

Regional Academic Bowl – Round 8

First Quarter

(1) Devushkin's struggles in poverty are the subject of the first novel by this person, which is titled *Poor Folk*. The "Parable of the Grand Inquisitor" appears in another work by this writer, in which Alexei, Dmitry, and Ivan are the title siblings. A pawnbroker is the subject of an attack carried out by an ex-student in St. Petersburg in this writer's best-known work. For ten points, name this Russian author of *Crime and Punishment*.

ANSWER: Fyodor **Dostoevsky** (or Fyodor Mikhailovich **Dostoevsky**)

(2) Atrocities committed under the regime of this ruler were exposed in the Casement Report. This ruler hired Henry Morton Stanley to explore central Africa and acquired personal ownership of a vast territory he named the Congo Free State. This ruler's reign was marked by forced labor, mutilations, and the deaths of millions in the rubber trade. For ten points, name this Belgian king whose brutal exploitation of the Congo became one of the most notorious examples of colonial cruelty in Africa.

ANSWER: **Leopold the Second** (prompt on "Leopold")

(3) This organ, which is most active in childhood and adolescence, is gradually replaced with adipose tissue after puberty. The cortex of this organ is densely populated with T lymphocytes that migrate from the bone marrow for maturation. This organ is located in the mediastinum and functions as a primary lymphoid organ. For ten points, identify this organ and component of the immune system, which is located behind the sternum and between the lungs.

ANSWER: **thymus** (accept **thymi**)

(4) This character repeatedly tries to quiet one figure who is characterized by a checkerboard. A burp by Mack results in a disturbance that makes this character "King of the Mud." Sala-ma-sond is an island ruled by this character, who requests that others stack themselves higher and higher so that he can expand his realm. For ten points, name this reptile ruler and analogy of Adolf Hitler, created by Dr. Seuss.

ANSWER: **Yertle** the Turtle

(5) During this dynasty, ceramic sancai [[SAN-TAI]], or three-color, statues of horses and servants were made as goods that were buried in graves with their owners. Han Kan created the painting *Night Shining White* depicting the war horse of this dynasty's Emperor Xuanzong. This dynasty's luminaries included the Golden Age poets Du Fu and Li Bai. For ten points, name this Chinese dynasty that rose following the collapse of the Sui and was succeeded by the Song.

ANSWER: **Tang** dynasty

(6) The resolution of an aspect of the Rayleigh-Jeans law known as the ultraviolet catastrophe is achieved in this man's namesake law. Frequency multiplied by a quantity named for this man can be used to find the energy of a photon. The SI unit of joules per hertz is used to represent this man's namesake constant. For ten points, name this German physicist whose namesake constant is symbolized h .

ANSWER: Max **Planck** (or Max Karl Ernst Ludwig **Planck**; accept **Planck** constant)

(7) After auditioning to be his student, this man was told by Maurice Ravel, "Why be a second-rate Ravel when [he] can be a first-rate [version of himself]." Ferde Grofé completed multiple scorings of the best-known work by this composer of *An American in Paris*. This composer also created an orchestral jazz piece that opens with a glissando for clarinet. For ten points, name this American composer of *Rhapsody in Blue*.

ANSWER: George **Gershwin** (accept Jacob **Gershwin**)

(8) A collection of letters written by this man while in prison was published as the book *Glimpses of World History*. That work by this man was addressed to his daughter, who later became the leader of their country. On the eve of his country's independence, this man gave the "Tryst With Destiny" speech, and this man said "the light has gone out from our lives" following the assassination of Mahatma Gandhi. For ten points, name this father of Indira Gandhi, the first prime minister of India.

ANSWER: Jawaharlal **Nehru**

Second Quarter

(1) Along with Jules Furthman, this person wrote the screenplay for the Howard Hawks film *To Have and Have Not*. Fifteen different narrators appear in a work by this author about the death of Addie Bundren and subsequent attempts to bury her in Jefferson. This man's experiences growing up in Mississippi inspired the creation of his fictional Yoknapatawpha County. For ten points, name this American author of *As I Lay Dying* and *The Sound and the Fury*.

ANSWER: William **Faulkner** (or William Cuthbert **Faulkner**)

BONUS: *The Sound and the Fury* concerns Jason, Quentin, and Benjy, three members of this family, for whom Faulkner created a fictional genealogy reaching back to the 1690s.

ANSWER: **Compson**

(2) Ribozymes are molecules of this compound that exhibit catalytic properties and take part in namesake splicing. To detect a specific sequence of nucleotides within this acid, one can use Northern blotting with gel electrophoresis. A nitrogenous base characteristic for this nucleic acid is the ability of uracil to pair with adenine. For ten points, name this single-stranded nucleic acid containing ribose.

ANSWER: **RNA** (accept **ribonucleic** acid)

BONUS: Anticodon is a characteristic sequence within a molecule of this type of RNA, which carries a specific amino acid and propels translation.

ANSWER: **transfer** RNA (accept **t**RNA)

(3) Two members of this family created fictional worlds called Angria and Gondal. Members of this family published their works under the pseudonyms of Currer, Ellis, and Acton Bell. The youngest member of this family wrote works such as *Agnes Grey* and *The Tenant of Wildfell Hall*. For ten points, name this English literary family, which included a set of three sisters named Charlotte Emily, and Anne.

ANSWER: **Brontë** family

BONUS: Charlotte Bronte's best known work is this novel in which the title governess marries Edward Rochester after encountering his imprisoned wife, Bertha Mason, in an attic.

ANSWER: **Jane Eyre**

(4) This technique, which can be extended to the ordinals via a transfinite form, is generally applicable to members of well-founded sets. This technique, which is similar to recursion in computer science, is also related to infinite descent. This method of mathematical proof uses a statement that holds for a natural number "N plus one" if it holds for the same number "N," as well as the base case. For ten points, name this mathematical technique, often compared to falling dominoes.

ANSWER: mathematical **induction** (or proof by **induction**; accept transfinite **induction**; accept **inductive** step; do NOT accept or prompt on "deduction")

BONUS: Dominoes can also be used to represent these "gates," which are devices that perform operations on binary inputs, producing a single binary output.

ANSWER: **logic** gate

(5) After a speech, this emperor pardoned Caratacus, a chieftain of the Catuvellauni tribe. The Roman conquest of Britain began during the reign of this emperor, who married Julia Agrippina. This emperor was the subject of a work of historical fiction by Robert Graves that was adapted into a television show. For ten points, name this Roman emperor who was succeeded by Nero.

ANSWER: **Claudius** (or Tiberius **Claudius** Caesar Augustus Germanicus; accept Tiberus **Claudius** Nero Germanicus)

BONUS: Claudius was recognized as emperor by this force that was tasked with protecting his predecessor, Caligula. This force assassinated Caligula, as well as twelve other emperors.

ANSWER: **Praetorian Guard**

(6) This man wrote the *Liber Quadratorum*, a volume on squares, as well as the work *Liber Abaci*. This man names a set of numbers closely related to the Lucas number, and those numbers named for this man form a sequence with a ratio that gradually approaches the golden ratio. For ten points, name this Italian mathematician who names a sequence of numbers resulting from the sum of two previous numbers.

ANSWER: **Fibonacci** (accept **Leonardo** of Pisa; accept **Fibonacci** Sequence)

BONUS: Fibonacci's *Liber Abaci* is best known today for popularizing the use of these numerals to symbolize numerical values. Despite their name, these numerals were based on Indian positional notation.

ANSWER: **Arabic** numerals

(7) One king of a city in this modern country, Tabnit, was buried in an Egyptian sarcophagus, though his body decomposed once found. According to Babylonian legend, Gilgamesh cut down this country's cedar trees after battling Humbaba. An undeciphered script was used in this country's city of Byblos, while a later alphabet in this country gave rise to Greek and Latin. The ancient cities of Phoenicia, Sidon, and Tyre were situated in, for ten points, what country that is today led from Beirut?

ANSWER: **Lebanon** (or **Lubnān**)

BONUS: The Phoenician alphabet likely descends from this earlier writing system, which combines phonetic and logographic elements to record such works as the *Instructions of Amenemhat*.

ANSWER: **Egyptian hieroglyphs** (accept either underlined part)

(8) In one poem, this figure "startled the pigeons from their perch / On the sombre rafters." This person instructs his friend to "Hang a lantern aloft in the belfry-arch / Of the North-Church-tower, as a signal-light," in a poem in which he goes to "every Middlesex village and farm." On the "eighteenth of April, in Seventy-Five," this person walked by men "pierced by a British musket-ball." For ten points, name this man, who titles a Henry Wadsworth Longfellow poem about his famous midnight "Ride."

ANSWER: Paul **Revere** (accept "Paul **Revere**'s Ride")

BONUS: *The Midnight Ride of Paul Revere* is a painting by this artist of American literary scenes like *Parson Weems' Fable*, as well as the pastoral portrait *American Gothic*.

ANSWER: Grant **Wood** (or Grant DeVolson **Wood**)

Third Quarter

The categories are:

1. Operas
2. Anthropology
3. Organic Chemistry

Operas

Concerning historically significant operas, name the...

- (1) Composer and musical prodigy who created *The Magic Flute* and *Don Giovanni*.

ANSWER: Wolfgang Amadeus **Mozart**

- (2) English queen of the sixteenth century, the subject of Benjamin Britten's opera *Gloriana*.

ANSWER: **Elizabeth the First** (prompt on "Elizabeth")

- (3) Giuseppe Verdi opera about an Ethiopian princess that was commissioned by Cairo's Khedivial Opera House.

ANSWER: **Aida**

- (4) Disease that claims the life of Mimi in Giacomo Puccini's *La Boheme*, which PBS claims killed one in seven people by the nineteenth century.

ANSWER: **tuberculosis** (or **TB**; accept **consumption**)

- (5) Minimalist composer who created *Satyagraha* about Mahatma Gandhi, as well as an opera about the pharaoh Akhenaten.

ANSWER: Philip **Glass**

- (6) Opera by Modest Mussorgsky, whose prologue involves the ascendancy of the title man, later opposed by a False Dmitri.

ANSWER: **Boris Gudonov**

Anthropology

Concerning the field of anthropology, name the...

- (1) Concept from anthropology defined as a society's collective beliefs and customs.

ANSWER: **culture**

- (2) Anthropology term that denotes the social organization of family ties and relationships.

ANSWER: **kinship**

- (3) Anthropologist who studied the sexual norms of young residents of Ta'u in *Coming of Age in Samoa*.

ANSWER: Margaret **Mead**

- (4) Anthropologist who studied Japanese culture in *The Chrysanthemum and the Sword*.

ANSWER: Ruth **Benedict** (or Ruth Fulton **Benedict**)

- (5) So-called "Father of American Anthropology" who wrote *The Mind of Primitive Man*.

ANSWER: Franz **Boas** (or Franz Uri **Boas**)

- (6) Polish anthropologist who studied the Trobriand Islanders in ethnographic works such as *Argonauts of the Western Pacific*.

ANSWER: Bronisław **Malinowski** (or Bronisław Kasper **Malinowski**)

Organic Chemistry

Concerning organic chemistry, name the...

- (1) First element, which is bonded to carbon in a hydrocarbon molecule.

ANSWER: **hydrogen** (accept **H**)

- (2) Most abundant element in the atmosphere. This central atom of ammonium ions commonly bonds to carbon.

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

- (3) Number of valence electrons possessed by carbon, which is also the number of covalent bonds carbon can form.

ANSWER: **four**

- (4) Functional group in organic chemistry with the formula -COOH.

ANSWER: **carboxylic acid** (or **carboxylate**; prompt on "acid")

- (5) Property of cyclic molecules including benzene, suggesting a pleasant smell.

ANSWER: **aromaticity**

- (6) Spherical allotropes of carbon whose name is often prefaced by "Buckminster."

ANSWER: **fullerene** (accept **buckminsterfullerene**)

Fourth Quarter

(1) **One pope of this name oversaw the canonization of Francis Xavier and Ignatius of Loyola. Another pope of this name authorized a mission led by Augustine of (+) Canterbury. Another pope of this name initiated a project that drew on the work of the chronologist (*) Aloysius Lilius. For ten points, identify this papal name, which was used by a man who developed a namesake replacement for the Julian calendar.**

ANSWER: **Gregory** (accept **Gregory** the Fifteenth; or **Gregory** the First; or **Gregory** the Great; or **Gregory** the Thirteenth)

(2) **This biome is known for hosting most common occurrence of "tilted" or "drunken" trees. A word meaning "under-ash," which describes soil commonly found in this biome, is podzol. (+) Coniferous organisms such as spruces and pines typically characterize this biome that comprises most of inland (*) Canada. For ten points, name this biome that is sometimes referred to as a "snow forest."**

ANSWER: **taiga** (accept **boreal Forest**; accept **snow forest** before read)

(3) **In this work, a type of beverage in which the bubbles sink downward is known as frobscottle. One character in this work hides in a cucumber-like food in order to avoid the Bloodbottler. (+) One character in this work catches dreams in jars and distributes them to good children, and this work begins when Olivia is carried away by the title character. (*) For ten points, name this children's book by Roald Dahl about a large, amiable figure.**

ANSWER: *The* **BFG** (accept *The* **Big Friendly Giant**)

(4) **A popular motto used in this city translates to "She has not abandoned me." A dodecagonal watchtower in this city has a name translating to "Tower of Gold." The (+) Torre del Oro is located in this city, which is also home to a namesake Royal Alcazar, and this city is found in the southwest of the Iberian Peninsula. (*) For ten points, name this Spanish city, the capital of Andalusia.**

ANSWER: **Seville** (or **Sevilla**)

(5) **This person hypothesized that porpoises could engage in echolocation in *The Silent World*. La Therese and the HMHS *Britannic* were both located through the efforts of this person, who conducted research aboard the (+) RV *Calypso*. This man invented the Aqua-Lung, which operated as an early form of (*) SCUBA gear. For ten points, name this French oceanographer known for his underwater documentaries.**

ANSWER: Jacques **Cousteau** (or Jacques-Yves **Cousteau**)

(6) **This museum expanded in the 1940s with the purchase of the entire estate of Karl Nierendorf. The three top stories of this museum contain its Thannhauser Collection. Paul Cezanne's *Man with Crossed Arms* (+) and Marc Chagall's *Paris Through the Window* are among the works at this six-story museum known for its bowl-shaped (*) main gallery design. For ten points, name this Fifth Avenue art museum in New York that was designed by Frank Lloyd Wright.**

ANSWER: Solomon R. **Guggenheim** Museum (accept The **Guggenheim** Museum)

(7) **In humans, the heart possesses the highest abundance of this organelle. The inner membrane of this organelle is folded into cristae, which increase the surface area for oxidative phosphorylation. This organelle contains 70S (+) ribosomes that translate the RNA encoded in its own, usually circular genetic material. Found in most (*) eukaryotic cells, this is, for ten points, what organelle responsible for producing energy through cellular respiration?**

ANSWER: **mitochondrion** (or **mitochondria**)

(8) **Among the nicknames of this figure were "Little Magician" and "Sly Fox." An insult toward this politician referred to him as "a used up man" and was employed by a campaign in which one of this politician's opponents ran with the slogan (+) "log cabin and hard cider." Born in Kinderhook, this man was defeated by William Henry Harrison (*) in the election of 1840 after having succeeded Andrew Jackson. For ten points, name this eighth president of the United States.**

ANSWER: Martin **Van Buren**

Extra Question

(1) **This deity turned Orion's daughters Menippe and Metioche into comets after they were sacrificed during a plague in Aonia. For her affair with this god, the nymph Menthe was turned into a (+) mint plant. This deity sentenced Pirithous to spend eternity in the "Chair of Forgetfulness," and a domain overseen by this deity holds the prisoners Ixion and (*) Sisyphus. For ten points, name this husband of Persephone, the Greek god of the Underworld.**

ANSWER: **Hades** (do NOT accept or prompt on "Pluto")

BONUS: Prior to assuming the presidency, George H. W. Bush served as director of this organization that first opened its Langley, Virginia headquarters in 1961.

ANSWER: **Central Intelligence Agency** (or **CIA**)