

ICCS 2014
Packet 1

TOSSUPS

1. The demise of one character in this novel is inferred from a chess club roster, and another character in this novel is arrested for talking in his sleep. Another character in this novel is “only a rebel from the waist downwards” and is a member of the Junior Anti-Sex League. The protagonist’s friend Syme works on the 11th edition of the Newspeak dictionary before becoming an unperson. For 10 points, Ministry of Truth employee Winston Smith is the protagonist of what dystopian novel by George Orwell?

ANSWER: 1984

2. Favorable geography helped this man fend off a large force led by King Constantine at the Battle of the Sakarya River. Reformism and Nationalism are two of the “six arrows” of this man’s ideology. He became the President of his country after his ambassador Ismet Inonu won many territorial negotiations in the Treaty of Lausanne. This man, who replaced the Arabic script of his native language with a Latin script, established a secular Western legal code after overthrowing the final Sultan of the Ottoman Empire with the Young Turks. For 10 points, name this first President of Turkey who is called the “Father of all Turks.”

ANSWER: Ataturk [or Mustafa Kemal Pasha]

3. This man incorrectly found Andromeda to be approximately one million light-years away. Later work led him to declare a redshift law named after him, though it was first proposed by Georges Lemaître. His “tuning fork” classifies galaxies based on appearance. The reciprocal of his namesake constant is the approximate age of the universe; that constant is commonly given in units of kilometers per second per megaparsec. For 10 points, name this American astronomer who postulated the expansion of the universe, the namesake of an orbiting telescope.

ANSWER: Edwin Hubble

4. This thinker argued that Octavian was a “grotesque mediocrity” imitating Caesar in a book stating that history repeats itself “first as tragedy, then as farce” in reference to Napoleon III. This man theorized that people not owning the product of their labor results in alienation from human nature. This developer of historical materialism wrote a tract that claims “a specter is haunting Europe” and ends by encouraging the proletarians of the world to unite. For 10 points, name this author who worked with Friedrich Engels on *The Communist Manifesto*.

ANSWER: Karl Marx

5. This painter showed a girl sitting up in a white-canopied bed and looking out a window in *Chambered Nautilus*. This man's painting *Braids*, as well as several nudes hidden from his wife Betsy, was uncovered after Leonard Andrews bought over 250 portraits of the artist's Scandinavian immigrant neighbor Helga Testorf. He also painted a colorless barn on the horizon being looked towards by a polio-crippled girl in a field, whose back is to the viewer. For 10 points, name this American painter from Cushing, Maine, the creator of *Christina's World*.

ANSWER: Andrew Wyeth

6. Some participants in a raid on this country joined up with Swallow Team and escaped this country on skis after blowing up their target. A team of Royal Engineers was executed after a failed raid in this country with gliders in Operation Freshman. Those operations targeted a plant at Vemork in this country’s Telemark region which produced heavy water for nuclear weapons. Vidkun Quisling served as

Germany's puppet ruler of this country, whose King Haakon VII went into exile during World War II. For 10 points, name this Scandinavian country which the Nazis controlled from Oslo.

ANSWER: Norway (or Norge or Noreg)

7. "Robin Hooders" in this state have attempted to prevent parking tickets from being issued. That group is connected to the Free State Project, which plans to influence this state's politics by having 20,000 libertarians move there. This state features the largest state legislature in the US, and, like Massachusetts, calls its legislature the "General Court." This is the only state with an all-female Congressional delegation, and also has a female governor, Maggie Hassan. For 10 points, name this New England state which, every four years, has the earliest Presidential primaries.

ANSWER: New Hampshire

8. A small transverse version of this quantity is generated in the skin effect, and this quantity is odd under spatial inversion while even under time reversal. This quantity induces the splitting of spectral lines in the Stark effect and it falls off as the inverse-third power of the distance for a dipole arrangement. The Poynting vector is the cross product of the magnetic field with this quantity, whose divergence is equal to the charge density according to Gauss' Law. For 10 points, identify this vector quantity which falls off as the inverse square of the distance from a point charge and exerts Coulomb force on charged particles.

ANSWER: electric field

9. One character in this novella stops taking off his work uniform after coming home from his job as a bank attendant. At the end of this work, the central family decides to take a trolley ride and find their daughter a suitable husband. Three boarders are disgusted when they spot the central character of this novella, who often hides under a couch while his violin-playing sister Grete brings him food. For 10 points, name this Franz Kafka novella that opens with Gregor Samsa waking up to find he transformed into an insect.

ANSWER: *The* Metamorphosis [or *Die* Verwandlung]

10. Niels Kaj Jerne cited this man's concept of "open-endedness" in a protein generation model in a lecture applying one of this man's ideas to the immune system. One work by this man argued that "bounding nodes" were "barriers" in order to unify Subadjacency with the Empty Category Principle. "Type 2" on his namesake hierarchy includes context-free grammars. He used the sentence "colorless green ideas sleep furiously" to illustrate his "poverty of the stimulus" argument. For 10 points, name this MIT linguist who proposed the idea of Universal Grammar.

ANSWER: (Avram) Noam Chomsky

11. A symporter of this organ is inhibited by pertechnate ions, and this organ's function is inhibited by propyl-thio-uracil and methimazole. This organ forms the foramen cecum as it descends during development. The parafollicular cells of this organ produce a peptide that opposes the action of PTH. One disease of this organ is caused by antibodies stimulating the TSH receptor and causes eye-popping; that is Graves' disease. When this gland is malnourished, it can swell in a goiter. For 10 points, name this gland in the neck that requires iodine to function.

ANSWER: thyroid

12. The Arbol de Piedra is a tree-shaped stone formation in this nation's Eduardo Avaroa Fauna National Reserve. A proposed highway in this nation has been protested by the indigenous people of Isiboro Sécuré National Park. The Salar de Uyuni in this nation contains most of the world's reserves of lithium. Most of the Spanish empire's silver came from this nation's mine at Potosí. This nation shares Lake Titicaca with Peru. For 10 points, name this South American nation whose largest city is Santa Cruz de la Sierra and whose seat of government is La Paz.

ANSWER: Plurinational State of **Bolivia** [or Estado Plurinacional de **Bolivia**]

13. This author described how “they put me in the closet because they liked me still” in the poem “They shut me up in Prose.” A “plank in reason” breaks and “mourners to and fro kept treading” in this author’s poem “I felt a Funeral, in my Brain.” Another of her poems describes the day that the speaker “first surmised that Horses’ Heads were toward Eternity.” This poet described a ride in a carriage which held “but just Ourselves – And Immortality.” For 10 points, name this author of “Because I could not stop for death”, nicknamed “the Belle of Amherst.”

ANSWER: Emily **Dickinson**

14. A pope named Pius who had this regnal number was the only person to write an autobiography while pope, and wrote the erotic novel *The Tale of the Two Lovers* before becoming pope. Another pope of this number commissioned the painting of the Sistine Chapel ceiling. A pope of this number gave a speech ending with the rallying cry “God wills it” at the Council of Clermont, calling for the First Crusade. Mehmet Ali Agca tried to assassinate a pope of this number, who preceded Benedict XVI. For 10 points, give the number of the most recent Pope John Paul.

ANSWER: **two**

15. In the last movement of the second of these pieces, fast sixteenth notes depict a thunderstorm. The last of these pieces, in F minor, has an E-flat major slow movement with pizzicato arpeggios in the accompaniment. The first movement of the first of these pieces uses violin trills to represent birdsong. These pieces were published in *The Contest Between Harmony and Invention*, and were accompanied by sonnets that may have been written by the composer. For 10 points, name this set of violin concertos by Antonio Vivaldi that depict different times of year.

ANSWER: *The **Four Seasons*** [or *Le **quattro stagioni***; do not accept or prompt on “The Seasons” alone]

16. These entities are treated in Hückel theory as linear combinations of a similar construct. The secular determinant can be used to solve for their energies. The theory of these entities can be used to explain why diatomic oxygen is paramagnetic and why diatomic helium does not exist. One type of these things is denoted by a superscript star and has zero electron density. The most common types of these orbitals are bonding and antibonding. For 10 points, name this type of orbital, contrasted with atomic orbitals.

ANSWER: **m**olecular **o**rbitals [prompt on partial answer]

17. One of these items belonging to Shiva is broken by Rama, winning him the right to marry Sita. Varuna gives a chariot and one of these items called Gandiva to Arjuna to use during the Kurukshetra War. One of these made of sugarcane and honeybees is owned by Kama. Penelope devises a test involving twelve axes and one of these items; after passing that test, Odysseus uses that item to kill many of her other suitors. This is the primary weapon of Philoctetes, Artemis, and Apollo. For 10 points, name these weapons, with which Cupid inspires love by firing arrows.

ANSWER: **bows** and arrows [prompt on “arrow(s)” until read]

18. This person pardoned Communist Maurice Thorez, after which Thorez gave a speech supporting him. After Maurice Papon’s police massacred over 70 people in 1961, this man helped cover it up and he resigned following student protests in May, 1968. This man’s boycott of the European Community caused the Empty Chair crisis and he negotiated the Evian Accords that eventually led to Algerian independence. For 10 points, name this French politician who established the Fifth Republic after leading Free French forces during World War II.

ANSWER: Charles **de Gaulle**

19. He's not E.M. Forster, but this author categorized critics as "hostile," "amazed," or "conscious" in his essay "Where Angels Fear to Tread." This man created a character who is forbidden from marrying Clara because she is an osu. In another work by this man, an explosion at a funeral kills Ezeudu's son, after the protagonist sacrifices his adopted child, Ikemefuna. That novel's sequel was called *No Longer at Ease*. For 10 points, name this Nigerian author who used a quote from Yeats's "The Second Coming" to title his novel about the life of Okonkwo, *Things Fall Apart*.

ANSWER: Chinua Achebe

20. The Nestorian minister Alopen was the first to bring Christianity to this country, around 655 CE. An 81-part sacred text from this country opens by claiming "the name that can be named is not the eternal Name." This country's folklore includes a Queen Mother of the West who tends to immortality-granting peaches. A faith founded in this country advocates action through inaction, in accordance with the ineffable Way. For 10 points, name this modern-day country which reveres the Jade Emperor, and which is the place of origin of Daoism and Confucianism.

ANSWER: China [or Zhongguo]

21. In the 1700's, Scottish merchants known as the "lords" of this product included merchant John Glassford. The House of Burgesses passed a 1730 act regulating how inspectors graded the quality of this crop. James Buchanan Duke, the namesake of Duke University, ran a company named for this product that was broken up in 1906 for antitrust violations. John Rolfe, the future husband of Pocahontas, was the first Englishman to grow this crop in Virginia. For 10 points, name this American cash crop whose leaves are used for smoking in cigarettes.

ANSWER: tobacco [prompt on cigarettes until mentioned, prompt on things like cigars]

22. Canaries can help detect smashing operations against an entity of this name. This type of data structure is used to perform the backtracking steps in depth-first searches and can easily support operations on a reverse Polish notation calculator. Infinite recursion can cause an entity of this name to overflow. When this data structure is implemented with a singly-linked list, the head of the linked list is removed in the pop operation, unlike a pop operation on a queue. For 10 points, name this last-in, first-out data structure.

ANSWER: call stacks

23. In this novel, the crew of the cargo ship *Demeter* vanishes one by one, leaving only the captain, who is eventually found dead holding a cross. A Bowie knife and a Kukri are used in this novel's climactic fight, during which Quincey Morris is killed. In this epistolary novel, Lucy is proposed to by three men on the same day, and ultimately accepts Lord Godalming's proposal. Its title character is killed by a group including Jonathan Harker and Abraham Van Helsing. For 10 points, name this Bram Stoker novel about a Transylvanian vampire.

ANSWER: Dracula

24. One photograph taken in this state is of Lorrie Stirm running to hug her father, who had been a prisoner of war in Vietnam. That photograph from this state is *Burst of Joy*, by Sal Veder. This state was where a photograph of Florence Thompson entitled *Migrant Mother* was taken by Dorothea Lange. Another photographer's pictures taken in this state include *Moon and Half Dome*. For 10 points, name this state where Ansel Adams took photographs like *Half Dome from Glacier Point* in Yosemite.

ANSWER: California

BONUSES

1. The identity kind of these entities is square and has ones along its diagonal. For 10 points each:

[10] Name these mathematical constructs in which numbers or expressions are placed in a rectangular array with rows and columns.

ANSWER: matrix [or matrices]

[10] A square matrix is invertible when this value is non-zero. Laplace's formula gives it in terms of minors or cofactors, and for a matrix with elements a, b, c, and d, it equals ad minus cb.

ANSWER: determinant

[10] Eigenvalues of a matrix are the roots of this kind of polynomial, formed by taking the determinant of a matrix minus the identity times a variable, lambda.

ANSWER: characteristic polynomial

2. This philosopher's notion of a *telos*, or final cause, was later revised by Christian thinkers to mean the God-given purpose of each created object. For 10 points each:

[10] Name this student of Plato and teacher of Alexander the Great. His lectures from the Lyceum became such writings as *Poetics*, *Rhetoric*, and *Nicomachean Ethics*.

ANSWER: Aristotle of Stagira [or Aristoteles]

[10] These arguments were held by Aristotle to be the cornerstone of deductive logic. They include a major premise, a minor premise, and a conclusion which follows from the two.

ANSWER: syllogism

[10] The Greek name of this Aristotle text refers to its placement after his writings on the nature of motion. It describes the "unmoved mover" and includes a long account of primary substances.

ANSWER: Metaphysics [or *ta meta ta physika*]

3. In this play, Major Undershaft is determined that his factory should be inherited by a foundling like himself, and not his legitimate son Stephen. For 10 points each:

[10] Name this play whose title character gets upset that the Salvation Army has accepted donations from a distillery and an arms manufacturer.

ANSWER: Major Barbara

[10] In this other play by the same author, Pickering places a bet with the linguist Henry Higgins that he won't be able to teach the cockney flower girl Eliza Doolittle to speak like a duchess.

ANSWER: Pygmalion

[10] Both *Major Barbara* and *Pygmalion* were written by this Irish playwright, whose other works include *Arms and the Man* and *Caesar and Cleopatra*.

ANSWER: George Bernard Shaw

4. This woman wrote a book that described the so-called "Problem That Has No Name." For 10 points each:

[10] Name this woman who helped launch second-wave feminism by describing the frustrations of suburban housewives in her book *The Feminine Mystique*.

ANSWER: Betty Friedan [or Bettye Goldstein]

[10] Friedan was the first president of this group, formed in 1966 to bring women "into equal partnership with men."

ANSWER: NOW [or National Organization for Women]

[10] An oft-heard request of NOW and other feminist groups was that "equal work" would result in this for women. In the U.S., a clear gap between men and women persists involving this statistic.

ANSWER: equal pay [accept any answer indicating that pay between men and women should be equal]

5. Big Sean is featured on this artist's song "Best Mistake" from her 2014 album *My Everything*. For 10 points each:

[10] Name this American singer who "got a bad boy, I must admit it" in her 2013 hit song "The Way."

ANSWER: Ariana **Grande**-Butera

[10] Ariana Grande collaborated with this Australian rapper on her song "Problem." She "can't stand no haters" and "can't shop at no department" in her number one hit "Fancy."

ANSWER: Iggy **Azalea** [or Amethyst Amelia **Kelly**]

[10] Azalea's song "Black Widow" from her album *The New Classic* features this Kosovo-born British singer who wants to "party and bullshit" in her 2012 song "How We Do (Party)."

ANSWER: Rita Sahatçiu **Ora**

6. The protagonist of this work witnesses a "brilliant event" every September, when the "assembly of station wagons" signals the beginning of the fall semester. For 10 points each:

[10] Identify this novel about Professor of Hitler Studies Jack Gladney's attempts to deal with "The Airborne Toxic Event" and his wife's addiction to the drug Dylar.

ANSWER: **White Noise**

[10] This Postmodern American author of *White Noise* described Keith Neudecker becoming a professional poker player after the September 11th attacks in *Falling Man*.

ANSWER: Donald Richard **DeLillo**

[10] In DeLillo's novel *Libra*, Nicholas Branch intensely studies the assassination of this U.S. President, while the protagonist's attempts to kill Edwin A. Walker go awry.

ANSWER: **John Fitzgerald Kennedy** [accept **JFK**; prompt on "Kennedy"]

7. The title character states that his goal for justice is to "make the punishment fit the crime," such as having the teeth of quack doctors extracted by amateurs. For 10 points each:

[10] Name this operetta in which Nanki-Poo disguises himself as a minstrel in order to court Yum-Yum.

ANSWER: *The* **Mikado** (or *The* **Town of Titipu**)

[10] These two men, a librettist and a composer, teamed up to write *The Mikado*, as well as other comic operas like *The Pirates of Penzance* and *HMS Pinafore*.

ANSWER: William S. **Gilbert** and Arthur Seymour **Sullivan**

[10] In *The Mikado*, all the town officials resigned when Ko-Ko became Lord High Executioner, so this character stepped in to fill their roles as Lord High Everything Else.

ANSWER: **Pooh-Bah**

8. This man sponsored expeditions that discovered the Azores, and supported what became the University of Lisbon. For 10 points each:

[10] Name this Portuguese prince who helped start the Portuguese Golden Age by supporting exploration.

ANSWER: **Henry the Navigator** [prompt on partial answer]

[10] Henry's father John I founded this Portuguese dynasty, which ruled until Portugal was absorbed into Spain in 1580.

ANSWER: **Aviz**

[10] Henry sponsored the expeditions in the hopes of finding this legendary king's kingdom. He was widely believed in the middle ages to rule over a Christian kingdom in Ethiopia or India.

ANSWER: **Prester John**

9. This island is connected to the island of Funen by the Great Belt Fixed Link. For 10 points each:

[10] Name this island whose Kronborg castle in Elsinore is the setting of *Hamlet*.

ANSWER: **Zealand** [do not accept "New Zealand"]

[10] This most populous city on Zealand is home to the Tivoli Gardens amusement park and the Edvard Eriksen statue *The Little Mermaid*.

ANSWER: **Copenhagen**

[10] Copenhagen is the capital of this European nation which claims Greenland and the Faroe Islands as its territory and shares the Jutland peninsula with Germany.

ANSWER: **Denmark**

10. Flame hemorrhages appear in this structure in people suffering from diabetes or hypertension. For 10 points each:

[10] Name this organ found in the back of the eye, which relays signals from light-sensitive cells to the optic nerve.

ANSWER: **retina**

[10] There are two types of photoreceptor cells in the retina, one responsible for color vision, and the other responsible for vision in low light. Name both.

ANSWER: **rod** and **cone**

[10] The outermost layer of the retina contains these cells, which receive signals from bipolar cells and send them to the optic nerve.

ANSWER: retinal **ganglion** cells

11. The Loiseles spend ten years paying off a debt they incur after a ball at the Ministry of Education in this story. For 10 points each:

[10] Name this short story. At its end, Madame Loisel learns the object she went 36,000 francs in debt in order to replace was fake.

ANSWER: “The **Necklace**” [or “La **Parure**”]

[10] “The Necklace” was written by this man. He also wrote the story “Boule de Suif,” in which passengers hypocritically shun a prostitute.

ANSWER: Guy de **Maupassant**

[10] “The Necklace” is set in this city. This city is also the setting of a Victor Hugo novel about the bell-ringer Quasimodo.

ANSWER: **Paris**, France

12. Answer the following about Enrico Dandolo, a power broker of medieval European politics, for 10 points each.

[10] Dandolo held this elected leadership title with an Old Italian name. Genoa was ruled by one of these people, and in Dandolo's city they ruled from a palace near Saint Mark's Square.

ANSWER: **doge** [or **doxe**]

[10] As doge, Dandolo presided over this Italian city-state whose layout has been organized around canals for centuries.

ANSWER: Serene Republic of **Venice** [or Serenissima Republica di **Venezia**]

[10] Dandolo helped finance this anti-Muslim campaign, despite being over eighty years old and blind when it started. In 1204, its participants went astray and sacked Constantinople.

ANSWER: **Fourth Crusade** [prompt on “Crusades”]

13. This artist painted a work with several boys in or near a river; one wears a straw hat while another has a red hat. For 10 points each:

[10] Name this painter whose works include *Bathing at Asnieres* along with other paintings like *The Circus* and *Young Woman Powdering Herself*.

ANSWER: Georges-Pierre **Seurat**

[10] Georges Seurat is best known for his pioneering work in this painting technique, which van Gogh used on a self-portrait where he had red facial hair and a brown jacket.

ANSWER: **pointillism** [accept word forms]

[10] Seurat's best known work incorporating pointillism is this huge one featuring a group of people standing near a body of water, including several women prominently holding umbrellas.

ANSWER: A **Sunday Afternoon** on the Island of La Grande Jatte [or Un **dimanche après-midi** à l'Île de la Grande Jatte]

14. A substance ordered in this way consists of a regular pattern called a lattice. For 10 points each:

[10] Name this type of solid whose constituent particles are arranged orderly throughout three dimensions.

ANSWER: **crystalline** solid

[10] This crystal arrangement produces a 68% packing efficiency, greater than that of a simple cubic arrangement but less than that of hexagonal closest packing. Its coordination number is 8.

ANSWER: **body-centered cubic** packing [or **bcc**]

[10] A solid that does not exhibit a crystalline structure is known by this name.

ANSWER: **amorphous** solid

15. This concept was first introduced in its creator's book *Theory of Moral Sentiments*. For 10 points each:

[10] Identify this metaphor that captures the idea that the self-interested nature of the market seamlessly promotes the interest of the nation at large.

ANSWER: **invisible hand**

[10] The invisible hand metaphor was created by this Scottish thinker, who laid the foundation for capitalism and the field of economics in his masterpiece *The Wealth of Nations*.

ANSWER: Adam **Smith**

[10] Adam Smith promoted the free market in opposition to this economic system. He coined this system's English name and believed that it gave too much power to the royal state.

ANSWER: **mercantile** system [accept word forms like "mercantilism"]

16. This speech is recorded in chapters 5 through 7 of the Gospel of Matthew. For 10 points each:

[10] Name this long speech from Jesus's ministry, in which he tells the people below him to "turn the other cheek" if someone hits them.

ANSWER: **Sermon on the Mount** [or **Sermo in monte**]

[10] This term describes the nine phrases, such as "blessed are the poor in spirit, for theirs is the kingdom of heaven," which open the Sermon on the Mount.

ANSWER: **Beatitudes**

[10] Jesus cites these flowers, which neither "toil nor spin," in the Sermon on the Mount to show how God provides for every living thing.

ANSWER: **lilies** of the fields

17. One of these route went through the land of the Sabines, and the Appenines, and was used to move a substance gathered from the mouths of the Tiber River to the adriatic. For 10 points each:

[10] Identify these routes that were integral to the trade of a commodity that is now commonly iodized.

ANSWER: **salt roads** [accept equivalents for "roads" like "highways"]

[10] An extensive account of salt production is just some of the evidence that has been used to corroborate that this Venetian traveler did indeed visit China during the 13th century.

ANSWER: Marco **Polo**

[10] Salt was used as currency in this empire, whose capital was located at Gao. This empire was ruled by leaders like Askia Muhammad and Sunni Ali.

ANSWER: **Songhai** empire [or **Songhay** empire]

18. The curl of this quantity is zero when the flow it describes is irrotational. For 10 points each:

[10] Identify this vector quantity from fluid mechanics whose curl in general is the vorticity.

ANSWER: **velocity** field

[10] This term describes flow for which the divergence of the velocity field is zero. Fluids described by this term maintain a constant density within an infinitesimal control volume that moves with the same velocity as the flow.

ANSWER: **incompressible** [accept **isochoric**]

[10] This scientist's namesake circulation theorem holds that an inviscid flow that starts out irrotational will remain irrotational. He is also the namesake of the unit of absolute temperature, in which 0 is absolute 0.

ANSWER: William **Thomson**, First Baron **Kelvin** [accept either name]

19. This piece's most famous melody is played in its Largo second movement by the English horn. For 10 points each:

[10] Name this symphony, which was written during the composer's stay in the United States. Its composer was influenced by African-American spirituals and Native American music.

ANSWER: **Symphony No. 9** in E minor, "**From the New World**" [or **New World Symphony**; accept either underlined portion]

[10] The *New World Symphony* was written by this composer, who also composed the *Slavonic Dances* and a famous *Humoresque*.

ANSWER: Antonin **Dvorak**

[10] This other Czech composer wrote the tone poem collection *Ma Vlast*, which includes pieces such as "From Bohemia's Fields and Woods" and "The Moldau."

ANSWER: Bedrich **Smetana**

20. This story's title character greets people by saying, "Hello, shell shock!" For 10 points each:

[10] Name this short story about Marjorie's socially awkward cousin who, after performing the title action, cuts off Marjorie's pigtails and leaves town.

ANSWER: "**Bernice Bobs Her Hair**"

[10] "Bernice Bobs Her Hair" is by this Jazz-age author who wrote about Dick Diver in *Tender Is the Night* and about the ill-fated James Gatz in *The Great Gatsby*.

ANSWER: Francis Scott Key **Fitzgerald**

[10] This first novel by Fitzgerald is about Amory Blaine, who befriends Monsignor Darcy and falls in love with Rosalind Connage, who spurns him for a wealthy man.

ANSWER: **This Side of Paradise**

21. This character's preference for the Palatine Hill as the site of a new city sparked a quarrel with his brother, whose choice was the Aventine Hill. For 10 points each:

[10] Name this son of Mars and Rhea Silvia, who founded the city of Rome after killing his brother Remus.

ANSWER: **Romulus**

[10] In order to balance out his mostly-male population, Romulus ordered the abduction of women from this neighboring tribe, whose king Titus Tatius later became co-ruler of Rome.

ANSWER: the **Sabines**

[10] This man was elected as the second king of Rome as a compromise between factions loyal to Romulus and Titus. He received divine guidance from the nymph Egeria.

ANSWER: **Numa** Pompilius

22. Chemicals used for this function include atrazine and mesotrione, which was developed from an allelopathic chemical. For 10 points each:

[10] Name this kind of chemical substance used to control populations of undesirable plants.

ANSWER: **herbicides** [prompt on “pesticides”]

[10] This chemical, marketed as an herbicide by Monsanto, inhibits the enzyme EPSPS in growing plants. In 1996, Monsanto introduced soybeans resistant to this herbicide.

ANSWER: **glyphosate** [or **Roundup**]

[10] Glyphosate inhibits production of amino acids like tyrosine, tryptophan, and this tyrosine precursor with a benzyl side chain. People with PKU can’t metabolize this amino acid.

ANSWER: **phenylalanine**

24. This author collaborated on an opera in which Leocadia Begbick and her fugitive friends decide to set up a new city; that opera is *The Rise and Fall of the City of Mahagonny*. For 10 points each:

[10] Name this German playwright of *The Caucasian Chalk Circle* who wrote the text to *The Threepenny Opera*.

ANSWER: Bertolt **Brecht**

[10] One Brecht play is titled for this character “and her children.” This character’s real name is Anna Fierling, and she loses her children Eilif, Kattrin, and Swiss Cheese in the play.

ANSWER: **Mother Courage** [or **Mutter Courage**]

[10] This composer wrote the music to Brecht’s *The Rise and Fall of the City of Mahagonny* and *The Threepenny Opera*, which features this composer’s song “Mack the Knife.”

ANSWER: Kurt **Weill**