

*Bergen Academies Spring Quizbowl Tournament II [BASQT II]*

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Special thanks to Jon Pinyan.

**Round 8: Tossups**

**1. A feather fell on the city of Tarsus on the day this character was turned into a constellation. According to legend, anywhere this figure touched the earth, a freshwater spring would appear – however, he stomped on Mt. Helicon to create the (\*) Hippocrene. This brother of Chrysaor was said to have sprang out of his mother’s neck upon her being decapitated by Perseus. Upon attempting to reach Mount Olympus, its rider fell off of its back. Bellerophon slew the Chimaera on – for ten points – what winged horse?**

ANSWER: Pegasus

**2. Solomon, a judge from this family, hires Cyrus Pinkney after seeing his architectural designs in court. Two members of this family are murdered after a screening of *Zorro*. A philanthropic foundation owned by this family is managed by (\*) Lucius Fox, and its most prominent member has affairs with Talia al Ghul and Selina Kyle while working with Barbara Gordon. Martha Kane marries into this family after meeting Thomas, and their son is cared for by their butler Alfred. For ten points, what wealthy family resides in Gotham City?**

ANSWER: Wayne

**3. A ship named after this man was used at the Battle of Santiago under Captain Emilio Díaz-Moreu y Quintana. A Washington Irving biography of this man popularized many myths, including one of his belief that only one-third of the Earth’s circumference remained undiscovered. Francisco de Bobadilla (\*) replaced this man as Governor of the Indies after accusations of tyranny in Hispaniola. Commissioned by Ferdinand and Isabella of Spain, this man sailed the *Niña*, *Pinta* and *Santa María*. For ten points, name this explorer who was once credited with discovering the Americas.**

ANSWER: Christopher Columbus (accept Cristoforo Colombo or Cristóbal Colón)

**4. One of these named after Saccheri was used in an attempt to disprove the parallel postulate, and Thébault’s theorem creates a regular polygon out of squares constructed on one class of these figures. The area of a bicentric one of these is the square root of the product of the side lengths, in a specific case of (\*) Brahmagupta’s formula. If a diagonal of one of these shapes is a perpendicular bisector of the other, then that shape is called a kite. For ten points, name this class of polygons whose members have four sides.**

ANSWER: quadrilaterals (accept quadrangle or 4-gon)

**5. At the end of this work, the narrator notes that “twenty centuries of stony sleep, were vexed to nightmare by a rocking cradle,” in reference to the sudden arrival of war. Lines from this poem are mentioned in the introduction of a novel that takes place in Umuofia, a village led by (\*) Okonkwo. A falcon is unable to return to its master and the narrator notes that “surely some revelation is at hand” in accordance to the titular phenomenon. For ten points, name the poem written by William Butler Yeats that describes the aftermath of World War I as compared to the return of Jesus.**

ANSWER: The Second Coming

6. One film directed by this man, *Rope*, consists of a single uninterrupted take, and his film *Lifeboat* unfolds entirely within that vessel. Bernard Herrmann worked on many of his films' scores, including the avian soundtrack to his adaptation of *The Birds*. James (\*) Stewart appears in both his *Rear Window* and *Vertigo*. Cary Grant stars as Roger Thornhill and Anthony Perkins manages the Bates Hotel in two of this man's films. For ten points, name this director of *North by Northwest*, *Vertigo*, and *Psycho*.

ANSWER: Alfred Hitchcock

7. An extensive discussion of the equal consideration of interests as applied to this topic occurs in "Practical Ethics" by Australian hedonist Peter Singer. One ancient Greek school which did not eat fava beans also engaged in this practice. That school was founded by Pythagoras. (\*) Some Mahayana Buddhists engage in this practice as part of their belief in universal compassion. Justification for this practice often involves ethical considerations, particularly belief in the moral status of animals. For ten points, name this practice of not eating meat.

ANSWER: vegetarianism (or clear knowledge equivalents, do not accept or prompt on veganism)

8. Guge ["goo-guh"] was a kingdom in this region, where the where Massacre of Chumik Shenko was committed by the British, who preemptively invaded before Russia. Songtsen Gampo founded an empire that contained what is now Gansu and Yunnan, but this region would later lose its sovereignty after the (\*) Battle of Chamdo. This territory is governed in exile from Dharamsala, India, where the government fled to from Lhasa before it became an "Autonomous Region" of China. The Dalai Lama leads – for ten points – what plateau north of the Himalayas?

ANSWER: Tibet (accept Bod; prompt on "Xizang")

9. Certain cells in this tissue can live for an entire season without nuclei and ribosomes due to the presence of neighboring companion cells. The stylets of aphids are designed to penetrate this tissue. In woody plants, the secondary form of this tissue creates (\*) bark. Enlarged plasmodesmata allow for rapid flow of substances from sources to sinks through this tissue's sieve tube elements. For ten points, name this plant tissue that transports a sap filled with sugars, unlike water-carrying xylem.

ANSWER: phloem

10. In this work, a character mentions his father's copy of *Pilgrim's Progress* as a "doomed thing," shortly before leaving it behind. At the start of this novel, that character finds his family loading luggage into a Hudson Motor Car Company saloon that was converted into a truck. (\*) Jim Casy gives up on preaching after coming to a conclusion that "There ain't no sin and there ain't no virtue" and accompanies Tom home after he is released from jail. The Dust Bowl is the setting in – for ten points – what novel about the Joad family by John Steinbeck?

ANSWER: Grapes of Wrath

11. This individual described himself as the "natural son and compatriot" of his predecessor, and wrote the political treatise *Basilikon Doron* in 1599. He attempted to marry his son Charles to Maria Anna in the failed Spanish Match, and William Wade was knighted and appointed Lieutenant of the Tower of London by this ruler. Under him, the (\*) Plantation of Ulster was established. He is the namesake of the first permanent English settlement in America, and he was the target of the Gunpowder Plot. For ten points, name this son of Mary, Queen of Scots, a Stuart monarch who ruled Scotland, Ireland and England.

ANSWER: James I of England and Ireland or James VI of Scotland

**12. Falling fourths in the strings open this symphony, followed by fanfare-like calls from offstage trumpets. The original second movement of this symphony was entitled “Blumine,” and was scrapped by its composer. The third movement of this symphony uses oboes, clarinets, and trumpets to create a klezmer-like theme, as well a double bass playing (\*) “Frere Jacques” in D minor. The first movement of this symphony quotes the composer’s *Songs of a Wayfarer*. For ten points, name this symphony, whose nickname is a type of divine being, written by Gustav Mahler.**  
ANSWER: **Symphony No. 1** in D Major (accept anything alluding to Mahler’s first symphony, accept **Titan** Symphony)

**13. One short story by this author features the painter Piskarev as he follows a dark haired woman to a brothel. In another work by this author, a “non-commissioned officer’s widow” allegedly flogged herself. That same work recounts the visit of (\*) Khlestakov, who observes incessant corruption in a Russian town. This author’s most prominent work features a character who is rumored to be Napoleon in disguise or the infamous Captain Kopeikin. For ten points, name this famous Russian author who wrote *The Government Inspector*, *The Overcoat* and *Dead Souls*.**  
Answer: Nikolai **Gogol**

**14. RAND Corporation employees Merrill Flood and Melvin Flesher researched this phenomenon in 1950, though it was first assigned its common name by Albert Tucker. Psychologist George Ainslie noted that present and future selves of an addict going through rehab and/or relapsing is an intemporal version of this phenomenon. The (\*) Pareto-optimal solution is for both participants to cooperate, while Nash equilibrium is achieved when both defect. For ten points, name this scenario where a group of individuals decide whether to work together to escape or leaving the group the behind for the individual’s sole benefit.**  
ANSWER: **Prisoner’s Dilemma**

**15. In a study involving this concept, Rudolf Clausius studied the Carnot cycle, where he measured the effects of hot and cold reservoirs and posited an equality that would eventually measure this concept. This quantity can be calculated by taking the (\*) logarithm of the number of possible microstates and multiplying it by the Boltzmann constant. The Second Law of Thermodynamics asserts that this quantity in an isolated system increases over time, and change in Gibbs free energy minus change in enthalpy equals this change in quantity times temperature. For ten points, name this thermodynamic quantity, the disorder of a system.**  
ANSWER: **entropy** (prompt on “S” until mentioned)

**16. The destruction of one of these locations by Typhoon Nina in 1975 killed over 100,000 people in Henan Province. Operation Chastise targeted these locations using “bouncing bombs”, and the squadron that conducted the mission was nicknamed (\*) “busters” of these objects. In 2014, ISIS took over one of these structures in Mosul, raising fears that it might collapse due to being built on water-soluble land. The Three Gorges one generates around 90 terawatt-hours of energy and is the hydroelectric kind of – for ten points – what structures that restrict the flow of rivers?**  
ANSWER: **dams**

**17. The Trinamul Congress and Samajwadi Parties of this nation observed a “Day of Outrage” on November 28th after an event which its previous leader called “organized loot and legalized plunder”. The Ambani family was allegedly informed in advance about a policy in this country which involved the restriction of (\*) withdrawals from ATMs. That plan was called the “biggest scam” by Randeep Surjewala of this country’s Congress Party, and was designed in part by Governor of the Reserve Bank, Urjit Patel. For ten points, in what country did Narendra Modi’s government demonetize 500 and 1000 rupee banknotes?**  
ANSWER: Republic of **India**

**18. Don Antonio Moreno confides in this character that he has a brass head that answers any question. This man sails down the River Ebro to save a prisoner, and the Duchess convinces one of his friends that he was deceived and that his love interest was truly turned into a (\*) peasant girl. This man steals a barber's basin because he believes it to be the Mambrino's helmet and his endeavors are all in the name of his love, Dulcinea del Toboso. Riding the horse Rocinante, he is accompanied by Sancho Panza. For ten points, name the titular character of a novel written by Miguel de Cervantes.**

ANSWER: Don Quixote de La Mancha (accept Alonso Quijano)

**19. The radius of gyration of an object is the square root of this quantity divided by mass. This quantity is preserved under the stretch rule, and the polar variety of this value is calculated with respect to its motion and its center of mass. This value can be evaluated about a different (\*) axis according to the parallel axis theorem, and can be computed as the weighted sum of all points in an object, or the integral of mass times radius squared. Torque divided by angular acceleration equals – for ten points – what rotational analogue of mass?**

ANSWER: moment of inertia (accept rotational inertia or angular mass)

**20. One artist from this country painted the Bellelli family and became a member of the Anonymous Society of Painters, Sculptors and Printmakers. A critic from this country, Louis Leroy, coined the more popular name of that movement started in this country when he wrote about one artist's painting of a (\*) sunrise over Le Havre here. That artist from this country painted multiple scenes of a Gothic-style building under different light conditions in Normandy. For ten points, name this country where the Rouen Cathedral and water lilies were painted by Claude Monet.**

ANSWER: France

TIEBREAKER:

**William Walter Grayson fired the first shot in the largest of of this war's battles while under the command of General Elwell Otis. Joseph Wheeler claimed one side in this conflict mutilated their dead to defame their opponents, and this war was sparked by the transfer of territory in a Treaty of (\*) Paris; the territory's declaration of independence was ignored by both parties to that treaty. William Jennings Bryan opposed this conflict and Emilio Aguinaldo was the President of of the defending nation. For ten points, name this war between the United States and an island state which was formerly held by the Spanish.**

ANSWER: Philippine-American War or Tagalog Insurrection

## Round 8: Bonuses

1. Answer some questions about the politics of the Philippines. For ten points each,

[10] This current president of the Philippines has been called the Trump of that nation. He previously served as the mayor of Davao.

ANSWER: Rodrigo **Duterte**

[10] Duterte is a member of this political party. The President of the Philippine Senate, Aquilino “Koko” Pimentel III, is also a member of this party.

ANSWER: **PDP-Laban** or **Partido Demokratiko Pilipino Lakas ng Bayan**

[10] Rodrigo Duterte has been criticized for permitting and advocating extrajudicial killings of this group of people. When told that his behavior towards this group of people was a crime against his humanity, Duterte asked, “Are they human?”

ANSWER: **drug users** (or anything that indicates the people who consume or deal drugs)

2. Different cultures have different ways of making music. For ten points each, name these non-Western musical instruments.

[10] This Chinese stringed instrument only has two strings, D and A, which the bow passes between. This instrument has no fingerboard, and its wooden body is covered with python skin.

ANSWER: **erhu**

[10] This wooden wind instrument originated with the Indigenous Australian population around a thousand years ago. It is capable of playing one fundamental tone, called the drone, and is frequently cylindrical or conical in shape.

ANSWER: **didgeridoo**

[10] This plucked stringed instrument uses sympathetic resonance in order to create harmony with the played strings. It is popular in Indian classical music, and one of its most notable players is Ravi Shankar.

ANSWER: **sitar**

3. Politburo member Liu Shaoqi was against this massive movement. For ten points each:

[10] The mandatory agricultural collectivization of this economic and social program is widely believed to have caused what the Chinese Communist Party refers to as the Three Years of Natural Disaster, a period of famine.

ANSWER: **Great Leap Forward** or **Dayuejin**

[10] Improving the human race through more selective breeding behavior is the goal of this set of practices, which can range from encouraging reproduction in specific groups to forced sterilization to genocide.

ANSWER: **Eugenics**

[10] The Soviet Union repressed genetic research and applications, instead advocating this set of pseudoscientific beliefs that involved attempts at improving future generations of crops by exposing seeds to extreme heat or cold.

ANSWER: **Lysenkoism**

4. For ten points each, answer some questions about medical testing.

[10] Over the counter varieties of this kind of test attempt to find hCG in urine and test for a medical condition only females may have.

ANSWER: **pregnancy** test

[10] This procedure can be used to identify genetic and chromosomal disorders prenatally; it usually involves taking a piece of the placenta and performing PCR. It can be performed before amniocentesis, which can test for the same disorders.

ANSWER: **Chorionic Villus Sampling** (prompt on “CVS”)

[10] This evaluation is used to measure the health of newborns. Invented by and named after an anesthesiologist, this metric considers five categories with a maximum value of two points in each category.

ANSWER: **Apgar** Score

5. This term indicates a lie propagated by the elite class to maintain social harmony. For ten points each:

[10] The myth of the metals was also known by this name. This lie involves telling the people of Kallipolis that their souls contain a specific metal, indicating what their status in life ought to be.

ANSWER: **Noble Lie**

[10] This noble lie was introduced by Plato to convince people that their role is predestined.

ANSWER: **humans** are **born** from the **earth** (accept obvious equivalents)

[10] Albert Camus wrote an existentialist work about suicide titled after Greek figure who rolls a stone up a hill eternally.

ANSWER: **Sisyphus**

6. Much Renaissance-era sacred music is sung in this style. For ten points each,

[10] Name this style of singing, which employs no instrumental accompaniment. Its name translates to “in the manner of a chapel.”

ANSWER: **A cappella**

[10] This Kristen Anderson-Lopez musical about the New York public transportation system had its Broadway debut in 2016, and is performed a capella.

ANSWER: **In Transit**

[10] This technique allows an unaccompanied singer to create two tones simultaneously. Historically, this technique has been used in Tuva, a region in Mongolia.

ANSWER: **Throat** singing or **Overtone** Singing or **Khoomei** or **Hooliin Char**

7. In this book, Cain kills Abel after his offering was refused unlike Abel’s. For ten points each:

[10] According to this book of the Old Testament, God created heaven and earth in six days, leaving the seventh for rest.

ANSWER: **Genesis**

[10] This two-word Latin phrase describes how Catholic doctrine says God created everything. It refers to the lack of things before things were made.

ANSWER: **Ex nihilo**

[10] On the fourth day, God is said to have affixed these to the firmament in addition to the greater and lesser lights.

ANSWER: **stars**

8. In this work, the author argues that government is a “necessary evil”. For ten points each:

[10] This pamphlet helped to convince British colonists in the Americas to rebel; it is divided into four sections, including “Of Monarchy and Hereditary Succession.”

ANSWER: **Common Sense**

[10] “Common Sense” was written by this man, who also wrote “The American Crisis.”

ANSWER: Thomas **Paine**

[10] This work by Paine defends the French revolution and posits that revolution is allowable when natural freedoms are not protected.

ANSWER: **Rights of Man**

9. Until the discovery of fullerenes, known allotropes of this element were limited to graphite, diamond, and amorphous forms. For ten points each:

[10] Name that element with atomic number 6, whose four valence electrons help form an immense number of configurations.

ANSWER: **carbon** (prompt on “C”)

[10] The buckminsterfullerene, also called the buckyball, has 60 carbon atoms arranged in the shape of a truncated form of this platonic solid.

ANSWER: **icosahedron**

[10] When fullerenes are doped with alkali metals, they exhibit this property at unusually high temperatures. A buckyball doped with cesium and rubidium has been shown to have this at 33 K.

ANSWER: **superconductivity** (accept word forms)

10. Most of Shakespeare’s plays are not set in his native England. For ten points each:

[10] The pastoral comedy *As You Like It* is set in this forest, which may be a corruption of a French spelling or of a village near Shakespeare’s home.

ANSWER: **Arden**

[10] Shakespeare included the characters of Patroclus, Pandarus, and Hector in a play set in this ancient city.

ANSWER: **Troy** (the play is *Troilus and Cressida*)

[10] The early scenes of *Othello* are set in this city, whose army travels to Cyprus to fight the Turks.

ANSWER: **Venice**

11. She disregards her father’s advice and spends a night with Shahrayar despite his murderous history with women. For ten points each:

[10] Name this narrator of the *One Thousand and One Nights* who puts off her execution by telling stories about Sinbad and Harun al Rashid, among others.

ANSWER: **Scheherezade**

[10] Although not originally part of the *One Thousand and One Nights*, a story about this man is commonly included in translations. He becomes rich after finding the hoard of 40 thieves that only opens to the words “open sesame”.

ANSWER: **Ali Baba**

[10] Ali Baba only gets a happy ending due to the wit of this slave girl of his, who he ends up marrying to his own son after she saves him from several murder attempts.

ANSWER: **Morgiana** or **Marjana**

12. One line in this recitation gives “liberty and justice for all”. For ten points each:

[10] The first version of this text was written by George Balch in 1887 and it was first adopted by Congress in 1942.

ANSWER: The **Pledge of Allegiance**

[10] Jehovah’s Witnesses refuse to say the Pledge of Allegiance; the Supreme Court ruled no one could be required to say it in this case.

ANSWER: **West Virginia State Board of Education v. Barnette**

[10] The phrase, “Under God,” was added to the Pledge of Allegiance under this U.S. president, a fervent anti-communist and 5-star general.

ANSWER: **Dwight Eisenhower**

13. For ten points each, identify these storm deities in religion:

[10] This Algonquian god is said to rule the upper world while the underwater panther rules the lower world. When it flaps its wings, it can cause lightning.

ANSWER: **Thunderbird**

[10] Give this Sanskrit name for a Hindu god who rides the elephant Airavata and who slew the evil serpent Vritra.

ANSWER: **Indra**

[10] This Chinese deity became a god after eating the fruit of a peach tree from heaven and punishes mortals guilty of secret crimes. He uses a drum to make thunder.

ANSWER: **Lei Gong**

14. The exterior of this structure was built in the Doric style. For ten points each:

[10] Name this temple on the Athenian Acropolis. It includes scenes of fighting centaurs and Lapiths on its friezes, and figures from its metopes were taken as the Elgin Marbles.

ANSWER: The **Parthenon**

[10] This is the sculptor credited with designing the reliefs of the Parthenon, as well as the cult statue once inside it.

ANSWER: **Phidias**

[10] Many of the structures of the Parthenon are in this mathematical relationship to each other. This ratio became prevalent again in Renaissance art.

ANSWER: the **golden ratio** or **phi**

15. In the early 20th century, the White Star Line unveiled their new Olympic-class ocean liners - all prone to disaster. For 10 points each:

[10] Name the most infamous of the three ships of this class, tragically lost on its 1912 maiden voyage along with its captain and designer after hitting an iceberg.

ANSWER: RMS **Titanic**

[10] The second most infamous of the three sisters, lost during the first World War near Greece after being hit by an underwater mine

ANSWER: RMS **Britannic**

[10] This rival company's RMS Carpathia had previously saved the remaining survivors of the Titanic and it would later agree to merge with the White Star Line

ANSWER: **Cunard** Line

16. On a circuit diagram, these devices are represented by two equal parallel line segments. For ten points each:

[10] Name these devices which can store electricity through the use of a dielectric between two metal plates. Their strength is measured in farads.

ANSWER: **capacitors**

[10] In a simple RC circuit, the current through a capacitor can be calculated as the initial current times  $e$  to the quantity  $t$  over tau, where  $t$  is time and tau is the time constant, the product of capacitance and this other quantity.

ANSWER: **resistance**

[10] The predecessor to the modern capacitor was this device, a glass jar coated with metal and connected by a metal conductor from the internal surface to the outside.

ANSWER: **Leyden** jar



17. The best-known exact solution to this problem is an exponential-time algorithm named for Michael Held and Richard Karp. For ten points:
- [10] Name this problem in computer science of finding the minimum distance that one must travel in order to go to each of some collection of cities.
- ANSWER: **traveling salesman** problem (prompt on **TSP**, prompt on **traveling purchaser** problem or **vehicle routing** problem)
- [10] TSP is NP-hard; this means that there exists a polynomial-time algorithm for TSP if and only if what Millennium Prize Problem in computer science is true?
- ANSWER: **P vs. NP**, or anything having to do with the (in)equality between those sets
- [10] This American mathematician introduced several important early concepts to theoretical computer science, including the lambda-calculus and a “thesis” co-named for him and Alan Turing.
- ANSWER: Alonzo **Church**
18. He works to expose corruption as Frank Serpico in a Sidney Lumet drama. For ten points each:
- [10] Name this actor who also starred in *Scent of a Woman* and *Glengarry Glen Ross*.
- ANSWER: Al **Pacino**
- [10] Pacino also appeared as Michael Corleone in this film trilogy based on the work of Mario Puzo, which was directed by Francis Ford Coppola and starred Marlon Brando as Vito Corleone in its first installation.
- ANSWER: *The* **Godfather**
- [10] *The Godfather* films also featured this actress as Kay Adams; she also appeared in a number of Woody Allen films, including *Manhattan* and *Annie Hall*.
- ANSWER: Diane **Keaton**
19. For ten points each, identify these different types of swords.
- [10] This sword which is attached to the front of rifles were utilized in close quarters combat by infantry during the 19th century.
- ANSWER: **Bayonet**
- [10] This type of sword designed in Spain was used by the elite for dueling and has developed into the epee used in modern fencing.
- ANSWER: **Rapier**
- [10] This type of sword was popular with officers in the French and Indian War and one was gifted to George Washington during his inauguration
- ANSWER: **Colichemarde**
20. In this book, a key work in New Journalism, the central figure’s followers dub themselves the “Merry Pranksters.” For ten points each:
- [10] Name this nonfiction book by Tom Wolfe, that centers around Ken Kesey under the influence of the CIA’s LSD.
- ANSWER: *The* **Electric Kool-Aid Acid Test**
- [10] This 1987 Wolfe novel centers on bond trader Sherman McCoy and strained race relations in New York and how they impact employees on Wall Street.
- ANSWER: *The* **Bonfire of the Vanities**
- [10] This other Wolfe nonfiction tells of the “Mercury Seven”—including John Glenn and Alan Shepard—as well as Chuck Yeager, who failed to make the cut.
- ANSWER: *The* **Right Stuff**

EXTRA:

Answer some questions about experimental apparatuses in particle physics. For ten points each:

[10] Examples of this type of experimental apparatus can be found at CERN and Stanford; this type of apparatus is used to study the composition of fundamental particles by smashing two particles traveling at relativistic velocities into each other.

ANSWER: **Collider**

[10] The Large Hadron Collider at CERN is this type of collider, identified by the path the particles travel.

ANSWER: **Ring Accelerator**

[10] This ring accelerator at the Fermi National Accelerator Laboratory was the second highest energy collider in the world prior to its deactivation in 2011.

ANSWER: **Tevatron**