

# Regional Academic Bowl – Round 5

---

## First Quarter

(1) In this work, Friedrich Bhaer is noted as having been a prominent professor in Berlin before arriving penniless to America. The author's mother inspired the character of Marmee in this work, in which John Brooke marries one of the title characters. One of the sequels to this work is *Jo's Boys*. Meg, Beth, and Amy appear in, for ten points, what novel by Louisa May Alcott about the lives of the March sisters?

ANSWER: **Little Women**

(2) This country attempted to normalize relationships with Eastern Europe and the Soviet Bloc through the policy of *Ostpolitik*. Konrad Adenauer oversaw this country's economic Miracle on the Rhine. Leaders of this country included Helmut Schmidt, Willy Brandt, and Ludwig Erhard. For ten points, name this former country that was reunited with its eastern neighbor in 1990 after the fall of the Berlin Wall.

ANSWER: **West Germany** (or **Federal Republic of Germany**; or **Bundesrepublik Deutschland**; or **FRG**; or **BD**; prompt on "Germany" or "Deutschland"; reject all other answers)

(3) A means of producing an output with these devices is sometimes known as Q-spoiling. A phenomenon central to the functioning of these items involves a high concentration of particles in an excited state and is known as population inversion. Optical amplification based on a stimulated emission allows for the central phenomenon of these devices. For ten points, name these devices that produce namesake "beams" of light.

ANSWER: **lasers** (or **light amplification by stimulated emission of radiation**)

(4) One song from this music genre asks the audience to "come as you are, as you were." Albums from this rock genre include Soundgarden's *Badmotorfinger*, and one album cover from this genre features a baby swimming after a dollar on a fishhook. One band from this genre shouts "an albino, a mosquito" in its song "Smells Like Teen Spirit." For ten points, name this mid-'80s to late-'90s subgenre of rock featuring bands like Pearl Jam and Nirvana.

ANSWER: **grunge** (accept **Seattle sound**; prompt on "alternative" or "alternative rock"; prompt on "rock" until read)

(5) The cultivation of oil from this plant has caused damage to orangutan habitats in Indonesia. These plants can also produce crops such as açai [[ah-"SIGH"-ee]] and dates. This plant names a city in the Coachella Valley, and artificial islands named for Jebel Ali and Jumeriah are shaped like these plants off the coast of Dubai. For ten points, name these tropical plants commonly found in California, Florida and Hawai'i, which can sometimes produce coconuts.

ANSWER: **palm** trees (accept **palm** oil)

(6) This substance is the only element that cannot be solidified under normal atmospheric pressure, even at extremely low temperatures. The full electron configuration of this element is one "S" two, indicating that it has two electrons in its outermost shell. This second-most abundant element in the universe is commonly used as a lifting gas in balloons and airships. For ten points, name this noble, inert gas with the atomic number two.

ANSWER: **Helium** (accept **He**)

(7) A period between two coups in this country was known as the Ten Years of Spring. Archaeological remains of human settlements were discovered in Sipacate and the Quiché region of this modern-day country. In 1954, this country's leader, Jacobo Árbenz, was deposed in favor of a U.S.-backed leader in a coup orchestrated by the CIA. For ten points, name this Central American country which suffered a nearly 40-year civil war that devastated its Maya population.

ANSWER: **Guatemala**

(8) This novel originated at the Villa Diodati, where its author was challenged by Lord Byron to write a ghost story. This work's Arctic frame narrative includes letters from Robert Walton to his sister, Margaret. The strangulation and murder of William sets off a chain of revenge in this work, which was subtitled "The Modern Prometheus." For ten points, name this 1818 novel by Mary Shelley about a scientist who creates a monster.

ANSWER: **Frankenstein** (or **Frankenstein**; or, *The Modern Prometheus*)

## Second Quarter

(1) On July 28, 1945, a B-25 bomber accidentally crashed into this building. This building, which was used in the ending scene of *King Kong*, was the tallest in the world from its construction in 1931, when it surpassed the Chrysler Building, until the construction of the World Trade Center in 1970. For ten points, name this skyscraper in Manhattan referencing New York's state nickname.

ANSWER: **Empire State** Building

BONUS: The Empire State Building's design defined this form of art and architecture, which flourished in 1920s and 1930s. This luxurious architecture style is characterized by geometric patterns and symmetry.

ANSWER: **Art Deco** (or **Decorative Arts**)

(2) The Stern-Gerlach experiment involved the deflection of silver atoms upward or downward depending on their value for this quantity. A distribution named for Enrico Fermi and Paul Dirac describes particles with a half-integer value of this quantity, which are also known as fermions. For ten points, name this quantity which describes the intrinsic angular momentum of a particle, the name of which also describes the action of a top.

ANSWER: **spin**

BONUS: This Austrian theoretical physicist's namesake "exclusion principle" states that two electrons in the same orbital must have opposite spins.

ANSWER: Wolfgang **Pauli** (accept **Pauli** Exclusion Principle)

(3) This work describes an "air-bridged harbor that twin cities frame." A quote about "huddled masses yearning to breathe free" appears in this work which describes a "Mother of Exiles." The last two lines of this poem states, "Send these, the homeless, the tempest-tost to me, I lift my lamp beside the golden door!" For ten points, name this 1883 poem by Emma Lazarus which describes how a certain figure "Glows world-wide welcome."

ANSWER: "The **New Colossus**"

BONUS: "The New Colossus" is engraved on the pedestal of this landmark, which was gifted to the United States by France.

ANSWER: **Statue of Liberty** (accept **Liberty Enlightening the World**)

(4) Indicators for this scale include substances such as Thymol Blue and Congo Red. This scale, which utilizes litmus paper, is defined as the negative base ten logarithm of the hydrogen ion activity. This chemical logarithmic scale has extreme values of one and 14, with a neutral value of seven. For ten points, identify this scale used to measure the acidity or basicity of a substance, whose name means "potential of hydrogen."

ANSWER: **pH** (accept **potential of hydrogen** before read)

BONUS: This substance in the body possesses the lowest pH of any other fluid in the human body and is measured between 1.5 to 3.5. This fluid made of hydrochloric acid aides in the digestion of food.

ANSWER: **gastric juice** (accept **gastric acid**; accept **stomach acid**)

(5) In her research on the Easterlin paradox that tracks this trait with income, Carol Graham determined that this trait was unusually high for migrants. The four pillars of a government philosophy named for this trait include environmental conservation and equitable socioeconomic development. This trait is measured in an analogy to GDP in Bhutan. Some governments measure, for ten points, what basic trait of contentment or joy?

ANSWER: **happiness** (or being **happy**; or **well-being**; accept obvious equivalents like **pleasure** or **satisfaction**)

BONUS: Scholars believe that the values of Gross National Happiness derive from the philosophies of this religion, whose Middle Way describes a balanced lifestyle and aversion of extreme practices.

ANSWER: **Buddhism**

(6) In 1928, this event became the first individual competition at the Olympics in which a woman medaled in mixed-gender competition with men. LeRoy Neiman officially performed this activity for five Olympic games. Examples of this activity's intersection with other sports included *The Epsom Derby* by Théodore Géricault, which is in the Louvre. For ten points, name this former Olympic event in which oil and watercolor specialists competed.

ANSWER: **painting** (prompt on "art")

BONUS: In the 1948 Olympics, this art form was divided into categories such as chamber, choral, and vocal.

ANSWER: **music**

(7) After failing to bring a horse to a wedding, this figure was sent on a supposedly impossible mission by Polydectes. This figure killed the sea monster Cetus to rescue the daughter of Cassiopeia. This son of Danaë and Zeus used Hades' cap of invisibility, Hermes' sandals, and Athena's shield to slay the only mortal Gorgon, whose head he later used as a weapon. For ten points, name this Greek hero who beheaded Medusa.

ANSWER: **Perseus**

BONUS: Perseus rescues and marries this Princess of Aethiopia after she was bound to a rock. She also names a galaxy near the Milky Way.

ANSWER: **Andromeda**

(8) Smaller moons of this planet include Nereid, Galatea, and Proteus. A vortex on this planet is called The Wizard's Eye, which was also present alongside the Great Dark Spot when the *Voyager 2* probe flew past it. This planet, orbited by Triton, is the most massive of the ice giants. For ten points, identify this planet in the Solar System named for the Roman god of the sea, which is located between Uranus and Pluto.

ANSWER: **Neptune**

BONUS: Although faint, Neptune has six known examples of these features, two of which are named after François Arago and William Lassell.

ANSWER: **rings**

### Third Quarter

The categories are:

1. Famous Musicals
2. New Zealand
3. Natural Disasters

**Famous Musicals**

Concerning famous musicals, name the...

(1) Musical created by Andrew Lloyd Webber which is composed entirely of the namesake feline characters.

ANSWER: **Cats**

(2) Musical which documents the life of its namesake Founding Father, who is portrayed on the ten-dollar bill.

ANSWER: **Hamilton**

(3) Musical that precedes *The Wizard of Oz* and was adapted into a 2024 movie starring Ariana Grande.

ANSWER: **Wicked**

(4) Musical based on a Victor Hugo novel, which describes the life of Jean Valjean and the Paris Uprising of 1832.

ANSWER: **Les Misérables**

(5) Musical written by Anaïs Mitchell in which a Greek god rules the titular industrial wasteland and manipulates Eurydice [[yuh-RIH-duh-see]].

ANSWER: **Hadestown**

(6) Musical in which con-man Harold Hill attempts to sell a boys' band to the town of River City, Iowa.

ANSWER: *The* **Music Man**

*New Zealand*

Concerning the country of New Zealand, name the...

- (1) Capital of New Zealand, considered the southernmost capital of a sovereign state.

ANSWER: **Wellington**

- (2) Island that is home to the cities of Dunedin, Nelson, and Christchurch.

ANSWER: **South** Island (or **Te Waipounamu**)

- (3) Ceremonial tribal dance performed by New Zealand athletes across many sports, such as basketball and rugby.

ANSWER: **haka**

- (4) Sport played by Kane Williamson and Trent Boult, for which New Zealand and Australia jointly hosted the 2015 ODI World Cup.

ANSWER: **cricket**

- (5) Town that names an 1840 treaty that transferred Maori ownership of New Zealand to Great Britain.

ANSWER: **Waitangi**

- (6) Native name for New Zealand given by the Maori, which is believed to mean “Land of the long white cloud.”

ANSWER: **Aotearoa**

**Natural Disasters**

Concerning natural disasters, name the...

- (1) Event that occurs when tectonic plates shift.

ANSWER: **earthquakes**

- (2) Tropical cyclone that is specified into five categories based on its windspeed.

ANSWER: **hurricanes** (accept **typhoon**)

- (3) Event in which areas have a water shortage due to a lack of precipitation.

ANSWER: **drought**

- (4) Event that can occur when ice debris block the flow of a river.

ANSWER: **flood**ing

- (5) Event that can occur when erosion or gravity weaken the stability of a slope.

ANSWER: **landslide**

- (6) Disaster that occurs when the surface collapses, causing a massive pit in the ground.

ANSWER: **sinkhole**



### Fourth Quarter

(1) **In 1905, a section of this project known as the Waterford Flight began construction. Benjamin Wright was the chief engineer of this project, of which (+) Governor DeWitt Clinton was a leading supporter. This project, dubbed "The Nation's First Superhighway," led to growth of cities like Utica, Rochester, and (\*) Buffalo.** For ten points, identify this waterway completed in 1825 which connected the Hudson River to its namesake Great Lake.

ANSWER: **Erie Canal**

(2) **Photolithography can produce these devices by using light to transfer a pattern onto a wafer. Very-large-scale integration can be used to make these devices and combine functions such as (+) RAM and a CPU. Moore's law concerns the development of these devices, noting that the number of transistors within them will double every two years. (\*)** For ten points, name these devices which are part of semiconductors and used in consumer electronics.

ANSWER: micro**chips** (or **i**ntegrated **c**ircuits)

(3) **These books' protagonists collect artifacts like the Sword of Light and the Hand of Ptah during their quests for Camelot. Morgan le Fay sends the main characters of these books on missions through their (+) Pennsylvania hometown's woods. In these books, Annie often rushes into danger while her brother, (\*) Jack, carefully consults his notebook.** For ten points, name this series by Mary Pope Osborne about siblings who travel through time in an enchanted wooden structure.

ANSWER: **Magic Tree House** (prompt on partial answers)

(4) **In the Book of Enoch, some of these beings called the Watchers became the fathers of the Nephilim. One of these beings killed the firstborn sons of households that did not smear lambs' blood on the doorway in (+) Exodus. Onphanim and seraphim are types of these beings that circle the throne of God, while another of these beings appears to Daniel to deliver a (\*) message from God.** For ten points, name these heavenly beings that include Gabriel and Michael.

ANSWER: **angels** (accept **archangel**)

(5) **The significant height of these phenomena is defined as the mean height from trough to crest for the highest third. The seiche type of these phenomena have (+) longer periods of water-level oscillations. The unpredictable, "rogue" type of these phenomena is dangerous to (\*) lighthouses and ships.** For ten points, name this mass of wind-driven water that swells before crashing, and driven to seashores and creating conditions for surfers.

ANSWER: **waves** (accept significant **wave** height; accept rogue **wave**)

(6) **This book contains an epilogue analyzing a fictional language contained within and ends with the main character acknowledging his love for a dictator. In this novel, a fictional Brotherhood supposedly fights against (+) "oligarchical collectivism."** This novel includes O'Brien acknowledging that he seeks power for its own sake prior to using rat torture on another. (\*) Newspeak is spoken in, for ten points, what dystopian novel by George Orwell that features Winston?

ANSWER: **Nineteen Eighty-Four** (accept **1984**)

(7) **The high-speed collision of an electron of oxygen and this element produces the aurora phenomena in the night sky. This element was named "azote" by Antoine Lavoisier, and fertility clinics use the (+) liquid form of this element as a refrigerant to preserve sperm and egg cells. This element's namesake cycle involves bacteria fixing this element into (\*) ammonia.** For ten points, identify this element with the chemical symbol N.

ANSWER: **nitrogen** (accept **N** before read)

(8) **This country was once home to the anti-communist death squad Grupo Colina. In 1990, the Nobel Prize-winning author Mario Vargas Llosa [[YOH-sah]] came in (+) second in this country's presidential election. This country's Ayacucho region is the origin of the Maoist insurgency group Shining Path, which was violently suppressed by (\*) Alberto Fujimori.** For ten points, name this South American country where Dina Boluarte governs from Lima.

ANSWER: **Peru**

### Extra Question

(1) **It's not cheese, but the Manchego variety of this food often makes use of game birds. One variety of this type of food titles a series of self-help books co-authored by (+) Jack Canfield. One type of this food that is often eaten on the Iberian Peninsula is usually served cold and is known as gazpacho. Goulash, borscht, and (\*) chicken noodle are varieties of,** for ten points, what type of food mostly made with stock, vegetables, and broth?

ANSWER: **soup** (accept chicken noodle **soup**; prompt on specific types of soup before read)

BONUS: Jaguars and toucans can be found in this biome, which consists of an emergent layer, canopy, and understory and is defined by its annual precipitation.

ANSWER: **rainforest** (accept tropical **rainforest**; accept temperate **rainforest**; accept Amazon **Rainforest**)