

## RTO 2016

### Round 9

Tossups:

1. **An American Rock band from 1969. An occupation that repairs locks, metals, or other items, indicated by the name. Another name for the Alien Registration Act of 1940, which required non-citizen adult U.S. residents to register with the government. The antagonist agent of the *Matrix* movie series, (\*) who almost always wears sunglasses. A private, liberal arts women's college in Northampton, Massachusetts. A philosopher and author of *An Inquiry into the Nature and Causes of the Wealth of Nations*. FTP, give this word or name, the surname of a British explorer and admiral who helped establish Jamestown, and was said to have been saved by Pocahontas.**

#### Smith

2. **One of this author's poems is addressed to a character who, despite being male, has a "woman's gentle heart" and "woman's face with nature's own hand painted." Excerpts from six of this author's works were combined into a 2008 play by (\*) John Reed. This author lends his name to a type of poem consisting of three a-b-a-b quatrains followed by a rhyming couplet, for a total of fourteen lines. FTP, identify this British poet, whose 154 sonnets were mostly in iambic pentameter and include one beginning "Shall I compare thee to a summer's day?"**

William Shakespeare

3. **A work by this man famously states that the human soul is a synthesis of the psyche, body, and of the spirit. In that work, this man also stated that "anxiety may be compared with dizziness." In another work, Abraham wishing he didn't have to sacrifice his son shows his love for God while Agamemnon happily sacrificed his daughter for the Greek state. Similarly, this man was depressed that he had to sacrifice his love for his fiancée, Regine, to God. In addition to *Repetition*, one of his most famous works, writing under the pseudonym (\*) Victor Eremita, compares and contrasts the aesthetic, ethical, and religious lifestyles with each other to answer the question of how people ought to live. For ten points, name this Danish philosopher, the author of *Concept of Anxiety*, *Either/Or* and *Fear and Trembling*.**

Søren Kierkegaard

4. **One ruler of this kingdom was crowned by William of Sabina when he established a capital at Nidaros. During medieval times, this kingdom established colonies at Lambay and Waterford and lost a war against Richard "Strongbow." This country ruled two areas later annexed by the Kingdom of Alba and Scotland: the Hebrides and Orkney. One ruler attempted to mount an invasion through (\*) York and saw his contingent defeated by Harold Godwinson at Stamford Bridge. During World War II, this country was led by the Nazi collaborator Vidkun Quisling. For 10 points, identify this kingdom whose rulers held possessions in Ireland after the Viking raids and included Harold Hadrada and Haakon the Old.**

Kingdom of Norway (accept Kongeriket Norge)

5. **On this holiday, the piyuttim poems are added to services. According to the Talmud, the Book of Life is open on this day. Some groups celebrate this holiday with tashlikh where people cast bread or pebbles into a river. This holiday marks the end of Elul and the beginning of (\*) Tishrei. It is often preceded by a period of time where selichot prayers are recited. Apples and honey are traditionally eaten on this holiday. Shofars are traditionally blown on, FTP, which holiday that is the Jewish New Year?**

Rosh Hashanah or Yom Teruah

6. **This religion is summarized neatly in just five points.** The first is the belief that people are naturally inclined to resist God, and cannot be (\*) saved. Jacob Arminius's rejection of this led to the split between this religion and Methodism. The founder of this branch centered his work in Geneva, from which it spread to Switzerland and Scotland. For ten points, name this branch of Protestantism, which famously supported predestination.

Calvinism

7. **This author wrote about a woman who is accused of lying in bed with her father's dead body, sucking his fingers. This author also wrote about the death of marigolds planted by Claudia and Frieda in parallel with the death of a newborn. In another novel, a woman attacks an unknown man with an ice pick. The author of A Mercy and (\*) Paradise wrote about Milkman Dead the third and Pecola Breedlove, in addition to writing a novel in which 124 Bluestone road is haunted by a ghost eventually spoiled by Sethe. FTP, name author of Song of Solomon, The Bluest Eye, and Beloved.**

Toni Morrison or Chloe Wofford

8. **This time period was established by the Council of Tours. In the Mozarabic Rite, blue is worn, as it is in the Sarum Rite. During this time period, the O Antiphons are sung. In the Anglican church, the Sunday before this time period is known as stir up Sunday. On Gaudete Sunday, (\*) rose vestments are worn. The name of this time period comes from a word for the "arriving". Priests wear purple vestments on the other three sundays of this period. FTP, name this season made up of the four Sundays before Christmas.**

Advent

9. **In 1902, this man won the Nobel prize in physics for his work on the Zeeman Effect. His namesake group is a six-dimensional Lie group in Minkowski space. Einstein's 1905 paper on Special Relativity was largely influenced by this man's (\*) work, so much that the theory was originally named in part for him. He names a transformation between coordinate frames with constant relative velocity while an equation of his named for him along with George Fitzgerald states that as an object approaches the speed of light, its length contracts. FTP, name this Dutch physicist, whose namesake factor, denoted gamma, is used in length contraction.**

Hendrik Lorentz

10. **This entity is featured in a Noel (pronounced "no-elle") Coward play in which about Sir George Shottor and the island of Samolo. A famous man said of this entity, "I can calculate the movement of the stars, but not the madness of people." That man was (\*) Isaac Newton. Its financial backing was provided by the Hollow Sword Blade Company, which is owned by its creator, John Blunt. Robert Walpole's rise to power was facilitated by the scandal caused by this entity. FTP, name this "bubble" in which government debt could be traded for stock in a namesake company.**

The South Sea Company (or Bubble)

11. **The Krutzsch process produced about a ten percent aqueous solution of this compound, but was never commercialized. When threatened, bombardier beetles use enzymes to break down a mixture of hydroquinone and this compound. This compound is produced commercially by the (\*) anthraquinone process, and is also produced from the oxidation of fatty acids in organelles that are named for this compound. The liver produces an enzyme that converts 40 million molecules of this compound into water and oxygen per second. For 10 points, name this substance which is broken down by catalase and has the formula H<sub>2</sub>O<sub>2</sub>.**

Hydrogen peroxide (accept H<sub>2</sub>O<sub>2</sub> before mention)

12. This geographic feature is the origin of the Sebou River, which is the largest in its region. It is home to the shortest known viper, which grows to be just over a foot long, and to a species of gazelle named for naturalist George Cuvier, and the (\*) Kabyle people live on this mountain range. Marrakesh, Fes, and Rabat are major cities in this range, and its tallest mountain is Toubkal. FTP, name this mountain range that spans Morocco, Tunisia, and Algeria, which shares its name with the mythological sky-holding titan.

Atlas Mountains

13. When this representation is equal to its function for all  $x$  in the complex plane, it is called entire. For any polynomial, this representation is the exact same as the polynomial itself. In sigma notation, this function is the sum of the  $n$ th derivative of  $f$  evaluated at the point  $a$  times the quantity  $x$  minus  $a$  (\*) to the  $n$ th power over  $n$ th factorial. When this series is centered at zero, it's also called a Maclaurin series. For ten points, name this infinite-sum representation of a function, named after an English mathematician.

Taylor series (accept Maclaurin series before " $x$  minus  $a$ ")

14. This initialism's first-known use was in a BBS called Viewline in Calgary, Alberta, Canada in the early 1980s. An animated ASCII art image made in 2004 used this acronym to make a (\*) helicopter. A famous version of this acronym is applied to cats that contains a message; this message is often grammatically incorrect. Also, this acronym can be applied to a famous FTP, name this three-letter acronym that can vary in intensity with variations like rofl (raw-full) or lmao (luh-mow).

LOL (accept pronunciation (lawl) or (elle-oh-elle))

15. In one of this author's works Paul Bannerman is diagnosed with thyroid cancer is later quarantined. In another work, Kim Capran changes her name to Hillela. Jessica Stilwell notices an affair between Ann and Gideon. Those novels are *Get a Life*, *A Sport of Nature*, and *Occasion for Loving*. (\*) In another work, a dead body is found in Mehrling's farm. The titular character houses the Smales family in her most famous work. FTP, name this South African author of *The Conservationist* and *July's People*.

Nadine Gordimer

16. This man was once a Professor of Natural and Experimental Philosophy and Instructor of Artillery, but he was highly unpopular as a teacher and was known as "Tom Fool." His Valley Campaign (\*) was successful because it prevented Union forces from reinforcing Virginia. This man was shot by Confederate pickets and lost his arm to amputation, but actually died due to pneumonia after the Battle of Chancellorsville. FTP, name this man who received his name for standing his ground during the First Battle of Bull Run.

Thomas Johnathan "Stonewall" Jackson

17. His son was part of a camarilla that pushed him to assume more power through Article 48. He won a battle against Paul von Rennenkampf and Alexander Samsonov, causing the latter to commit suicide. For this and other successes in the East, he would be appointed to succeed a general who lost credibility at the (\*) Battle of Verdun, Erich von Falkenhayn. He would also give his name to a defensive line established after that battle. FTP, name this last president of the Weimar Republic and namesake of an airship that exploded while docking at Lakehurst Naval Air Station in 1937.

Paul von Hindenburg

18. In work by this author, Vasili Brekhunov saves his peasant Nikita during a snowstorm. In another work, the titular character dies after falling off a snow covered roof. Along with "Master and

**Man" and "Alyosha the Pot," this man wrote about the horse (\*) Frou-Frou. In another work, Pozdnyshev kills his wife but the violinist escapes. That work is "The Kreutzer Sonata." FTP name this Russian author of "The Death of Ivan Ilyich" and "Anna Karenina."**

Leo Tolstoy

**19. This poem was written at the same time as another poem with the same name by Horace Smith. Its central object has "wrinkled lip and sneer of cold command" while (\*) "lone and level sands stretch far away" from it. That central object of this poem is half sunk and has a shattered visage. The poem also describes "the hand that mocked them" and "the heart that fed." FTP, name this poem about a King of Kings described to the author by a traveller from an ancient land, by Percy Shelley.**

Ozymandias

**20. In one of this man's works, the main characters are at the Shrovetide Fair. Two major triads one tritone apart stacked upon each other is this play's eponymous chord, used in the main character's theme. In that ballet, one character challenges the (\*) Moor to a duel for the hand of the Ballerina but is slain by the Moor's scimitar. In another work, the main character frees the creatures by destroying the egg in the casket. In that play, the eponymous avian beguiles everyone and performs the "Infernal Dance." He also wrote a ballet in which the main character is the "chosen one" who dances herself to death. FTP, name this Russian composer of *Petrushka*, *The Firebird*, and *The Rite of Spring*.**

Igor Stravinsky

**21. A character in this book, whose friend dies is a car thief from Cicero, Illinois who thinks revenge is the "sweetest thing in life." The main character invites a failed (\*) science fiction author to a wedding celebration after they meet in a back alley in Ilium, New York. His experiences take him back to World War II, where he was a Chaplain's Assistant and was captured by Nazis. The story is told from the point of view of a narrator who experiences flashbacks to his former life from a distant planet where he was kept in a zoo in an enclosure meant to look like a typical home on Earth. For ten points name this novel about the titular entity in which Billy Pilgrim survives the Dresden firebombing authored by Kurt Vonnegut .**

Slaughterhouse-Five or the Children's Crusade

**Bonuses Round Nine:**

1. FTPE, name the Shakespeare play given 5 main characters

A.

Claudius, Gertrude, Polonius, Ophelia, and Horatio

**Hamlet**

B. Duke Frederick, Rosalind, Celia, Touchstone, Le Beau

**As You Like It**

C. Benedick, Don Pedro, Claudio, Leonata, Borachio

**Much Ado About Nothing**

2. FTPE, name these orders of insects given their literal translation and insects found in each order.

A.

Mosquitoes and flies belong to this order which translates to "two wings."

**Diptera**

B. Butterflies are a part of this "scaly wings" order.

**Lepidoptera**

C. You'll find termites in this order, whose name means "equal wings."

**Isoptera**

3. For ten points each, answer these questions about estuaries.

A.

Estuaries form a transition environment between these two types of water.

**fresh** and **salt** water (accept **rivers** and **oceans**)

B. This main category of primary producer in estuaries includes examples such as diatoms and dinoflagellates. Its name derives from the fact that they live in the euphotic zone of a body of water.

**Phytoplankton**

C. This type of estuary is formed in a glacier-eroded valley. Examples can be found in the Puget Sound and in Washington state.

**Fjord-type** estuary

4. FTPE, identify these paintings with prominent orange suns.

A.

This Monet painting shows an orange sun amidst smoke from factories and several ships. The hazy painting style identifies it with a similarly named movement.

**Impression: Sunrise**

B. This artist's *Nocturne: Blue and Gold--Southampton Water* also depicts a orange sun amidst boats. He famously named most of his pieces similarly to music.

James Abbott McNeill **Whistler**

C. While suns aren't technically depicted, this Vincent Van Gogh series depicts the title object, frequently in a vase.

**Sunflowers** (accept obvious equivalents, like the **sunflower series**)

5. FTPE, name some books that will keep you warm and toasty on long winter nights.

A.

This novel by Ray Bradbury describes a dystopian society in which books are outlawed and burned if found. It surrounds Guy Montag.

**Fahrenheit 451**

B. In this 1st part of a renowned epic poem, the "author" is lead through hell by the Roman poet Virgil, and sees men such as Judas the Betrayer suffering in the worst section of hell.

Dante's **Inferno**

C. In this second installment of the Kane Chronicles, author Rick Riordan tells the tale of Carter and Sadie Kane, human hosts of the ancient Egyptian gods Horus and Isis, and their continued quest to stop chaos, or Apophis, from destroying the earth.

The **Throne of Fire**

6. FTPE: Answer these questions about the leader of the Silver Hand.

A.

This man was the leader of the Silver Hand and fought against the Horde in the second war.

**Uther** the Lightbringer

B. Uther was killed by this man, his former student, that later became the Lich King

Prince **Arthas**

C. After Uther's death, this man commanded the Silver Hand. He wields the Ashbringer.

**Tirion** Fordring

7. For ten points each, answer these questions related to Donald Trump.

A. Trump's famous NBC reality show launched this spinoff in 2008 and has featured such participants as Dennis Rodman and Khloé Kardashian

The **Celebrity Apprentice** (Do not prompt on Apprentice)

B. Trump has fought off allegations that he deliberately hired foreign workers instead of Americans at this Florida club in Palm Beach

**Mar-a-Lago**

C. Trump attended this Ivy League university, founded by Benjamin Franklin.

The **University of Pennsylvania** (**UPenn**) Prompt on "Wharton School".

8. FTPE answer some questions on different art movements.

A.

This movement, also known as "late baroque" begun in the 18th century and featured artists such as Jean-Antoine Watteau, Giovanni Battista Tiepolo, and Jean-Baptiste Fragonard.

**Rococo**

B. Works in this movement feature an upside down urinal and bicycle wheel

**Dada**

C. This art movement in America during the mid-19th century often depicted the Catskill, Adirondack, and White Mountains. Artists from this movement include Thomas Cole and Asher Durand.

**Hudson River** School

9. The Iliad was an epic written by Homer. FTPE answer the following questions about characters in the Iliad whose first name started with the letter "p."

A.

This man was tricked by Athena, and shot at Menelaus.

**Pandarus**

B. This man was the king of Troy.

**Priam**

C. This man was the first Greek to step foot on the beaches of Troy.

**Protesilaus**

10. This phenomenon oscillates along with the magnetic field to form light.

A.

FTPE, name this phenomenon symbolized E and measured in Newtons per Coulomb or Volts per meter.

**Electric Field**

B. This inverse square law can be used to determine the electric field from point charges.

**Coulomb's** law

C. This effect describes how the electric field can alter the spectral lines emitted by atoms and molecules.

**Stark** effect

11. FTPE, answer these questions about...

A.

This painting technique which involves painting tiny little dots in patterns to create an image. Paintings created by this technique are analogous to the CMYK printing process.

**Pointillism**

B. *Woman with Umbrella* and *The Port of Saint-Tropez* are by this famous developer of pointillism.

George **Signac** (sin-yak)

C. This other famous pointillist worked with George Signac (sin-yak) and painted him a couple times. His paintings show realistic scenes such as a bath and a fishing hole.

Georges-Pierre **Seurat**

12. We all know it's the easiest way to make a story sad. FTPE, name these novels where dogs die.

A.

In this novel, Fanny the springer spaniel is hung by a handkerchief on a bridle hook. She is found by Nelly Dean, who narrates this novel about Thrushcross Grange and the title estate.

**Wuthering Heights**

B. Quite a few dogs die in this novel, killed by the title animal who is bought and forced to dogfight. He learns to fight after being bullied by Lip-lip in a Native American camp.

**White Fang**

C. The dog Argos dies in this novel after his master returns home.

The **Odyssey**

13. For ten points each, name these Platonic dialogues.

A.

This dialogue occurs the day before Socrates's execution. The person whom the dialogue is named after tries to convince Socrates to escape prison in order to live.

**Crito**

B. In this dialogue, Socrates is brought out in front of a crowd in order to defend himself against the accusations of the Athenian government declaring that Socrates was corrupting the minds of the youth. Socrates at one point in this dialogue notably compares himself to a social gadfly.

**Apology**

C. According to Walter Hamilton, this is the most perfect Socratic dialogue. It was in this dialogue that Plato first discusses his Theory of the Forms.

**Symposium**

14. FTPE Answer these questions about the Count of Monte Cristo

A.

This author of the Count of Monte Cristo also wrote the Three Musketeers.

Alexander **Dumas**

B. Give the real name of the man who seeks revenge against men like Fernand and Danglars

**Edmond Dantes** (accept either)

C. Dantes is imprisoned for supposedly supporting this political view. The father of Villefort, the



judge who condemns him, also holds this political view.

**Bonapartism** (accept **supporting Napoleon** or logical equivalents)

15. FTPE Name some famous cathedrals.

A.

This Cathedral in Paris is the setting of a Victor Hugo novel.

**Notre Dame**

B. This Moscow cathedra that was built to commemorate the victory over Napoleon was destroyed by the Soviets for its golden onion domes and to build the Palace of the Soviets that was never built. It was rebuilt after the fall of the Soviet Union

**Cathedral of Christ the Saviour**

C. This Italian Cathedral, named for the city it's in, the capital of Lombardy and second most populous city in Italy, is dedicated to St. Mary of Nativity and took nearly six centuries to build. Its tallest spire is capped by a golden statue of the Madonna and is called the Madonnina.

**Milan Cathedral**

16. FTPE name these drugs.

A.

This drug was first synthesized by C.R. Alder Wright by adding two acetyl groups to a molecule of morphine. Despite being advertised as a non-addictive morphine substitute, it has a high rate of dependence.

**Heroin** (accept Diamorphine)

B. This psychoactive drug is named for its euphoric and emotional feeling after consumption.

**Ecstasy**

C. This Opioid is a prescription drug that is synthesized from thebaine that itself is found in the Persian Poppy

**Oxycodone** (accept **Oxycottin** or **Oxycontin**)

17. FTPE, answer these questions about the uterus.

A.

The uterus is lined with this blood-like layer. Over the course of the menstrual cycle, it becomes thicker until it is eventually shed.

**endometrium**

B. A Pap smear is a method of detecting cancer of this bottom part of the uterus, cancer which is sometimes caused by HPV. This part is what is dilated during childbirth.

**cervix**

C. Opposite from the cervix is this top, rounded part of the uterus. The height of this is a crude indicator of abnormalities in childbirth, like twins or a baby in the breech position.

**fundus**

18. For ten points each, answer these questions about drugs.

A.

This drug, also used to treat ADHD, has chemical formula  $C_{10}H_{15}N$  and is sold under the brand name Desoxyn. It is also called "crank," "chalk" or "speed."

Crystal meth

B. This drug, also called "acid," is a psychedelic, non-addictive recreational drug that was initially synthesized from a grain fungus.

LSD

C. This is the name of the fungus from which LSD is synthesized. It is parasitic on grasses, cereals, and oats.

Ergot fungus

19. This theory implies the existence of black holes. FTPE,

A.

Name this theory in modern physics that replaced a previous theory of gravitation. Parts of it include time delay and lensing and it was developed by Albert Einstein.

General Theory of Relativity (do not accept "special theory of relativity")

B. Albert Einstein apologized in his memoirs to this famous physicist. This man's notation for derivatives, usually used in physics, uses fluxions. However, it is only used for the first and second time derivatives.

Sir Issac Newton

C. Issac Newton proved this theorem using calculus. It simplifies the effects of gravity on objects inside or outside of a spherically symmetrical object.

Shell Theorem

20. FTPE: Answer these questions about the provinces of China.

A.

This province, with a capital at Cheng Du, is known for its spicy food.

Sichuan (suh-schwan)

B. This province contains the Terracotta Army, and has a capital at Xi An.

Shaan Xi

C. This autonomous region has a capital at Lhasa. The current Dalai Lama was born here.

Tibet

21. FTPE, answer some questions about speech.

A.

This term is used to describe any speech or language deficiency resulting from damage to the brain, common in stroke victims.

Aphasia

B. This type of aphasia is characterized by misuse and not comprehending the meanings of words. It

is named after the affected part of the brain, located in the temporal cortex.

**Wernicke's** Aphasia

C. People with this other type of aphasia have difficulty forming words and sentences, but have little trouble with comprehension. It is also sometimes named for the affected area of the brain, located in the left frontal lobe.

**Broca's** Aphasia (or expressive or motor aphasia)