

TOSSUPS – ROUND THIRTEEN

DENNIS HASKINS OPEN MARCH 2005 (UTC/CWRU)

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1. Born in 1265 in Florence, this writer began a study of philosophy around 1290 after the sudden death of his wife, Beatrice. About the same time, he began to intensify his political roles in Florence. In 1302, he was exiled by the Black Guelphs. While exiled, he wrote a work in three parts: *Inferno*, *Purgatorio*, and *Paradiso*. FTP, name this famous Florentine, who wrote *The Divine Comedy*.

Answer: **Dante Alighieri**

2. Bernard Courtois discovered this element after adding sulfuric acid to a sample of kelp and observing a purple vapor being released and named it for the Greek word for "violet colored". Commercial applications include photographic paper and cloud seeding from one of its compounds with silver, and medically it is used to test for thyroid disease treating goiter and was the most common antiseptic for many years. FTP what is this violet-black halogen with atomic number 53 and chemical symbol I?

Answer: **Iodine**

3. This creature is referred to in Ugaritic mythology where it is usually associated with the god Yam. It is also mentioned in the Old Testament in Psalms, Job, and Isaiah, and Jews include it in their final prayer at the festival of Sukkot. It also appears in several of the Final Fantasy games and in the Sci-Fi series of Farscape as a class of space vessel. Ever since Moby Dick, however, it has been associated with the Sperm Whale. FTP, name this Biblical sea-monster, the title of a book by Thomas Hobbes.

Answer: **Leviathan**

4. He was born in New Lebanon, NY, on February 9, 1814 and after being educated at Yale started his legal practice. Through this he became rich, and decided to turn his interest to politics as he served as the chairman of the Democratic state committee. He was elected governor, and soon became known for his aggression towards corruption, especially that of Tammany Hall and Boss Tweed and other forms of graft. However, this did not stop him being on the short end of one of the most corrupt presidential elections in US history. FTP, name this man who probably should have been president when the House of Representatives gave the office to Rutherford B. Hayes instead.

Answer: **Samuel Tilden**

5. Tall spindly trees with no leaves are in the foreground, with jutting peaks in the back right corner, and skaters on frozen ponds below. The artist uses atmospheric perspective, typical of northern renaissance paintings, to create distance between the mountains and the houses in the right foreground. Men with spears and dogs trod over a winter landscape in, FTP, what 1565 painting from a series depicting man's activities in different months of the year by Pieter Bruegel.

Answer: **Hunters in the Snow**

6. Founded in 1885, it proposed economic reforms as well as greater involvement for the indigenous peoples in the political process. By 1907 it had split into a moderate dominion-seeking faction under Gopal Krishna Gokhale and a more staunchly separatist wing led by Bal Gangadhar Tilak. In 1920 it began following Gandhi's urgings and began a path of passive resistance in pursuit of independence. FTP name this group, long headed by Jawaharlal Nehru, the oldest political party in India.

Answer: **Congress Party or Indian National Congress**

7. It was written for the author's wife on their 12th wedding anniversary in 1940 and was not released until 1956, after its author's death. By the action, the men are nearly passing out as a result of drunkenness. Most of the action comprises infighting among the characters, including morphine addict Mary and tuberculosis-ridden Edmund. For ten points name about the Tyrone family written by Eugene O'Neill.

Answer: **Long Day's Journey Into Night.**

8. Jimmy was raised by animals in the Amazon, who taught him how to fight. After many years, he ventured into the real world and challenged local fighters. Eventually, Jimmy ended up in the World Warrior's tournament, to not only test his skills, but to help discover his origin. He lost to Ken, but his mother recognized him, although his form had been altered. FTP, name this electrified green fighter from the Street Fighter series.

Answer: **Blanka**

9. Caused by the insufficient specificity of the enzyme that converts ribulose biphosphate to 3-phosphoglycerate, it can be combated by using the PEP carboxylase or by incorporating carbon dioxide into organic acids at night. C4 and CAM plants thus avoid this process that generates no ATP and siphons off organic material. For ten points, what counter-productive process uses oxygen in place of carbon dioxide in the Calvin cycle and is named for the fact that it occurs in the light and consumes oxygen?

Answer: **photorespiration**

10. It produced China's most famous historian: Sima Qian, whose *Historical Records* included a detailed chronicle of emperor Wu Di. Tributary system was inaugurated, paper and porcelain were invented, and Confucian scholars returned to civil service. Emerging with capital at Chang'an, it was interrupted by the reign of reformer Wang Mang. FTP name this dynasty beginning in 206 B.C. that gives its name to the ethnic majority of China.

Answer: **Han**

11. At first glance it seems like a violation of the Second Law of Thermodynamics. Its explanation is that the information needed to conduct it has its own entropy, and that the increase in entropy of maintenance of this simple memory would more than make up for the decrease in entropy due to the heat flow. It postulates a perfectly insulated container of gas partitioned into two equal sides, each in thermal equilibrium with the other, with a small trap door operated by a tiny mischief maker. FTP name this hypothetical experiment illustrating the concepts of entropy, named for its British creator.

Answer: **Maxwell's demon**

12. Individuals in the story of this northern community include Prudence Alcott, the leader of a group of Unitarian missionaries who were the first white folk to spend time in the region; Henry Francis Watt, a somewhat misguided member of that group of missionaries who would later return to found New Albion, the community's original name; and Magnus Oleson and Oskar Tollefson, early leaders of the Norwegian community. More recent stories center around characters like Florian Krebsbach, Clint and Clarence Bunsen, Norwegian bachelor farmers, and Father Emil of Our Lady of Perpetual Responsibility. FTP, what is the name of this Minnesota community, the product of Garrison Keillor's brilliant imagination?

Answer: **Lake Wobegon**

13. If family decrees had allowed, when the Hapsburg prince Rudolph died, the right of succession would have passed to his daughter Elizabeth. Instead Franz Joseph I's brother Charles Louis became heir apparent. On his premature death in 1896, next in line was his anti-Semitic and anti-parliamentary eldest son, whose intense zeal for military matters contributed to his unpopularity but also led to his appointment as inspector general of all land and sea forces. This explains his presence in Bosnia to review maneuvers. FTP name this Hapsburg prince, assassinated on June 28, 1914 in Sarajevo by Gavrilo Princip.

Answer: **Archduke Franz Ferdinand**

14. A descendent of indentured servants who immigrated to Trinidad, he studied at the University of Oxford and settled in England. His earliest novels are set in Trinidad including his first, *The Mystic Masseur*, and the one that won him major recognition, *A House for Mr. Biswas*. His subsequent work explores the personal and collective alienation experienced in new post-colonial nations. *In a Free State* won him the 1971 Booker Prize, and he was knighted in 1989. FTP, name this novelist who won the 2001 Nobel Prize.

Answer: **Sir Vidiadhar Surajprasad Naipaul**

15. This great king and lawmaker was made a judge of the dead after his own death. He fathered Ariadne and Phaedra with his wife Pasiphae, but he did not father the minotaur, her most famous offspring. His mother was Europa, who was spirited, by his father Zeus in the form of a Bull to the island he would eventually rule. FTP, name this Cretan king, who trapped Daedalus, Icarus and Theseus in the Labyrinth?

Answer: **Minos**

16. Lord Enrico Ashton is outraged to find that his sister is in love with his mortal enemy, Sir Edgardo di Ravenswood. He wants his sister, the title character, to marry Lord Arturo Bucklaw instead, but she pledges herself to Ravenswood. Enrico disrupts their wedding and Raimondo commands that he and Edgardo should fight a duel. Arturo is killed by the title heroine and she, having gone mad and believing herself in heaven, kills herself by falling from Wolf's Crag Tower. Edgardo hopes the duel will take his own life because of his sister's betrayal, but, finding out she has died, kills himself in, FTP, what opera by Gaetano Donizetti?

Answer: **Lucia Di Lammermoor**

17. His zeta function is used to aid in determining the distribution of prime numbers. His mapping theorem states that if U is a simply connected open subset of the complex plane, that there is a bijection from U to the open disk. For ten points, name this mathematician more well-known for his hypothesis and his integral of sums.

Answer: Georg Friedrich Bernhard **Riemann**

18. It had been weakened by attacks from its neighbors, so in 1863 its king placed it under French protection, which led to full French control by 1887. It became fully independent in 1953. While a ceasefire and democratic elections were mandated by the 1991 Paris Peace, it took till 1999 to remove the last vestiges of Khmer Rouge rule. FTP name this Southeast Asian country, home to the famous ruins of Angkor Wat, with its capital at Phnom Penh.

Answer: **Cambodia**

19. This substance's identity was confirmed by Otto Loewi. The experiment to identify the substance involved bathing a beating frog's heart in it; the resulting decrease in heart rate showed that the release of this chemical by the vagus nerve was controlling the heart rate. This neurotransmitter works with muscarinic and nicotinic receptors and is the primary neurotransmitter involved with muscular contraction. For ten points name this neurotransmitter directly linked to Alzheimer's disease.

Answer: **acetylcholine**

20. In the first the hero sets for on a merchant venture, but quickly realizes that the island he landed on is really a whale. The second tells of his adventure with a Roc and a trip into the valley of diamonds. The fifth he is tricked by the old man of the sea into carrying him across a river, but then the old man will not get off, until the hero gets him drunk and kills him. The Seventh tells of the hero's adventures among men who sprout wings once a year and turn out to be brothers of Satan. FTP name these fantastical voyages recounted in the *One Thousand and One Nights*, named for the titular seaman.

Answer: The Seven Voyages of **Sinbad** the Sailor

21. There's an island and a sports franchise named after them in California. The elemental one rules over games of chance while the highest ranking one rules over the waters. Their existence was reasserted by John Paul II in 1986. One of them brought Allah's word to Prophet Muhammad, another handed down the Ten Commandments to Moses, and another came down to Earth to tell Mary that she is bearing the son of God. FTP name this supernatural being intermediate between God and humans.

Answer: **angels**

22. Their atomicity and isolation can be ensured by time-stamping, validation, two-phase locking, and other concurrency control mechanisms. Their durability can be ensured by redo logging, undo logging, checkpointing, and other recovery management mechanisms. For ten points, these are what atomic groups of queries or data manipulation actions--such as withdrawals from ATM machines--that must be executed completely or not at all--and must not be interleaved with other actions on the same data--in a database system?

Answer: transactions

23. Its creator and namesake served on the Economic Policy Advisory Board for both of President Reagan's terms. It helped inspire the Kemp-Roth Tax Cut of 1981, and has a value of 0 for both 0% and 100%. At some point "t-star" between those two extremes, it takes on a maximum value. Those who believe that the current tax rate is to the right of t-star argue that decreasing tax rates will increase government revenue. Important to supply-side economics, this is what eponymous curve?

Answer: Laffer Curve

1. A woman's 1844 poem "Lady Geraldine's Courtship" mentions another poet, whom she would later marry. FTPE:
1. All or nothing, name both those poets.

Answer: Elizabeth Barrett Browning (Moulton) (accept either underlined name); Robert Browning

2. For ten points, "Lady Geraldine's Courtship" makes explicit reference to what "blood-tinctured" fruit, paired with "bells" in a Robert Browning work?

Answer: pomegranates

3. The American edition of the volume that included "Lady Geraldine's Courtship" had an introduction by this poet, who may have borrowed its trochaic octameter and trochaic heptameter for his most famous work.

Answer: Edgar Allan Poe (the work is "The Raven")

2. FTPE identify the Russian czar:

[10] This czar ruled from 1682 to 1725, stood nearly 7' tall, won the Great Northern war against Sweden, and attempted to modernize the backward country he inherited.

Answer: Peter the Great [Accept: Peter I]

[10] This czar ruled from 1762 to 1796, took great interest in the French Enlightenment, corresponded with Voltaire, read the works of Montesquieu, and some say loved horses far too much.

Answer: Catherine the Great [Accept: Catherine II or Sophie of Anhalt-Zerbst]

[10] This czar ruled from 1801 to 1825, considered himself an enlightened reformer in the early part of his reign, and attended the Congress of Vienna.

Answer: Alexander I

3. Astronomy stuff FTPE:

In the early 20th century the astronomer Vesto Slipher noted that absorption lines in the spectra of most spiral galaxies were longer than those observed from stationary objects. What is the name given to this 'shift' which appears when galaxies or objects are moving further away from our own galaxy?

Answer: Red Shift

In the 1920's this astronomer noted that the further a galaxy is from the Milky Way, the faster it was moving away. His namesake parameter tells us how fast a galaxy at a given distance is receding from us.

Answer: Edwin Hubble

Although rarely occurring, there is another type of 'shift' which occurs when a galaxy, instead of moving farther away from the Milky Way, is actually moving closer. Perhaps the most famous example is the Andromeda Galaxy, which exhibits a shift of this color.

Answer: Blue Shift

4. In Greek myth, Heracles was assigned to perform ten labours, but he did twelve because two didn't count. FTP each:

A. Killing this beast didn't count because of help from Iolas, who used a white-hot brand to keep it from regenerating.

Answer: the Hydra of Lerna

B. Involving the use of diverted rivers, which labor was rejected because Heracles performed it in return for payment?

Answer: cleaning the stables of Augeus (accept wide variety of variants) (prompt on "fifth labour")

C. In his first labour, which did count, Heracles strangled what creature and later wore its invincible skin?

Answer: the Nemean lion or lion of Nemea

5. Answer the following about Jacques Offenbach, FTPE.

(10) Offenbach was one of the leading composer for the operetta form. Name the other notable operetta musician, a Viennese who was inspired by Offenbach to write music for his Waltz-filled dramas.

Answer: Johann Strauss, Jr.

(10) Offenbach's most famous operetta is this mythologically inspired work with an overture by Carl Binder. It famously quotes the catchy can-can.

Answer: Orpheus in the Underworld; or Orphee aux enfers

(10) Offenbach's serious unfinished opera was completed by Guiraud. It boasts of a Barbier and Carre libretto based on a set of famous stories.

Answer: The Tales of Hoffman; or Les contes d'Hoffmann

6. Identify these works by Virginia Woolf, FTPE.

(10) The preparations for a party conjures up the title character's experiences at different times in her life.

Answer: **Mrs. Dalloway**

(10) Multiple perspectives of different characters reveal their relationship to the dead Percival while ten interludes construct the passage of a single day from morning to night.

Answer: **The Waves**

(10) This essay examines the history of literature written by women and the famous anecdote of Woolf being forbidden entrance to a university library because she was female.

Answer: **A Room of One's Own**

7. Identify the following neurotransmitters for 10 points each

a) This neurotransmitter is synthesized from the amino acid Tryptophan and is involved with aggression and anxiety.

Answer: **serotonin** or **5-HT**

b) Adrenaline is another name for this neurotransmitter.

Answer: **epinephrine**

c) Deficits related to this neurotransmitter are responsible for Parkinson's disease and is also thought to be associated with feelings of reward.

Answer: **dopamine**

8. Songs from the "Napoleon Dynamite" Sound Track FTPE:

[10] This song by Cyndi Lauper is played when Napoleon and Deb are dancing.

Answer: **"Time After Time"**

[10] This is the Bette Midler song that Napoleon signs with the Happy Hands Club.

Answer: **"The Rose"**

[10] This song by "When in Rome" is played over the closing credits.

Answer: **"The Promise"**

9. For ten points each, identify the following acts concerning Native Americans.

a) Passed in 1830 and signed by Andrew Jackson, this act provided for the exchange of Native American tribal lands for lands west of the US states.

Answer: **Indian Removal Act**

b) Enacted in 1887, this act divided up reservations into land given to individual tribe reservation members. Though intended by some to help them it primarily served to open up their lands to white settlers.

Answer: **Dawes Act**

c) Passed in 1924 as part of the New Deal, this act reversed the privatization of lands created by the Dawes Act.

Answer: **Indian Reorganization Act**

10. He built Vienna's most utilitarian house, a rectangular, gray, piece of slab, but is more famous for writing a numbered treatise while fighting in World War I espousing the logical commonalities of the external world and linguistic representations.

(10) For 10, name him.

Answer: Ludwig **Wittgenstein**

(10) For another 10, he claims to be the last working member of what profession, whose daily duties are intermingled with head-scratching, finger-pointing, and dining with chopsticks.

Answer: **philosophy**; or **philosopher**

(10) Name the work Wittgenstein sent to Bertrand Russell while a prisoner-of-war, a set of propositions beginning with "The world is all that is the case" and ending with "What we cannot speak about we must pass over in silence."

Answer: **Tractatus Logico-Philosophicus**; or **Treatise on Logical Philosophy**; or **TLP**; or **The Tractatus**
(you need the "The")

11. Never mind title characters; name these works with title buildings from clues FTPE:

a) In fairness, the would-be owner's name is also included in this whimsical 1961 V.S. Naipaul novel set in Trinidad

Answer: **A House for Mr. Biswas**

b) Considered the first Gothic novel, any plot summary of this Horace Walpole work sounds ridiculous even before you note that Isabella's father, is called the Knight of the Gigantic Saber.

Answer: **The Castle of Otranto**

c) In this E.M. Forster novel, Mrs. Wilcox wills the title residence to Margaret Schlegel, who never learns this but winds up there anyway as the second Mrs. Wilcox. Bad things happen to poor Leonard Bast so the author can denounce society's hypocrisy.

Answer: **Howards End**

12. Identify the following figures related to genetics, FTPE.

1. He published the first textbook on Mendelian genetics in 1905, and he worked with William Bateson to discover some of the fundamental processes of Mendelian genetics. His namesake squares show the probable results of genetic crosses.

Answer: **Reginald Punnett**

2. Maurice Wilkins received the Nobel Prize for doing the same X-ray diffraction work that she did. But she died of cancer at age 37, probably costing her a share in the Nobel Prize received by Wilkins, Watson, and Crick.

Answer: **Rosalind Franklin**

3. This paleontologist and evolutionary biologist worked with Niles Eldredge to create the revision of Darwinism known as punctuated equilibrium.

Answer: **Stephen Jay Gould**

13. *Rolling Stone's* list of the 500 Greatest Songs of All Time has some interesting choices, but there were some picks that puzzled your question author. Identify the following artists from the list FTSNOP.

5) Only three songs from the list have been released in the 21st century, including Outkast's "Hey Ya!" and two tracks from this artist, "Stan" and "Lose Yourself".

Answer: **Eminem**

10) Although your question author thought it was cool that this band's "Pictures of You" was selected, he didn't think it deserved to be over 200 spots higher than "Just Like Heaven."

Answer: **The Cure**

10) One intriguing inclusion was the track "Fake Plastic Trees" from the album *The Bends*, which was of two songs chosen for this list from this band.

Answer: **Radiohead**

5) This band had three songs on the list, but each one was in ranked in the 300's. Interestingly, none of the songs came from *Dark Side of The Moon*.

Answer: **Pink Floyd**

14. For the stated number of points, answer the following about Niagara Falls.

5) The Niagara River that feeds the falls is not actually a river since it runs between two large bodies of water. For five points, what is the correct designation of such a waterway?

Answer: **Strait**

5/5) For five points each, which two Great Lakes are connected?

Answer: **Lake Erie and Lake Ontario**

5/5/5) Niagara Falls is actually composed of three separate falls. Name each of them for five points each.

Answer: **Horseshoe Falls, American Falls, and Bridal Veil Falls**

15. Identify these South Korean leaders, FTPE.

1. This founder and first president of South Korea was driven from power after a 1960 student uprising.

Answer: **Syngman Rhee**

2. This major general seized control in October 1979. Elected president in 1981, he would eventually be pardoned after being given the death sentence for his role in the 1979 coup.

Answer: **Chun Doo Hwan**

3. In 1997, he became the first opposition leader to become South Korea's president, and he has the same surname as the leader of North Korea.

Answer: **Kim Dae Jung**

16. Answer the following questions about photosynthesis, FTPE.

1. An atom of this metallic element is at the center of the porphyrin [pour-fur-in] ring in *chlorophyll a* and *chlorophyll b*.

Answer: magnesium

2. Photosynthesis could not occur without this effect which (as we noted earlier) was discovered by Heinrich Hertz, and Albert Einstein won the Nobel Prize in 1921 for explaining it.

Answer: photoelectric effect

3. In this path, carbon dioxide is taken in through the stoma at night and converted to organic acids. It is used by some water-storing plants such as cacti.

Answer: CAM or crassulacean acid metabolism

17. Literary terms FTPE.

(10) Espoused by Rousseau, it is a pure and honorable primitive human being uncorrupted by society and social values.

Answer: noble savage

(10) Explained in a poem by Kipling, it is a justification for the imperialist aspirations of European nations, to purify and Christianize primitive cultures.

Answer: white man's burden

(10) Exemplified by Goethe's *Wilhelm Meister's Apprenticeship*, it's a novel following the development of a young person.

Answer: bildungsroman; or education novel

18. Let's say that the statement Q implies the statement P. For ten points each, answer the following.

a) What type of assertion is "NOT P implies NOT Q"?

Answer: **Contrapositive**

b) What type of assertion is "NOT Q implies NOT P"?

Answer: **Inverse**

c) What type of assertion is "P implies Q"?

Answer: **Converse**

19. Given a cult from the 20th century, name its infamous leader FTPE:

[10] Branch Davidians

Answer: David Koresh

[10] The People's Temple

Answer: Jim Jones (James Jones is acceptable)

[10] The Solar Temple

Answer: Luc Journet

20. Name these ballerinas for ten points each.

1. This Native American from the Osage tribe was briefly married to choreographer George Balanchine. She was honored by the Kennedy Center in 1996 for her contributions to dance.

Answer: Maria Tallchief

2. Born Peggy Hookham in England in 1919, this dancer, noted for her partnership with the much younger Rudolf Nureyev, was the most famous British ballerina of the 20th century. She was knighted in 1956.

Answer: (Dame) Margot Fonteyn

3. This red-haired beauty retired at the age of 27 and was often overshadowed by Fonteyn, but film buffs remember her for starring roles in the classic British films "The Red Shoes" and "Peeping Tom."

Answer: Moira Shearer

21. Name these characters from *Crime and Punishment*, FTPE.

(10) He was the friend of Roskolnikov whose drinking made his wife Katerina Ivanovna drag him by his hair. He dies after being run over. Roskolnikov helps to pay for his funeral and comforts his family.

Answer: Marmelodov

(10) Along with Kolya and Lida, she is a child of Marmelodov. She resorts to prostitution to support the family. Roskolnikov falls in love with her and they endure Siberia together.

Answer: Sonia or Sofya Semyonovna

(10) Roskolnikov confessed to this man, the explosive lieutenant, who earlier started the rumor that Roskolnikov is the culprit when he saw him faint when the police discussed the murder.

Answer: Ilya Petrovich; either name acceptable

22. Name the musical groups FTPE.

(10) Consisting of Milhaud, Honegger, Poulenc, Auric, Durey, and Tailleferre, they admired popular music, rejected romanticism, and honored the Frenchman Eric Satie.

Answer: Les Six

(10) Consisting of Balakirev, Cui, Borodin, Mussorgsky, and Rimsky-Korsakov, this mighty handful composed nationalist music for Russia.

Answer: The Five

(10) Consisting of Schoenberg, Berg, and Webern, this school used the 12-tone method of composition to write atonal music.

Answer: The Second Viennese School