Bergen Academies Spring Quizbowl Tournament II [BASQT II]

Written by David Song, Simon Seal, Ryan Murphy, Caleb Shi, Mollie Bakal, John Ferrante, Marvin Yu, Michael Gleyzer, Derek Lin, and Nathan Tang, **Bergen County Academies**; Zachary Stier, **Princeton University**; Rebecca Rosenthal, **Swarthmore College**. Special thanks to Jon Pinyan.

Round 2: Tossups

1. Early in this man's career, he was commissioned to the La Fére regiment as a second lieutenant. He was forced to flee his homeland after a clash with nationalist Pasquale Paoli, but not before he participated in a failed raid on La Maddalena. In 1793, this leader wrote the pamphlet *Le souper de Beaucaire*, gaining him the support of Augustin (*) Robespierre. He defeated the Holy Roman Empire at Austerlitz, and served as First Consul of the Republic before being elected Emperor in 1804. For ten points, what Corsican was the Emperor of the French until his defeat at Waterloo?

ANSWER: Napoleon Bonaparte (accept either part)

2. Ken Akamatsu criticized this document for its effects on derivative dōjinshi works, while one supporter claimed it agrees with the Doha Declaration. A study in the New England Journal of Medicine argued that data exclusivity provisions of this document threatened to make drugs unaffordable. It began as an expansion of a (*) deal between Brunei, Chile, New Zealand, and Singapore from 2005, and Bernie Sanders criticized this treaty as "much more than a free trade agreement". On January 23, Donald Trump withdrew the United States from – for ten points – what trade agreement?

ANSWER: Trans-Pacific Partnership

3. One work of this type opens with a soloist mimicking the clarinet's four-note arpeggio motifs. Giovanni Battista Viotti wrote 29 works of this type, while a soloist plays rapid triplet rhythms in the third movement of another one of these works, before moving to sixteenths in its coda. Johann Sebastian Bach wrote a (*) "double" work of this type in D minor, and works of this type of Beethoven, Brahms, and Tchaikovsky are all in D major. Mozart wrote five of, for ten points, what type of work, one example of which is the "Four Seasons?"

ANSWER: violin concerto (prompt on just "concerto")

4. In a T.S. Eliot critique, this work was considered an "artistic failure" and that the true meaning of the work was "the effect of a mother's guilt upon her son". In a scene from this work, Reynaldo is sent to France in order inquire about the dealings of his master's son, (*) Laertes. While meditating on his potential suicide, the main protagonist contemplates about life beyond death in this play's most famous soliloquy, "To be or not to be". For ten points, name this Shakespeare play about the titular prince and his struggle to murder his treacherous uncle King Claudius.

ANSWER: The Tragedy of **Hamlet**, Prince of Denmark

5. A mutation in the TRP-1 gene of humans can cause this condition by deregulating tyrosinase enzymes, resulting in the OCA3 genotype of this condition. Humans with this condition have improper development of the pigment epithelium causing irritation when (*) bright light hits their eyes. In Chediak-Higashi syndrome, organisms have silvery skin that is caused by this condition as a result of improper granule transportation. White hair and skin characterize - for ten points - what mutation in organisms that result in a lack of melanin?

ANSWER: albinism (accept albino)

6. The Digambara sect of this religion believe that women cannot attain liberation without being reborn into a man, unlike the Svetambara sect. Mahavira is the twenty-fourth of the teaching gods among this religion who have attained infinite knowledge after ridding themselves of desire. (*) Bindusara ascended to the throne after Chandragupta Maurya abdicated to become a monk of this religion. For ten points, name this Indian religion whose followers shed their karma through the practice of nonviolence.

ANSWER: Jain ism

7. Benoit Mandelbrot noted that a model of financial markets based on this phenomenon is unfit because prices are not continuous. Jean Perrin developed the theory of sedimentation equilibrium by studying this phenomenon, which was described in the *Annals of Physics* in (*) 1905. In that journal, a statistical explanation of this phenomenon supporting the evidence for atoms was given by Albert Einstein. Named for a British botanist is – for ten points – what random motion of suspended particles exemplified by pollen grains in water?

ANSWER: **Brownian motion** (accept **pedesis**; prompt on "diffusion")

8. Hasse diagrams can be drawn for a class of of these mathematical objects. A direct product acts on two or more of them. The Zermelo-Fraenkel axioms form a basis for their theory, and the axiom of (*) choice concerns an uncountable number of them. Combining one of these with a single operation yields a group, and two operations gives a ring. Important examples of these mathematical objects include the natural, real and complex numbers, and they are often denoted with curly braces. Operations on them include union and intersection. For ten points, give this name for a collection of objects, each known as an "element".

ANSWER: set (accept poset on first line)

9. The *Huolongjing* describes one of these devices constructed with boiling oil poured into bamboo. During the Peninsular Campaign of the Civil War, Union troops refused to chase retreating rebels after the latter deployed these weapons. The U.S. is not a signatory to the (*) Ottawa Treaty, which bans the anti-personnel type of these weapons. American ones called "toe-poppers" still harm civilians in Southeast Asia and, unlike other models, cannot be sensed by metal detectors. For ten points, what explosive devices are hidden underground?

ANSWER: landmines

10. One character in this novel is beaten by her father for supposedly dressing like a tramp. That father takes her child to the woods away from her, but they are reunited at a fabric store. Kate asks the protagonist to fight back her husband's abuse, (*) but Mister eventually atones for his gross negligence. Shug Avery has an affair with the Mister whom the main protagonist is also attracted to, but both are heartbroken in the end when Shug pursues a man named Germaine. For ten points, name this novel about Celie's letters to God by Alice Walker.

ANSWER: The **Color Purple**

11. The Bakhtishu family were Nestorian Christians who were personal physicians to this dynasty's rulers, and the Canon of Medicine was published during this period by Ibn Sina. The Hindu numeral system spread to the west under this dynasty, where al-Khwarizmi described a method known as (*) al-jabr while a scholar in an institution responsible for translating both Chinese and Latin texts into Arabic. That is the House of Wisdom in this dynasty's capital. Governed from Baghdad was – for ten points – what empire named for the youngest uncle of Muhammad and the successor of the Umayyads?

ANSWER: Abbasid Caliphate

<Song>

12. The teleological argument for the existence of God was first analogized to the necessity of a designer for one of these objects in "Natural Theology or Evidences of the Existence and Attributes of the Deity" by William Paley. Richard Dawkins refuted that analogy in a 1986 book explaining (*) evolution called "The Blind" maker of these devices. Isaac Newton's belief in constant physical laws led him to conclude that God had set in motion a universe that moved regularly and predictably like these objects. For ten points, name these devices used to measure the passage of time.

ANSWER: clocks or watches

13. April, Kathy and Marta are lovers of the protagonist of one of this man's works who sing "You Could Drive a Person Crazy". Two princes sing about the agony of working hard for their princesses in another musical by this man. In another, one character makes a hair growing "elixir" out of (*) "piss and ink". In that show by this man, "The Worst Pies in London" are baked by Mrs. Lovett, who partners with the title character, "the demon barber of Fleet Street". For ten points, name this composer of *Into the Woods* and *Sweeney Todd*.

ANSWER: Stephen Sondheim

14. In one scene from this work, the protagonist is told hide in order to eavesdrop on a conversation between his daughter and the title character so that they do not get married. Monsieur Loyal tricks the family into letting him into the house so that they he can give the brother of (*) Cleante and his family a writ kicking them off the property. The title character tries to interfere with the marriage of Mariane and Valere and is arrested for trying to deceive the King with the strongbox containing evidence against Orgon. For ten points, name this comedy by Moliere about a hypocritical religious devotee.

ANSWER: Tartuffe

15. This thinker is referred to by one of his characters, Salviati, as the "Academician", while another character, Simplicio, was seen as a criticism of the Pope. Those characters appear in a work about the "Chief World Systems". One of his letters describes the phases of Venus and documents for the first time the (*) "appendages" of Saturn. His other accomplishments in astronomy include the discovery of Io, Europa, Ganymede, and Callisto, moons of Jupiter later named in his honor. For ten points, name this Italian scientist punished by the Catholic Church for his support of heliocentrism.

ANSWER: Galileo Galilei (accept either part)

16. One person with this position used his "necessary art" of Brinkmanship in the 1950's, and another holder of this post, in an address at Harvard University, described an anti-Communist Western European recovery plan. After an assassination attempt on the President, one holder of this office said "I am in control here"; that man was Alexander (*) Haig. While in this post, John Quincy Adams co-wrote the Monroe Doctrine. Under Bill Clinton, Madeleine Albright became the first female holder of this post. For ten points, name this Cabinet post held under Barack Obama by John Kerry and Hillary Clinton.

ANSWER: Secretary of State

17. Spandrels in this place are decorated with Jonah, Jeremiah and female figures called sibyls. One artist known as the "breeches maker" worked in this building after the Council of Trent, altering a scene on the Western wall of this building. That scene shows Charon and (*) demons torturing condemned souls. Another artist possibly included the outline of a brain in the cloth surrounding a bearded figure extending his arm for a scene on the ceiling of this building. For ten points, identify this place of worship where Michelangelo painted *The Last Judgment* and *The Creation of Adam*. ANSWER: Sistine Chapel

18. Charles Yerkes served as the inspiration for this author's *Trilogy of Desire*, which includes *The Financier* and the posthumous *The Stoic*. In one work by this man, Caroline is unsatisfied with her life in Wisconsin and decides to move to Chicago with her sister Minnie and her brother-in-law, (*) Sven Hanson. Sparser crashes the car after running from cops, causing Clyde Griffiths to flee the scene of the crime in this author's most famous work. For ten points, name this author of novels such as *Sister Carrie* and *The American Tragedy*.

ANSWER: Theodore **Dreiser**

- 19. This person, who mains Leona and goes by the handle "Imagine Cerebral", acquired *Dota 2* team Leviathan in 2015. In a December 2016 broadcast, this man expressed concern that Birdman might kill him after a leak; earlier, he released the track "Entrance" from (*) *Once Upon a Time in Shaolin*, which he anonymously purchased for two million dollars. This executive testified in Congress on charges of securities fraud, but faced questions regarding Turing Pharmaceuticals. For ten points, name this "pharma bro" who raised the price of HIV drug Daraprim by 5000 percent. ANSWER: Martin Shkreli (prompt on "pharma bro" before mention)
- 20. In his article "What is it like to be a bat?" Thomas Nagel used qualia's separation from observable phenomena as an argument for this belief. That philosophical zombies have no qualia, but seem plausible is another argument for this position. The (*) pineal gland was claimed to be the principal seat of the soul by the formulator of the Cartesian variety of this stance that is contrasted with monism. For ten points, what philosophical position is that mind and body are two distinct entities?

ANSWER: dualism

TIEBREAKER:

The main character of this work finds that he no longer likes to drink his favorite beverage, milk, and hides under the couch in his room from his sister. Three boarders in this work insist on things being tidied up and watch (*) Grete play the violin. The body of this story's main character is discovered by a cleaner after he is killed by his father, who threw an apple at him. In the opening of this story, the main character awakens from "troubled dreams" to find that he has many legs. For ten points, name this novella about Gregor Samsa's transformation into a giant bug by Franz Kafka. ANSWER: *The Metamorphosis* or *Die Verwandlung*

Round 2: Bonuses

1. Two symphonies of his were nicknamed "Military" and "Hornsignal." For ten points each:

[10] Name this Austrian composer, who called for musicians to snuff out the candles on their music stands in his "Farewell" symphony.

ANSWER: Franz Joseph Havdn

[10] Haydn is commonly referred to as the "father" of this type of work. Ensembles playing these works typically have two violins, a viola, and a cello.

ANSWER: string quartet

[10] Some of Haydn's chamber works include one for the now obscure baryton, the primary instrument of Nikolaus I, a prince of this Hungarian royal family. Haydn worked as this family's *Kapellmeister* for most of his career.

ANSWER: Esterházy

2. This language is used by the Android SDK. For ten points each:

[10] Name this programming language, which is compiled to bytecode and run on an eponymous virtual machine. It was developed by James Gosling at Sun Microsystems.

ANSWER: Java (do not accept "JavaScript")

[10] Java is an example of this type of programming, which uses classes to create instances of a certain kind of construct and methods to modify them.

ANSWER: **object-oriented programming** (prompt on "OOP")

[10] This keyword in Java is used to designate variables or methods. A method with this descriptor cannot be called, even in child classes.

ANSWER: private

3. In this author's most famous work, the narrator tries to forget the death of Lenore. For ten points each:

[10] Name this author of "The Raven" and "The Tell-Tale Heart" who was expelled from West Point, apocryphally for greeting a visiting dignitary wearing only his boots and his sword.

ANSWER: Edgar Allan Poe

[10] Better known for poems and short stories, Poe only wrote one novel: this story about an ill-fated adventure on the high seas.

ANSWER: The Narrative of Arthur Gordon Pym of Nantucket

[10] This is the crewmember who is selected to be eaten after the *Grampus* capsizes in Poe's novel; coincidentally, a real person selected to be eaten after the *Mignonette* sank 46 years after Poe's novel was published also had this name.

ANSWER: **Richard Parker** (accept either part)

4. A seismoscope was invented in Han China using this technology. For ten points each:

[10] Gravity is typically the restoring force for one of these systems in which a weight is suspended from a pivot.

ANSWER: pendulum

[10] This value for a pendulum can be estimated as 2π times the square root of L over g when the amplitude is small.

ANSWER: period

[10] For a compound pendulum, this quantity is equal to the moment of inertia divided by the product of the mass and the distance to the center of mass.

ANSWER: <u>radius of oscillation</u> or <u>equivalent length</u> (prompt on partial answer)

- **5.** Ramses II's campaign for the control of Levant was stopped at this battle. For ten points each:
- [10] Name the battle where Ramses II fought the forces of Muwatalli II to a standstill in 1273 BC.

ANSWER: Battle of **Kadesh**

[10] Kadesh was famous for having been primarily fought on these mobile platforms driven by horses introduced to the Egyptians by Hyksos invaders in 16th century BCE.

ANSWER: chariots

[10] Muwatalli II was the leader of these people whose empire was situated in Anatolia and reached its pinnacle under the rule of Suppiluliuma I ["suhp-pil-loo-lee-oo-ma"].

ANSWER: Hittites

6. This empire mastered the *volta do mar* during the early stages of the Age of Discovery. For ten points each:

[10] Name this empire that discovered Brazil and was the first to reach India by sea with its explorer Vasco da Gama.

ANSWER: **Portugal**

[10] This Duke of Viseu and Prince of Portugal was the major patron for Portuguese exploration during the 15th century and created the caravel ship.

ANSWER: **Henry the Navigator** (prompt on just "Henry")

[10] Prince Henry was a member of this royal house, which was founded by his father John I and dissolved after a succession crisis in 1580.

ANSWER: House of Aviz

7. Common mutations in this organism affect wing size, shape and eye color. For ten points each:

[10] Name this model organism. Mutations in its eye color were studied by Thomas Hunt Morgan and found to be linked to sex chromosomes.

ANSWER: **D**rosophila **melanogaster** or **fruit flies**, prompt on "flies"

[10] This tropical fish is often used in developmental experiments due to its largely transparent skin.

ANSWER: zebrafish or Danio rerio

[10] Hans Dreisch performed influential experiments in developmental biology by separating cells of larvae of these spiky echinoderms. His findings helped to determine the the totipotency of early embryonic cells.

ANSWER: sea urchins

8. This space is decorated with scenes of the Last Judgement at the Church of Sainte-Foy in Conques, France. For ten points each:

[10] Name this space found above a doorway or window. It can be semi-circular or triangular and is often highly decorated in cathedrals and churches.

ANSWER: tympanum

[10] This architectural element is made of stones called voussoirs topped by a keystone and often supported by columns. Simple types are rounded and corbeled ones, and they are found between a wall of a building and a flying buttress.

ANSWER: arches

[10] Unlike the pointed arches used in Gothic architecture, this style of architecture uses round arches. The Church of Sainte-Foy was built in this style which uses non-flying buttresses.

ANSWER: Romanesque

- **9.** This character's execution was removed from a Disney adaptation. For ten points each:
- [10] Name this "gypsy" woman from *The Hunchback of Notre Dame* who seeks sanctuary in the titular cathedral before Frollo hands her over to be hung.

ANSWER: Esmeralda (accept Agnés)

[10] This author of *The Hunchback of Notre Dame* also wrote *Les Misérables* and supported the abolition of capital punishment.

ANSWER: Victor Hugo

[10] In this Hugo novel, Gilliat attempts to repair a steamship in order to win Deruchette's hand in marriage. He also fights an octopus in this novel.

ANSWER: Toilers of the Sea or Les Travailleurs de la mer

- **10.** Barometers measure the atmospheric kind of this quantity. For ten points each:
- [10] What physical quantity equals the applied force per unit area and is measured in pascals?

ANSWER: pressure

[10] This chemical law states that the amount of gas dissolved in a liquid is proportional to its partial pressure as a gas, and is named after an English chemist.

ANSWER: **Henry**'s Law

[10] When the body goes under rapid depressurization, gases dissolved in blood may form bubbles, leading to this condition. Divers can suffer from this condition, commonly called "the bends".

ANSWER: decompression sickness (prompt on caisson disease)

- 11. In this storyteller's most famous work, a turtle beats a hare in race despite being slower. For ten points each:
- [10] Name this Greek storyteller often described as an ugly slave; he is best known for his fables.

ANSWER: Aesop

[10] In one of Aesop's fables, a fox leaps unsuccessfully for these fruits before deciding they were undesirable anyway, leading to an English-language idiom. Give the fruits and the adjective used to describe them.

ANSWER: **Sour Grapes** (prompt on partial answer)

[10] In another Aesop fable, this character is not noticed by the much larger Bull, though he believes he is very important in the Bull's decision making.

ANSWER: Gnat

- 12. This man was ridiculed for his story involving an attempted stabbing and a belt buckle. For ten points each:
- [10] Name this neurosurgeon, the first to separate twins conjoined at the back of the head, who made an unsuccessful run for the Republican nomination in 2016.

ANSWER: Ben Carson

[10] Carson now heads this department, which includes Ginnie Mae and the Office of Equal Employment Opportunity.

ANSWER: Department of **H**ousing and **U**rban **D**evelopment

[10] In response to a question from Senator Warren during his confirmation hearing, Ben Carson said, "It will not be my intention to do anything to benefit any" member of this group of people.

ANSWER: Americans (accept equivalents)

- **13.** Hegel once said that adhering to this man is requisite for being a philosopher. For ten points each:
- [10] Name this philosopher, referred to by Hebrew, Portuguese, or Dutch names, who attempted to systematically derive all truths from a set of axioms.

ANSWER: (Baruch or Benedito or Benedict) Spinoza

[10] This Spinoza book, named for a field in philosophy, was banned by the Catholic Church because it equated God and nature as different terms for describing the same thing.

ANSWER: **Ethics**

[10] This German accused Spinoza of confusing God and nature while describing pantheism, though he later adopted similar views after studying Indian philosophy.

ANSWER: Arthur Schopenhauer

14. For ten points each, name these founders of fast food chains.

[10] This man founded Wendy's, a fast food restaurant named after his daughter.

ANSWER: Dave Thomas

[10] This man massively expanded the restaurant chain he purchased from the McDonald brothers and is honored on plaques in many McDonald's restaurants.

ANSWER: Ray Kroc

[10] The largest fast food chain in China, ken-da-jee-jah-ji, was founded by this man, whose military rank was awarded after he had left the service.

ANSWER: Harland David "Colonel" Sanders

- **15.** This author's first successful work, *The Fountainhead*, featured modern architectural design and competition amongst architects. For ten points each:
- [10] Name this author of *Anthem* and *Atlas Shrugged*. She wrote these books to share her views on the necessity of personal liberty and capitalism.

ANSWER: Ayn Rand

[10] Rand referred to her philosophy by this name, referring to her belief that reality was not dependent on perception.

ANSWER: Objectivism

[10] Philosophers have largely ignored objectivism, instead favoring the study of libertarianism, as espoused by this author of *Anarchy, State and Utopia*.

ANSWER: Robert Nozick

- **16.** This spiritual practice is characterized by deep meditation and chanting. For ten points each:
- [10] This originally Hindu practice was popularized in the West by Swami Vivekananda.

ANSWER: voga

[10] Yoga was historically used to find enlightenment and release from samsara, considered this Hindu aim of life.

ANSWER: moksha

[10] Moksha and the trivarga of artha, kama, and dharma make up this set of four goals in life.

ANSWER: Purusartha

17. Ballerinas have frequently been featured in art. For ten points each:

[10] This 1881 wax sculpture of a ballet student is wearing real clothing and has real hair.

ANSWER: Little Dancer of 14 Years or La Petite Danseuse de Quatorze Ans

[10] Little Dancer was the only sculpture this artist displayed in his life; he is also known for paintings of ballerinas.

ANSWER: Edgar **Degas** ["day-gah"]

[10] Degas claimed to be a realist, but he is more commonly identified with this artistic movement whose early artists include Claude Monet.

ANSWER: Impressionism

18. There were many antebellum attempts to compromise between the North and the South. For ten points each:

[10] This African country was founded from a colony for former slaves and free blacks as a way to remove them from the United States.

ANSWER: Liberia

[10] Liberia, while still a colony, was sponsored by this organization, which viewed sending blacks back to Africa as a middle way between abolitionists and slaveholders.

ANSWER: American Colonization Society

[10] This Senator and western member of the Great Triumvirate was a founder of the American Colonization Society.

ANSWER: Henry Clay

19. This character abducts and kills Esher, a soldier for Hrothgar. For ten points each:

[10] Name this character killed under a lake with one of her own swords, after Unferth's Hrunting is found to be useless.

ANSWER: Grendel's mother (do not accept or prompt on Grendel; accept Grendel's maja)

[10] Grendel and his mother appear in this Old English epic poem which was studied and translated by J.R.R. Tolkien. Much of the action takes place in the mead-hall of Heorot.

ANSWER: Beowulf

[10] When Beowulf is killed by a dragon at the end of the poem, this thane is the only of Beowulf's men not to flee; he is subsequently gifted Beowulf's rings and armor.

ANSWER: Wiglaf [VEE-laf]

20. This leader founded the Kamehameha schools and was married to the Governor of Oahu. For ten points each:

[10] Name this woman who was the last monarch of Hawaii.

ANSWER: Queen Liliuokalani

[10] This man was the President of Hawaii while it was an independent, non-monarchical nation, in addition to owning a fruit company.

ANSWER: Sanford B. Dole

[10] This man was the President of the United States when Hawaii became a territory.

ANSWER: William McKinley

EXTRA:

For ten points each, answer the following questions about energetic reactions.

[10] This phenomenon is typified by exothermic oxidation reactions, and the requirements for it to occur are often represented in a tetrahedron in chemical reaction notation.

ANSWER: fire (accept combustion)

[10] This theoretical substance, held to be like fire, was said to be contained within objects, and released during combustion. However modern science has found no evidence of it.

ANSWER: phlogiston

[10] Lightning can start fires; hot fires and lighting can both partially ionize matter, taking it into this fourth state of matter.

ANSWER: plasma