

## RTO 2016

### Round 7

Tossups:

1. **The pillars where the Philaeni twins were buried alive mark one of this city's borders. This city was home to an artificial harbor, the outer rectangular part of which was home to merchants and the inner part was reserved for military use. This city was once saved by a Spartan General named (\*) Xanthippus.** Despite their naval prowess, this city was defeated by an enemy in part due to the reverse engineering of a ship that had ran aground, recruitment of experienced Greek sailors, and an unorthodox boarding tool. FTP, name this city whose was once led by Hannibal, and fought three Punic Wars against the Romans.

#### Carthage

2. **One character in this novel dies after a whore falls in love with him. This novel's main character is thereafter stabbed by that whore. Near the end of this novel, it is revealed that Orr has escaped. Another character creates (\*) M&M Enterprises and ends up bombing his own squadron after striking a deal with the Germans.** Near the end of this novel, the chapters become much darker and one deals with the death of Snowden. FTP, name this novel in which Yossarian is the captain of the 256th Army Air Force, by Joseph Heller.

#### Catch-22

3. **The Tomlinson model is used to describe this phenomenon on the atomic scale. One of Amontons' laws describing this phenomenon states that it is independent of surface area, while Coulomb's law for it says that it is independent of velocity. The triboelectric effect describes how (\*) this phenomenon generates static electricity.** The angle of repose is found by taking the arctangent of this phenomenon's namesake constant. That coefficient is mu, and comes in the static and kinetic varieties. FTP, name this force that always opposes motion.

#### Friction

4. **This man was originally buried in his own royal tomb, but the body was supposedly moved. The search for this man's actual body was sparked by Flinders Petrie and his body was finally found buried in the tomb KV55 in 1907 by Edward R. Ayrton. This man built the city of Amarna as a new capital, and he had 9 children (\*) and 5 wives, one of whom is an unidentified sister.** His original name meant "strong bull of the double plumes" and he was the father of Tutankhamun and son of Amenhotep III. Name this Egyptian Pharaoh who was married to Nefertiti and attempted to make Egypt monotheistic and focused on the sun god Aten.

#### Akhenaten (accept Amenhotep IV)

5. **This man issued the Donations of Alexandria and divorced his wife Fulvia to marry Octavia the Younger. This man was defeated by forces under the consuls Hirtius and Pansa when he attempted to capture Decimus Brutus at Mutina. This man commanded the left wing at the Battle of Pharsalus (\*)** This man abandoned his forces to chase after his own flagship, and as a result he was defeated by Marcus Agrippa. He delivered the eulogy at Caesar's funeral. For ten points, name this man who was a member of the Second Triumvirate and famously had Cleopatra as his lover.

#### Marcus Antonius (or Mark Antony)

6. **Ruins built in this empire's first capital are called the Roluos Group. Attacks on this kingdom by the Champas damaged its irrigation network, which used water tanks called barays. The people of this empire believed that its king spent every night with a nine-headed snake woman in a golden tower, according to (\*) Zhou Daguan's account of this empire. This empire, whose boats fought against Champa on the Tonle Sap, was founded by Jayavarman II. For 10 points, name this Cambodian empire which built Angkor Wat.**

**Khmer Empire**

7. **Its first trial was conducted in Germany, but was done with such little care that it had to be done again in America with better equipment. The Fizeau Experiment, which was repeated by the namesakes of this experiment, awkwardly concluded the opposite result, with (\*) Fresnel's drag coefficient. Emission theory is not a valid explanation for this experiment's results but theories used to explain the results of this experiment include the theory of relativity and the FitzGerald-Lorentz contraction hypothesis. For ten points, name this experiment first conducted by its two namesakes at Case School of Applied Science in 1887 that did not confirm the existence of the luminiferous aether.**

**Michelson-Morley Experiment**

8. **This poem concerns a "blood dimmed tide" drowning "the ceremony of innocence" It draws upon William Blake's Urizen it its phrase "stony sleep." In this work, "somewhere in sands of the desert" a creature "moves its (\*) slow thighs" as it is surrounded by "indignant desert birds." The narrator describes an apocalyptic world, where "the Falcon cannot hear the Falconer." After an epiphany of sorts, "a vast image out of Spiritus Mundi" fills the sight of the narrator. FTP, name this post-World War I poem by William Butler Yeats, a line from which names a Chinua Achebe novel.**

**The Second Coming**

9. **The battle plans for this conflict were found wrapped around three cigars. Confederate politicians believed that a win in this battle would increase foreign recognition of the Confederacy. George McClellan (\*) was dismissed as a general after this battle because of his unwillingness to give up men. Abraham Lincoln issued the Emancipation Proclamation in the wake of this battle because he didn't want it to seem like the decision was made due to desperation even though the Union's belief that they had won this battle only came from the fact that the Confederates were the first to retreat. FTP, name this bloodiest single-day battle in American history, and the first major battle of the Civil War to be fought on Union soil.**

**Battle of Antietam or Battle of Sharpsburg**

10. **This empire started as a result of a referendum that was passed with support of 97 percent of people even though most of the "yes" votes came out of thin air. During its reign, war was declared on the Austrian Empire over control of Italy which took place shortly after the end of the Crimean War. This empire came into existence after the coup of (\*) 1851 and fought in the Crimean war. The murder of Victor Noir by a member of the imperial family probably led to the downfall of this empire. The war which eventually ended this empire included the Battle of Sedan. That war was the Franco-Prussian War. FTP, name this era in French history in which Napoleon Bonaparte's nephew, Napoleon III, ruled which Leon Gambetta replaced with the Third Republic.**

**The Second French Empire (Prompt on French)**

11. **This man's first pieces during the late Romantic period were famous for having elements of Brahms and Wagner, who are considered polar opposites of the time. He coined the term "developing variation," (\*) though he says it has been around since about 1750. He wrote a work which describes a sergeant yelling at his soldiers to count faster and another consisting of three groups of seven poems each in which the title character sings of love, religion, blasphemy, and his return home to Bergamo. That work is**

Pierrot Lunaire (pee-air-oh loo-nayr). His most famous work is based on a poem about a man and a woman walking through a moonlit forest at night written by Richard Dehmel. FTP, name this German composer and painter who wrote Variations for Orchestra and Transfigured Night, and developed the twelve-tone technique.

Arnold Schoenberg

12. **This god killed the god of food, Ogetsu Hime, creating silkworms and several grains. He names an ability in Naruto where the Uchiha summon a large battle warrior. He and another god claimed parenthood over five male gods created using the necklace of the other god. In a fit of rage, he once threw a horse (\*) at his sister and sent her into hiding. This god obtained the sword Kusanagi after defeating the eight-headed serpent, Orochi, and gave it to his sister, Amaterasu, to come out of a cave. He was born after his father, Izanagi, washed his nose. FTP, name this Shinto god of storms.**

Susano'o

13. **In Calculus, this is reasoning in equational first-order logic, to show the unsatisfiability of first order clauses. In electrical circuits, this states that the response in a branch of a bilateral circuit with more than one source is the sum of the responses caused by (\*) each independent source. In Quantum mechanics, a particle in this state exists in more than one quantum state that is the sum of other distinct quantum states. In wave mechanics, this states that the algebraic sum of pulses is the net displacement. FTP, name this axiom of geology, that in an undeformed stratigraphic sequence, the oldest strata is at the bottom of the sequence.**

Law of/principle of Superposition

14. **In this novel, a story is told to explain why a tortoise's shell is not smooth. Villagers in this work disregard the fate of the village Abame, which was ruined by men riding (\*) "iron horses." The main character struggles to balance his chi and is afraid of appearing weak like his father, Unoka. After the protagonist kills Ikemefuna, he is exiled from his Umuofia for seven years for killing someone at a funeral. FTP, name this novel about Okonkwo, a novel by Chinua Achebe.**

Things Fall Apart

15. **He gained fame in the '80s for defending The Guildford Four and Birmingham Six. He joined the Stop the War Coalition in 2001, which led to him being one of only 12 of his party's representatives to vote for an inquiry into the Iraq War. He has come under fire for his policy of disarmament as well as calling (\*) Hamas and Hezbollah representatives "friends". A rule change that allowed people to join his party for only 3 pounds helped him to win leadership of that party. FTP, name this Islington-North MP who won the Labour Party's Leadership election after the resignation of Ed Miliband.**

Jeremy Corbyn

16. **The losing side of this battle had recently sacked Eretria for the same reason it was attacking the side that won. The winning side was assisted by the Plataeans, but did not receive aid from one of its allies due to the battle's coincidence with Carneia. The battle (\*) was fought in a marshy area to prevent the the use of Persian cavalry. One general, Callimachus, died in the battle, and another general on his side was Miltiades. FTP, name this battle fought between the Persians and the Greeks in a namesake bay that a messenger legendarily ran 25 miles to bring news of.**

Battle of Marathon

17. **Once character is this novel utters epigrams such as "Violence is the last refuge of the incompetent." The titular entity of this novel establishes control over the Four Kingdoms through a science-based religion. This novel is split into 5 sections, The Merchant Princes, The Traders, The**

**Mayors, The Encyclopedists, and the occupation of one of its main characters, (\*) Hari Seldon.** Trantor is the capital of a declining Galactic Empire in this novel, where the titular entity is established on the planet Terminus. FTP, name this Isaac Asimov novel, the first in a titular series, that was inspired by Gibbon's *Decline and Fall of the Roman Empire*.

### Foundation

18. **This man's most notable case when he was a prairie lawyer was when he defended a murderer by using a Farmers' Almanac to show that the moon was too low for the only eyewitness to see the crime. He was encouraged (\*) by a little girl to grow out his beard in order to gain popular support.** This Illinois man lost the race for senator to Stephen Douglas after the eponymous debates. FTP, name this "honest" president that helped end slavery, assassinated by John Wilkes Booth

Abraham Lincoln

19. **The author of this webcomic participated in a Cartoon Off against Farley Katz in 2008. A panel called "Time" was awarded the Hugo Award for Best Graphic Story in 2014. This webcomic has depicted Cory (\*) Doctorow with a red cape, goggles, and a balloon. Earlier strips made fun of the author's fear of raptor attacks, and would also include red spiders harassing other characters of the comic.** FTP, name this webcomic identified by four letters, that is written and drawn by Randall Munroe.

### xkcd

20. **This book was published almost entirely from the efforts of Ezra Pound and Sylvia Beach. In one scene in this book a character sees a dead dog on the beach while thinking of Aristotelian metaphysics. (\*)** This book's last chapter is entirely one sentence both beginning and ending with the word yes. Name this stream of consciousness novel with characters Stephen Daedalus, Molly Bloom, and Leopold Bloom, the greatest work by James Joyce based on Homer's *The Odyssey*.

### Ulysses

21. **One of its emperors fell down a staircase while praying. This empire was defeated and their capital was sacked by the Afsharid dynasty at the Battle of (\*) Karnal.** The Hindu Jats, who used to be pastoralists, were one of the social groups that took up arms because of its establishment. During its "classic period" the region saw economic progress and religious harmony even though the Maratha Empire was still a thorn in its side. This empire was established when it defeated the Lodi Empire at the First Battle of Panipat. It saw the golden age of Muslim Architecture including Red Fort and the Taj Mahal. FTP, name this empire whose capital was first Agra then Delhi, founded by Babur whose emperors include Shah Jahan and Akbar the Great.

Mughal Empire (accept Mogul Empire or Garakani)

**Bonuses Round 7:**

1. This short story is about the only survivors left after their boat crashes. FTPE,  
A.  
Name this short story in which Billie the Oiler dies in the end though the Cook and the Captain survive.

**"The Open Boat"**

- B. "The Open Boat" was written by this American author of *Red Badge of Courage*.

Stephen **Crane**

- C. Stephen Crane also wrote this work in which the title character turns to prostitution. Billie fights the main character's brother, Jimmie in this novella's first scene.

**Maggie: A Girl of the Streets**

2. FTPE, name these Roman figures who voluntarily gave up power.  
A.  
This emperor stepped down with his co-Augustus Maximian and retired to Split. When asked why he would not come back, he said that others would understand if they saw the cabbages he grew on his farm.

**Diocletian**

- B. This 2-time dictator is famous for the ease with which he gave up absolute power. George Washington is sometimes called the American version of this man.

**Cincinnatus**

- C. This man actually captured Jugurtha, and won absolute power by defeating his rival Marius. He attempted to stabilize the republic, but his actions, ironically, inspired others to do as he had done.

Lucius Cornelius **Sulla**

3. For ten points each, name these emperors who did not wear pants.  
A.  
One of the most insane leaders of all time, he supposedly started the Great Fire of Rome, and most notably executed his mother.

**Nero**

- B. One of the most unpopular emperors of all time, he has been diagnosed insane. His name translates to "little boots." He succeeded Tiberius.

**Caligula**

- C. This son of Marcus Aurelius changed the name of the legions, the city of Rome, as well as a month on a calendar to match his own. He was strangled while bathing and was succeeded by Pertinax.

**Commodus**

4. FTPE answer these questions about chickens in different religions.  
A.  
This man was told by Jesus that before the rooster crows this man will deny Jesus three times.

Saint Simon **Peter**

B. In an Indonesian form of this Hindu cremation ceremony a chicken is kept tied by the leg so that evil spirits go through it and not to any family members.

**Antvesti**

C. On the afternoon before this Jewish holiday a chicken may be swung overhead in kapparos.

**Yom Kippur**

5. FTPE, name the quantity that represents the derivative of the given vector quantities

A.

The derivative of position with respect to time. This quantity times mass is equal to momentum.

**Velocity**

B. The time derivative of momentum. This quantity can be found using Coulomb's law in electrostatics.

**Force**

C. The derivative of acceleration with respect to time. This quantity is also known as surge or lurch.

**Jerk**

6. FTPE, answer these questions about a particular play.

A.

This play by Thornton Wilder is divided into three parts. It is about George Gibbs and Emily Webb and their love story.

**Our Town**

B. This omniscient narrator of Our Town is known by this name. He also served as the minister at Emily and George's wedding.

the **Stage Manager**

C. In the second act of Our Town, Emily talks to George about their feelings for each other while consuming one of this type of dessert.

**Ice cream float** or **ice cream soda** (accept descriptions and obvious equivalents)

7. FTPE, answer these questions about an important organ.

A.

This organ contains the glomerulus and uses nephrons to filter waste from the blood.

**Kidney**

B. This hormone, released when the body is dehydrated, causes kidneys to retain water, thus increasing the concentration of urine.

**Antidiuretic Hormone** (accept **Vasopressin**)

C. This part of a nephron uses a system of countercurrent exchange to create a high concentration of urine in the medulla of the kidney.

**Loop of Henle**

8. He fell in love with a girl through piano lessons. but ended up marrying her sister. FTPE,  
A.  
Name this composer whose popular Symphony No. 9 *From the New World* was taken to the Moon by Neil Armstrong.

Antonin **Dvorak** (de-vore-jak)

B. This most-famous opera of Dvorak includes the famous "Song to the Moon" excerpt. It is named after a Slavic water sprite which translates to "mermaid."

**Rusalka**

C. This popular chamber music piece by Dvorak was written during his summer vacation in Spillville. The way he wrote it was influenced by Papa Haydn.

**American String Quartet** (prompt if "quartet" is left out, accept String Quartet no. 12)

9. FTPE, answer these questions about a certain linguist.

A.  
Name this man, sometimes considered the father of modern linguistics, who wrote a book called *Syntactic Structures*.

Avram Noam **Chomsky**

B. Chomsky came up with this five word sentence that is grammatically correct but meaningless, proving such a thing was possible

**colorless green ideas sleep furiously**

C. Chomsky created a hierarchy with Schützenberger that has this numbered type as the highest order of grammar. It represents regular grammars.

Type 3

10. FTPE, name these famous Greeks by one of the creatures they killed.

A.  
The Minotaur

**Theseus**

B. Medusa

**Perseus**

C. Skylla

**Heracles**(Accept Hercules)

11. This British movement demanded universal male suffrage, and annual elections for members of Parliament. FTPE,

A.  
Name this failed 19th century British political movement, that rallied around a namesake document written by a committee led by William Lovett.

The **Chartist Movement** (accept Chartism, or the People's Charter of 1838)

B. The Chartist newspaper was named for this cardinal direction.

**North** (accept the Northern Star)

C. Chartists marched to Westgate Hotel to free Chartist members in this city leading to the namesake rising that was a failure for the Chartists. A seaport in Rhode Island famed for the Gilded Age "cottages" for the extremely wealthy shares the name of this town.

**Newport**

12. This monster's head was cut off with the vorpal blade.

A.

FTPE, name this creature with "the jaws that bite, the claws that snatch!"

**Jabberwocky**

B. Jabberwocky is a poem by this author of Alice in Wonderland and Through the Looking Glass.

Lewis **Carroll**

C. Besides being careful for the Jabberwock and Jubjub bird, the character is told to shun this frumious creature.

**Bandersnatch**

13. FTPE, name these types of psychological biases.

A.

This is the tendency to focus on and remember only the information or evidence that validates a person's preconceived beliefs or ideas.

**Confirmation** Bias (accept **confirmatory** or **myside** bias)

B. When a person thinks that a past answer, event, or task is predictable, they display this bias, sometimes called the "I-knew-it-all-along" effect.

**Hindsight** Bias (accept **creeping determinism**)

C. This is the tendency to better recall unpleasant memories than positive ones.

**Negativity** Bias

14. FTPE, name some of the Canterbury Tales.

A.

Arcita and Palamon compete for Emily's hand in marriage in this first tale, with Arcita winning the tournament but Palamon winning her hand in marriage because of Arcita's death soon afterwards.

**Knight's Tale**

B. In this tale, John and Aleyn take revenge on a deceptive miller and end up in bed with his wife and daughter, respectively. This tale is a response to the Miller's Tale, which makes fun of this storyteller's occupation.

**Reeve's Tale**

C. In this tale, a knight must find "the thing that women most desire." He receives the answer from an old woman whom he must later marry, after which she becomes a young and faithful wife.

**Wife of Bath's Tale**

15. This collection of poems was translated most famously by Edward Fitzgerald. FTPE,

A.



Name this collection, the most recent edition of which contains 101 quatrains. Fitzgerald's first translation of it was illustrated by Edmund Joseph Sullivan.

**Rubaiyat** of Omar Khayyam (DO NOT mention "Omar Khayyam" if they get it wrong---Just Say Rubaiyat)

B. The poems, numbering about one thousand, are attributed to this poet, mathematician, and astronomer.

Omar **Khayyam**

C. This entity "writes; and, having writ, / Moves on." It also names an Agatha Christie novel.

**The Moving Finger**

16. For ten points each, name these battles fought by the Red Army during World War Two.

A.

This battle, fought from 1942 - 1943, is considered by many to be the turning point of the war for the USSR in World War II.

**Stalingrad**

B. This battle, Germany's last major offensive on the Eastern Front, was fought in July and August of 1943, and is one of the largest armored clashes in history.

Battle of **Kursk**

C. This battle, the last one during World War II in Europe, was fought in the German capital.

Battle of **Berlin**

17. Star light, star bright. FTPE, given its brightest star, name the constellation.

A.

Sirius

**Canis Major**

B. Vega

**Lyra**

C. Rigel

**Orion**

18. FTPE, name these famous works by J.S. Bach

A.

This work consists of 6 pieces for a solo instrument. It includes some of the most famous works for that instrument, and is sometimes performed on a smaller instrument.

**Cello Suites**

B. This collection has preludes and fugues in all 24 major and minor keys for the keyboard.

**The Well-Tempered Clavier**

C. This piece is written for the harpsichord and has an aria plus 30 of its namesake features. It may have been named after the first person to perform the piece.

### Goldberg Variations

19. FTPE, answer these questions about the First Crusade

A.

The first group of Crusaders to reach Byzantium were led by this man. They were defeated at the Battle of Civetot

### Peter the Hermit

B. This Byzantine emperor had asked for the West's help in retaking land from the Turks, which triggered the crusade.

### Alexios I Komnenos

C. Bohemond, one of the military leaders of the Crusade, managed to convince the other leaders to give him this city. It was founded by Seleucus the 1st and was the major city of the East in roman times.

### Antioch

20. For ten points each, name these German composers.

A.

Name this father of the tone poem who most famously composed works like *Also Sprach Zarathustra* and his *Alpine Symphony*.

Richard Strauss

B. Name this Romantic composer of *Der Ring Des Nibelungen*. He was known to be a prominent anti-Semite during the latter part of his life.

Richard Wagner

C. This composer received a doctorate from Breslau (brez-law) and wrote his *Academic Festival Overture* as thanks. His first symphony is famous for alluding to Beethoven's work.

### Johannes Brahms

21. FTPE, name some physical constants.

A.

This constant, equal to approximately  $3 \times 10^8$  m/s, is the upper limit on speeds, and appears in the equation for mass-energy equivalence.

The Speed of Light (prompt on c)

B. This constant is equivalent to the Boltzmann constant, but expressed in different units. It appears in the Nernst Equation and is defined by the U.S. Standard Atmosphere. Name this constant equal to approximately 8.31 J/mol\*K.

Universal Gas Constant (accept molar or ideal gas constant)

C. This constant's value was first measured in Millikan's oil drop experiment. All isolatable particles have a certain quantity that is a multiple of this, which is approximately  $1.6 \times 10^{-19}$  Coulombs.

The Elementary positive Charge (prompt on Charge of an Electron or e)