

**RTO 2015**  
**Round 8 - Tossups**

1. **A short story from this country begins with a man walking through Paradise and eventually seeing Hell in the water of a lotus pond. One novel from this country contains a man who tramples a pregnant woman in the snow for a package of cigarettes. Another novel from this country involves a man who has a kid with his step mother named (\*) Reizei who later becomes emperor. Another famous novel contains a character who thinks the title structure is the most beautiful building in the world, yet becomes obsessed with burning it, which he eventually does. FTP, "The Spider's Thread," *The Tale of the Heike*, *Confessions of a Mask*, *The Tale of Genji*, and *The Temple of the Golden Pavilion* are all from this country, the birthplace of authors Murasaki Shikibu and Yukio Mishima.**

**Japan**

2. **In 1800, a farmer named Pierpont with this last name opened a namesake academy in Colchester, Connecticut. Works by another person with this last name include *The Great Instauration*, *Valerius Terminus: of the Interpretation of Nature*, and *History of Life and Death*, although this person is better known for a 1627 work detailing the island Bensalem and the scientific institution Solomon's House, *The (\*) New Atlantis*. The "permeal" type of this name is widely eaten in Canada and is coated in fine cornmeal. For ten points, name this name, both the last name of an English philosopher who wrote *Novum Organum* and the name for a meat that is often eaten with lettuce and tomato in a sandwich.**

**Bacon**

3. **This actor's film debut was in a film his father directed in the 1970's called *Pound*. After a short stint in *Saturday Night Live*, his film career kicked off after he landed roles in the hits *Weird Science*, *Less Than Zero*, and *Soapdish*, and eventually he received his first Oscar nomination for his performance in the movie *Chaplin*. After several stints in (\*) rehab, his career has come back together as evidenced by his recent Oscar nomination for his performance as Kirk Lazarus in *Tropic Thunder*. FTP name this actor who is best known for playing as Sherlock Holmes in several films and Tony Stark in *Iron Man*.**

**Robert Downey Jr.**

4. **This country's Akhurian River passes through Gyumri, its second largest city, before joining with the Aras River. The largest city in this country is home to locations such as the Matenadaran Institute of Ancient Manuscripts and the Sergei Parajanov Museum. This nation borders an exclave known as Nakhchivan, and an unrecognized breakaway region called (\*) Nagorno-Karabakh has close relations with this country, even using a modified version of its flag. This country's Lake Sevan is the largest lake in both this country and the entire Caucasus region. Bordering Georgia, Turkey, Iran, and Azerbaijan, FTP, name this landlocked nation with capital at Yerevan.**

**Armenia**

5. **This object was said to have created the sound of a myriad roaring dragons in the Iliad, and had one hundred tassels of pure gold hanging from it. It is said that when its wielder shakes it, Mount Ida is covered in clouds, thunder roars, and fear is struck into the hearts of men. Some pieces of art depict it as the skin of Aex or Pallas, both of whom (\*) Athena slew. Others show it as the skin of the goat that suckled Zeus when he was a child. FTP, name this mythical Greek shield, which most often refers to the shield that Perseus used to see Medusa indirectly, after which an image of her head was permanently burned into the shield.**

**Aegis** (accept Zeus' or Athena's shield before Aex is mentioned)

6. **The only two cultivated species of this crop are *O. sativa* and *O. glaberrima*, which respectively designate the Asian and African types. The GABA method of cooking this food includes soaking it in water for twenty-four hours for additional health benefits. Unlike other common staple foods, this crop does not contain (\*) gluten, making it more widely and easily digestible. The parboiled type of this crop is initially boiled and then dried to retain nutritional benefits. For ten points, name this most widely consumed staple food in the world and along with nori and fish, one of the primary components of sushi.**

### Rice

7. **This river may have disastrously shifted westward around 1500 BC. It is theorized that the actual term 'hindu' first occurs as a Persian geographical term for the people who lived beyond this river. It is described in the Rigveda as (\*) Sindhu.** Historical sites along this river include Mohenjo-Daro and Harappa. For ten points, name this river that flows through Pakistan and some parts of India and China.

### Indus River

8. **The first ones were used against Hugh le Despenser, 1st Earl of Winchester and his son Hugh Despenser the Younger, Earl of Gloucester. These were used to convict (\*) William Laud and the Earl of Strafford. One was backdated to convict Oliver Cromwell. These are prohibited in Article 1, Section 9 of the United States Constitution. FTP name these bills in which a legislature simply votes on whether a defendant is guilty or innocent rather than a judicial trial**

### Bill of Attainder (Accept Act of Attainder, Writ of Attainder, and Bill of Pains and Penalties)

9. **A vacation in Germany inspired this composer's *From the Bavarian Highlands*, which includes his *Three Bavarian Dances*. He's not Verdi, but he composed "Falstaff," a symphonic poem inspired by Henry IV. This composer's only ballet, *The Sanguine Fan* was written to raise funds during the first World War. This composer's close friends and family each inspire different (\*) sections of one of this man's works, which includes a notorious secret theme. That work includes movements like "C.A.E." for his wife, and "Nimrod." For ten points, name this English composer of a cello concerto in E minor, and of the *Enigma Variations*.**

### Edward Elgar

10. **Leibniz, Lagrange, Newton, and Euler developed notations for this, Lagrange's and Leibniz's being the most commonly found in recent textbooks. The entries of the Jacobian matrix are all examples of this operation applied to a function. For any function, this is the limit as (\*)  $x$  approaches  $a$  of quantity  $f$  of  $x$  minus  $f$  of  $a$  over  $x$  minus  $a$ . This can be used to solve optimization and minimization problems. The 2nd this tells the points of inflection and concavity of a function. FTP, name this mathematical operation used in calculus, defined as the instantaneous rate of change for a function.**

### Derivative (accept differentiation or dy over dx or d over dx or different word forms)

11. **One type of these algorithms can take up to quadratic time but it usually has linearithmic time. These algorithms can be stable or unstable. The stooge variety of these algorithms takes  $n^{2.7}$  time and is done by applying the algorithm to the first 2/3, last 2/3 and then the first 2/3 again. The Tim variety combines the (\*) insertion and merge variety of these algorithms. The quick variety uses a divide-and-conquer algorithm and is focused around a pivot. The heap variety is a little slower on average but faster in the worst case. FTP name these type of algorithms that order lists, usually, in non-decreasing order.**

### Sorts (accept equivalents)

12. **This novel was inspired by the author's wife's being beaten by drunk American airmen. It was removed in several public high schools for "questionable language." This novel was turned in to a controversial film directed by Stanley Kubrick and received an (\*) "X" rating. This novel opens in the Korova Milk Bar and the main character of this novel refers to himself as "Your Humble Narrator." Name this novel by Anthony Burgess set in the near future in which Alex and his Droogs perform "ultraviolence."**

### A Clockwork Orange

13. **The kingdom of Colchis was located on the eastern side of this body of water, and the Mysians from its southeast invaded Assyria during the reign of Sargon II. The Romans fought the Mithridatic Wars against a kingdom situated on the southern coast of this body of water, and vassalized the Bosphoran Kingdom to its north. Cities on its coast included Chersonesos, Olbia, Istros, Trapezus, and Sinope, the capital of (\*) Pontus. The Scythians, Ostrogoths, and Huns successively lived to its north. It has been suggested that the flood story originated due to a catastrophic rise in this body of water around**

5600 BC. For ten points, name this body of water that was accessed past Byzantium through the Bosphorus Strait.

**Black Sea**

14. **This man described a game in which 14 triangles and quadrilaterals could be arranged in 536 different ways to form a square. A mathematical property named for this person requires the absence of infinitesimals, and his namesake spiral is described in polar coordinates by  $r$  equals a plus  $b$  theta. This man declared "Give me a place to stand, and I will move the (\*) world" in his explanation of the lever. A screw named for this man was used in irrigation, and a principle named for him states the buoyant force on an object is equal to the weight of the fluid displaced by that object. For 10 points, name this ancient Greek who legendarily shouted "Eureka!" in his bathtub.**

**Archimedes** of Syracuse

15. **While Carl Menger tried to explain it with his "regression theorem," Gianfranco Poggi wrote a book about it and the modern mind. Ludwig von Mises wrote a book about the theory of this and credit, and according to the Fisher Equation, the amount of it can be determined by dividing  $PT$  by  $V$ , which stands for its velocity. When two forms are available, that which is (\*) worse dominates, according to Gresham's Law. In the United States, its supply is reported as  $M1$ ,  $M2$ ,  $M3$ , etc. by the Federal Reserve. Inflation causes its purchasing power to decrease. For 10 points, name this keystone of the economy, whose examples include coins and dollar bills.**

**Money** (accept obvious equivalents; do not accept "currency")

16. **In this book, one figure is left in prison until Festus becomes the governor. Another figure sees a sheet let down to earth containing multitudes of four-footed animals, from which he is then instructed to eat. This work, written to Theophilus, begins with Matthias replacing Judas, and sees a man (\*) blinded on the road to Damascus. Stephen is stoned by the Sanhedrin, and the Holy Spirit descends upon the disciples at Pentecost. For ten points, name this book of the Bible which comes after John.**

Book of **Acts**

17. **This neurotransmitter can be found in platelets or the central nervous system. Biochemically derived from tryptophan, this monoamine neurotransmitter is metabolized mainly to 5-HIAA by the liver. 90% of the human body's supply of this is found in the enterochromaffin cells in the (\*) gastrointestinal tract, where it regulates intestinal movements. It also has cognitive functions such as memory and learning. For ten points, name this neurotransmitter also called 5-hydroxytryptamine, thought to be a contributor to well-being and happiness.**

**Serotonin** (Accept **5-hydroxytryptamine** or **5-HT** before mentioned)

18. **The alpha and beta forms of the D isomer of this molecule differ in the placement of a hydroxyl group that either causes spiral or linear polymers of this molecule. Commercially, this molecule is produced by the hydrolysis of (\*) starches, such as maize, rice, and cassava. This molecule is the monomer of humans' main sources of energy, providing 3.75 kilocalories per gram. Two molecules of G3P combine to form this molecule after photosynthesis. For ten points, name this most common six-carbon sugar, one of the direct products of photosynthesis.**

**Glucose** (accept **C6H12O6**)

19. **It was invaded for its copper by the Hittites, and a later stele attests to its conquest by Sargon II of Assyria. The Byzantines lost control of this island in 649, shortly before the Arab naval victory at the Battle of the Masts, and again in 1191, when it was captured by (\*) Richard the Lionheart on the Third Crusade. It was a Ptolemaic possession for several centuries despite its proximity to the Seleucid capital of Antioch. For ten points, name this Eastern Mediterranean island that contained the cities of Salamis, Paphos, and later Limassol and Nicosia.**

**Cyprus**

20. **Many of this empire's administrative forms were retained in a successor state by Harsha. The astronomers Aryabhata and Varahamihira lived under this empire, and its third ruler may have patronized the poet Kalidasa. It was during this age that Aryabhata devised the number (\*) "0," discovered the value of pi, and wrote the "Aryabhatiya and "Suryasiddhanta."** Its kings added new inscriptions to older Mauryan monuments. FTP what empire ruled northern India from the 4th to 6th centuries AD?

**Gupta** Empire

21. **This piece's second movement was described by Franz Liszt as "a flower between two chasms," and that scherzo movement switches over to the major key and repeats its short melody twenty times throughout the piece. Its mostly pianissimo first movement is instructed to be played with the sustain pedal depressed the entire time, while its stormy final movement is marked presto (\*) agitato and is characterized by sforzando notes and fast arpeggios. It was dedicated to Guilietta Guicciardi, and is described as "Quasi un fantasia", but is better known by a nickname given by Ludwig Rellstab. FTP, name this C-sharp minor sonata by Beethoven, which earned its nickname from the title phenomenon shining on Lake Lucerne.**

**Moonlight Sonata** (accept Beethoven's Piano Sonata No. 14 in C-sharp minor)

### Bonuses – Round 8

1. For ten points each, name these attempts at quantum gravity.

- A. This is the most popular theory of that subject, in which point-like particles are replaced with vibrations of the namesake one-dimensional structures.

#### String Theory

- B. This theory was founded by Lee Smolin, and suggests that quantum mechanics and relativity would stabilize if nothing was smaller than the Planck scale, and then gravity would remain in check. It is abbreviated LQG.

#### Loop Quantum Gravity

- C. It combines Supersymmetry and general relativity to suggest that the gravitational field has a superpartner called this gravitational field with spin 3/2. Its quantum is the gravitino.

#### Supergravity

2. Although Halloween today is mainly known for marketing and store-bought candy, it actually consists of a decent amount of history. For ten points each, answer these questions about Halloween.

- A. Halloween falls on the evening before this Christian holy day. The feast celebrated on this holiday was initially called "Hallowmas."

#### All Saints' Day

- B. All Saints' Day and All Hallows' Eve were designated by this Syrian pope from 731 to 741 AD who was also known for conflict with the Lombards.

#### Pope Gregory III

- C. According to *USA Today* in 2013, the most popular Halloween candy in the United States is this peanut butter candy manufactured by The Hershey Company.

#### Reese's Peanut Butter Cups

3. For ten points each, name these dams.

- A. As of 2014, this largest dam in the world was completed in 2012. However, it was met by much criticism for its negative effects on the environment in China.

#### Three Gorges Dam

- B. This dam on the Colorado River impounds Lake Mead and finished construction in 1936. Although it isn't located in California, almost thirty percent of its power is allotted to southern California.

#### Hoover Dam

- C. This dam on the Parana river, located between Brazil and Paraguay, generates even more energy than the Three Gorges Dam.

#### Itaipu Dam

4. Identify these words whose etymologies lay in events or people of the 19th century.

- A. This word which refers to voluntarily abstaining from buying or using an item has its origin in the Irish land wars of the 1880s. The person after whom this policy was named was the estate agent for an absentee landlord and who ejected many tenants.

**Boycott**

- B. This word referring to exaggerated, blind and often bellicose patriotism was named after a French soldier who supposedly performed great feats in Napoleon's army and continued his blind loyalty to Bonapartism in Restoration France. In the 20th century, this term was then applied to males who believed in masculine superiority.

**Chauvinism or Chauvinist**

- C. This word meaning extreme patriotism and support for an aggressive foreign policy originated in the chorus of a song about the willingness of the British to fight the Russians. The phrase used in the song had long been used to avoid saying "by Jesus." By the late 19th century, this term was also being used to apply to the policies advocated by Theodore Roosevelt and others advocating for war with Spain.

**Jingoism**

5. FTPE, name these anthropologists.

- A. This woman is most known for writing about the girls in Ta'u in *Coming of Age in Samoa*.

Margaret **Mead**

- B. This British woman studied chimpanzees at the Gombe Stream National Park in Tanzania. She wrote *In the Shadows of Man*.

Jane **Goodall**

- C. This man wrote *The Interpretation of Cultures* and shares his first name with a particular big red dog.

Clifford **Geertz**

6. For ten points each, name these states destroyed during the French Revolutionary or Napoleonic Wars.

- A. This empire was dissolved by Napoleon in 1806, when he forced Francis II to abdicate.

**Holy Roman Empire**

- B. Napoleon claimed the medieval Iron Crown of Lombardy to establish this kingdom. It was dissolved upon his fall, though it was later replaced in the 1860s.

**Kingdom of Italy**

- C. The Knights of St. John were expelled from these islands in 1798 by Napoleon; as the last remnant of the Crusading movement, the Knights had occupied these islands after they were ejected from Rhodes by the Ottomans in 1522.

**Malta**

7. As teenagers, we all like eating unhealthily, but this question will reward those of you that actually eat vegetables. FTPE, name these salads.

- A. This type of salad is made with parmesan cheese, Worcestershire sauce, olive oil, egg, anchovy, and lemon juice. It shares its name with a Roman ruler.

**Caesar** salad

- B. This salad is made up of fresh mozzarella, basil, and tomato slices. It was made to resemble the Italian flag, and is named for an Italian island.

**Caprese** salad

- C. This Levantine dish consists of mint, onion, tomato, parsley, and bulgur. Instead of bulgur, it sometimes uses couscous. It comes from the Arabic word meaning seasoning.

**Tabbouleh** (be lenient with pronunciation)

8. FTPE, give the category of jokes the following descriptions describe.
- A. These jokes aren't meant to be funny, but instead give often depressing and violent punchlines like dead babies or murdered families.

**Anti-jokes**

- B. Setting up these jokes involves the person imitating the sound of hitting a door, and then answering the question, "Who's there?"

**Knock-knock** jokes

- C. Jokes like this give often exaggerated claims that a certain parental unit is "so fat" or "so stupid."

**Yo mama** jokes

9. FTPE, answer these questions about a particular philosopher.
- A. This philosopher proposed the idea of the hierarchy of needs.

Abraham Harold **Maslow**

- B. According to Maslow's Hierarchy of Needs, this is the lowest level of human need that contains things such as food, water, sleep, and sex.

**Physiological** needs or **basic** needs

- C. This is the highest level in which people can start to worry about things such as truth, beauty, and can focus on problems outside themselves.

**self-actualization** (accept other word forms)

10. For ten points each, name these civilizations that left behind almost no history.

- A. This Mesoamerican city may have been larger than Constantinople at its height around 450 AD, but was sacked by 600 and abandoned, leaving no records behind.

**Teotihuacan**

- B. This Cretan civilization left behind palaces at Knossos, Phaistos, and Mallia. Its Linear A script has never been deciphered.

**Minoan** civilization

- C. This city in southern Africa was inhabited between 1000 and 1500. It was succeeded by the Mwenemutapa kingdom.

Great **Zimbabwe**

11. There have been many advances in rocketry these past few months. FTP each, name these things relating to space travel and exploration.

- A. This rocket, being currently developed by NASA, Boeing, and SpaceX, is the only rival in power to the Saturn V rocket

**SLS** (Space Launch System)

- B. This probe is the first ever man-made object to land on a comet

**Philae**

- C. This advanced capsule, now equipped with an abort/safety-eject mechanism, will carry humans to Mars by 2030. It is also the name of a constellation with a famous belt.

**Orion**

12. For ten points each, name these rivers that served as boundaries in ancient times.

- A. Except for the provinces of Agri Decumates and Dacia, this river, along with the Rhine, was the northern frontier of the Roman Empire. It was breached when the Visigoths were allowed to cross it in 376 AD.

**Danube**

- B. Egyptian rule reached this river under Thutmose I, but receded southward following the Battle of Qadesh. Later, it served as the Roman-Parthian frontier.

**Euphrates**

- C. This river in Catalonia was the boundary between Roman and Carthaginian spheres of influence in Spain until the Second Punic War.

**Ebro**

13. The world champion San Antonio Spurs are well known for fielding players from around the world. Identify the country that these members of the 2014 championship team are from.

- A. Tony Parker

**France**

- B. Patty Mills

**Australia**

- C. Tiago Splitter

**Brazil**

14. Answer these questions about literary sketches.

- A. Ivan Turgenev's first publication was a collection of short stories that led both to his being confined temporarily to house arrest as well as influencing the eventual emancipation of serfs. Name Turgenev's set of literary sketches.

**A Sportsman's Sketches** or **A Hunter's Sketches** or **Sketches from a Hunter's Album** (Accept any reasonable translation of **Zapiski Okhotnika** that contains both Hunter or Sportsman plus Sketches)

- B. The collection of short stories containing "The Legend of Sleepy Hollow" and "Rip Van Winkle" by Washington Irving is titled the Sketchbook of this pseudonymous narrator.

*The Sketchbook of **Geoffrey Crayon**.*



- C. The first published work of fiction by Charles Dickens was a collection of short works called "Sketches by" this pseudonymous author.

*Sketches by* **Boz**

15. Answer these questions about a ham sandwich, for ten points each.

- A. Judge Saul Wachler famously said that a prosecutor can get one of these bodies to indict a ham sandwich.

**Grand Jury**

- B. www.hamsandwich-nc.com introduced a ham sandwich as a candidate for what elected federal office in North Carolina in 2014?

**Senate**

- C. A ham sandwich found at the scene contributed to a myth about the death of this member of the Mamas and the Papas.

**Mama Cass** Elliot

16. FTPE. Answer these questions about an event in the Bible.

- A. The transfiguration of this person occurs in the book of Matthew on a mountain. It occurs immediately before this man drives a demon out of a boy.

**Jesus**

- B. Two men appeared after the transfiguration and began to converse with Jesus. Name one of those two men.

**Moses** or **Elijah**

- C. This man offered to build tents for Jesus, Moses and Elijah.

**Peter**

17. Name these celebrated composers who are all buried near each other in the Tikhvin Cemetery in St. Petersburg.

- A. This composer, a member of "The Five," was known for using Russian folklore and history in his works, including one of his most famous pieces, *Pictures at an Exhibition*, which includes a section, "The Hut on Fowl's Legs," based on the popular witch, Baba Yaga, of Russian folktales.

Modest **Mussorgsky**

- B. Another member of "The Five" is buried there. He wrote the opera *May Night*, based on a Nikolai Gogol story, as well as his symphonic suite *Scheherazade*.

Nikolai **Rimsky-Korsakov**

- C. Sadly this composer died just nine days after the premier of his Sixth Symphony, the *Pathétique*, in Saint Petersburg, possibly from cholera contracted from drinking contaminated water.

Pyotr Ilyich **Tchaikovsky**

18. The American media are so lame that they've come to add the suffix -gate to any mildly scandalous story in the news. Answer these questions about recent -gate scandals that were not Watergate.

- A. In 2014, allegations of misogynistic harassment of women involved in the video game industry has led to attacks on social media using this hashtag.

**#gamergate**

- B. Governor Chris Christie suffered a setback to his presidential ambitions as a result of Bridgegate involving the closure of the George Washington Bridge at this New Jersey entrance supposedly in retaliation against the town's mayor's not endorsing Christie in his reelection fight. Name that New Jersey terminus of the George Washington Bridge which was also the location of the letters read by Gilda Radner's Roseanne Roseannadanna character on Saturday Night Live.

**Fort Lee**

- C. Another -gate suffix was used to talk about Florida's Governor Rick Scott's refusal to come to the stage in a debate because his opponent, Charlie Crist, had one of these items hidden under his lectern.

**Fan** (Accept **Fangate**)

19. FTPE identify the following Union generals from the Civil War known for these famous quotes.

- A. "They couldn't hit an elephant at this distance"

**General John Sedgwick**

- B. "Find out where your enemy is. Get at him as soon as you can, and strike him as hard as you can. And keep moving on!"

**General Ulysses S. Grant**

- C. "By some strange operation of magic I seem to have become the power of the land."

**General George B. McClellan**

20. FTPE, name these slightly odd literary characters.

- A. This Cervantes creation had his brains addled from reading too many books about chivalry, and eventually was forced into retirement by the Knight of the White Moon.

**Don Quixote**

- B. In Shakespeare's play *King Lear*, this son of Gloucester (GLAW-ster) adopts the persona of Tom of Bedlam.

**Edgar**

- C. Originally named Sméagol, this creature eventually became corrupted and driven mad by the One Ring in Tolkien's legendarium.

**Gollum**

21. FTPE, name these Arabian cities,

- A. This largest city of The United Arab Emirates is home to Palm Island and the Burj Al Arab Hotel.

**Dubai**

- B. This city was the seat of the Umayyad Caliphate until 750 CE, when the Abbasids moved it to Baghdad.

**Damascus**

- C. This capital of Saudi Arabia has a population of about 5.7 million people, and is home to the Princess Nora bint Abdulrahman University for Women.

**Riyadh**