

OOT 2017
Packet 09 - Editors 3

Edited by Oliver Clarke, George Corfield, Charlie Clegg, Daoud Jackson, Chris Stern and Spencer Weinreich.
Questions also written by Eric Mukherjee, Thomas De Bock, Isaac Brown.

The last tossup in the last packet should have been: Switzerland

Tossups

1. **The Madman's War was fought against this empire by Pa Chay leading men who made their own muskets and poisoned imperial troops by adding dangerous fruit to the rivers. This empire's troops defeated the Black Flag Army in the Son Tay campaign and later won the battle of Ko Chang. Restoration League-founder, (*) Phan Bội Châu [fan boy chow] was arrested in Shanghai by agents of this empire and was inspired by the Can Vuong movement which sought to expel this empire. One religion started in this empire, Cao Dai [cow die], includes Victor Hugo among its saints. For 10 points, name this european colonial empire, where locals made Banh Mi [ban me] by adding meats or pâté to baguettes.**
ANSWER: France [anti-prompt on French Indochina]

2. **Thomas Allen wrote "Low Bridge, Everybody Down" about a mule working on this structure which was the subject of *The Nine Million Dollar Improvement* plan. This structure's construction was opposed by the bucktails and a number of people died of malaria while working on this project at Montezuma Marsh. As there were no professional civil engineers in America when this project was begun, the route was laid out (*) by judges James Geddes and Benjamin Wright. This project was rejected by Thomas Jefferson, as did those who dubbed it the "ditch" of New York Governor DeWitt Clinton. For 10 points name this canal that makes it possible to get from Buffalo to Albany.**
ANSWER: Erie Canal

3. **This state is home to the fried chicken chain, Federal Donuts, whose owner has opened a chain of hummus restaurant named for a street in Tel Aviv, Dizengoff. A coconut cream is coated in cinnamon to produce this state's delicious sounding Irish potato candy. Joseph Horn and Frank Hardart opened America's first automat, a self-service restaurant, in this state. After feeding a homeless man in this state, Julius Sturgis was given a recipe which led him to start America's oldest commercial (*) pretzel business. This state was where Lebanese Bologna was developed and Amoroso Sandwich rolls are central to this state's two most famous sandwiches. For 10 points name this state where the Oliveri brothers first made the "Philly Cheesesteak."**
ANSWER: Pennsylvania

4. **In this book, the plot of the film *La Plume de ma tante* is related by a would-be biographer of Branwell Bronte and this book's protagonist draws strength from *The Pensées of the Abbé Fausse-Maigre*. Adam Lambsbreath continues to use twigs for "clettering" as he is too proud of the mop bought for him by this book's protagonist. In this novel, Cousin Amos informs the Church of the (*) Quivering Brethren that "there is no butter in Hell" and Aunt Ada Doom repeatedly claims to have witnessed "something nasty in the woodshed." Flora Poste helps the Starkadders at the title location of, for 10 points, what "loam and lovechild" parody by Stella Gibbons?**
ANSWER: Cold Comfort Farm

5. **This thinker's early work focused on gall wasps, of which he collected more than 5 million. Abraham Maslow tested the sample for this man's most significant project and argued it was unrepresentative because he hadn't factored in "volunteer bias" and had overrepresented prisoners and prostitutes. Fritz Klein sought to expand on one of his creations by adding past and ideal elements to the (*) seven-point scale named for this man, who founded a research institute in Indiana. For 10 points, name this pioneering**

sexologist who names a measure of relative sexual orientation and produced two reports on sexual behaviour in males and females.

Answer: Alfred Charles Kinsey Jr.

6. **This artist created only two known marble sculptures, busts of his wife and son. He's not Van Gogh, but this artist counterfactually showed himself with red hair in a self-portrait as Christ in the Garden of Olives and with a severed ear in a self-portrait in the form of a jug. This artist showed a Raven overlooking a restless naked woman in (*) *Nevermore* and this artist's depictions of women in traditional Breton dress include the spectators of Jacob wrestling the angel in *The Vision after the Sermon* and those at the foot of the cross in *Yellow Christ*. For 10 points, name this French Post-Impressionist perhaps best-known for his work from his time in Polynesia.**

ANSWER: Eugène Henri Paul Gauguin

7. **One person with this given name converted to Christianity after falling asleep in church and having a dream in which the forty holy martyrs beat him up. That author of the letter "On Not Three Gods" was the brother of Basil the Great, with whom, together with an archbishop of Constantinople with this name, he constituted the Cappadocian Fathers. The first pope with this name sent (*) Augustine of Canterbury to England and was legendarily attributed as the originator of his namesake liturgical "chant". For ten points, give this name shared by the Church Fathers known as Nyssen and Nazianzen [Na-zee-an-zen] as well as a pope known alliteratively as "the Great".**

ANSWER: Gregory [accept obvious non-English equivalents]

8. **William Driver, the first to call the U.S. flag "Old Glory", returned 65 people to this island. This island is named for a midshipman on the HMS *Swallow* whose father's death is depicted on John Trumbull's painting of the Battle of Bunker Hill. John Tay converted everyone on this island to Seventh Day Adventism. Ned Young and John Adams settled on this island and here murdered (*) Matthew Quintal with an axe; Quintal had earlier burnt the ship they used to reach this island, which had set out on a breadfruit trading mission to Tahiti. For 10 points, name this Pacific island, most notable as the destination of several of the *Bounty* Mutineers.**

ANSWER: Pitcairn Island [accept Pitcairn Henderson, Ducie and Oeno Islands]

9. **The propensity of tunneling to cause this process is measured by the Keldysh parameter, and its namesake energy can be approximated by Koopman's theorem. For atoms, that energy is proportional to effective nuclear charge over principal quantum number all squared, and the (*) work function is its analogue in solids. Electrospray and Matrix Assisted Laser Desorption are two forms of this process used in Mass spectroscopy. Mulliken electronegativity is the mean of electron affinity and the energy required for this process, which is 13.6 eV for a Hydrogen atom. For 10 points, name this process of removing an electron from a nucleus.**

ANSWER: Ionisation [accept Ionisation Energy]

10. **Carbone et al suggest a Lévy distribution is a better model than the Poisson distribution for these events as as they are not truly independent. These events lead to increased production of beryllium-10 due to cosmic ray spallation. The Laschamp event marked the last time one of these events took place. The (*) Vine Matthews Morley hypothesis explains how these events generate parallel stripes beside mid-oceanic ridges, validating Hess' explanation of seafloor spreading. These events cause the van Allen belts to move closer to earth and would disrupt the navigation of certain species. For 10 points name these events where the north and south poles of a certain field swap places.**

ANSWER: Geomagnetic reversal [accept obvious equivalents like reversal of earth's magnetic field]

11. **Name and type of work required. In one poem from this collection, the poet mocks his own work by asking the Muse why he covers "great matters with trivial metres". One poem of this group attacks the immorality of modern Rome and asks "What do the harmful days not render less?" One poem in this**

collection declares a hostility to urban bustle and wealth, and ends with a wish to keep this poet's (*) "Sabine vale". The second poem of the 3rd book in this collection considers war against the Parthians, and declares "dulce et decorum est pro patria mori". For 10 points, name this collection of poems by this author of *Epistles* and *Satires*.

ANSWER: Horace's Roman Odes

12. A reconstruction published by this architect included a hexagonal structure at the center of a stone circle, which supposedly confirmed that Stonehenge was a Roman site. The two-part design for Greenwich Hospital is split to allow for unimpeded view from the house this architect designed for Anne of Denmark. This architect, who had been a set designer for Ben Jonson, was in charge of the restoration of (*) Old St. Paul's Cathedral. A double-cube building designed by this man that houses Rubens's *Apotheosis of James I*. For 10 points, name this English architect of the Banqueting House at Whitehall.

ANSWER: Inigo Jones

13. The day after a major victory, this man presented a list of the "Top Ten reasons it took me 20 years" to win a certain sporting event on the Late Show with David Letterman. Formula 1 driver Daniel Ricciardo uses the number 3 as a tribute to this man. This man won his first title in 1980 before signing for Richard Childress Racing in 1984, where he remained for 17 years and won 67 Cup races. This man won the Daytona 500 in (*) 1998, and three years later, his final race was won by Michael Waltrip ahead of this man's son. For 10 points, name this seven-time NASCAR champion, nicknamed "The Intimidator", who died in an accident on the final lap of the 2001 Daytona 500.

ANSWER: (Ralph) Dale Earnhardt Sr. (do NOT accept "Dale Earnhardt Jr.")

14. In one work, this character travels to Africa aboard a hot air balloon, while in another story, Judith Loftus easily sees through his attempt to pass as a girl. This character witnesses the massacre of the Grangerfords by the Shepherdsons, before colluding in the "Sick Arab" and "The Royal Nonesuch" schemes. This character says to himself, (*) "All right, then, I'll go to hell!" after deciding to save his friend from captivity. The Widow Douglas tries to "civilize" this character, the neglected son of the alcoholic vagrant "Pap," after he saves her from "Injun Joe." For 10 points, name this friend of Jim and Tom Sawyer, the hero of an eponymous novel by Mark Twain.

ANSWER: Huckleberry Finn [accept either underlined part]

15. One form of this quantity is proportional to the trace of the density matrix multiplied by the logarithm of the density matrix. For ideal gases, this quantity is proportional to the natural logarithm of the Volume over the thermal wavelength cubed according to the (*) Sackur-Tetrode equation. Helmholtz Free Energy is equal to internal energy minus temperature multiplied by this quantity, whose Shannon form is used in Information theory. This quantity is zero for a perfect crystal at absolute zero according to the third law of thermodynamics. Commonly symbolised S, name, for 10 points, this thermodynamic quantity which is a measure of a systems disorder.

ANSWER: Entropy [accept more specific versions such as Von Neumann Entropy or Shannon Entropy, prompt on S]

16. One work by this composer includes a passacaglia describing giant butterflies who extinguish the sun. This composer used a Danish castle as a setting for an expansive three part cantata. This composer used Brahms' return to a contrapuntal, imitative style to argue the he was a (*) 'progressive' composer. Another work by this composer which transitions from D minor to D major was inspired by a Richard Dehmel poem in which a woman admits adultery to her lover. For 10 points, name this leader of the second Viennese school who composed *Gurre Lieder*, *Pierrot Lunaire* and *Transfigured Night*.

ANSWER: Arnold Schoenberg

17. Herbert Fingarette wrote a book subtitled "The Secular as Sacred" that tried to make this philosopher relevant to contemporary philosophy, using J. L. Austin's performative utterances to explain

the power of this philosopher's concept of rules of respectful ritual behaviour. This philosopher argues that those (*) rules cultivate moral character through repetition "as though carved". This philosopher also argued that "restraining yourself and returning to the rites constitutes *ren*", a state of complete moral excellence, whose aspects include *xiao* or filial piety. For 10 points, name this philosopher whose thoughts are collected in the *Analects*.

ANSWER: Confucius [or Kong Fuzi]

18. In one poem by this author "Th' Insensible fell weeping in his Hands" after Lysander cannot sexually satisfy Cloris in the poem "The Disappointment". This writer created Wilmore, an Englishman in Naples who falls in love with Hellena, in a revision of a Thomas Kilgrew play. In a novel by this author, (*) Imoinda is reunited with her Coromantin lover in Suriname, but he cuts her head off after organizing a slave revolt. This author's first novel *The Fair Jilt* is said to be first English novel by a woman. For 10 points, name this author of *The Rover*, a female Restoration playwright who created Prince Oroonoko.

ANSWER: Aphra Behn [accept "The Disappointment" until "this author's"]

19. Intra-articular deposition of hydroxyapatite crystals is seen in the "Milwaukee" syndrome of this joint. Hill-Sachs lesions and Bankart lesions are found after an injury affecting this joint. The "light-bulb" sign is seen in X-rays of the rare posterior dislocations of this joint, which typically happens in epileptic fits and electrocutions. The (*) glenoid labrum is a ring of fibrocartilage which deepens this joint. Supraspinatus and teres minor are two muscles give this ball-and-socket joint dynamic stability as part of its "rotator cuff". The deltoid abducts this joint. The scapula and humerus articulate at, for 10 points, which joint of the upper limb.

ANSWER: Shoulder [accept gleno-humeral joint]

20. One source says that while staying with Pandolfo Pucci, this man was fed only vegetables leading him to be called "*Monsignor Insalata*". This man escaped from prison on Malta using ropes and continued to call himself a Knight of Malta after his expulsion from the order as a "foul and rotten member". One of the largest sources for this man's opinions are his attacks on Giovanni Baglione, his first biographer, who he suggested was a (*) "clumsy" painter during a libel trial brought against him and associates Ottavio Leoni and Orazio Gentileschi. For 10 points, name this killer of Ranuccio Tomassoni whose troubled life influenced his paintings like *Supper at Emmaus*.

ANSWER: Michelangelo Merisi da Caravaggio [accept either underlined part]

Tiebreaker

21. One opera by this man ends with Michele revealing the murdered body of Luigi hidden beneath his cloak. In another work, Buoso's relatives scheme to get their hands on his mule, house, and mill, and that work is part of *Il Trittico* along with *Il tabarro*. One of this man's characters, the mistress of Alcindoro, sings "Quando me'n vo'" to win back the affections of Marcello, and that song is known as Musetta's waltz. Rodolfo sings "O soave fanciulla" and "Che gelida manina" about the seamstress Mimi in an opera by this man, who also wrote the aria "O mio babbino caro." For 10 points, name this Italian composer of *Gianni Schicchi* and *La bohème*.

ANSWER: Giacomo Antonio Domenico Michele Secondo Maria Puccini

Bonuses

1. One of this man's poems suggests that you "Take Eden, further south: at dawn today / I ordered up my troops to tear away." For 10 points each:

[10] Name this poet who described how, "Advancing down the road from Nineveh / Death paused a while and said 'Now listen here'" in "Regime Change."

ANSWER: Andrew Motion

[10] Andrew Motion held this official position at the time of the Iraq War. Other holders have included Alfred, Lord Tennyson and John Betjeman.

ANSWER: **Poet Laureate** of the United Kingdom

[10] Number 9 on the Guardian's "Top 10 books about the Iraq War" is this long-delayed report into Britain's role in the war, which was read out in its entirety in a scintillating 12-day continuous show at the Edinburgh Fringe called "Iraq Out & Loud".

ANSWER: **Chilcot** Report (accept **Chilcot** Inquiry or The **Iraq Inquiry**)

2. One of the main trends of the Romantic period was the increasing use of cyclic form in large scale compositions. For 10 points each:

[10] This composer's three movement symphony in D minor has its opening theme reappear in the final coda. That symphony's second movement features a notable passage in which a cor anglais plays over harp and plucked strings.

ANSWER: Cesar **Franck**

[10] A theme from the first movement of this E minor Dvorak symphony reappears in all the other movements. The second movement of this symphony includes a cor anglais solo later used in Hovis adverts.

ANSWER: *From the **New World*** [accept *Symphony No. 9*]

[10] Cyclic form is also used in this programmatic symphony by Tchaikovsky, which opens with a Lento lugubre first movement depicting a young man pining for his lost love Astarte.

ANSWER: **Manfred** *Symphony*

3. For 10 points each, answer the following on the career of Florence Kelley:

[10] In 1893, Kelley, who campaigned against child-labor, became the first woman to be appointed to statewide office in Illinois after this governor appointed her Chief Factory Inspector.

ANSWER: John P. **Altgeld**

[10] Kelley also headed the National Consumers League, and along with Josephine Goldmark did most of the work creating this pioneering legal brief submitted during the 1908 Supreme Court case, *Muller vs. Oregon*.

ANSWER: **Brandeis Brief**

[10] Kelley was also a keen correspondent with this man whose *The Condition of the Working Class in England in 1844* she translated into English. Her translation is in print to this day.

ANSWER: Friedrich **Engels**

4. Answer some questions about the surprising contributions of William Ewart MP—not to be confused with William Ewart Gladstone PM—to nineteenth-century Britain. For 10 points each:

[10] In 1850, Ewart secured the passage of an act promoting these institutions, funded out of the public rates. Manchester boasts an enormous E. Vincent Harris-designed one of these, one of more than four thousand established under Ewart's bill.

ANSWER: public **libraries**

[10] Ewart's concern for public access to cultural patrimonies also led to his creation of these markers indicating a particular place's links with famous people or events. Appropriately, one now adorns Ewart's home in Hampton.

ANSWER: **blue plaque**

[10] One of Ewart's early achievements was a bill abolishing this penal practice, in which executed bodies were displayed after death, often coated in tar to preserve them.

ANSWER: **hanging in chains** [accept "**gibbeting**," prompt on "hanging"]

5. This character stages a bizarre modernist play in which his neighbor Nina plays "the soul of the world" after the passage of long ages. For 10 points each:

[10] Name this son of the actress Arkadina, who achieves limited fame as a writer and envies the more successful Trigorin. In Act II of the play in which he appears, this man presents Nina with a bird he has killed.

ANSWER: **Konstantin** Gavrilovich **Treplev** [accept either underlined part, accept "**Kostya**"]

[10] This other character created by the same author falls in love with Irina, younger sister to Masha and Olga, who mocks this character as ugly. He repeatedly declares his intention to go work in a brick factory, despite his rank.

ANSWER: **Baron Nikolai** Lvovich **Tuzenback** [accept any of the underlined parts]

[10] Figuratively speaking, the seagull, Konstantin, and the Baron are all shot with guns belonging to this man, who said that an author must never introduce a gun unless it is eventually fired, a rule he broke in *The Cherry Orchard*.

ANSWER: Anton Pavlovich **Chekhov** [accept “**Chekhov**’s Gun”]

6. John Cairns called this experiment “the most beautiful in biology”. For 10 points each:

[10] Name this experiment which saw *E. Coli* first grown on a medium rich in nitrogen-15 before being transferred to a nitrogen-14 medium. A crucial result in this experiment was the fact that a sample from the first new generation of *E. Coli* was of intermediate density.

ANSWER: **Meselson-Stahl** experiment [accept names in either order, both are required]

[10] The Meselson-Stahl experiment showed that this process occurs in a semi-conservative fashion. This process is achieved in vitro by PCR.

ANSWER: **DNA replication**

[10] *Read slowly*. If generation 0 of a Meselson-Stahl experiment has 100% heavy DNA and generation 1 has 100% intermediate DNA, what will be the ratio of *intermediate* DNA to *light* DNA in generation 3

ANSWER: **1:3** [accept equivalents such as **25:75** or **25% to 75%**]

7. The lifetime for this process is typically of the order of milliseconds, unlike for fluorescence which is on the order of nanoseconds, for 10 points each:

[10] Name this photochemical transition which has a lower rate than fluorescence, as it occurs from a triplet state to a singlet state and is thus spin forbidden..

ANSWER: **Phosphorescence**

[10] Triplet states are formed via intersystem crossing, which is mediated by the hamiltonian associated with this interaction, which occurs between an electron’s spin and the magnetic moment generated by its motion.

ANSWER: **Spin-Orbit** Coupling

[10] Spin Orbit coupling can be thought of as an example of this effect due to an internal field. This effect is the splitting of spectral lines in the presence of a magnetic field.

ANSWER: **Zeeman** effect

8. Answer some questions about fictional libraries, none of which were created by Jorge Luis Borges, for 10 points each:

[10] This man’s collection of books on knights errant is burned by the curate and barber of his village, but not before it inspires him to go tilting at windmills.

ANSWER: Don **Quixote** [or **Alonso Quijano**]

[10] Lucian, a servant of Morpheus, looks after the Library of Dreams, which houses unwritten works like Wodehouse’s *Psmith and Jeeves* and Charles Dickens’s *The Return of Edwin Drood*, in this series of graphic novels.

ANSWER: *The* **Sandman**

[10] The *Musaeum Clausum*, or “Sealed Museum,” is an inventory of “remarkable books, antiquities, pictures and rarities of several kinds, scarce or never seen by any man now living” compiled by this English author of *Religio Medici* and *Pseudodoxia Epidemica*.

ANSWER: Thomas **Browne**

9. This task can be achieved by a method named for Cholesky provided that the input is Hermitian and positive-definite. For 10 points each:

[10] Name this process that involves rewriting a certain type of mathematical object as the product of two or more of those objects with particular properties.

ANSWER: **Matrix decomposition** [prompt on decomposition by asking “of what?”, accept **matrix factorization**, anti-prompt on any specific types of matrix decomposition]

[10] One way of achieving matrix decomposition is by using the LU method. Here a matrix is factorized into these two types of matrix — one where every element above the leading diagonal is zero, and one where every element below it is zero.

ANSWER: **Lower triangular** and **upper triangular**

[10] The LU decomposition was developed by this British mathematician who is probably better known for his role in cracking the enigma code.

ANSWER: Alan **Turing**

10. If you are a monarch, it may be unwise to leave your realm for medical treatment. Side effects may include a coup d'état. For 10 points each:

[10] A 1961 medical trip to the United States by this man, the second king of Saudi Arabia, provided his younger brother Faisal the opportunity to build support for his accession to the throne, which came three years later.

ANSWER: **Saud** bin Abdulaziz Al Saud [or **Saud** of Saudi Arabia]

[10] In 1969, this king of Libya was overthrown by Muammar Gaddafi while he was recuperating from an illness at a spa in Turkey.

ANSWER: **Idris**

[10] A U.S.-backed coup in this country was devised while its dictatorial head of state and former monarch Norodom Sihanouk was out of the country seeking treatment. He was replaced by Lon Nol and Sisowath Sirik Matak.

ANSWER: Kingdom of **Cambodia** [Preah Reacheanachak **Kampuchea**]

11. This painting's titular subject holds a peacock-feather fan and her pose mimics David's portrait of Madame Récamier. For 10 points each:

[10] Name this 1814 painting of a Turkish courtier. It was the subject of a 2014 paper in the Journal of the Royal Society of Medicine examining claims that its artist included too many vertebrae.

ANSWER: *La Grande **Odalisque*** [or *Une **Odalisque***]

[10] *La Grande Odalisque* is by this pupil of David, rival of Delacroix, and painter of such works as *Napoleon I on his Imperial Throne* and *The Turkish Bath*.

ANSWER: Jean-Auguste-Dominique **Ingres**

[10] At the Paris Salon of 1833, Ingres exhibited a portrait showing this aging art-dealer sat with his hands on his knees and staring directly at the viewer.

ANSWER: Louis-François **Bertin**

12. While searching for philosophy answerlines in the Merton College Library, the writer chances upon a case with the letters F. H. B. and knows that noted philosopher F. H. Bradley was a fellow at Merton. For 10 points each:

[10] Given the two previous facts, the writer might think that the case is Bradley's, having taken this step which Bradley defines as "the ideal self-development of an object taken as real".

Answer: **Inference** [anti-prompt on "deduction" or "abduction", do not accept or prompt on "induction"]

[10] The writer now thinks it ironic that his perception of the two initial ideas as separate but relatable was highly un-Bradleyan and much resembled those of this philosopher of *An Essay Concerning Human Understanding*, of which Bradley was a strong critic.

Answer: John **Locke**

[10] Beset by shame the writer hides his face only to see a copy of "The Nature of Judgment" by this author who criticized Bradley's arguments in *The Principles of Logic*, because "truth and falsehood are not dependent on the relation of *our* ideas to reality."

Answer: G. E. **Moore**

13. Venice experiences *Acqua Alta* ever more often as it subsides. Name the following about attempts to stop the city sinking beneath the lagoon for 10 points each:

[10] This ongoing project which began in 2003 aims to stop Venice flooding in almost all scenarios, by blocking the inlets to the lagoon with barriers. Its name alludes to a biblical leader.

ANSWER: **MOSE** project

[10] The control centre for MOSE is located in this area of Venice, noted in the past for its quick production of galleys along an assembly line. It gives it name to a factory or warehouse for arms.

ANSWER: **Arsenale** (accept the **Arsenal**)

[10] In contrast to flooding, this original island of Venice suffered from the silting up of the surrounding channels. Now only the Cathedral of Santa Maria Assunta remains.

ANSWER: **Torcello**

14. For 10 points each, answer the following on wagtails in mythology:

[10] When this creature was first depicted at Heliopolis its iconography was based on the yellow wagtail and it represented Atum. This creature which is said to be the ba of Ra, may have inspired the Greek phoenix.

ANSWER: **Benu** bird

[10] **Two answers required.** These kami dance around a pillar because they are going to give birth to Japan, but realise they don't know how to have sex, and are taught a literal birds-and-bees lesson by a pair of copulating wagtails.

ANSWER: **Izanami** and **Izanagi**

[10] In India wagtails are associated with this deity because their black throats look like ammonites, which are also associated with this god, who rides the eagle Garuda and whose 10th avatar will be Kalki.

ANSWER: **Vishnu**

15. In March 2017, this man tweeted that his former team's sponsor now wants "100 mil plus a dollar and 9 cents" from him. For 10 points each:

[10] Name this cyclist whose complete competitive record since 1998 was voided following a 2012 USADA investigation revealing "the most sophisticated, professionalised and successful doping programme the sport has ever seen".

ANSWER: Lance Edward **Armstrong** (accept Lance Edward **Gunderson**)

[10] Armstrong rode for a team sponsored by this government agency until 2004, when the team was renamed following a deal with the Discovery Channel.

ANSWER: **United States Postal Service** Pro Cycling Team (accept **U.S.P.S.** or alternatively-abbreviated equivalents)

[10] Armstrong's seven initial victories followed this man's 1998 victory. This Italian cyclist was the last to win the Tour de France and Giro d'Italia in the same year, and died of a cocaine overdose in 2004.

ANSWER: Marco **Pantani**

16. This particle is found in the D meson along with an up or down quark and it was discovered nearly simultaneously by groups lead by Simon Ting and Burton Richter. For 10 points each:

[10] Name this quark, the fourth to be discovered. This quark is found in the same generation as the strange quark.

ANSWER: **Charm** quark

[10] This meson was the first known bound form of a charm quark and a charm antiquark .

ANSWER: **J/psi** meson (prompt on **Charmonium**)

[10] One of the original proposers of the Charm quark was this physicist, who won the Nobel prize along with Salam and Weinberg for his work on unifying electromagnetism and the weak force.

ANSWER: Sheldon **Glashow**

17. For 10 points each, answer the following on the Hadza people's perception of their past:

[10] The first epoch of history of the Hadza, the Akakaanebe, was inhabited by people who were gigantic, hairy and ate this sort of food, which along with cooked and rotten makes up Levi-Strauss' culinary triangle.

ANSWER: **raw** [or **cru**]

[10] In the time of the Tlaatlanebe, the Hadza began worshipping a being known as *epeme* through this sort of ritual. Hopi dress as *kachina* to perform this sort of ritual.

ANSWER: **dance** (prompt on religious ritual)

[10] The Hamakwebe, people of the third age, invented *lukuchweko*, the primary method of object circulation among the Hadza, which is this sort of practice. Clifford Geertz described women and children being involved in these sort of activities around the edge of the Balinese cockfight.

ANSWER: **gambling** games [accept more specific answers like “**dice**”, accept “games of **chance**” and other word variants]

18. In the first short story in this collection, Tobin has his fortune told on Coney Island, and after optimistically attempting to interpret his day, is reunited with his love Katie Mahorner. For 10 points each:

[10] Name this short story collection, mostly set in New York, which includes the stories “Tobin's Palm” and “The Cop and the Anthem”.

ANSWER: **The Four Million**

[10] In this other short story in O. Henry's *The Four Million*, Jim buys Della a comb for Christmas and Della buys Jim a watch chain, although neither of them is able to use the gifts.

ANSWER: *The* **Gift of the Magi**

[10] Several stories in *The Four Million* are about women reacting positively to sexual assault, including *The Brief Debut of Tildy*, who has this occupation which she shares with Mildred Rogers in *Of Human Bondage*.

ANSWER: **waitress** (accept **server** or other obvious equivalents)

19. The Naples Archaeological Museum doesn't only contain works from Pompeii and Herculaneum. For 10 points each

[10] This largest surviving sculpture from antiquity was found first in the Baths of Caracalla before Pope Paul III moved it to his family's Palazzo in Rome.

ANSWER: **Farnese Bull** (accept **Toro Farnese**)

[10] The Callipyge [Kally-pie-gee] version of this goddess was also part of the Farnese collection, while other well known depictions are the de Milo and the Victrix.

ANSWER: **Venus** (accept **Aphrodite**)

[10] The bronze originals used to produce these two sculptures were the second version, after the first version was looted by the Persians in 480. They are notable examples of the severe style of Greek art.

ANSWER: **Tyrannicides** (accept **Harmodius and Aristogeiton** - both names needed)

20. For 10 points each, answer the following on the Frankish Kings as described by Mike Tyson on the prompting of Werner Herzog:

[10] Tyson says that his interest in this first Carolingian monarch came from his insecurity about being poor. He replaced Childeric III following a controversial dialogue over legitimacy with Pope Zachary.

ANSWER: **Pepin** the short

[10] Tyson seems to confuse Pepin the short with Pepin of Landen, and says that he came from Austria, rather than this similarly named kingdom centred on the Rhine, for which the Pippinids served as mayors of the palace.

ANSWER: **Austrasia**

[10] Tyson correctly states that Pepin of Landen married his daughter Begga to Ansegisel, son of this Bishop of Metz, who helped overthrow Brunhilda and is usually depicted holding a rake.

ANSWER: St. **Arnold** (accept **Arnulf**)