

KICK: ASS

Washington University in St. Louis – April 15, 2000

Packet by Roger Bhan

Toss-Up Questions

1. He glittered when he walked and made pulses flutter when he said "Good morning." The people on the pavement looked at him whenever he went downtown. He was clean favored and imperially slim, always quietly arrayed and admirably schooled in every grace. Always human when he talked and richer than a king, people always thought he was everything to make them wish they were in his place. FTP, identify this title character of a poem that went home one night a put a bullet through his head, written by Edwin Arlington Robinson.

Answer: Richard Cory

2. Also known as the Embden-Meyerhof pathway, its more common name comes from the fourth step of this biochemical pathway in which the enzyme aldolase cleaves fructose 1,6-diphosphate into dihydroxyacetone phosphate and glyceraldehyde phosphate, both three-carbon sugars. The dihydroxyacetone phosphate is isomerized, and the two molecules undergo a series of reactions that forms two molecules of pyruvate and a net production of two ATP molecules. FTP, identify this first reaction series of cellular respiration that occurs in the cytosol.

Answer: glycolysis

3. A naval victory at Point Angamos was followed by the capture of the provinces of Tacna and Arica. The only major land battle of this war was the Battle of Antofagasta, which occurred after Bolivian president Hilarión Daza demanded a new tax on Chilean nitrate companies. Bolivia withdrew from the war, and its ally, Peru, was forced into subjection when Chile occupied Lima. This war was fought over the nitrate-rich Atacama Region, and Chile ended up controlling all of the nitrate provinces. FTP, identify this 1879-1883 South American war that caused Bolivia to become a landlocked nation.

Answer: War of the Pacific

4. Composed primarily of granite and crystalline rock, it extends for about 1200 kilometers from the Abseron Peninsula to the mouth of the Kuban' River. Some of its notable peaks include Dykh-Tau, Koshtan-Tau, and Kazbek, all over 16,000 feet. Geologically, this mountain range belongs to a system that extends from southeastern Europe into Asia. Running through Georgia, Armenia, Azerbaijan, and southwest Russia, this is, FTP, what mountain range sometimes considered a border between Europe and Asia that contains Mount El'brus?

Answer: Caucasus Mountains

5. He is often associated with the intuitionist school, since he emphasized the importance of intuition over intellect. He promoted his ideas of inert matter in conflict with organic life as the vital urge strives toward free creative action. These philosophies were made apparent in such works as *The Two Sources of Morality and Religion* and *Matter and Memory*. He is most famous, however, for purporting the vital force responsible for organic evolution known as the "élan vital." FTP, identify this French philosopher and author of *On Laughter* and *Time and Free Will*.

Answer: Henri Bergson

6. The grandson of King Arkel finds one of the title characters wandering wretchedly through the forest. Though she reveals nothing of herself to Golaud, he marries her and brings her home to court. Her sadness and charm win her the sympathy and love of the other title character, Golaud's brother, and the two have an affair. Yniold, Golaud's son from a former marriage, informs him of his brother and

wife's affair. Golaud ends up killing his brother, and his wife dies after giving birth to their child. FTP, identify this 1902 drama by Maurice Maeterlinck that was made into an opera by Debussy.

Answer: Pelléas et Mélisande

7. The light from a laser is divided so that some of the reference beam falls directly on a photographic plate. The other part illuminates an object, which reflects it back onto the photographic plate. Two sets of diffracted waves are produced: one set forms a virtual image coinciding with the original object position, and the other set forms a real image on the other side of the photographic plate. To reproduce the image, it is usually illuminated with the original reference beam. FTP, identify this method discovered in 1948 by Dennis Gabor that renders an object in three dimensions.

Answer: holography or holograph (do not accept hologram)

8. They were originally organized to oppose the claims of the New York government to their home state's territory. They repeatedly harassed New Yorkers and, after the American Revolution, declared their home state an independent republic. Their lieutenant colonel commandant was Seth Warner, who accepted the position after leading them to victories at Crown Point in 1775, and at the Battle of Bennington in 1777. FTP, identify this American Revolutionary regiment from Vermont led by Ethan Allen that captured Fort Ticonderoga.

Answer: Green Mountain Boys

9. His early works reflect 16th century Mannerism, but his style began to change and he concentrated more on Biblical and mythological themes. His early works were dominated by the influence of Titian, such as his *Plague at Ashdod*, but his later works came to resemble Raphael, like his *Adoration of the Golden Calf*. He secured fame as the first French painter in history to gain international acclaim, particularly for his *Arcadian Shepherd* and *Cephalus and Aurora*. FTP, identify this greatest of the 17th century French classicists, the creator of *The Abduction of the Sabine Women*.

Answer: Nicolas Poussin

10. "Stay asleep," "No imagination," and "Submit to authority" are some of the media and government messages that people are bombarded with in this movie. The plot centers on John Nada, a jobless man who comes across a pair of sunglasses that mysteriously reveal the true faces of people. He finds that most of the important people on Earth are aliens from the Andromeda galaxy that keep humans in ignorance. Nada joins up with the small resistance movement and drives away all the aliens. FTP, this forms the plot of what 1988 John Carpenter sci-fi movie starring Rowdy Roddy Piper?

Answer: They Live

11. The titular character flees for having killed an officer. The suitors Sir Timothy Thicket and Lord Quiverwit thwart his romance with Narcissa. He later flees to France and plans to marry Miss Melinda Goosetrap, supported by the funds of his itinerant travel companion Hugh Strap. Failing in this endeavor, he goes to South America with his uncle Tom Bowling, where he meets the wealthy Don Rodrigo, who turns out to be his long lost father. He returns to marry Narcissa and mocks those that mocked him before. FTP, identify this 1748 picaresque novel by Tobias Smollet.

Answer: The Adventures of Roderick Random

12. In higher dimensions, it gives general relativity and more general gauge theories. When combined with supersymmetry, it gives rise to supergravity, which requires eleven space-time dimensions. A process known as spontaneous compactification causes the higher dimensions to "roll up" and allow only the four standard ones to be observed. The five-dimensional version of this theory allows for the existence of electromagnetic interactions. FTP, identify this type of unified field theory that postulates a general theory of relativity to higher than four-dimensional space.

Answer: Kaluza-Klein theory

13. Field Marshal Gunther von Kluge planned to strike at this site 320 kilometers southeast of Smolensk, where Soviet trenches bulged deep into German lines. In this last great offensive of the central Eastern Front, von Kluge's forces attacked the Soviet lines, and Soviet Generals Rokossovsky and Vatutin destroyed about 40 percent of the German tank forces due to new antitank guns. Soviet General Popov's army then counterattacked at Orel, forcing von Kluge to abandon his tank attack on July 13, 1943. FTP, identify this Soviet victory of WWII that proved to be the largest tank battle in history.

Answer: Battle of Kursk

14. He fulfilled a prophecy and gained the wisdom he would need to challenge his mortal enemy when he ate the Salmon of Knowledge. He studied under the druidess Bodbal and the warrioress Fiachel, who taught him everything he would need to know to revenge his family. When he was a child, his father was killed in battle by the leader of the rival clan, Goll mac Morna. Gathering 150 of the bravest and best of the Fianna warriors, he launched an attack and defeated Goll mac Morna, who died on his sword. FTP, identify this warrior from Irish legend, the hero of the *Fenian Cycle*.

Answer: Finn mac Cumhail or Finn McCool

15. After he succeeded his father as organist of the cathedral of Notre Dame in Dijon, he published a work that examined the origins of harmony and the relationships of chords called *Treatise on Harmony*. He received patronage from La Riche de la Pouplinière and began his orchestral career with such works as *Les Indes galantes* in 1735 and *Le Dauphine*. His first opera, a break from the established styles of Lully, was *Hippolyte et Aricie*. FTP, identify this 17th and 18th century French composer of the opera *Castor et Pollux*.

Answer: Jean-Philippe Rameau

16. It was first presented in 1949 under the auspices of the Library of Congress, sponsored by a philanthropic trust created by Paul Mellon. Due to the controversy over the first subject of this award, the foundation canceled future prizes, but it was announced in 1950 that the award would be resurrected and presented by the Yale University Library, and in 1960 a separate prize for poetry translation was added to the original prize for distinguished English translations of foreign poetry. FTP, identify this annual American poetry prize that was first awarded to Ezra Pound's *Pisan Cantos*.

Answer: Bollingen Prize

17. Of the five different varieties of this cell type, astrocytes encircle the capillaries in the brain and contribute to the blood-brain barrier that controls the passage of chemicals into the brain. Ependymal cells and the micro variety exist, as well as the oligodendrocytes, which form the insulating myelin sheath around the neurons of the central nervous system, and the Schwann cells, which are found in the peripheral nervous system. FTP, identify the collective name for these types of cells that support the neurons and other cells of the nervous system, whose name means "glue" cells.

Answer: glial cells (accept neuroglia)

18. Lincoln's disapproval strengthened opposition to this proposal, which was rejected by the House of Representatives in January and by the Senate in March 1861. It was preceded by the election of Lincoln and by Buchanan's declaration that the government could not coerce a seceding state into submission. It proposed that slavery should be prohibited in the territories north of 36°30', as established by the Missouri Compromise of 1820, but slavery should be protected south of that line. FTP, identify this attempt at compromise on the eve of the Civil War proposed by a Kentucky senator that supported the north.

Answer: Crittenden Compromise

19. Born Giuseppe Melchiorre Sarto, he opposed the Modernism movement and issued a decree condemning 65 Modernist propositions. He initiated the recodification of canon law, restored Gregorian chant to the liturgy, and established a new breviary as the standard for the whole church. Anticipating the Roman Catholic Action movement, he encouraged the laity to undertake church-supervised social action programs. FTP, identify this Pope who reigned from 1903-1914 and who was the last pope to be canonized in 1954.

Answer: Saint Pius X

20. He became curate of the parish of Albury in 1798, the same year he published his most famous work. His writings encouraged the first systematic demographic studies. His *An Inquiry into the Nature and Progress of Rent* held a considerable influence on Ricardo's "iron law of wages," as did his *Principles of Political Economy*. The theory purported in his most famous work was often used as an argument against helping the lower classes, and stated that the increase in population will eventually outstrip the food supply. FTP, identify this political economist, the author of *An Essay on the Principle of Population*.

Answer: Thomas Malthus

21. The oldest ones studied are in Denmark, where they are so large and ancient that they were originally thought to be natural formations. First excavated in the 19th century, ones near ocean shores where mollusks abound are often called shell heaps. Other objects unearthed from these sites include not only animal debris, but also artifacts such as piercers, knives, scrapers, hammers, slingstones, and pottery. FTP, identify this term for an ancient refuse heap left at the site of a camp or village.

Answer: midden

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Bonus Questions

1. Identify these terms from economics FTPE.

- a) This is the term for the sum of the incomes of all the individuals in the economy after all taxes have been deducted and all transfer payments have been added.

Answer: disposable income

- b) This is the ratio of the change in consumption to the change in disposable income that produces the change in consumption.

Answer: marginal propensity to consume or MPC

- c) The marginal propensity to consume appears as the slope on the graph of this. It is the relationship between total consumer expenditures and total disposable income in the economy, holding all other determinants of consumer spending constant.

Answer: consumption function

2. Suppose that we can form a class of all classes that are not included in themselves. Is this class within itself or not? Identify the following FTPE.

- a) The statement above is a summarization of this 20th century philosophical problem.

Answer: Russell's paradox

- b) A solution to Russell's paradox might be this theory, which states that properties fall into different categories, and that the property is never the same as the entities to which it applies.

Answer: theory of types

- c) Bertrand Russell discussed his paradox and his theory of types in this work of logic, which he co-wrote with Alfred Whitehead.

Answer: Principia Mathematica

3. Identify these 20th century Irish dramas from plot descriptions FTPE, or FFPE if you need the playwright.

- a) (10 points) Christy Mahon, a timid boy, flees home after dealing his father a blow to the head, thinking him dead. The people of the town regard his actions as heroic, but change their opinion when the two have another scuffle.

(5 points) John Millington Synge

Answer: The Playboy of the Western World

- b) (10 points) Richard Rowan, an Irish writer who has spent most of his life abroad, returns to Dublin. The action of the play concerns Richard, his common-law wife Bertha, and his friends.

(5 points) James Joyce

Answer: Exiles

- c) (10 points) One title character attempts to overcome a life of war, poverty, and drunkenness. Her story is set against the Irish civil war of 1822. The other title character is her husband, a weakling who hides behind the bottle and fine language.

(5 points) Sean O'Casey

Answer: Juno and the Paycock

4. Identify the following concerning group theory FTPE.

- a) If all the elements of a group commute, they are described with this term.

Answer: Abelian

- b) This type of group has a finite number of elements, such as the symmetries involved in rotations and reflections of molecules, which give rise to point groups.

Answer: discrete

- c) This type of group is exemplified by rotation groups, the set of rotations about a fixed axis. There are an infinite number of elements in this group and they all display this property.

Answer: continuous

5. Identify the following concerning the Mau Mau Rebellion FTPE.

- a) In which African country did the Mau Mau Rebellion take place?

Answer: Kenya

- b) This is one of the largest ethnic groups in Kenya, and members of this group organized the secret Mau Mau society that began the rebellion against the British in 1951.

Answer: Kikuyu

- c) This Kikuyu leader of the Kenya African Union was deemed responsible for inciting the Mau Mau Rebellion and was sentenced to seven years in prison. He is best known for his anthropological work and his studies under Bronislaw Malinowski.

Answer: Jomo Kenyatta

6. Identify these psychologists from descriptions F15PE.

- a) In his chief work, *Psychology from an Empirical Standpoint*, he introduced the notion of the "intentionality" of mental phenomena into modern philosophical doctrine. This German psychologist and philosopher influenced the works of Husserl and the logical positivists in the early 20th century.

Answer: Franz Brentano

- b) This American psychologist was instrumental in the development of the new science of educational psychology. His work in that field shows the influence of William James, a classmate of his at Harvard. In 1887, he founded the *American Journal of Psychology*.

Answer: G. Stanley Hall

7. Given a description, identify the U.S. river FTPE.

- a) The largest city on this river is Shreveport, Louisiana, and its chief tributaries are the Wichita, Washita, Kiamichi, and Sulphur Rivers. It forms the Oklahoma-Texas border and empties into the Mississippi.

Answer: Red River

- b) Its tributaries include the White and Tippecanoe Rivers. It rises in western Ohio and flows mostly southwest across Indiana, forming its border with Illinois before flowing into the Ohio River.

Answer: Wabash River

- c) Formed at the junction of the West Fork and Tygart Rivers in Fairmont, West Virginia, this river flows north to Pittsburgh and joins the Allegheny to form the Ohio River.

Answer: Monongahela River

8. Identify the following works by Ranier Maria Rilke FTPE.

- a) This series of poems were named after a castle near Trieste, where Rilke had stayed for a year. Elegiac in mood, though not necessarily in meter, these poems try to view reality from the “angelic” perspective.

Answer: Duino Elegies

- b) This sonnet cycle of fifty-five poems centers on a famous Greek myth. One of the main ideas of this cycle deals with realizing the true essence of man. The means by which one does this is to make his or her nature fluid, capable of constant inner change and adaptation.

Answer: The Sonnets to Orpheus

- c) The hero and titular character of this novel by Rilke is a Danish poet of noble birth who comes to Paris, where he lives in poverty. It is written as a collection of diary entries and is a parallel of the Biblical story of the prodigal son.

Answer: The Notebooks of Malte Laurids Brigge

9. Identify the following types of particle accelerators FTPE.

- a) This is a cyclic accelerator in which charged particles are fed through the center of the device and sped through two D-shaped conductors in an outward spiral. Ernest Lawrence invented this device in 1931.

Answer: cyclotron

- b) Particles in this type of accelerator are sped up through circular orbits by radio-frequency fields and make use of the namesake radiation that is emitted to regulate the motion of the particles.

Answer: synchrotron

- c) This is a type of cyclotron in which the frequency of the accelerating potential is synchronized with the increasing period of revolution of a group of particles, resulting in their increase in mass as they approach relativistic speeds.

Answer: synchrocyclotron

10. Identify the following concerning the Protestant Reformation FTSNOP.

- a) (5 points) The Diet of Worms convened in 1521 to ask this Protestant leader to recant his critical statements of the Catholic Church.

Answer: Martin Luther

- b) (10 points) Presented in 1530, this was the most widely accepted specifically Lutheran confession, or statement of faith. It was presented at a diet in the city that bears its name.

Answer: Augsburg Confession

- c) (15 points) This German religious reformer, whose name means "black earth," penned the *Augsburg Confession* under the auspice of Martin Luther.

Answer: Melanchthon or Philipp Schwarzerz

11. Identify these animals from Norse mythology FTPE.

- a) This is the primeval cow on whose milk the giant Ymir fed. She was created from the melting ice at the beginning of time and sustained herself by licking the salt and hoar frost from the ice of Niflheim.

Answer: Audhumla

- b) This is the golden boar that was given to Freyr by Loki to use as a mount.

Answer: Gullinbursti

- c) When Loki transformed into a mare and mated with the stallion Svaldifari, this eight-legged horse was the offspring, which Loki gave to Odin to use as a mount.

Answer: Sleipnir

12. Identify these 20th century German artists from works FTPE.

- a) The triptychs *Akrobaten*, *Schauspieler*, and *Karneval*; *The Prodigal Son*; *Rugby Players*

Answer: Max Beckmann

- b) *Girl Under a Japanese Parasol*; *Two Women in the Street*; *Self-Portrait as a Soldier*

Answer: Ernst Kirchner

- c) *Oedipus Rex*; *The Robing of the Bride*; *Pieta*, or *Revolution by Night*; *The Virgin Spanking the Christ Child before Three Witnesses*; *Andre Breton*, *Paul Eluard*, and *the Painter*

Answer: Max Ernst

13. Identify these literary terms coined by T. S. Eliot F15PE.

- a) Coined in a 1919 essay on *Hamlet*, this term refers to a fact or circumstance corresponding to an emotion or inner state. It is so closely associated with an emotion that when the object is presented, the emotion is necessarily evoked.

Answer: objective correlative

- b) Eliot created this term in *The Metaphysical Poets* in 1921. This term refers to the sense of disjointedness in thought and feeling in post-Metaphysical poets. Poetry became either intellectual or emotional, but not both.

Answer: dissociation of sensibility

14. Identify the following amino acids from descriptions FTPE.

- a) This simplest of the amino acids is important in the manufacturing of hormones responsible for a strong immune system. It is the only amino acid that does not display optical activity.

Answer: glycine

- b) The only amino acid with a sulfhydryl group, it helps lower cholesterol levels by increasing the liver's production of lecithin and is a natural chelating agent for heavy metals.

Answer: methionine

- c) This amino acid is the primary constituent of the protein hemoglobin and has been used in the treatment of rheumatoid arthritis, ulcers, and anemia. A deficiency can cause poor hearing.

Answer: histidine

15. Identify these African-American revolts against slavery FTPE.

- a) This 1841 incident took place on the ship after which it was named. A group of slaves bound for New Orleans from Virginia took possession of the ship, killed the captain and the crew, and sailed for Nassau, Bahamas. They became free there according to British law and the U.S. failed to recover them.

Answer: Creole case or incident

- b) This ex-slave purchased his freedom, but in 1821 began to plot a rebellion against all slave owners in Charleston, South Carolina. The plot was leaked to the authorities, however, who arrested and hanged this man and his followers.

Answer: Denmark Vesey

- c) In the spring of 1800, this slave plotted with Jack Bowler to seize the arsenal at Richmond and kill all whites. His plans were foiled, however, by a torrential thunderstorm that washed away a bridge vital to his success.

Answer: Gabriel Prosser

16. Identify these works of Claude Debussy FTPE.

- a) A trance-like flute theme opens this orchestral work, establishing a languid atmosphere that fully captures the essence of the Mallarmé poem upon which this work was based.

Answer: Prélude à L'Après-Midi d'un Faune or Prelude to the Afternoon of a Faun

- b) This 1912 ballet of Debussy's was the first of his last three works. It was produced by Diaghilev's Ballet Russes in 1913 and contains a basic, undulating phrase that is then developed into a wild variety of musical gestures, vaguely corresponding to the strokes of a tennis game.

Answer: Jeux or Games

- c) This suite was dedicated to Debussy's daughter. Debussy gave all the sections English titles, which demonstrates his lack of facility with the language since the work *Jimbo's Lullaby* was meant as a baby elephant's lullaby. Other parts include *The Snow is Dancing* and *Doctor Gradus ad Parnassum*.

Answer: Children's Corner Suite

17. Beans and disease to you, too. Given the name of an actor, identify the character he played on *Sanford and Son* FTSNOP.

- a) (5 points) Redd Foxx

Answer: Fred Sanford (accept either name)

- b) (10 points) LaWanda Page

Answer: Aunt Esther Anderson

- c) (15 points) Pat Morita

Answer: Ah Chew

18. Identify these Japanese poetic forms from descriptions FTSNOP.

- a) (5 points) This form of Japanese poetry usually deals with nature. It is composed of 17 syllables, with 5-7-5 syllables per line.

Answer: haiku

- b) (10 points) This poetic form of 31 syllables consists of 5-line stanzas of 5-7-5-7-7 syllables per line.

Answer: tanka

- c) (15 points) Usually consisting of 100 verses, this poetic style involved two or more poets that alternated verses.

Answer: renga

19. Identify the following different phyla FTPE.

- a) This phylum of invertebrates is comprised of the flatworms and includes the classes Cestoda, Trematoda, and Turbellaria.

Answer: platyhelminthes

- b) This phylum of invertebrates is comprised of the classes Polychaeta, Oligochaeta, and Hirudinea. It consists of the segmented worms that display metameric segmentation.

Answer: annelida

- c) This phylum is characterized by animals having a hollow dorsal nerve cord and, at some stage in their development, a flexible skeletal rod and gill slits opening from the pharynx.

Answer: chordata

20. Given a description, identify these Chief Justices of the U.S. Supreme Court FTPE.

- a) He served as the eighth chief justice, reigning from 1888 until his death in 1910. He served on a commission to arbitrate the Venezuela boundary dispute, and served as a member of the Permanent Court of Arbitration in The Hague.

Answer: Melville Fuller

- b) Washington appointed him the third chief justice in 1796, and he served for three years until John Adams sent him as a commissioner to France to negotiate trade agreements with Napoleon.

Answer: Oliver Ellsworth

- c) This successor to Ellsworth saw many of the famous early court cases, such as Fletcher v. Peck and Dartmouth College v. Woodward. He served as the fourth chief justice from 1801 to his death in 1835.

Answer: John Marshall

21. Identify these Christian holidays from descriptions FTPE.

- a) Held on November 11, this feast day for a saint is the day on which cattle were slaughtered and salted for winter consumption. Traditionally, fairs were held on this day, and farmworkers were hired for the coming season.

Answer: Martinmas

- b) A feast day for this saint, held on September 29, was established because it is the anniversary of the dedication of a namesake church on the Salarian Way in Rome in the 6th century CE. It is the beginning of the legal and university terms in England, and the day of collection of quarterly rents.

Answer: Michaelmas

- c) Celebrated on February 2, it was instituted in 541 by Justinian I. This holiday observes the presentation of the infant Christ in the Temple and the purification of the Virgin Mary.

Answer: Candlemas