OOT 2016: "Waiting for Goldman" Packet 6 (Oxford Forever)

Written by Alex Bubb, Edmund Dickinson, Zachary Vermeer and Luke Pitcher Edited by Oliver Clarke, George Corfield, Charlie Clegg, D. Joey Goldman, Daoud Jackson, Ewan MacAulay, Chris Stern and Spencer Weinreich

1. Bishop John Leslie became involved in a plan to do this, which was foiled after Charles Baillie confessed to the involvement of the Duke of Norfolk. Another attempt at doing this led to the Spanish ambassador Bernardino de Mendoza being expelled; in that scheme, this action was to accompany an invasion by the Duke of Guise. The Ridolfi Plot, the Throckmorton Plot, and the Babington Plot all attempted to perform this action - the latter was prevented by Sir Francis Walsingham. For 10 points, name this murderous action that would precede the installation of Mary, Queen of Scots as a Catholic queen of England.

ANSWER: assassinating Elizabeth I [or deposing Elizabeth I]; or replacing Elizabeth I with Mary, Queen of

ANSWER: <u>assassinating Elizabeth I</u> [or <u>deposing Elizabeth I</u>; or <u>replacing Elizabeth I</u> with Mary, Queen of Scots or Mary Stuart; accept word forms such as <u>assassination</u>; or anything reasonable reflecting the fact that we're talking about Catholic plots against <u>Elizabeth I</u>; prompt on "Elizabeth" with no regnal number, in all cases]

2. In *Moby-Dick*, Melville writes that, 'Dash *this object* from Phidias's marble Jove' and 'what a sorry remainder!'; but Melville also writes that the lack of *this object* in a whale is 'no blemish at all. Nay, it is an added grandeur.' In the land of Ennasin, Rabelais's Pantagruel meets people who have this object shaped like the ace of clubs. Falstaff claims to find his way between taverns using the red glow from Bardolph's, and Saleem Sinai use his as a receiver for the communications of the other Midnight's Children, even though it is always blocked. For 10 points, name this appendage which attains government rank in an eponymous story by Nikolai Gogol.

ANSWER: the nose

- 3. Mutations in the receptor for this protein can result in Donohue Syndrome, which is also known as Leprechaunism. A protein named for its similarity to this protein is produced by the liver in response to growth hormone. This protein is formed from its precursor by cleavage and loss of C-peptide. The steroid cortisol directly counteracts the biological role of this protein, whose structure of A and B chains was discovered in Frederick Sanger's first full protein sequencing. Beta cells in the Islets of Langerhans manufacture, for 10 points, what protein that promotes glycogen synthesis to store glucose?

 ANSWER: Insulin
- 4. A variant of this instrument used in Sufi music is the Turkish ney, while practitioners of Fuke [foo-kay] Zen Buddhism often play a type of this instrument called the shakuhachi. The modern concert form of this instrument can sometimes use a "gizmo key" to assist the playing of high C; that type of this instrument arose from the development of a parabolic taper in the headjoint which was carried out by Theobald Boehm. "Fipple" types of this instrument are end-blown and include the ocarina. For 10 points, name this class of woodwind instruments in which sound is generated by blowing across a sharp edge in a pipe, such as the piccolo. ANSWER: **Flute** [accept **reed flute** until "shakuhachi"]
- 5. This man represented the Carbolic Smoke Ball Company in a landmark case for the Law of Contract. His leader would ask for his help in parliament with the phrase "send for the sledgehammer". This man formed the Relugas Compact along with R. B. Haldane and Edward Grey, in the aftermath of which this man became Chancellor of the Exchequer. Until Margaret Thatcher, this man was the twentieth century's longest continuously serving UK Prime Minister. Sometimes known as "Squiffy" on account of his alcohol consumption, identify, for 10 points, this Liberal politician, who was Prime Minister at the outbreak of the First World War.

ANSWER: H. H. Asquith

6. This Greek god helped Pelops to win the hand of Hippodameia, after he and Pelops had been lovers. This god's other lovers included the maiden Caenis, whom this god made invulnerable and turned into a man.

Laocoön [Lay-oh-co-own] was the priest of this god at Troy, and Apollo refuses to fight this god in the *Iliad*, since Apollo worked with this god when they built the walls of Troy. In the *Odyssey*, this god hates Odysseus for blinding this god's son, Polyphemus the Cyclops. This husband of Amphitrite [Amph-i-trite-i] was one of the older brothers of Zeus. For 10 points, name this Greek god of the sea.

ANSWER: **Poseidon**

- 7. One work depicting this event incorporates a partial portrait of the artist's new wife sleeping inside an ivy-clad, spiked railing; that work shows God the Father in the porch of a church shrouded in flowers, behind figures including the artist and Hilda Carline. A depiction of this event on the right wing of the Isenheim Altarpiece shows its central figure subsumed in a golden halo while three armoured men cower in the foreground. A box -like tomb is depicted as the setting of this event in a Sansepolcro altarpiece by Piero della Francesca. The flag of St George often represents, for 10 points, what event celebrated on Easter Sunday? ANSWER: the **resurrection** of Jesus Christ [prompt on word equivalents]
- 8. Group exercises in which workers shut each other inside wooden boxes have been a corporate response to this phenomenon in South Korea. In the 1990s, Greenland found that more than 0.1% of its population was affected annually, some attributing this to summer insomnia. According to the WHO, Guyana, Sri Lanka and Lithuania have a very high incidence of this phenomenon, which is usually twice as common among men as among women. Henry Morselli studied this behaviour, and Émile Durkheim found it was more common among Protestants than Catholics. For 10 points, name this act of self-annihilation.

 ANSWER: suicide (accept word equivalents)
- 9. The rate-determining step of this molecule's namesake evolution reaction is used to classify its electrode kinetics in the Volmer-Heyrovský-Tafel mechanism. This molecule is oxidised at the anode of a PEM fuel cell. With carbon monoxide, this is the main product of steam reforming of biomass, and the main constituent of syngas. The Lindlar catalyst adds exactly one of this molecule to an alkyne, while Raney nickel catalyses this molecule's electrophilic addition to a carbon-carbon double bond; that addition leads to the saturation of organic compounds. The action of strong acid on a metal releases, for 10 points, what lightest elemental molecule? ANSWER: (molecular) hydrogen [accept dihydrogen or H2 ["aitch two"]; do not accept or prompt on "H"]
- 10. 'They order, said I, this matter better in France', is the opening line of a novel by this author. That remark is made at Calais, and the story breaks off at Lyon with the narrator accidentally catching hold of a chambermaid in the dark. In another of his novels, jackboots are used to supply mortars for a miniature re-enactment of the Siege of Namur [na-moor] by Trim and Uncle Toby. "My dear, have you forgotten to wind up the clock?" is the unhappy question put by wife to husband at the moment of conceiving the titular narrator, who announces the death of Yorick with a black page. For 10 points, name this author of *A Sentimental Journey* and *Tristram Shandy*.

ANSWER: Laurence **Sterne** [accept A **Sentimental Journey** before mention of "this author"]

11. One popular type of this device with a low volume footprint is its "planar inverted-F"-type, which is an example of the "patch" type of this device. One common graph used in the design of these devices illustrates the polar complex reflection coefficient; that graph is the Smith chart, which is used to ensure impedance matching between a driving circuit and these devices. Transmission lines are used to feed these devices, whose simplest example is the "dipole" type invented by Heinrich Hertz that consists of two wires pointing in opposite directions. For 10 points, name these devices that use strips of conductor to transmit or receive electromagnetic waves.

ANSWER: antenna(s) [or antennae; accept aerial]

12. The city of Koblenz in the Rhineland derives its name from the Latin for one of these geographical features, which prompted the Romans to site two forts here. To Hindus they are known as sangams, and the invisible presence of the Saraswati makes one near Allahabad [ILL-A-HA-BAD] especially holy. Every twelve years the Maha Kumbh Mela festival takes place at one of these places. Pittsburgh, Manaus, Belgrade and Khartoum are all sited at one of these features, which gives their downtowns a compact triangular shape, and one north of Basra forms the start of the Shatt al-Arab. For 10 points, give the term for the meeting of two or more rivers.

ANSWER: river **confluence** [accept obvious word forms]

13 In a short story by Vladimir Nabokov, Anton Petrovich organizes an event of this kind, but hides from it in a hotel room. Colonel Proctor's interruption of a game of whist causes an event of this kind that itself is interrupted by a Sioux [Soo] raiding party, in Jules Verne's *Around the World in Eighty Days*. In another novel, a collision while running down a staircase and the return of a dropped lover's handkerchief cause the protagonist to schedule an event of this kind three times in one afternoon, before an interruption by the guards of Cardinal Richelieu. For 10 points, name this combative event, in which D'Artagnan nearly engages with each of Porthos, Athos, and Aramis.

ANSWER: <u>duel(s)</u> (accept obvious equivalents)

14. Characters in an unfinished novel by this author include the ghost of a mirror inspector who hanged himself in the mid-1960s. An earlier novel by this author includes a posthumous appearance from a man who believed that a finite number of erections were possible on Earth at any given time. The principal settings for the two novels already mentioned are the offices of the Internal Revenue Services in Peoria, and the tennis academy founded by James Incandenza, the creator of the film that gives that novel its title. For 10 points, name this author of *The Pale King* and *Infinite Jest*.

ANSWER: David Foster Wallace

15. This man wrote a pamphlet titled *On the Extinction of Pauperism*, and an article on the feasibility of the Nicaragua Canal. His nicknames included 'Boustrapa' and 'the Man of December' after the month of the coup in which he seized power, and among his achievements were a victory over the Austrians at Solferino, and the rebuilding of his capital by Baron Haussmann. He was branded a traitor by Victor Hugo, and eventually exiled to England after defeat at Sedan. For 10 points, name this first President and last monarch of France, the ruler of the Second Empire.

ANSWER: <u>Napoleon III</u> [accept <u>Louis-Napoleon</u> Bonaparte; do not accept or prompt on "Napoleon" or "Napoleon Bonaparte"]

- 16. Kays and Crawford attempted to quantify this phenomenon's effect on heat diffusivity by introducing a specific Prandtl number named for it. In one model, the variables "k" and "epsilon" are used to express this phenomenon's energy and dissipation rate, in a stress term that averages the effect of rapid fluctuations by the Reynolds decomposition. This behaviour occurs when inertial forces strongly outweigh viscous forces, and it arises as a solution to the Navier-Stokes equations at high Reynolds number. For 10 points, name this flow behaviour characterised by eddy formation and chaotic behaviour, and contrasted with laminar flow.

 ANSWER: turbulence [or turbulent flow; prompt on "eddy formation" or "eddies" or "high Reynolds number flow" or "chaotic flow" until respectively mentioned]
- 17. Pieter Claesz [clahs] painted one of these objects sitting on a book next to an upturned glass and an extinguished lamp. Robert Mapplethorpe's final self-portrait features a walking cane topped with one of these. Alongside a lion, Saint Jerome often chooses to decorate his hermitage with one of these in Renaissance paintings, and Vasily Vereshchagin depicted a pile of them in *The Apotheosis of War. For the Love of God* is a sculpture of one of these objects, one of which is hidden in anamorphic distortion in Holbein's *The Ambassadors*. For 10 points, name this symbol of death that Damien Hirst thought fit to coat with diamonds. ANSWER: **skull**
- 18. When asked if he believed in God, this thinker told the BBC that 'I don't need to believe; I know'. He also wrote that the state had replaced God, and that it had become an object of worship in *The Undiscovered Self*. He argued that the promulgation of the dogma of the Assumption in 1854 expressed a deep yearning within a concept composed of two parts: instinct, and another concept he developed which was influential with Joseph Campbell, archetypes. He developed the process of individuation and the Myers-Briggs type indicator was

¹ This is of course actually true but the book suggests that the number is somewhat less than what is theoretically the limit.

based on his distinction between extraverts and introverts. For 10 points, name this Swiss psychologist who developed the collective unconscious.

ANSWER: Carl Jung

19. Louis IX died of dysentery near this city's ruins, and France built a large basilica on Byrsa Hill during its colonial rule of the surrounding region. Before the silting up of the river Medjerda, one of this city's most impressive features was a circular artificial harbour to house its navy of 220 warships. Utica was a longstanding rival of this city, and within its Sanctuary of Tophet archaeologists have found the ashes of 20,000 children believed to have been sacrificed to Tanit and Baal Hammon. Destroyed at the hands of Scipio Africanus Minor, for 10 points, name what ancient city on the Gulf of Tunis that numbered Hannibal among its sons?

ANSWER: Carthage

20. This work contains a short fable saying that a god fastened the heads of pleasure and pain together so that one would always be sure to follow the other. The fable foreshadows an argument later in this work that things capable of generation, such as sleep and waking, are always generated from their opposites. In this work, Cebes (Ke-bees) uses the analogy of an elderly tailor dying before he wears out his last coat to argue that existence before birth does not entail survival after death. The last hours of a philosopher's life, are told in, for 10 points, what Platonic dialogue about the immortality of the soul?

ANSWER: **Phaedo**

- 1. For 10 points each, answer these questions about the pseudonyms of Victorian female writers.
- [10] Marian Evans decided she needed this solid, respectable name in 1856, after she had moved from Coventry to London and published her scathing article 'Silly Novels by Lady Novelists'. She later wrote *Middlemarch*. ANSWER: **George Eliot** [prompt on "Eliot"]
- [10] Retaining their real initials, the Brontë sisters adopted the androgynous first names Currer, Ellis and Acton and used this shared surname *de plume*.

ANSWER: Bell

[10] Babington White was the sometime handle of this actress turned sensation novelist. She is now chiefly remembered for *Lady Audley's Secret*, the tale of a murdering bigamist who skilfully tips her first husband into an old dry well.

ANSWER: Mary Elizabeth **Braddon**

- 2. A famous thought experiment in ethics was introduced in 1967. For 10 points each:
- [10] According to its original conception, in what thought experiment must a driver choose whether to steer away from a collision with five men on one track, or in the direction of a single man on another track?

ANSWER: the **trolley** problem

[10] This British philosopher first formulated the trolley problem.

ANSWER: Philippa (Ruth) **Foot** [or Philippa **Bosanquet**]

[10] Foot's work on virtue ethics was inspired by Aristotle's *Nicomachean Ethics*. This other contemporary philosopher wrote about Aristotelian ethics and Greek tragedy in *The Fragility of Goodness*.

ANSWER: Martha Nussbaum

- 3. For 10 points each, here are some bonuses to test your knowledge of Italian-language cinema:
- [10] Roberto Benigni received an Oscar for best actor for his lead performance in this tragicomedy, in which he keeps his son's spirits up in a Nazi concentration camp.

ANSWER: *Life is Beautiful* [or *La vita è bella*]

[10] A 1976 Dino Risi film takes its name from this term referring to the "Hungarian-style comedies" produced in Fascist Italy. The name is taken from a utility which often appeared in such films.

ANSWER: Telefoni Bianchi OR White Telephones

[10] This neorealist classic from 1948 tells the story of a poor father and son desperately searching Rome for a stolen object.

ANSWER: The Bicycle Thieves [or Ladri di biciclette; accept The Bicycle Thief]

4. According to Norse mythology, the sailing of the ship Naglfar would portend Ragnarok. For 10 points each:

[10] Naglfar will be made from what items belonging to the dead?

ANSWER: their (finger and toe) nails

[10] The *Poetic Edda* describes this treacherous Norse god as steering Naglfar. Son of Laufey and father of Hel, he frequently betrays the gods who eventually bind him using the entrails of one of his sons.

ANSWER: Loki

[10] Naglfar is bound for this place whose Old Norse name means "battle-surge". It is a plain on which, it is foretold, the forces of Surtr will do battle with the gods.

ANSWER: Vígríthr or Óskópni

5. For 10 points each, answer the following on the use of different isotopes in chemical experimentation:

[10] In the Geiger-Marsden experiments which inspired and then quantitatively confirmed the Rutherford model of the atomic nucleus, radon-222 was the source of these particles used to bombard gold foil.

ANSWER: alpha particles [or helium nucleus or helium nuclei]

[10] Isotopes like iron-57 and tellurium-125 are of particular use as targets of gamma rays in this technique that probes an atom's chemical environment by means of recoil-free and resonant absorption.

ANSWER: Mössbauer spectroscopy

[10] This biochemical experiment used *E. coli* grown in an environment of nitrogen-15, to prove that DNA replicates semi-conservatively: each parent molecule gives one full strand to each of two copied molecules.

ANSWER: Meselson-Stahl experiment

6. Since the 1990s, some historians have sensibly preferred to call the English Civil War "the Wars of the Three Kingdoms". The names of its battles have remained constant. For 10 points:

[10] In this decisive battle of 14 June 1645, Charles's main army was destroyed by the New Model Army under Fairfax and Cromwell.

ANSWER: Naseby

[10] This city was the scene of the final battle of the Third Civil War, after which the future Charles II hid in an oak tree at Boscobel House and fled to France.

ANSWER: Worcester

[10] This Scottish Earl, who also fought for the Swedes, led the Scottish Covenanter forces at the battle of Marston Moor. The nursery rhyme "there was a crooked man" was about him.

ANSWER: Alexander Leslie, 1st Earl of Leven

7. For 10 points each, answer these questions about a revolution:

[10] Led by Toussaint L'Ouverture against the forces of France, a slave rebellion between 1791 and 1804 resulted in the foundation of this republic, the second-oldest independent state in the Americas.

ANSWER: Haiti

[10] Toussaint L'Ouverture's successor Jean-Jacques Dessalines gave himself this title. He was assassinated in 1806.

ANSWER: **Emperor** of Haiti

[10] Published in 1938 by the Trinidadian writer C.L.R. James, this book was the first history of the Haitian Revolution told from the perspective of the revolutionaries.

ANSWER: The Black Jacobins

8. Max Weber suggested that this was the central factor in the development of modern Capitalism in Northern Europe. For 10 points each:

[10] Name this concept where those of a certain faith are driven by that faith into being more economically productive.

ANSWER: <u>Protestant</u> (work) <u>ethic</u> (accept <u>Die protestantische Ethik</u>)

[10] Weber illustrates this by examining the pre-capitalist worker who reduces hours when given a pay rise. This phenomenon has been seen as a precursor of this theory described by Milton Freidman, which sees long term average earnings as more important than the marginal propensity to consume in determining consumption. ANSWER: **Permanent Income** hypothesis

[10] Others have suggested that it can be best understood as an example of this tension examined by Leon Festinger because as the wages increase the worker comes to think, irrationally, that the job must be more onerous.

Answer: <u>Cognitive Dissonance</u> (there are a lot of other similar things but accept <u>Induced-compliance</u> <u>paradigm</u>)

9. In 2014, the New York Youth Symphony cancelled the performance of a piece it commissioned after learning that it included a 45-second excerpt from this song. For 10 points each:

[10] This official anthem of the Nazi party is named after the author of its lyrics, an SA squadron commander who was assassinated by Communists in 1930.

ANSWER: The <u>Horst Wessel</u> Song [or <u>Horst-Wessel</u>-Lied; or "<u>Die Fahne hoch</u>"]

[10] The official anthem of Mussolini's Fascist Party celebrated this quality, from which it took its title. People with this quality in Fascist Italy were organized in the *Balilla* organization, certain aspects of which were condemned by Pope Pius XI in a 1931 encyclical.

ANSWER: **Youth** [or "**Giovinezza**"; accept **young people**, **children** or equivalents]

[10] This song of the worldwide socialist movement, whose lyrics were written by Eugene Pottier in 1871, which was also the anthem of the Soviet Union between 1922 and 1944.

ANSWER: The Internationale

10. Cooley and Tukey developed a "fast" numerical algorithm to perform this operation in O(n log n) ["big oh enn log enn"] time. For 10 points each:

[10] Name this mathematical operation that is used in signal processing to resolve a time domain signal into its continuous spectrum of frequencies.

ANSWER: Fourier transform [accept fast Fourier transform, prompt on "FFT" or "FT"]

[10] The kernel of the Fourier transform is an exponential function whose argument is this type of number. This type of number can be plotted on an Argand diagram.

ANSWER: complex number (accept imaginary number)

[10] This function is the Fourier transform of a rectangular function, as created by a constant signal of finite duration. Low-pass filtering has the effect of convoluting a signal's Fourier transform with this function, which is also the integrand of the sine integral.

ANSWER: (un)normalized) sinc function [or cardinal sine; do not accept or prompt on "sine" or "sin"]

11. This entity is described as "A monster of vaguely anthropoid outline, but with an octopus-like head whose face was a mass of feelers, a scaly, rubbery-looking body, prodigious claws on hind and fore feet, and long, narrow wings behind." For 10 points each,

[10] Name this Great Old One, introduced in a story named for its "Call."

ANSWER: **Cthulhu** [be extremely lenient on pronunciations]

[10] Cthulhu was the creation of this American horror writer of "The Rats in the Walls."

ANSWER: Howard Phillips Lovecraft

[10] Lovecraft wrote a novella entitled *The Shadow over* this place, a fictional Massachusetts town home to the Esoteric Order of Dagon.

ANSWER: **Innsmouth**, Massachusetts

12. The position was abolished for the first time in 1782, its duties being transferred first to the Home Secretary and then to the Secretary of State for War. For 10 points each:

[10] Name this position which was revived in 1854 with the appointment of Sir George Grey to the post. Its final holder, before the office was abolished in 1966, was Frederick Lee.

ANSWER: Secretary of State for the **Colonies** [or **Colonial** Secretary]

[10] A particularly prominent Colonial Secretary was this monocle-wearing industrialist, who held the office from 1895 to 1903. He instructed the British people to "learn to think imperially" and oversaw the Federation of the Australian colonies.

ANSWER: $\underline{\mathbf{J}}$ oseph $\underline{\mathbf{Chamberlain}}$ [or $\underline{\mathbf{J}}$ oe $\underline{\mathbf{Chamberlain}}$; prompt on "Chamberlain"]

[10] As Lord Passfield, Sidney Webb served as Colonial Secretary from 1929 to 1931, in the second government of this first Labour Prime Minister. The two men had been close collaborators in the Fabian Society.

ANSWER: Ramsay MacDonald

- 13. All of Amtrak's trains, be they ever so dingy, still bear glamorous and Romantic monikers. Identify some places they reach, for 10 points each:
- [10] The New York Chicago overnighter, for instance, is known as the "Lake Shore Limited" because of this lake along whose shore the train chugs for 300 miles of its 1000-mile run.

ANSWER: Lake Erie

[10] The "City of New Orleans" links New Orleans with Memphis and terminates in this "Sweet Home" of Robert Johnson, destination of many African-Americans during the Great Migration.

ANSWER: Chicago

[10] Amtrak's longest daily route, the "California Zephyr", covers the ground from Chicago to Emeryville, a nondescript burg between Oakland and Berkeley. The line does not actually reach the Pacific Ocean, because of the intervention of this large body of water crossed by two famous bridges.

ANSWER: San Francisco Bay

- 14. This person was court painter to Marie Antoinette. For 10 points each:
- [10] Name the French artist of a self-portrait in London's National Gallery, who depicts herself wearing a straw hat and holding her palette and brushes in her left hand.

ANSWER: (Louise) Élisabeth Vigée Le Brun

[10] Vigée Le Brun's self-portrait was inspired by the more buxom and much less sexy *Portrait of Susanna Lunden*, a work by this Baroque artist. That portrait is also kept in the National Gallery, in the same room as one of this artist's many depictions of the *Judgement of Paris*.

ANSWER: Peter Paul **Rubens**

[10] Vigée Le Brun's self-portrait scandalised contemporary society due to her depiction of this body part, traditionally hidden in classical portraiture. In Rubens' *Descent from the Cross*, the top-rightmost figure holds Jesus' shroud with this body part.

ANSWER: teeth

- 15. In the words of Lord Tennyson, "God made the country, and man made the town. But the Devil made the small country town." For 10 points each:
- [10] Based on Dorchester, Thomas Hardy created this fictional town and depicted its unfortunate mayor, Michael Henchard.

ANSWER: Casterbridge

[10] Many of Kurt Vonnegut's novels make reference to this rubbish, racially-segregated town, where Billy Pilgrim works as a dentist and Kilgore Trout bullies paperboys. Though its towers are by no means topless, it is presumably based on Troy, New York.

ANSWER: Ilium

[10] Almost all of this author's novels are set in sleepy Malgudi, whose landmarks include the Albert Mission College, Palace Talkies, and the statue of Sir Frederick Lawley; among those novels are *Swami and Friends*, *The Painter of Signs* and *Waiting for the Mahatma*.

ANSWER: R. K. Narayan

- 16. Kim Sterelny used the subtitle *Survival of the Fittest* for a work on the scientific disagreements between Richard Dawkins and this biologist. For 10 points each:
- [10] Name this Harvard-based palaeontologist and popular scientist who summarised his opposition to the notion of the gene as the sole unit of selection in his last work, *Structure of Evolutionary Theory*.

ANSWER: Stephen Jay Gould

[10] Gould's best-known contribution to evolutionary theory was this concept he advanced with Niles Eldredge, that evolution takes place in short bursts rather than at a constant, gradual rate.

ANSWER: punctuated equilibrium [or punctuated equilibria]

[10] Another of Gould's major works is this book on evolutionary biology, whose two title concepts describe respectively the development of an individual from an embryo, and the evolutionary history and relations of a certain species. Ernst Haeckel famously said that one of the title concepts recapitulates the other.

ANSWER: Ontogeny and Phylogeny

- 17. This man wrote *La Caccia di Diana*, a catalogue of Neapolitan women, as well as the *Teseida*, which provided the source for Chaucer's "The Knight's Tale." For 10 points each:
- [10] Name this Italian humanist, the author of *The Decameron* and *On Famous Women*.

ANSWER: Giovanni Boccaccio

[10] Boccaccio's *Il Filostrato* tells the story of these two lovers from classical antiquity, who also inspired a poem by Chaucer and a tragedy by William Shakespeare.

ANSWER: **Troilus and Cressid**a [prompt on partial answers]

[10] Many of Boccaccio's works, among them the *Teseida*, *Il Filostrato*, and *The Decameron*, feature a woman with this name, thought to be an alias for Maria d'Aquino, a noblewoman with whom Boccaccio was infatuated.

ANSWER: Fiammetta

18. This composer celebrated his native Bohemia in a set of symphonic poems. For 10 points each:

[10] Name this person who depicted the Vltava [vil-tava] River in *Die Moldau* from his *Má vlast*.

ANSWER: Bedřich Smetana

[10] Smetana's best known opera is probably this comic work which includes the *Dance of the Comedians* and ends with the marriage of Mařenka and Jeník [Yenik].

ANSWER: <u>The Bartered Bride</u> OR <u>Prodaná nevěsta</u>

[10] After going deaf, Smetana composed his first string quartet known by this reflective name.

ANSWER: From My Life [or Z mého života]

19. For 10 points each, answer these questions on songs of the Vietnam War.

[10] "Got in a little hometown jam / So they put a rifle in my hand, / Sent me off to a foreign land / To go kill the yellow man," sang Bruce Springsteen in the title song of this best-selling album.

ANSWER: **Born in the USA**

[10] Veterans have frequently named this escapist song as the most popular among American conscripts, though The Animals were probably singing about their desperation to leave their native Newcastle-upon-Tyne rather than Indochina

ANSWER: We've Gotta Get Out of This Place (if it's the last thing we ever do)

[10] For What it's Worth by Buffalo Springfield is better known by its refrain "Stop children, what's that sound?" It is a popular misconception that the song commemorates this May 1970 attack on students by Ohio national guardsmen.

ANSWER: the **Kent State** University shootings [or **May 4** massacre]

20. Martin Perl discovered this particle as part of his work on the cross-sections of electron-positron collisions. For 10 points:

[10] Name this negatively charged fundamental particle with spin ½ and a mass about twice that of a proton.

ANSWER: tau [or tauon; do not accept "tau neutrino"]

[10] The tau lepton is the only lepton heavy enough to decay into these composite particles made up of quarks. A namesake "Large Collider" for these particles is located at CERN in Geneva.

ANSWER: <u>hadron</u>s [accept <u>Large Hadron Collider</u>]

[10] This experiment studies tau particles generated due to the flavour oscillation of neutrinos in flight from CERN to a neutrino detector at Gran Sasso in Italy. Equipment errors accounted for this experiment's anomalous measurement of "faster-than-light" neutrino flights in 2011.

ANSWER: OPERA [or Oscillation Project with Emulsion-tRacking Apparatus]