## Playoff Round 3

Questions by Case Western Reserve University (Anthony de Jesus)
TOSSUP 1 (Fine Arts)
With the violin, cello, and piano, it is the fourth instrument in Olivier Messiaen's Quatour pour la fin du temps, while with nine strings, piano, bassoon, and flute, (*) it is the thirteenth player in the original score for Aaron Copland's Appalachian Spring. It has the introductory solo in Gershwin's Rhapsody in Blue. FTP, name this reed instrument played by Sabine Meyer and Richard Stolzmann.
ANSWER: clarinet
TOSSUP 2 (General Knowledge/Miscellaneous/Multidisciplinary)
Introduced in $1980, \mathbf{2 5} \%$ of them now include lemon tea or apple cider. Additional new options include black bean burrito, salsa chicken, (*) vegetarian pasta, and beef teriyaki to keep up with changing tastes. FTP, $\$ 6.22$ is the price of what approximately 1300 calorie items with a shelf life of 3 years that come in thick brown plastic pouches, made for soldiers?
ANSWER: MRE's or meals ready to eat (do not accept "meals rejected by Ethiopians") (or "Twinkics" - answand by Peter
TOSSUP 3 (History)
A 1953 article in the Harvard Law Review by Robert H. Jackson included a memorandum on this item, in which FDR objected to part of it on constitutional grounds. Roosevelt did not dispute it publicly, (*) not wishing to alienate his friends, but he had strong misgivings on allowing Congress to use a concurrent resolution to terminate the President's emergency authority. FTP, name this 1941 piece of legislation, designed to help the Allies financially.
ANSWER: Lend Lease Act

## TOSSUP 4 (Science)

Molten cryolite is an effective conductor of electrical current, so it is used as a solution in this electrolytic process, which uses graphite rods as anodes. Oxygen is deposited at one (*) and released as carbon dioxide, and the molten metal is deposited at the other. FTP, name this method, which can follow the Bayer process, and which made relatively affordable the large-scale production of aluminum.
ANSWER: Hall-Heroult process
TOSSUP 5 (Geography/Social Sciences)
Stads, Helgeands, and Riddar Islands make up the Old Town, or Gamla Stan, of this city located at the junction of Lake Mälar and Salt Bay. Bridges connect Gamla Stan (*) to the mainland of Uppland and Södermanland in this city noted for its beauty. FTP, name the second largest port in the country behind Göteborg, the largest city in Sweden.
ANSWER: Stockholm
TOSSUP 6 (Literature)
In Thomas Love Peacock's Nightmare Abbey, it is a character based on Mary Shelley. Another by the same name is based on Ester Johnson, who was possibly the niece of (*) Jonathan Swift. Swift wrote a Journal to this character. FTP, what is also the name of a character based on Penelope Devereaux, daughter of the first Earl of Essex, and one of the title characters of a sonnet sequence by Sir Philip Sidney along with Astrophel.

## ANSWER: Stella

TOSSUP 7 (Philosophy, Religion, Mythology)
Every ten days, the students here elected one from their numbers to supervise this school, which tended more to the natural sciences and biology, than to $\left(^{*}\right)$ mathematics and philosophy. Named after the protector of the flock against the wolf, FTP, name this Athenian school established by Aristotle.
ANSWER: Lyceum or Peripatetic School [Named after the athletic fields which was part of the grounds of the temple of Apollo Lyceus.]

TOSSUP 8 (Literature)
The skipper of this schooner ignores the warnings of an old Sailor, who fears a hurricane, and ends up dead, "lashed to the helm, (*) all still and stark, with his face turned to the skies," not answering the questions of the daughter he has bound to the mast. Swept by the wind to the reef of Norman's Woe, FTP, name this ship whose wreck was described by Henry Wadsworth Longfellow.
ANSWER: the Hesperus
TOSSUP 9 (History)
In 1821, she opened a school for girls in Boston. She was appointed the first superintendent of United States Army (*) nurses at the outbreak of the American Civil War, after her efforts to found or improve 32 hospitals in the country, inspired by a visit to an East Cambridge, Massachusetts jail. FTP, name this social reformer, an advocate for the mentally ill.
ANSWER: Dorothea Dix
TOSSUP 10 (Science)
In 1991, Caltech scientists bounced radio waves off this object and found an unusual bright spot at the north pole, possible evidence of ice. Because it rotates (*) almost perpendicular to its orbital plain, the insides of craters might never see the Sun, and be below $-160^{\circ}$ Celsius, while the mean surface temperature is $179^{\circ}$ Celsius. FTP, name this planet, only 58 million kilometers away from the Sun.
ANSWER: Mercury
TOSSUP 11 (Fine Arts)
At the bottom is a scene showing an army crossing the Danube on a pontoon bridge as a (*) river god looks on, just part of the more than 2500 individual figures on this 125 foot tall sculpture commemorating a victory over the Dacians. FTP, name this pillar which is both a monument and a tomb for the "Good Emperor" under whose rule the Roman Empire reached its greatest extent.
ANSWER: Column of Trajan
TOSSUP 12 (Science)
Unlike other organs, the myelinated fibers are on the outside, and the unmyelinated on the inside. When Marie-Jean-Pierre Flourens removed it from (*) pigeons, he found that death occurred. Containing several centers of the autonomic nervous system, FTP, name this body part, connected by the pons to the midbrain, and the lowest portion of the brain stem.
ANSWER: medulla oblongata

## TOSSUP 13 (Popular Culture/Sports)

Four of the American League's top 8 in this statistical category play for the Royals. Gerald Williams hit one to lead off the bottom of the 11th off Kenny Rogers in (*) Game 6 of the NLCS. Owen Wilson's 36 in 1912 is still the single-season record. Mark McGuire hit his first one in a decade this season when Tony Gwynn misplayed his shot to the wall. FTP, what is this play which usually only occurs on balls hit to right field?
ANSWER: triples
TOSSUP 14 (Literature)
During a great storm, the love of its title character says the name "Klopstock," referencing a contemporary poet known for his odes. This (*) epistolary novel inspired many satires, as well as young men dressed in blue and yellow committing suicide. The title character rationally discusses suicide with Albert, who ends up being chosen for marriage by Lotte. FTP, name this Sturm und Drang work by Goethe. ANSWER: The Sorrows of Young Werther or Die Leiden des Jungen Werther

TOSSUP 15 (Philosophy, Religion, Mythology)
He was born in Sharon township, Vermont, but he is better known for what happened while he was living with his parents in Manchester, New York. He found a (*) book bound together by rings, six inches long, six inches wide, six inches thick, with gold like pages engraved on metallic plates, buried in a hill. FTP, whose discovery led to the establishment of the Church of Jesus Christ of Latter Day Saints?
ANSWER: Joseph Smith

## TOSSUP 16 (History)

Imprisoned in Küstrin after he tried to flee to France or Holland, his accomplice, Lt. Hans Hermann von Katte, was (*) executed in his presence. Criticized, humiliated, and beaten by his martinet father, he himself would later be known for his military actions. FTP, name this example of an "enlightened despot," who invaded Saxony, Bohemia, and Silesia, while attempting to add land to Prussia.
ANSWER: Frederick II or Frederick the Great
TOSSUP 17 (Geography/Social Sciences)
Succeeding Léon Walras as chair of political economy at the University of Lausanne, he turned to sociology, arguing that lower-class individuals of superior ability (*) rose to challenge the position of the upper-class in a circulation of elites. FTP, name this economist, whose law states that most defects can be accounted for by only a few categories, and whose optimum is the foundation of modern welfare economics.
ANSWER: Vilfredo Pareto
TOSSUP 18 (Science)
The type II Meissner (MICE-ner) effect deals with the expulsion of a magnetic field from one of these. Their operation is successfully explained by the (*) BCS theory, which holds that electrons form Cooper pairs below the energy gap. Keike Kammerlingh-Onnes stumbled across the first one when he cooled aluminum to liquid-helium temperatures. FTP, name these materials in which, below the critical temperature, electrical resistance vanishes. ANSWER: superconductors

TOSSUP 19 (Current Events)
Optimistically, this company has ordered 2,494 miles in length of red satin ribbon, and 181 acres in area of wrapping paper. It has also bought four new (*) automated warehouses, under the watchful eye of founder Jeff Bezos. FTP, name this company which expects to lose $\$ 550$ million on sales of $\$ 1.5$ billion in 1999, adding sections such as home improvement, toys, and electronics, in addition to mainstays music, videos, and books, all sold online.
ANSWER: Amazon.com
TOSSUP 20 (Philosophy, Religion, Mythology)
He was the god of fifty names, such was his preeminence. He had a consort named Zarpanit. The (*) dragon with a forked tongue was sacred to this "lord of the gods of heaven and earth," according to a poem recited every New Year celebration at his shrine in Esagila, the Enuma Elish. FTP, name this chief god of the city of Babylon. ANSWER: Marduk or Bel

## TOSSUP 21 (Science)

In 1620, Joost Bürgi published a system of it, and apparently discovered it independently between 1603 and 1611. Its better known discoverer published his work in 1614. It was intended (*) to easily determine roots, quotients, and products through the use of tables. FTP, name this function, involving powers of a fixed base number, invented by Scottish mathematician John Napier.
ANSWER: logarithm
TOSSUP 22 (Popular Culture/Sports)
The Hollywood Reporter described it as "TV gone Dada." A prime-time Christmas special had guests such as the Del Rubio triplets, k.d. lang, Zsa Zsa Gabor, and Little Richard, most bringing (*) a fruitcake to build an addition to the title location. FTP, name this show, whose characters included Tito the Lifeguard, Ricardo the Soccer Player, Cowboy Curtis, and the title role, played by Paul Reubens.
ANSWER: Pee-Wee's Playhouse

TOSSUP 23 (Fine Arts)
In the upper left, you can see a pair of legs in green boots, evidence of a trapeze act. Méry Laurent and Jeanne Demarsy can also be seen in cameo in (*) the mirror, as can a customer who appears conversing with Suzon. The man appears to be missing, unless you consider that the viewers occupy the same space that he does. The barmaid Suzon stands with an expression of boredom and sadness. FTP, name the last major work of Eduoard Manet.
ANSWER: The Bar at the Folies-Bergère or Le Bar aux Folies-Bergère
TOSSUP 24 (Current Events)
Among the beliefs of this world leader are that the war-time Ustasha regime did not kill very many Jews. Those posed to replace him as (*) president include Ivica Racan and Drazen Budisa, the respective leaders of the Social Democrats and the Social Liberal party. FTP, name this leader of the HDZ, or Croatian Democratic Union, now gravely ill.
ANSWER: Franjo Tudjman
TOSSUP 25 (Literature)
This comedy has two plots: in one, Palamede falls in love with Doralice, the wife of his friend Rhodophil, who is interested in Melantha, $\left(^{*}\right)$ who is intended for Palamede. In the other, Leonidas is the rightful heir to Sicily, while his love, Palmyra, is the daughter of the usurper. FTP, name this nuptial comedy by John Dryden, which shares its name with a work by William Hogarth.
ANSWER: Marriage à la Mode

Playoff Round 3 by Anthony de Jesus
BONUS 1 (Geography/Social Sciences)
Consider Ivan Pavlov's famous dog experiment. FTPE:
A) What term describes salivation when food is placed in the dog's mouth?

ANSWER: unconditioned response (prompt on "response")
B) What term describes food placed in the dog's mouth?

ANSWER: unconditioned stimulus (prompt on "stimulus")
C) When Pavlov sounded a tone repeatedly without presenting food, the dog salivated less and less. What term describes this phenomenon?
ANSWER: extinction
BONUS 2 (Pop Culture/Sports)
Answer these questions about the Masters tournament of men's golf, FTPE.
A) In 1935, this golfer hit the "shot heard 'round the world," on the fifteenth hole. He would tie Jim Craig, and eventually win a 36 -hole playoff.
ANSWER: Gene Sarazen or Eugenio Saraceni
B) In 1961, this South African lefty became the first non-American to win the Masters. After Sarazen and Hogan, he became the third player to win the four tournaments of the modern grand slam.
ANSWER: Gary Plaver
C) In 1986, he became the oldest Masters Champion.

ANSWER: Jack Nicklaus
BONUS 3 (Current Events)
Identify the presidential hopeful from internet business.
A) This candidate has used the internet to disseminate an Waterloo Courier column by Eric Stern, which describes a "drunken college escapade when [George W. Bush] stole a Christmas wreath."
ANSWER: Steve Forbes
B) As of November 15 th, this man led all candidates in funds raised over the internet, with over $\$ 1$ million.

ANSWER: Bill Bradley
C) His website bio touts his interim presidency at Alabama A\&M, authorship of Our Characters, Our Future, and his presidency of the Ronald Reagan Alumni Association.
ANSWER: Alan Keves
BONUS 4 (HISTORY)
This culture was a melting pot of the Canaanites, the Sea Peoples, and refugees from Mesopotamia, Egypt, and Minoa.
A) For five points, name this culture, whose innovations included glass-working and the alphabet.

ANSWER: Phoenicians
B) For ten points, the Phoenicians produced one gram of this from 9000 murex shells. The shells were crushed and soaked in salt. The extract was sun-dried.
ANSWER: purple dye (prompt on partial answer)
C) Five points each, name any three of the five city-states along the Syrian coast which formed the Phoenician homeland.
ANSWER: Aradus, Byblos, Beirut, Sidon, Tyre

BONUS 5 (Literature)
Identify these works by Voltaire, for ten points each.
A) This work tells of a 500,000 foot tall individual from Sirius, who picks up a fellow from Saturn only a few thousand feet tall, on his way to visiting Earth.
ANSWER: Micromégas
B) This title character fakes his death and has his friend proposition his wife, in order to test her faithfulness. Name this Babylonian philosopher.

## ANSWER: Zadig

C) Voltaire wrote a history of this Swedish king, who fought Peter the Great at Poltava.

ANSWER: Charles XII
BONUS 6 (Philosophy, Religion, Mythology)
FTSNOP, identify these subfields of philosophy.
A) For five, this subfield deals with beauty, harmony, structure, and other concepts in developing a theory of artistic value.

## ANSWER: aesthetics

B) For five, this subfield is the study of moral value.

ANSWER: ethics
C) For ten, aesthetics and ethics are subdivisions of this branch of philosophy concerned with developing a theory of value.
ANSWER: axiology
D) For ten, George Edward Moore and Ralph Barton Perry are among the adherents of this axiological stance that there are multiple things which are intrinsically good.
ANSWER: pluralism
BONUS 7 (Science)
FTPE, answer these questions about glass from the science of materials.
A) The most commonly used mineral in glass manufacturing, it is readily available in sand deposits.

ANSWER: silica or $\mathrm{SiO}_{2}$ or silicon dioxide
B) This is a glass coating applied to a metal substrate.

ANSWER: enamel
C) This is a glass coating applied to a ceramic, such as clayware pottery.

## ANSWER: glaze

BONUS 8 (Literature)
Identify these authors, FTPE.
A) This poet used symbols such as the sun, the eagle, the star, the wheel, and the "sacred" Mississippi River in the poem on the ideal unity of man "Blue Meridian," but is better known for the novel Cane.
ANSWER: Jean Toomer
B) This playwright wrote of Meridian Henry, a minister and civil rights activist, who reevaluates his nonviolent stand after his son Richard is murdered by a racist in Blues for Mister Charlie.
ANSWER: James Baldwin
C) This author wrote of Pecola Breedlove, who goes insane after being raped twice by her father and being told by the "Psychic" Soaphead Church to kill a dog in her first novel The Bluest Eye.
ANSWER: Toni Morrison

BONUS 9 (Geography/Social Sciences)
Identify these lakes, for the stated number of points.
A) For ten, this lake is caused by the Glen Canyon Dam on the Colorado River.

ANSWER: Lake Powell
B) For five, many resorts line the shores of this lake, on the California-Nevada border, which is drained by the Truckee River into Lake Pyramid.

## ANSWER: Lake Tahoe

C) For five, this lake in Essex County, New York shares its name with the village on its southern end which hosted the 1932 Winter Olympics.
ANSWER: Lake Placid
D) For ten, Oshkosh, Wisconsin, sits on the shore of this lake at the mouth of the Fox River. It is named for a Native American, Siouan-speaking tribe.

## ANSWER: Lake Winnebago

BONUS 10 (History)
Identify these American pilots who made aviation history, for ten points each.
A) Richard Byrd and this other man were the first to fly over the North Pole in 1926.

ANSWER: Floyd Bennett
B) In 1933, he became the first pilot to fly solo around the world. He is perhaps more famously associated with the death of Will Rogers.
ANSWER: Wiley Post
C) Name either of the two pilots who made the first nonstop flight around the world, without refueling, in 1986.

ANSWER: Richard Rutan or Jeanna Yeager
BONUS 11 (Literature)
Identify these American short stories, FTPE.
A) Beginning with the line "None of them knew the color of the sky," this Stephen Crane story is written in third person, but mostly from the point of view of a newspaper correspondent, one of the 4 occupants of the title object. ANSWER: The Open Boat
B) This story concerns the costume party thrown by Prince Prospero during an epidemic of a mysterious but deadly disease. At the end, everybody falls victim to the personification of the disease.
ANSWER: The Masque of the Red Death (Edgar Allan Poe)
C) This story, the first from Sherwood Anderson's Winesburg, Ohio, concerns Wing Biddlebaum, a former schoolteacher lynched due to suspicions of homosexuality.
ANSWER: Hands
BONUS 12 (Philosophy, Religion, Mythology)
Identify these children of the mythological monster Echidna, FTSNOP.
A) Hercules found its skin impenetrable, so he crushed it in his arms and brought the carcass back to King Eurystheus.

## ANSWER: Nemean Lion

B) Sent to punish Laius, this creature would fling passers-by from a rock near Thebes if they could not answer her.

ANSWER: Sphinx
C) This hundred headed dragon guarded the Golden Apples in the garden of the Hesperides.

ANSWER: Ladon

BONUS 13 (Fine Arts)
Identify these Beethoven works, FTPE.
A) The last concerto written by Beethoven, this piano piece supposedly got its nickname from a French soldier's cry during its first performance.
ANSWER: Emperor Concerto or Concerto No. 5 in E flat Major for Piano or Opus 73
B) Known for its opening Adagio sostemuto, this second work making up Beethoven's opus 27 was named by Heinrich Friedrich Rellstab, who associated it with Lake Lucerne.
ANSWER: Moonlight Sonata or Piano Sonata No. 14 in C Sharp Minor
C) Dedicated to a former pupil named Rudolph, this ensemble chamber work is for violin, cello, and piano.

ANSWER: Archduke Trio or Trio No. 6 in B flat major or Opus 97
BONUS 14 (Current Events)
A Northern Ireland political party has now agreed for its leaders to take part in government with its hated rivals. FTSNOP:
A) For five points each, name this party and its rival, the political arm of the Irish Republican Army.

ANSWER: Ulster Unionist Party and Sinn Fein
B) For ten points, name the Ulster Unionist party leader and 1998 Nobel Laureate for Peace, who staked his leadership on party approval for this to happen.
ANSWER: David Trimble
C) For ten points, the British and Irish governments called in this former U.S. Senator for a rescue mediation to salvage a home-rule agreement.
ANSWER: George Mitchell
BONUS 15 (General Knowledge/Miscellaneous/Multidisciplinary)
Identify these things having to do with people named Frisch, for ten points each.
A) Ragnar Frisch was the first winner of the Nobel Prize in Economics in 1969, shared with this man.

ANSWER: Jan Tinbergen
B) Karl von Frisch, who shared the 1973 Nobel Prize for Physiology with Konrad Lorenz and Nikolaas Tinbergen, studied the circling and wagging dances of this animal.
ANSWER: honeybees
C) The Fordham Flash, Frankie Frisch, won four National League pennants between 1919 and 1926 with this team, before being traded to the St. Louis Cardinals.
ANSWER: New York Giants [Prompt on New York]
BONUS 16 (Science)
They typically produce beams of protons with maximum energies in the range of 10 mega electron-volts. FTPE:
A) Name this device developed by Ernest Lawrence.

ANSWER: cyclotron accelerator
B) A cyclotron consists of two symmetric parts separated by a small gap across which there is an alternating electric potential. Name the two parts, so called because of their resemblance to a letter of the alphabet.

## ANSWER: dees

C) Pencil and paper ready. In SI units, if the cyclotron has an internal magnetic field of $B$, the proton has charge $q$ and mass m , then what must be the angular frequency of the alternating potential? You have 15 seconds.

## ANSWER: q B over m or B q over m

BONUS 17 (Pop Culture/Sports)
Name musical groups from members, FTPE
A) Michael Steele, Vicki and Debbie Peterson, Susanna Hoffs

ANSWER: The Bangles
B) Siblings Margo, Michael, and Peter Timmins, as well as Alan Anton, no relation.

ANSWER: Cowboy Junkies
C) Posdnous (Kelvan Mercer), Trugoy the Dove (David Jolicoeur), P.A. Pasemaster Mase (Vincent Mason)

ANSWER: De La Soul

## BONUS 18 (Science)

Answer these questions about viruses and their laboratory applications FTSNOP.
A) For ten points, what is the general name for a virus, such as the Lambda strain used in genetics research, that infects or "eats" bacterial colonies?
ANSWER: bacteriophage (prompt on "phage")
B) Five points per answer. Bacteriophage undergo two types of cycles: an active one in which host cells are ruptured, and a dormant one in which viral DNA remains inactive in the host cell. Name both of these cycles. ANSWER: Ivtic [LIH-tik] cycle and Ivsogenic [LIE-so-JEN-ik] cycle
C) For ten points, what is the name for the segment of viral DNA spliced into the host bacterium's genome during the lysogenic viral cycle?
ANSWER: prophage
BONUS 19 (History)
Several Germanic tribes underwent mass conversions to Arianism. For ten points each, name these tribes.
A) Converting between 382 and 395, this Iberian tribe ceased being Arians when King Reccared converted in 587.

ANSWER: Visigoths
B) Converting between 456 and 472, they abandoned Arianism after being defeated by Justinian I in 552 .

ANSWER: Ostrogoths
C) Converted after contact with the Visigoths in Southern Gallia, in 517 King Segismund led them into the Catholic Church.

## ANSWER: Burgundians

BONUS 20 (Fine Arts)
Answer these questions about a certain composer, FTPE.
A) This American composed the opera Antony and Cleopatra as well as his more well-known 1936 String Quartet in B minor, which contains the Adagio for Strings.
ANSWER: Samuel Barber
B) This choral work of Barber is derived from the writings of a certain man's Journals, The Unchangeableness of God, and The Christian Discourses.
ANSWER: Prajers of Kierkegaard
C) Andromache 's Farewell depicts a scene from this play by Euripides.

ANSWER: The Trojan Women
BONUS 21 (Literature)
30-20-10 Name the author.
[30] This Englishman wrote The Life and Death of Mr: Badman describing the temptations of everyday life.
[20] While in prison, he also wrote the spiritual autobiography Grace Abounding to the Chief of Sinners.
[10] He is best known for an allegorical work about the journeys of a man named Christian.
ANSWER: John Bunyan (the work is Pilgrim's Progress)
BONUS 22 (Philosophy, Religion, Mythology)
FTPE, answer these questions about Iranian religion.
A) This religion worshipped a pre-Zoroastrian Iranian god of sun, justice, contract, and war who was later revived during the Roman Empire as the patron of loyalty to the emperor.
ANSWER: Mithraism (worship of Mithra or Mithras)
B) This modified form of Zoroastrianism-- appearing during the Sasanian period of Persia-- believed that time alone is the source of all things.

## ANSWER: Zurvanism

C) This group began to leave Iran in the 10th century CE. Based in Gujarat, India, these Zoroastrians have adapted to their new surroundings.
ANSWER: Parsis

