## Round 8

Questions by University of Chicago and University of Massachusetts Andrew Yaphe, John Tangren, Peter Onyisi, Alice Chou
Guy Jordan
TOSSUP 1 (History)
The second ruler of this name was made "Lieutenant-General of the Realm" by his father and only actually ruled for two months (*) in 1946. The first one made his name at the battle of Custozza before taking the throne in 1878 as the successor of Victor Emmanuel II. FTP, give the common name of these two kings, the first of whom was assassinated in 1900, the second of whom was the last king of Italy.

Answer: Umberto
TOSSUP 2 (Fine Arts)
He grew up in northern California and married Nanette, his childhood sweetheart, and still pays homage to her by hiding cryptic N's throughout (*) his "paintings." He went to Berkeley where he was roommates with the well-known contemportary artist James Gurney, and his most famous paintings include "The End of a Perfect Day" and "Glory of Morning". FTP, name this "painter of light", the most collected artist of the 20th century whose mass-produced kitch is making him millions in shopping malls around the country.
ANSWER: Thomas Kinkade
TOSSUP 3 (Mythology)
He married Siddhi and Buddhi after winning a bet with his brother Kartikeya. (*) His nickname "Ekadanta" refers to the fact that Rarashurama, the sixth avatar of Vishnu, knocked out one of his teeth in a fight while he was serving as guardian of Kailasa. FTP, name this Hindu god of wisdom and new enterprises, the son of Shiva and Parvati who has the head of an elephant.

Answer: Ganesha

## TOSSUP 4 (Social Sciences)

Some of this political economist's works include An Inquiry into the Nature of Peace and the Terms of Its
Perpetuation, in which he argued that the primary cause of war was competing business interests, and (*) The Instinct of Workmanship and the State of the Industrial Arts, which argued that much of man's potential labor energy was being wasted through inefficient institutions. This man is better known, FTP, for an 1899 treatise, of which H. L. Mencken that it was "one per cent platitude and 99 per cent nonsense" when referring to the concept of conspicuous waste?

Answer: Thorstein Veblen
TOSSUP 5 (Literature)
The main character eventually believes that he is the king of the Spain whose enemies have engineered his exile, and throughout the work, short periods of (*) sanity serve to act as a counterpoint to the narrator's deepening psychosis. FTP, identify this short story about the government clerk Poprischchin (poh-PREE-shin), written by Nikolai Gogol.
ANSWER: The Diary of a Madman
TOSSUP 6 (Religion)
After studying under Saint Bruno at Reims, he was appointed cardinal bishop of Ostia and Gregory VII named him papal legate to Germany. (*) The successor to Victor III, he gave Roger of Sicily the Monarchia Sicula, or control over the Sicilian church, and he reformed investiture at the councils of Melfi and Piacenza. FTP, identify this Pope, born Odo of Lagery, who proclaimed the Truce of God at the Council of Clermont, and whose rule, lasting from 1088 to 1099, is best remembered for his calling of the First Crusade.

> Answer: Urban II

TOSSUP 7 (Sports)
New Jersey, Philadelphia, Boston, and Washington, D.C., in the Atlantic Division. Chicago, Michigan, Tampa Bay, and Birmingham in the Central Division. (*) Arizona, Oakland, Los Angeles, and Denver in the Pacific Division. FTP, these were the teams in which league, formed in 1982 to rival the National Football League?

Answer: United States Football League
TOSSUP 8 (Science):
This moon is slowly spiraling in towards its planet. An early theory required that it be hollow, thus artificial, and it was even suggested that it had not been observed prior to (*) 1877 because it had not existed. This satellite, which orbits its parent body in seven and a half hours, will fall out of orbit in 40 million years. FTP name this inner moon of Mars.

Answer: Phobos

## TOSSUP 9 (Literature)

It ends with the line, "the eyes turn to topaz," and its author called it "an attempt to condense a Henry James novel." The title character makes his (*) first appearance in the second section, and is intended by the poet to represent the worst failings of contemporary artists. FTP, identify this long poem published in 1920 by Ezra Pound. ANSWER: Hugh Selwyn Mauberley

## TOSSUP 10 (Current Events)

This country's voters recently rejected a preamble to its constitution despite a last-minute deal between Senator Aden Ridgeway and (*) Prime Minister John Howard to insert a clause recognizing the contribution of Senator Ridgeway's people "for their deep kinship with their lands and for their ancient and continuing cultures which enrich the life of our country". FTP, name this island country which has also recently chosen to retain Queen Elizabeth II as head of state?

Answer: Australia

## TOSSUP 11 (Science):

The equation for this type of curve was obtained by Leibniz and Huygens in 1691. An upside-down version was used as the model for the (*) Gateway Arch in St. Louis. Its equation is y equals a times the hyperbolic cosine of $x$ over a. FTP, name the shape assumed by an inextensible chain of uniform density hanging between two supports.

Answer: catenary
TOSSUP 12 (History)
He was first elected to Congress in 1823, and served two years as governor of his state before his wife left him and he resigned from politics. (*) He moved to Nacogdoches (nack-uh-DOH-chess) after Jackson sent him to negotiate a treaty with the Indians, and he returned to Washington as a senator in 1846, before again becoming a governor in 1859 , a term that would also end abruptly when he was deposed in 1861 for opposing secession. FTP, name this statesman and soldier, the first president of Texas.

Answer: Sam Houston
TOSSUP 13 (Science):
In compounds of the transition metals, these ligands cause very large d-orbital splitting. The class of ligands includes phosphines, $\mathbf{N} \mathbf{O}$, cyanide ( ${ }^{*}$ ) and carbon monoxide, and produces strong metal-to-ligand charge transfer bands in spectra. FTP, what kind of ligands donate electron density to the metal through sigma orbitals but have empty pi antibonding orbitals to allow pi backbonding from the metal?
ANSWER: pi acids or pi acceptors
TOSSUP 14 (Current Events)
This nation now has the Americas' youngest head of state. Bharrat Jagdeo succeeded to the job in August when the incumbent, the Chicago-born widow of an independence leader, resigned due to heart disease. (*) Janet Jagan spent only two years as president of, for 10 points, what ethnically divided former British colony whose capital is Georgetown?
answer: Co-operative Republic of Guyana

TOSSUP 15 (Geography)
This island, about 5 miles long and 2 miles wide, lies 760 miles from Tokyo. It is the main island of the (*) Volcano Islands, which are administered by Japan. FTP, name this island, which the Japanese regained in 1968 after losing it on February 23, 1945.

Answer: Iwo Jima
TOSSUP 16 (Current Events)
It was discovered in Oklahoma in 1994 by University of Oklahoma scientists. It was first mistaken for tree trunks from $\left(^{*}\right)$ prehistoric times, but was later discovered to be a new species of dinosaur. Standing 60 feet tall and weighing 60 tons, this dinosaur could very well have been the largest creature ever to walk the earth. FTP, what is this newly discovered species of dinosaur, whose name means "Earthquake God Lizard"?

Answer: Sauroposeidon
TOSSUP 17 (Fine Arts)
"Military," "Miracle," "Drum Roll," "Clock," and "Surprise," are in this group, but "Oxford" and "Farewell" are not. They were composed during an 18-month stay in (*) England in 1791-92, and they represent the last works of their genre produced by their creator. For 10 points, what is the common name applied to symphonies 93 to 104 by Franz Joseph Haydn, named for the location of their composition?

Answer: London Symphonies (prompt on "Haydn" symphonies; also accept Solomon Symphonies)

## TOSSUP 18 (History)

Under the reign of al-Mustansir the dynasty began its decline, with the Zirids declaring independence and the Seljuks seizing Syria. (*) It began under Ubayd Allah who, with the support of the Berbers, made himself Caliph in 910 , and ended with the death of al-Adid in 1171, when it was overthrown by Nur al-Din's chief general, Saladin. FTP, identify this dynasty, which was ruled by al-Mu'izz and al-Hakim from Cairo, and which traced its descent from Ali and its namesake daughter of Muhammad.

Answer: the Fatimid dynasty

## TOSSUP 19 (Miscellaneous)

Perhaps its most famous musical setting was by J.S. Bach in 1723, but ifthas been used in the Vespers service of the Roman Catholic Church since the 6th century. It comes from Luke (*) chapter 1, verses 46 through 55. FTP, name this song of praise and thanksgiving spoken by Mary when she was greeted by her cousin Elisabeth in the house of Zacharius, which (in English) begins, "My soul doth magnify the Lord."
ANSWER: Magnificat

## TOSSUP 20 (Literature)

Characters in it include Mr. Eugenides, the Smyrna merchant unshaven; (*) Mrs. Porter and her daughter, who wash their feet in soda water, and Bill, Lou, and May, who gossip about Lil and Albert. More famously, it features Phlebas the Phoenician, a fortnight dead, Madame Sosostris, famous clairvoyante, and Tiresias. FTP, identify this poem in five sections, which ends with the word "Shantih" repeated three times and begins "April is the cruellest month," written by T.S. Eliot.

Answer: The Waste Land

## TOSSUP 21 (Science):

This man wrote a treatise on the volume of wine barrels, but he is better known for his work in another field. One of the few supernovas ever observed in the (*) Milky Way is named after him. He had once theorized that the planets moved according to the music of the spheres, and that each planet had its own theme. However, once he inherited Tycho Brahe's data after the latter's death, he replaced the circles in Copernicus' theory with somewhat less ideal ellipses. FTP, name this German astronomer and discoverer of three laws of planetary motion.

Answer: Johannes Kepler

TOSSUP 22 (Philosophy)
It begins by suggesting that, if the work is too long to be read at once, it may be separated into six portions. The fifth of these deals with physics (*) and the movement of the heart, the fourth includes proofs of the existence of God and the human soul, while the second tells us how the author came up with his plan while serving in the army in Germany during a cold winter which he spent in a well-heated room. FTP, identify this philosophical work, which sets out a way of rightly conducting the reasons and seeking for truth in the sciences, written by René Descartes.

Answer: The Discourse on Method or Le Discours de la méthode
TOSSUP 23 (Literature)
At the beginning, the title character tells us that he is in his mother's room, and he eventually remembers that he called her Mag and that she called him Dan, though that isn't his name. At the start of part 2, Gaber visits (*) Jacques Moran to tell him that he and his son must go after the title character. FTP, identify this novel, first published in French in 1951 and translated into English four years later, the first work in a trilogy which includes Malone Dies and The Unnameable, written by Samuel Beckett.

Answer: Molloy
TOSSUP 24 (Popular Culture)
This television show, in its second season on the WB network, is the newest creation of Constance M. Burge. Set in San Francisco, it portrays the lives of three sisters: Prue, Piper, and Phoebe Halliwell. It stars (*) Holly Marie Combs, Alyssa Milano, and Shannen Doherty. FTP, name this show, whose heroines can see the future, move objects, and freeze time?

Answer: Charmed
TOSSUP 25 (History):
The son of a coal miner, he joined the Bolsheviks in 1918. After outmanouvering Beria, Malenkov, (*) and others, he became Premier of the USSR. He delivered a secret speech to the 20th Party Congress denouncing Stalin in 1956. FTP, name this Soviet leader.

Answer: Nikita Sergeyevich Khrushchev
TOSSUP 26 (Misc):
While Li Long unfortunately does not appear in this sequel, Ivy, whose sword can change into a whip, and Xinghua are back. The new (*) Sega Dreamcast version also features Cervantes, who was not in the arcade version. FTP, what is this Namco fighting game, a sequel to Soul Blade?

Answer: Soul Caliber

## Round 8: Chicago and UMass

BONUS 1 (Miscellaneous)
Name the university, 30-20-10-5.
30) It is home to the Glenn H. Brown Liquid Crystal Institute which makes it a foremost center of research on flatpanel displays.
20) This university is Ohio's third-largest public university and was founded in 1910.
10) Its sports teams, the Golden Flashes, compete in the Mid-American Conference.
5) Four students were tragically killed here during a demonstration in 1970.

Answer: Kent State University
BONUS 2 (History):
FTPE, name the African nations from their first post-independence political leaders.
A) Kwame Nkrumah

Answer: Ghana
B) Julius Nyerere (NEE-uh-ray-ray)

Answer: Tanzania
C) Hastings Kamuzu Banda

Answer: Malawi
BONUS 3 (Literature)
Answer these questions about a medieval writer, FTP each.
A. Philip the Bold asked her to write the 1404 Book of the Deeds and Good Morals of Charles V. Her other works included poetry, The Book of 3 Virtues, and treatises on education and history.

Answer: Christine de Pizan
B. Christine's last work, written in 1429, was entitled Le Ditié of this other French woman, who had been experiencing some success at the time.

Answer: Joan of Arc
C. Christine is best known for this 1405 work, which begins by introducing the Virtues of Reason, Rectitude, and Justice, and which proceeds to tell stories of accomplished women.

Answer: The Book of the City of Ladies or Le Livre de la cité des dames

## BONUS 4 (Current Events)

The 30 stocks of the Dow Jones Industrial Average were shuffled on October 26. Four company's stocks were dropped from the index and four company's stocks were selected to take their place. Identify those stocks FTSNOP. A. For 5 points for two, 10 points for three, or 15 points for four, which company's stocks were dropped from the index?

Answer: Sears, Roebuck and Co., Goodyear Tire \& Rubber Co., Chevron Corp, Union Carbide Corp
B. For 5 points for two, 10 points for three, or 15 points for four, which company's stocks were added to the index? Answer: Microsoft Corp, Intel Corp, SBC Communications Inc., Home Depot Inc.

## BONUS 5 (Religion)

Answer these questions about a Biblical figure, FTP each.
A. He was captured by an alliance of Eastern kings led by Chedorlaomer, but Abraham rescued him from their clutches.

Answer: Lot
B. Lot was the son of this brother of Abraham.

Answer: Haran
C. After their mother was turned to a pillar of salt, Lot's daughters cut loose and had sex with their father. Name either of the children of this incestuous union.

Answer: Moab or Ben-Ammi

BONUS 6 (Science):
Identify the following related gas laws FTPE.
A. It states that the partial vapor pressure of a solvent in proportional to its mole fraction.

ANSWER: Raoult's law
B. Discovered in 1847 by a German chemist, this law states that the vapor pressure of a liquid is decreased when a solute is added, the amount of the decrease being proportional to the amount of the solute being dissolved.
ANSWER: Babo's law
C. Holding only for dilute solutions and low gas pressures, it states that the weight of a gas dissolved by a liquid is proportional to the pressure of the gas upon the liquid.
ANSWER: Henry's law
BONUS 7 (Fine Arts)
Identify the composers of the following works FTP each:
A. "The Ox of the Roof"

ANSWER Darius Milhaud
B. "Pacific 231"

ANSWER: Arthur Honnegger
C. For 5 more points, to what avant-garde group of French composers did both Milhaud and Honnegger belong?

ANSWER: Les Six or The Six
D. For a final 5 points name any other member of Lex Six besides Milhaud and Honnegger.

ANSWER: any of the following: Auric, Taillefaire, Poulenc, or Durev
BONUS 8 (Geography)
Identify the following lakes FTP each.
A. This is the large lake in western Turkey near where the battle of Manzikert was fought in 1072.

ANSWER: Lake Van
B. This is the lake in Oregon that was created from the explosion of Mount Mazama

ANSWER: Crater Lake
C. This is the largest lake in Canada outside of the Northwest Territories (including Nunavut) that is NOT one of the Great Lakes.
ANSWER: Lake Winnipeg
BONUS 9 (History):
Answer the following questions about an ancient civilization FTPE
A) This kingdom's greatest rulers were Shuppiluliuma (SHOOP-ill-ooh-lee-OOH-ma) and Muwatallis (MOO-ah-tahl-iss), and it controlled an area in east-central Anatolia from about 1600 to 1200 BCE . In 1590 BCE they put an end to the Amorite dynasty in Babylon.
ANSWER: Hittites
B) This city was the capital of the Hittites.

ANSWER: Hattusas (accept Boghazkoy)
C) In 1286 BCE the Hittite king Muwatallis secured an indecisive victory over Ramses II of Egypt at this battle. ANSWER: Kadesh

BONUS 10 (Literature)
Identify these Gothic novels F15P each, or 5 if you need the author.
A) [15] Set high in the dark and majestic Apennines, it tells how the orphaned Emily St. Aubert is subjected to cruelties by guardians, threatened with the loss of her fortune, and imprisoned in castles but is finally freed and united with her lover.
[5] It was written by Ann Radcliffe.
ANSWER: The Mysteries of Udolpho
B) [15] Heavily influenced by Radcliffe, this work focuses on horror rather than romance, and its violence and eroticism made it avidly read, though universally condemned following its 1796 publication. Its title became a byname for its author.
[5] That author was Matthew Lewis.
ANSWER: The Monk

BONUS 11 (Mythology)
Answer these questions about the voyage of the Argo, FTP each.
A. After leaving Iolcus, the Argo first went to this island, where the women, ruled by Hypsipyle, had murdered all the men after the men had ignored them in favor of concubines from Thrace.

Answer: Lemnos
B. Hercules abandoned the Argo in search of this youth, his lost cupbearer.

Answer: Hylas
C. After taking Ancaeus onboard as their new helmsman, the Argonauts reached the island of Ares, where they protected themselves from these malicious avians, who had been driven there by Hercules, by clashing their shields together.

Answer: the Stymphalian birds
BONUS 12 (Science):
Identify these quantities from mechanics for 15 points after one clue, or 5 after a second.
A) [15] In three dimensions and a conservative field, it is the negative of the gradient of the potential energy.
[5] It is equal to mass times the acceleration vector.
Answer: Force
B) [15] In quantum mechanics, this quantity is quantized in terms of half of Planck's constant over two pi.
[5] Its time derivative is torque.

## Answer: Angular momentum

BONUS 13 (Literature)
Identify these plays by Ibsen, FTP each.
A. In this 1892 play, the title character falls to his death after Hilda Wangel provokes him into overcoming his fear of heights.

Answer: The Master Builder or Bygmester Solness
B. His first major play features a zealous religious reformer whose uncompromising motto "all or nothing" leads to his death in an avalanche at the play's end. Name this verse drama, whose title character has a name suggestively meaning both "fire" and "sword" in Norwegian.

Answer: Brand
C. Ibsen's first play was this 1850 work, whose title character was denounced by Cicero.

Answer: Catilina or Catiline
BONUS 14 (Social Sciences)
Answer these questions about laws in linguistics, FTPE.
A. This law, developed in 1841, accounts for the differences between consonants in Germanic languages and consonants in other Indo-European language through a theory of consonant shifting over time.

Answer: Grimm's Law
B. This 1875 law further developed Grimm's law by explaining away some of its exceptions and influenced the newly-forming Neogrammarian school.

Answer: Verner's Law
C. Actually a hypothesis, it was based on its developer's work with the Hopi Indians. This principle states that a speaker's world view is shaped by the structure of the speaker's language.

Answer: Sapir-Whorf hypothesis

## BONUS 15 (History)

Answer these questions about the turbulent history of the Praetorian Guard, FTP each.
A. The Guard became more powerful when this prefect under Tiberius brought them together into a single barracks and placed them under the control of one commander.

Answer: Lucius Aelius Sejanus
B. In 97, the guard forced this emperor to name Trajan as his successor.

Answer: Nerva
C. In 312, Constantine finally did away with the Praetorian Guard, replacing them with this new body of soldiers. Answer: the Scholae

BONUS 16 (Current Events-Politics)
Answer the following questions about the presidential primary season FTPE.
A. The first major primary after New Hampshire's is held in this Southern state. Lee Atwater engineered what state's early Saturday primary to help George Bush in 1988?
answer: South Carolina
B. The group of primaries that will be held on March 14 in mostly Southern states is known by what two-word nickname?
answer: Super Tuesday
C. Both Super Tuesday and this primary are mislabeled, as this group of primaries, held one week before Super Tuesday, now elects more delegates. What two-word nickname collectively identifies the old Yankee Primary and six others?
answer: Junior Tuesday
BONUS 17 (Philosophy)
Identify these philosophers associated with phenomenology from works, FTP each.
A. He wrote The Transcendence of the Ego, as well as a major work subtitled "An Essay in Phenomenological Ontology." However he's more commonly associated with existentialism.

Answer: Jean-Paul Sartre
B. This Frenchman wrote The Phenomenology of Perception.

Answer: Maurice Merleau-Ponty
C. Considered the founder of the movement, he wrote Phenomenology and the Crisis of Philosophy and Cartesian Meditations

Answer: Edmund Husserl
BONUS 18 (Popular Culture/Sports)
This baseball offseason has already had more than its share of trades. FTSNOP, identify the following players. A. [10] For 10, the Reds expect to lose Greg Vaughn to free agency, so they packed off Jeffrey Hammonds and others to Colorado for this hitter.

Answer: Dante Bichette
B. [10] A Toronto Blue Jays outfielder has been clashing with Cito Gaston and would have become a free agent after 2000. A Dodgers slugger has $\$ 20.5$ million left on his contract, and he desperately wanted out of Los Angeles. F5PE, name these two who were traded for each other (along with Pedro Bourbon, Jr).

Answer: Shawn Green and Raul Mondesi
C. [10] He had great season for the Astros in 1997, but struggled in two years with the Rockies. Now he's off to the Cardinals for young pitching talent including no-hit wonder Jose Jiminez. For a final 10, name him. Answer: Darryl Kile

BONUS 19 (Science):
FTPE, identify these biochemical pathways in photosynthesis.
A) This is the general term for the group of pathways that involve the chlorophyll in photosystems I and II.

Answer: Light reactions
B) This type of dark reaction is the major carbon fixation pathway in plants, involving turning carbon dioxide into a three-carbon intermediary that can be used to make sugars.

Answer: Calvin-Benson cycle (or $\mathbf{C}-\mathbf{3}$ cycle)
C) This is a substitute for the Calvin cycle that some plants, including corn, use to reduce photorespiration.

Answer: C-4 cycle

BONUS 20 (History)
Identify the following about a Supreme Court Chief Justice and some decisions made by his court FTSNOP. A) [10] This Chief Justice of the Supreme Court was a member of the Court of International Arbitration at The Hague from 1900 until his death in 1910. He became Chief Justice of the U.S. Supreme Court in 1888.
ANSWER: Melville Fuller
B) [10] An important case heard by the Fuller court was this 1895 case which declared a national income tax unconstitutional.
ANSWER: Pollock vs. Farmer's Loan and Trust Company
C) [5] Many years later, this amendment was added to the constitution to circumvent the Fuller court's 1895 Pollock vs. Farmer's Loan and Trust Company decision, and pave the way for a national income-tax.
ANSWER: The 16 th Amendment.
D) [5] The Fuller court's most influential decision was probably this 1896 case which established the unfortunate mandate of "separate but equal," which lasted until the 1954 and Brown vs. Board of Education.

## ANSWER: Plessy vs. Ferguson

BONUS 21 (Literature)
Answer the following questions about a book FTSNOP.
A) This 1911 Edith Wharton novel tells of a man from New England who cheats on his hypochondriac wife with her cousin. Feeling both guilty and hopelessly in love, the man and his mistress try to committ suicide together, but both survive as invalids. FTP, name this book.
ANSWER: Ethan Frome
B) For another 10 points, in what way do Ethan Frome and his mistress try to commit suicide?

ANSWER: They try to crash their sled into a tree (accept equivilents)
C) Now, for five points each, give the first names of Ethan Frome's whiny wife and her voluptuous cousin.

ANSWER: Zeena and Mattic (accept Madeline)
BONUS 22 (PC/Sports)
Name these characters from the popular Japanese animation series Fushigi Yuugi FTSNOP.
A. For 5 points, what is the name of the schoolgirl who discovers a book which transports her to ancient China?

Answer: Suzaku No Miko or Miaka
B. For 5 points, who is the drifter with the sign of the ogre on his forehead who saves Miaka time and again?

Answer: Tamahome
C. For 10 points, who is the narcissistic emperor who falls in Miaka?

Answer: Hitohori
D. For 10 points, what term describes Tamahome and Hitohori, who are two of seven whom Miaka must find? Answer: Seishi

BONUS 23 (Literature)
Identify these Canterbury Tales from brief descriptions, FTP each.
A. We only have 57 lines of this fragmentary tale, which follows the Reeve's Tale at the end of the first group and begins by telling of an apprentice who moves in with a prostitute and her husband.

Answer: The Cook's Tale
B. At the end of this tale, Claudius is exiled and Apius commits suicide, after Virginia's father kills his daughter to preserve her honor.

Answer: The Physician's Tale
C. In this bawdy tale, Nicholas convinces a carpenter that a flood is about to come so he can have sex with the carpenter's wife Alison.

Answer: The Miller's Tale

## BONUS 24 (Fine Arts)

Answer these questions about a certain art movement FTPE.
A. This primarily architectural movement began with Vladimir Tlatlin around 1913, but its principles of were first articulated in 1820 by the brothers Naum Gabo and Antoine Pevsner.

Answer: constructivism or constructivist movement
B. Name the treatise which Gabo and Pevsner wrote, which suggested that architects "construct art" and take advantage of recent technological advances.

Answer: Realist Manifesto
C. This Russian director applied constructivist principles in his theatrical productions. His "biomechanics" approach to acting treated the actors on stage as parts of a harmonious machine.

Answer: Vsevolod Meverhold

BONUS 25 (Science):
For the stated number of points, name the operating system from a description.
A) [5] Its code name was Chicago, and it was launched with much fanfare in 1995 with a ceremony featuring Jay Leno.

## Answer: Windows 95

B) [5] This operating system from Bell Laboratories has spawned many variants, which include AIX, IRIX, and Solaris.

## Answer: UNIX

C) [10] This is Apple's next-generation, UNIX-based server operating system for the Macintosh.

Answer: MacOS X
D) [10] This operating system from IBM was once marketed as "a better DOS than DOS and a better Windows than Windows."

Answer: $\underline{\text { OS/2 }}$ (or Operating System/2)
BONUS 26 (History):
FTPE, name the pharaoh.
A) Builder of the second-tallest pyramid at Giza, many consider the face carved on the Great Sphinx to be his.

Answer: Kafre (or Chephren)
B) He founded a monotheistic religion of the sun god, changed his name, and moved his capital to a newly-built city which shared his new name.

Answer: Akhenaton (or Amenhotep IV)
C) This child succeeded Akhenaton. After ruling for three years, he changed his name to honor the god Amon. He was king for ten years and was buried in the Valley of the Kings.

Answer: Tutankhamen (or Tutankhaten)

