ACF Regionals 2016: Ben There, Didn't Do That
Edited by John Lawrence, Chris Ray, Max Schindler, and Itamar Naveh-Benjamin
Packet by McGill A (Derek So, Sam Baker, Joe Su, Georgios Panayiotou, Sebastian Drake), Louisville (Kurtis
Droge and assorted minions), Yale B (Adam Fine, Laurence Li, Connor Wood, Cathy Xue), Florida A
(Taylor Harvey, Alex Shaw, Matthew DeJong, Julio Gonzalez-Zuluaga)

TOSSUPS:

- 1. The interaction of more than two of these things in a namesake cluster is an open problem, though computers have shown that a torus is not area-minimizing in the "double" version of that problem. A second-order differential of the size of these things is set equal to the pressure differential over the liquid density in an equation modified by Keller and Miksis. These objects, which are described by the Rayleigh-Plesset equation, experience Bjerknes forces. Disgraced Purdue physicist Rusi Taleyarkhan claimed to have observed fusion in these objects, which release light when they implode in sonoluminescence. They form and collapse in cavitation, which explains the froth that trails a propeller. For 10 points, identify these round objects, whose formation is aided by surfactants like soapy water. ANSWER: liquid **bubbles**
- 2. In one painting by this artist, people peer over green balconies into a white courtyard where a turbaned man in red plays a mandolin-like instrument. This artist painted allegorical representations of Justice, Agriculture, Industry, and War on the ceiling of his namesake salon in the Palais Bourbon. On the right of one painting by this artist of *A Jewish Wedding in Morocco*, a blue cloth is wrapped around an otherwise naked oarsman, who is boat is being grasped and gnawed by writhing people in the river. In another painting by this artist of *The Barque of Dante*, a boy with pistols stands next to the title female allegorical figure with exposed breasts, who holds aloft a tricolor flag. For 10 points, name this French Romantic painter of *Liberty Leading the People*.

ANSWER: (Ferdinand Victor) Eugène Delacroix

3. This work mocks a Colombian author for suggesting that "the Indian is redeemable by impregnation with white, civilized semen... like everyone else." This book invokes the Tomb of the Unknown Soldier to argue that the central phenomenon is unique in its preoccupation with death and immortality, unlike Liberalism or Marxism. This work rejects arguments by Elie Kedourie and Ernest Gellner, and was published two decades after its author's work on the Cornell Paper concerning the 30 September Movement in Indonesia. This work argues that a key technological development combined with emerging economies to generate "print capitalism," which enabled populations to create the titular constructs. For 10 points, name this iconic study of nationalism, written by the late Benedict Anderson.

ANSWER: Imagined Communities

4. The speaker of one poem by this author declares: "I perceive that I have not really understood any thing, not a single object, and that no man ever can." The speaker of that poem by this author declares: "Cease not your moaning you fierce old mother / [...] but fear not, deny not me." One of this poet's speakers asks: "Who might you find you have come from yourself, if you could trace back through the centuries?" while examining people on auction at a "slave-mart." One poem by him declares: "The armies of those I love engirth me and I engirth them." Those poems by him were included in sections titled "Sea-Drift" and "Children of Adam." For 10 points, name this American poet who included "As I ebb'd with the ocean of life" and "I Sing the Body Electric" in his collection *Leaves of Grass*.

ANSWER: (Walter) "Walt" Whitman

- 5. A woman with this first name, sometimes called the first modern Queen Consort, was married to Cosimo de'Medici and hailed from Toledo. A woman with this name aroused ire in England over the aggravating presence of her various relatives, "the Savoyards," and refused to support the claims of Simon de Montfort against her husband, Henry III. A third woman with this name established the "Court of Love" to settle marital disputes in her time administrating Poitiers and took the blame for the massacre of Geoffrey de Rancon's division in the second crusade, on which she embarked with her husband Louis VII. That woman later married Henry II of England. For 10 points, give this name of the only woman to serve as queen of France and England, a native of Aquitaine.

 ANSWER: Eleanor [accept any specific Eleanors, of course]
- 6. This thinker asked whether the non-being that precedes birth is greater than the non-being that precedes re-birth through religious conversions in a work that introduces the concept of being a "Disciple at Second Hand." This thinker defined several relations between wish and duty, calling those who abandon the former for the latter "tragic heroes." He asked whether immortality would still exist if Jesus had not raised Lazarus from the dead in a book that claims that it is not death, but rather despair, that can kill the soul. This author of *Philosophical Fragments* included the figure of The Knight of Faith in a work asking whether Abraham's sacrifice of Isaac was ethical. For 10 points, name this author of *The Sickness Unto Death* and *Fear and Trembling*, a Danish existentialist. ANSWER: Soren (Aabye) **Kierkegaard**
- 7. In this novel, a philanthropist tells the guests at his birthday party that he killed a woman he loved and had her lover arrested for the crime, but his friends don't believe him and think he has gone mad. One character in this novel describes the turning point in his life, as when he woke up on the day he fought a duel and realized the beauty of the world. This novel's twelfth and final book details the trial of a man who is convicted of murdering his father with a brass pestle. Katerina and Grushenka vie for the love of that man, in this novel, in which Father Zosima's reputation is tarnished by the smell of his corpse. In this book, a man relates the parable of the Grand Inquisitor to his sibling. For 10 points, Dmitri, Ivan, and Alyosha are the title family members of what novel by Fyodor Dostoyevsky? ANSWER: *The Brothers Karamazov* [or *The Karamazov Brothers*; or *Brat'ya Karamazovy*]
- 8. A governor of this state earned national derision for calling up the National Guard an absurd 47 times in four years, and was known as "Alfalfa Bill." Reverend Charles Kerr protected survivors during an instance of violence in this state that saw the destruction of the Greenwood District. This state was born from the agitations of David L. Payne with the help of a provision in the Dawes Act that allowed a creative reading of settlement procedures. William H. Murray governed this state, where a Ryder truck was used by Terry Nichols and Timothy McVeigh to destroy the Alfred P. Murrah Federal Building. For 10 points, name this site of the Tulsa race riot that lies across the Red River from Texas.

ANSWER: Oklahoma

9. A cobalt-containing molecule with this many carbon monoxide ligands is often used to protect alkynes in the Pauson-Khand reaction. Phillip Eaton successfully synthesized a molecule with this many carbon atoms. Coordination complexes with this many ligands can have a square antiprismatic geometry. It's not six, but the benzene-derivative styrene has this many carbons. A "puckered ring" of this many atoms is the most common allotrope of sulfur. Langmuir's 18-electron rule generalizes a rule named for this number that is used to construct Lewis dot diagrams. There are this many elements in the second row of the periodic table, because there are this many total electrons combined in the *s* and *p* shells. For 10 points, what is the atomic number of oxygen? ANSWER: eight [or octet rule]

10. The victorious force at this battle landed most of their ground troops at Moorsh Moraine. Wes Janson was one of few participants during this battle to successfully execute an aerial maneuver that Dak Ralter died attempting. Only three of the losing side's ships managed to escape this battle. Shortly before it, a soldier from the losing side was attacked and nearly killed by a large carnivore before he could discover the other side's scouting unit. General Maximillian Veers commanded the heavy artillery to "target...maximum firepower" on an important generator during this battle, taking down the deflector shields around Echo Base. During it, tow cables were used by speeder pilots to bring down AT-AT walkers. For 10 points, identify this battle on a snowy planet at the beginning of *The Empire Strikes Back*.

ANSWER: Battle of **Hoth**

- 11. In the *Mahabharata*, Vibhishana removed this property from the followers of Ravana. It's not indestructibility, but "starving skeletons" named *gashadokuro* that roamed the countryside had this power. Caradog dies of shock while observing Caswallawn employing this power, which was also granted by the mantle of King Arthur. In the *Nibelungenlied*, Alberich bestows a non-ring item upon Siegfried that grants him this power. Autolycus owned a helmet that granted him this power. Another item granting this power was used by Athena during the Trojan War to cause injury to Ares and by Hermes in his fight with Hippolytus. For 10 points, name this ability granted by that aforementioned cap belonging to Hades, which allowed Perseus to enter and escape the lair of the Gorgons unseen. ANSWER: invisibility [accept equivalents or other word forms; make sure to NOT accept "invincibility"]
- 12. One character in this novel reads the book *Penguin Island* because it is in vogue at the moment, and a group of criminals in this novel are killed when a random explosion sends a boiler flying through the air to crush their hiding place. A character in this novel becomes obsessed with retrieving treasure from a sunken Spanish galleon, and that character later seduces his fourteen-year old ward America, leading to her eventual suicide. This novel begins with the suicide of Jeremiah de Saint-Amour and concludes with the two primary characters taking a steamboat voyage under a yellow flag, indicating the title quarantine. For 10 points, name this novel about the decades-long relationship between Florentino Ariza and Fermina Daza, by Gabriel Garcia Marquez.

ANSWER: Love in the Time of Cholera

13. An object named for this man that has 336 symmetries can be constructed by tiling a triple torus with 24 heptagons. That surface named for him is also described by the quartic x-cubed y plus y-cubed z plus z-cubed x equals zero. This mathematician proposed studying the invariants of a manifold and its transformation group in the Erlangen Program. The connected sum of two projective planes is named for this man, who also lends his name to Z2 times Z2. A shape named for this man is the only exception to the Heawood Conjecture. The smallest non-cyclic group is called his four-group. For 10 points, name this German mathematician, the namesake of a non-orientable surface which can be formed by joining two Mobius strips together, his "bottle."

ANSWER: Christian Felix Klein

14. Two men in this opera try to recruit three women for a shady business job in the Act II quintet "Nous avons en tête une affaire." A famous aria from this opera has a downwards moving melody that begins with D and C-sharp pickup eighths followed by C triplets. Legend has it that the creator of this opera's main role, Célestine Galli-Marie, fainted during a performance of it on the night that its composer died. The protagonist of this opera sings of the inevitability of fate in "En vain pour éviter" after drawing a fortune-telling card that predicts her own death. That title character had earlier compared love to a rebellious bird in her "Habanera." For 10 points, Don José vies with the toreador Escamillo for the hand of the title gypsy, in what opera by Georges Bizet?

ANSWER: Carmen

15. Massive violence broke out in this city after five monks were beaten and a major factory burnt down in response. That unrest led to what is often cited as the first strategic air bombing of a civilian population in history. Police firing into a crowd in this city triggered the May 30th Incident, which led to attacks on Stirling Fessenden's compound. The Green Gang was a prominent criminal organization in this city, the power base of the men who joined Jiang Qing in the Gang of Four. The Chinese Communist Party was founded in this city, which hosted China's international settlement in its Bund waterfront area. For 10 points, name this city in Yangtze Delta, the largest in China.

ANSWER: Shanghai

16. NOTE: COMPOSER AND TYPE OF PIECE REQUIRED

One of these pieces by this composer opens with a tricky rapid alternation of C-E and B-D major-third dyads in the right hand. One of these pieces opens with a phrase moving from C major via a secondary dominant to G first inversion, which is followed by the same phrase starting in B-flat major. An E-flat major horncall imitation represents the word "Lebewohl" in one of these works. A movement in A-flat major and 2/4 time marked *Adagio cantabile* appears in the eighth of these, which is in C minor. One of these works is dedicated to Count Waldstein, and another opens with C-sharp-minor triplet arpeggios, likened to a lunar glow reflected in a lake by Ludwig Rellstab. For 10 points, name these keyboard works, which include ones nicknamed "Pathétique" and "Moonlight." ANSWER: piano sonatas by Ludwig van Beethoven [both parts required]

17. Charles Fox Parham dispatched former slave Lucy Farrow to preach in this state, and, based on her reports, moved to preach here. The newspaper *The Apostolic Faith* was published in this state. A religious leader based in this state stumbled out of the desert in Mexico during a bizarre national spectacle in which she claimed to have been kidnapped and held in a shack. That leader preached at the Angelus Temple and founded the Church of the Foursquare Gospel in this state. William Seymour revived Pentecostalism with the Azusa Street Revival in this state, where a priest established a network of outposts along the Camino Real. Junipero Serra's missions were built in, for 10 points, what state whose religiously-named cities include San Diego and Los Angeles?

ANSWER: California

- 18. A line in this play compares women publicly flirting with their husbands to washing clean linen in public. A character in this play claims that ignorance is like "delicate exotic fruit", whose bloom disappears if touched. That character in this play tells an orphan that to lose one parent is unfortunate, but "to lose both looks like carelessness." Another character in this play dodges unwanted social engagements by attending to the ailments of an imaginary friend named Bunbury. In this play, Dr. Chasuble loves a woman who accidentally left a baby in a handbag in Victoria Station. That protagonist of this play is forbidden to marry Gwendolyn by Lady Bracknell. Jack Worthing and Algernon Moncrieff both adopt the same title first name in, for 10 points, what comedy by Oscar Wilde? ANSWER: *The Importance of Being Earnest*
- 19. At one battle in this war, an unlucky artillery strike on the garrison's alcohol supply led soldiers to abandon their posts en masse to drink themselves silly. That information was relayed to Fort St. David by a young clerk who gained fame by disguising himself to escape Madras during this war, Robert Clive. Madras would later be swapped for Louisbourg in the treaty ending this war, which caused outrage for handing over Maurice de Saxe's gains in the Netherlands won against the Duke of Cumberland. This war included major battles at Mollwitz and Fontenoy, and was prompted by the death of Charles VI, who violated Salic Law with the Pragmatic Sanction of 1713. For 10 points, name this war that ended with Maria Theresa's accession to the throne of the Habsburg empire.

 ANSWER: War of the **Austrian Succession** [Accept the First **Carnatic** War before "Maurice," prompt afterwards]

20. One general class of techniques for this procedure uses ATP sulfurylase to power luciferin, and the resulting light intensity is used to determine how much pyrophosphate was released. Another method for performing it, in which released protons trigger an ISFET, was developed by IonTorrent. Incorporating this procedure improves CHiP-on-chip. A dye-utilizing technique performed by Illumina is one of the cheapest "next-generations" approaches to it. This procedure is applied to many random small fragments, then the results are combined in the "shotgun" method of performing it. Dideoxynucleotides are used in Frederick Sanger's chain-termination method for performing this procedure. For 10 points, name this lab procedure that determines the order of nucleotides in DNA.

ANSWER: DNA sequencing

BONUSES:

- 1. In one painting in this series, a mother in black bows her head with grief while holding the hand of a tubercular girl dressed in green in a painting in this series titled *The Sick Child*. For 10 points each:
- [10] Name this series of paintings, which also includes Anxiety and The Vampire.

ANSWER: The Frieze of Life

[10] This Norwegian Expressionist painter's *The Frieze of Life* includes figure with mouth agape with horror, titled *The Scream*.

ANSWER: Edvard Munch

[10] This other Expressionist showed a bound man and woman being gang-raped in *The Night*. A blindfolded bellhop holds a fish next two people who are tied together, in the right panel of his *Departure* triptych.

ANSWER: Max Beckmann

- 2. This psychologist theorized that the process of a mother holding a child develops a key bond between them. For 10 points each:
- [10] Name this major Object Relations theorist who developed the ideas of the true and false self.

ANSWER: Donald Woods Winnicott

[10] The notion of object relations was first discussed by this man in his paper "The Genesis of the Object Relation." He argued that we spend our lives fighting to return to the womb in *The Trauma of Birth*.

ANSWER: Otto Rank

[10] Rank broke with Sigmund Freud by suggesting a stage before people were subject to this concept, in which males desire to possess their mother and remove their father. It is named for a Greek king.

ANSWER: Oedipus Complex [or Oedipal Complex]

- 3. Typical BLOSUM and PAM matrices each have this many rows. For 10 points each:
- [10] Identify this number of rows in the larger substitution matrices used in procedures like BLAST.

ANSWER: 20

[10] BLAST is a tool for comparing sequences of these entities, of which there are normally twenty types. FAH is a distributing computing project that attempts to figure out the 3D structure of polymers composed of them.

ANSWER: amino acids

[10] Polymers of amino acids are referred to by this term. A major problem of computational biology is figuring out how these entities fold into their tertiary structure.

ANSWER: proteins

- 4. Answer the following about the *Cours familier de littérature* [koor fah-mee-lee-ay durr leet-ay-rah-toor], for 10 points each.
- [10] The *Cours familier de littérature* was a literary periodical written by this French Romantic poet of *Mediations*, the novel *Graziella*, and the travelogue *Voyage en Orient*.

ANSWER: Alphonse de Lamartine

[10] The 14th and 15th editions of the *Cours familier de littérature* contains extensive analyses of *Les Miserables*, a novel by this author of *The Hunchback of Notre Dame*.

ANSWER: Victor (Marie) Hugo

[10] The 40th edition of the *Cours familier de littérature* popularized an Occitan poet of this last name, who wrote *Mirèio*. A Nobel Prize-winning Chilean poet of this last name mourned the death of Romelio Ureta in her *Sonnets of Death*.

ANSWER: Mistral

- 5. Answer these questions about colonial violence, for 10 points each:
- [10] Literally three years after co-naming a pact banning war forever, Secretary of State Frank Kellogg ordered this country's president, Miguel Mendez, to massacre citizens on behalf of United Fruit. This country experienced La Violencia after a political killing in Bogota.

ANSWER: Colombia

[10] Tensions between the English and Dutch East India culminated in this 1623 massacre of 20 men by Dutch traders. It lead to the "War of Pamphlets" and served as one of the catalysts for the First Anglo-Dutch War.

ANSWER: Amboyna Massacre

[10] In the Jabidah massacre, Filipino forces slaughtered members of this ethnic group, which has long sought autonomy for Mindanao. They are represented by a namesake "Islamic Liberation Front" that bears the fortuitous acronym "MILF."

ANSWER: Moros

- 6. The protagonist of this film is arrested for unwittingly participating in a Communist protest, by waving a flag that falls off a truck. For 10 points each:
- [10] Name this 1936 silent comedy, whose protagonist acts as a test subject for a feeding machine at the factory from which he is later fired.

ANSWER: *Modern Times*

[10] Modern Times is by this actor, writer, and director, who played the Little Tramp in his film City Lights and The Gold Rush.

ANSWER: (Charles Spencer) "Charlie" Chaplin

[10] Chaplin's early films were for this studio, run by producer Mack Sennett. Its major stars included "Fatty" Arbuckle and Mabel Normand.

ANSWER: **Keystone** Pictures Studio

- 7. This man succeeded Louis St. Laurent as party leader. For 10 points each:
- [10] Identify this liberal Canadian Prime Minister who advocated adopting BOMARC missile, universal healthcare, and the new Maple Leaf flag during his "60 days of decision" in the 1960s.

ANSWER: Lester Pearson

[10] Pearson won the Nobel Peace Prize for resolving this 1957 crisis, which was triggered by Gamal Abdel Nasser's nationalization of an Egyptian waterway.

ANSWER: The Suez Crisis

[10] Pearson became known as one of the "three wise men" of this entity after chairing a committee with Halvard Lange of Norway and Gaetano Martino of Italy. It was first led by Hastings Ismay.

ANSWER: NATO [or the North Atlantic Treaty Organization]

- 8. This author described newly married couples boarding a train on a sweltering day in the title poem of his collection *Whitsun Weddings*. For 10 points each:
- [10] Name this sardonic English poet, whose poem "This Be the Verse" begins "They fuck you up, your mum and dud."

ANSWER: Philip (Arthur) Larkin

[10] The speaker of this Larkin poem declares that "Death is not different whined at than withstood." This ironic morning song begins: "I work all day, and get half-drunk at night."

ANSWER: "Aubade"

[10] A half alien named Aubade only possesses the sense of hearing in this short story, in which she repeatedly notes that the temperature outside is always 37 degrees despite changes in the weather.

ANSWER: "Entropy"

- 9. For a spring, this quantity is the square root of k over m. For 10 points each:
- [10] Name this quantity. The Q-factor equals this quantity times the maximum energy stored divided by power loss. ANSWER: **angular frequency** [or **omega**, prompt on partial answer]
- [10] For a resonant circuit, the angular frequency is equal to one over the square root of quantity inductance times the characteristic value of one of these devices. These circuit elements store electric charge.

ANSWER: capacitors

[10] The formula for this function, describing the maximum amplitude of a filter, typically has the Q-factor in its denominator. For a general ODE, it is equal to the Laplace transform of output over Laplace transform of input.

ANSWER: transfer function

- 10. One figure of this name was the father of the incredibly long-lived Methuselah. For 10 points each:
- [10] Give this name, which was also held by the son of Cain and his sister-wife Avan.

ANSWER: Enoch

[10] Cain gave birth to Enoch after his exile for murdering this brother of his.

ANSWER: Abel

[10] Cain earned his living by performing this job, one of the products of which God judged inferior to Abel's offering. One of the consequences of Adam and Eve's sinning was that this task would thenceforth be more difficult. ANSWER: farming [accept any synonyms, but not any answers about shepherding/animal husbandry]

- 11. When generalized, this system of equations is equivalent to the (n+1)-dimensional replicator equation. For 10 points each:
- [10] Identify this set of first-order differential equations. In the two-variable case, the first sets x-dot equal to alpha-x minus beta-xy, while the second has y-dot equaling delta-xy minus gamma-y.

ANSWER: Lotka-Volterra equations

[10] The variables x and y in the Lotka-Volterra equations represent this quantity for each of predator and prey. This number of individuals of a given species in some environment is bounded above by the carrying capacity.

ANSWER: **population size** [accept either underlined part, prompt on descriptive answers]

[10] Population size can be estimated using this approach. In the simple Lincoln-Petersen type, two visits are made to a site: one to find an initial sample, and a second to see what fraction of a new subset had been previously caught.

ANSWER: <u>mark-and-recapture</u> [accept <u>capture-tag-recapture</u>, <u>tag-recapture</u>, <u>sight-resight</u>, <u>band recovery</u>, or multiple systems estimation]

- 12. This philosopher distinguished between an aesthetic object's publicly accessible "internal evidence" and the "external evidence" of the circumstances of its creation. For 10 points each:
- [10] Name this philosopher who divided critical statements into descriptive, interpretive, and evaluative forms. He was the 20th century's leading proponent of an instrumental theory of aesthetic value.

ANSWER: Monroe (Curtis) Beardslev

[10] Beardsley co-authored a 1946 essay with W.K. Wimsatt that introduced this concept. This concept refers to the mistaken practice of judging or interpreting texts based on what their authors wished them to mean.

ANSWER: "The Intentional Fallacy"

[10] This French semiotic philosopher also argued against intentional accounts of literature in "The Death of the Author." His other works include *Writing Degree Zero* and a collection of essays called *Mythologies*.

ANSWER: Roland (Gérard) Barthes

- 13. During this man's presidency, Richard Merrick was brought on board to help Benjamin Brewster's investigation of Thomas J. Brady and Stephen Dorsey in the Star Route Scandal. For 10 points each:
- [10] Name this U.S. president who had his veto of the Rivers and Harbors Act overridden during a budget dispute that also produced the Mongrel Tariff Act.

ANSWER: Chester Alan Arthur

[10] Arthur's most notable achievement was this civil service reform act, which was passed to address the spoils system that had indirectly led to the assassination of James Garfield.

ANSWER: Pendleton Civil Service Reform Act

[10] During the Arthur administration, this xenophobic founder of the Workingmen's Party of California briefly became a major leader in the labor movement. He was known for ending his speeches with the phrase "whatever happens, the Chinese must go."

ANSWER: Denis Kearney

- 14. For 10 points each, name these authors who wrote about people who made their living off of playing cards:
- [10] This author wrote about Frankie, who gains the nickname "Frankie Machine" for his card-dealing ability, in his novel *The Man with the Golden Arm*.

ANSWER: Nelson Algren

[10] The Swede starts a violent argument about whether Johnnie cheated at cards in "The Blue Hotel," a story by this American author of *The Red Badge of Courage*.

ANSWER: Stephen Crane

[10] A photograph by Richard Drew inspired this novel in which Keith Neudecker becomes a professional tournament poker player after experiencing the 9/11 attacks.

ANSWER: Falling Man

- 15. This man served as mayor of Istanbul from 1994-1998. For 10 points each:
- [10] Name this current President of Turkey, who has spent his time in power becoming increasingly authoritarian, suppressing free speech, and building a ridiculously expensive Ottoman-style palace.

ANSWER: Recep Tayyip **Erdogan**

[10] Erdogan sparked an international controversy in November after refusing to apologize for shooting down a plane from this country, whose president Vladimir Putin supports the Assad regime in Syria.

ANSWER: Russian Federation

[10] Turkey was accused of "crossing the line" by this Russian diplomat, who served as Russia's ambassador to the UN in the 1990s. He has taken point on Putin's foreign policy initiatives since becoming Foreign Minister in 2004.

ANSWER: Sergey Lavrov

- 16. One king of this name was deposed by Richard of York, rescued by his wife Margaret of Anjou and restored to the throne, then deposed again a year later. For 10 points each:
- [10] Identify this name born by the Lancastrian king whose incompetence sparked the Wars of the Roses. This name was also born by a Tudor monarch who took six wives.

ANSWER: Henry VI of England

[10] Henry's loss of Gascony to France was confirmed at this 1453 battle, which is considered to mark the end of the Hundred Years' War. It saw Jean Bureau defeat John Talbot, the Earl of Shrewsbury.

ANSWER: Battle of Castillon

[10] After Castillon the only part of mainland France which remained in English hands was the "Pale of" this city. Its fall to Henry II of France a century later devastated Mary Tudor.

ANSWER: Calais

- 17. One novella set in this location describes a visitor from "Timbuctoo" who arrives to conduct a project for the UN but stays to seduce the town librarian's daughter. For 10 points each:
- [10] Name this fictional town near Madras, whose landmarks include Ellmann Street and The Boardless Hotel. It serves as the setting of a novel in which Raman makes a signboard for Daisy.

ANSWER: Malgudi

[10] Malgudi is the creation of R.K. Narayan, who was brought to the attention of Western readers by this English author of *The Heart of the Matter* and *The Power and the Glory*, who promoted Narayan as the "Indian Chekhov."

ANSWER: Graham Greene

[10] In this Graham Greene novel, journalist Thomas Fowler forms an ambivalent relationship with the title character, an idealistic CIA agent named Alden Pyle, who funds terrorist actions in Vietnam.

ANSWER: The Quiet American

- 18. Alternative dipolarophiles used in this reaction include nitrile oxides and diazoalkanes. For 10 points each:
- [10] Identify this 1,3-cycloaddition which typically produces a 1,2,3-triazole.

ANSWER: Huisgen azide-alkyne cycloaddition [accept either underlined part]

[10] The Huisgen cycloaddition is the prototypical example of this class of reactions, which Barry Sharpless loved. Reactions of this type mimic biological processes by combining smaller components into the target molecule.

ANSWER: click chemistry

[10] Click chemistry reactions are typically able to be performed in this universal solvent. In chemistry labs, you probably want to use its deionized type.

ANSWER: water [or H2O]

- 19. His sons Zetes and Calais joined the Quest for the Golden Fleece and drove off the harpies. For 10 points each:
- [10] Name this personification of the North Wind, who carried off Orithyia from a riverbank after her father refused to give this figure her hand in marriage.

ANSWER: Boreas

[10] This aunt of Orithyia killed her son Itys and fed him to her husband Tereus following Tereus's rape of her beautiful sister Philomela. She was later turned into a nightingale.

ANSWER: Procne

[10] Orithyia, Procne, and Philomela all hailed from this city home to the Acropolis. Its later rulers included Aegeas and his son Theseus.

ANSWER: Athens

20. [NOTE TO MODERATOR: DO NOT READ ALOUD THE ALTERNATE ANSWER FOR THE FIRST PART]

This symphony spawned from music its composer created for a 1947 film. For 10 points each:

[10] Name this symphony, whose first movement quotes Shelley's *Prometheus Unbound* and whose epilogue quotes the final journal of Robert Scott.

ANSWER: Sinfonia antartica [or Vaughan Williams' Symphony No. 7]

[10] The *Sinfonia antartica* is by this English composer of *Fantasia on a Theme by Thomas Tallis*, whose first symphony was given the name "A Sea Symphony."

ANSWER: Ralph Vaughan Williams

[10] The theme by Tallis that Vaughan Williams used is a setting of Psalm 2:1-2, which is most commonly referred to by this name.

ANSWER: "Why Fum'th in Fight the Gentiles Spite"