere reserve Sian Ka'an (SEE-ahn kahn). The island of Cozumel is off the eastern coast of this peninsula, which is to the northeast of the Isthmus of Tehuantepec (tuh-WAHN-tuh-pek). The Chicxulub (chick-shoo-LOOB) asteroid crater is located here, as is the abandoned city of Chichen Itza (CHEE-chen EET-sah) once used by the Mayans. The resort town of Cancun is on what peninsula at the eastern end of Mexico?

ANSWER: Yucatan [yoo-kuh-TAHN] Peninsula [or Peninsula de Yucatan]

11. Entero-bacteria can carry out a mixed-acid type of this process, which creates a wide range of products. Pyruvate de-carboxyl-ase is a required enzyme in some organisms that can do this. The study of this process is zymurgy (ZIH-mer-jee). The end result of this process is either ethanol or lactic acid. Name this anaerobic process that creates energy for organisms such as yeasts.

ANSWER: fermentation [accept word forms; accept alcohol fermentation or lactic acid fermentation or mixed acid fermentation or ethanol fermentation; prompt on "anaerobic respiration"]

12. One of this composer's pieces was the source of the melody for the hymn "I Vow to Thee, My Country." The last movement of a suite by this composer ends with a fadeout and uses an offstage women's chorus. The strings play *col legno* in the opening of the first movement of his most famous composition, which is in 5/4 ("five four") time and depicts the "Bringer of War." Name the British composer who wrote *The Planets*.

ANSWER: Gustavus Theodore von Holst

13. One of these conflicts occurred in response to a siege led by Zengi that brought about the downfall of the County of Edessa. The Latin Empire was established following one of these conflicts, another one of which targeted adherents of Catharism known as Albigensians (al-bih-JEN-see-uhnz). Saladin fought against Richard the Lionhearted in the third of these conflicts, and the first one was called at the Council of Clermont (KLAIR-mahnt) by Pope Urban II (the second) in 1095. Name these medieval holy wars launched by the Catholic Church.

ANSWER: crusades [accept Second Crusade or Fourth Crusade or Albigensian Crusade or Third Crusade or First Crusade]

14. This philosopher wrote that the point of philosophy was to change the world, not merely interpret it, in a set of eleven philosophical notes intended to be the first chapter to his book *The German Ideology*. This author of the "Theses on Feuerbach (FOY-er-BAHK)" wrote another work subtitled *Critique of Political Economy*. One work co-authored by him states that "a specter is haunting Europe" and urges "workers of the world, unite!" Name this philosopher who authored *Das Kapital* (dahss KAH-pee-tahl) and partnered with Friedrich Engels (AYN-gullz) to write *The Communist Manifesto*.

ANSWER: Karl Marx

15. At the beginning of this play, its main character states that he received a postcard from his father in Mazatlan which simply stated "Hello - Good-bye!" This play ends with a character commanding his sister to blow out her candles. In its climax, the gentleman-caller Jim O'Connor accidentally destroys a unicorn made of the title substance. Name this so-called "memory play" that was about the Wingfield family and written by Tennessee Williams.

ANSWER: *The* Glass Menagerie

16. In one form, this god crushes the dwarf Apasmara Purusha under his foot. He wears Vasuki around his neck and is often depicted performing the Nataraj dance. This god swallowed poison during the churning of the milk ocean, which turned his throat blue. This god uses his third eye to kill Kama, and his wife is Parvati. Name this member of the Trimurti known as the destroyer.

ANSWER: Shiva [or Siva or Rudra or Mahadeva]

17. When a substance reaches this value, bumping may occur. In the technique called reflux, the solvent is kept at this value. An ebulliometer (uh-boo-lee-AH-muh-tur) is used to measure this quantity. In a colligative property, higher numbers of particles in solution raises this value. This is the point where the vapor pressure of a liquid equals the pressure of its surroundings. Name this temperature at which a liquid can evaporate into a gas.

ANSWER: **boiling** point or **boiling** temperature

18. The Battle of Fajardo (fuh-HAR-doh) occurred near the end of this war, during which Henry Glass captained the USS *Charleston*. One commander stated “you may fire when you are ready, Gridley” during this war, which was declared shortly after the Teller Amendment was enacted. Joseph Pulitzer and William Randolph Hearst engaged in yellow journalism before and during this conflict, which began after the USS *Maine* exploded in Havana Harbor. Name this U.S. war fought against a European nation in 1898.

ANSWER: **Spanish-American** War [or Guerra **hispano-estadounidense**]

19. One painting by this artist shows a dog in the lap of a reading woman who sits next to a girl looking through black bars at the title location. Victorine Meurent (VEEK-tor-ehn murr-AWN) modeled for both that painting and another by this artist in which a nude woman reclines on a bed next to a black woman holding flowers. Another of his works takes place during a picnic in the woods and shows a nude woman sitting with two well-dressed men. Name this French artist of *The Railway*, *Olympia*, and *The Luncheon on the Grass*.

ANSWER: Edouard **Manet** (AYD-war maa-NAY) [do not accept or prompt on “Monet” (moh-NAY)]

20. One chapter in this book compares two characters to a jackal and a lion. A minor character in this book is the grave robber Jerry Cruncher, who is known as the “resurrection man.” This book ends with the line “it is a far, far, better thing that I do, than I have ever done”; that line occurs shortly after Madame Defarge (deh-FARJ) is killed. Sidney Carlton gives his life to save Charles Darnay at the end of what historical novel by Charles Dickens?

ANSWER: A **Tale of Two Cities**