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: **Paul Samuelson**

Tossups

1. **A hollywood child star representing the International Federation of Multiple Sclerosis Societies had a presidential meeting cancelled during this period. This event saw the introduction of the Action Programme that included an economic focus on consumer goods. "The Two Thousand Words" was a manifesto published during this event and the (*)** Bratislava Declaration was issued in response to it. One of the catalysts for this event was the announcement of a political programme known as "socialism with a human face", and this event was concluded following an invasion by Warsaw Pact forces ordered by Leonid Brezhnev. For 10 points, name this period of political reform in Czechoslovakia in 1968 under Alexander Dubček.
ANSWER: **Prague Spring** (accept **Pražské jaro** or **Pražská jar**)

2. **In 2012, members of this denomination rejected a government estimate of their size as less than half their own estimate. The church's first parish in the United States was set up at St Mark's in Jersey City. This church celebrates the New Year during a feast that, in recent years, has tended to fall on 11th September. Due to disagreements about Christology after the Council of Nicaea, this church (*)** split from what are now the Eastern Orthodox and Roman Catholic churches. Pope Tawadros II is the leader of, for ten points, this largest Christian Church in Egypt and Northeast Africa.
ANSWER: **Coptic** Orthodox Church of Alexandria [do not accept "Coptic Catholic Church"]

3. **Nucleophilic addition of an anion to a carbonyl group is the first step of one of these reactions named for Knoevenagel. A silyl enol ether replaces an enolate in the Mukaiyama modification of one of these reactions governed by the Zimmerman-Traxler model. Another of these reactions sees two esters react to form a (*)** beta-ketoester. In addition to the aldol reaction and one named for Claisen, another of these reactions sees a peptide bond formed from two amino acids. For ten points, name these chemical reactions that combine two molecules to form a larger molecule at the expense of a small byproduct molecule such as water.
ANSWER: **Condensation** reaction [anti-prompt on dehydration reaction and on Aldol reaction before mention, accept **Aldol Condensation** before mention] [Do not accept "polymerisation"]

4. **The commissioner of a work designed by this man conjectured that it "would have boggled the minds of the Romans". A sculpture by this person consisting of a wire mesh stretched between two hoops, is the only one of this person's *Tees Valley Giants* to have been constructed. Nottingham Playhouse and the Rockefeller Center are locations where this person's *Sky Mirrors* have been commissioned. (*)** Liquid mercury inspired this person's stainless steel *Cloud Gate*, which is situated in AT&T Plaza in Chicago. Holder of the copyright for Vantablack, for ten points, name this British-Indian sculptor who designed the ArcelorMittal Orbit in the Queen Elizabeth Olympic Park.
ANSWER: Sir Anish **Kapoor**

5. **One biblical work by this composer starts abruptly with a narration by the tenor rather than a prelude or overture. That work expanded on an earlier overture called *La fuite en Egypte*. This composer arranged six Gautier poems, to produce the song cycle (*)** *Les nuits d'été*. A solo viola takes a prominent role in a work by this composer based on a poem by Lord Byron which was dedicated to Paganini. This composer's best known work

depicts a young artist who poisons himself with opium and dreams of being taken to the scaffold. *Harold en Italie* and *Symphonie fantastique* are, for 10 points, works by which French Romantic composer?
ANSWER: Hector **Berlioz**

6. **Bab and Betty help find a job on a farm for Ben in this author's novel *Under the Lilacs*. This author wrote a novel in which the scoundrel Phillip Tempest falls in love with Rosamund Vivian, only for her to fall in love with a Catholic priest and drown after a shipwreck. That work, *A Long Fatal Love Chase*, was one of three this author wrote under the pseudonym A. M. Barnard. Dan kills a man who cheats Blair in a novel by this author about the adult lives of several boys from (*)** Plumfield. The best known work by this author of *Jo's Boys* follows the lives of sisters Meg, Jo, Beth and Amy during and after the American Civil War. For 10 points, name this American author of *Little Women*.
ANSWER: Louisa May **Alcott** [accept ***Under the Lilacs*** before "this woman"]

7. **"Peoples are equal and parties to their own agreements" and "Peoples are to honour human rights" are two of eight principles introduced by this man in the work *The Law of Peoples*. This man expanded on the idea of "overlapping consensus" in the work *Political Liberalism*. A thought experiment concerning people who do not know their (*)** place in society making decisions based on moral considerations rather than self-interest appeared in a work by this man whose "difference principle" was attacked by Robert Nozick in *Anarchy, State, and Utopia*. The originator of the "veil of ignorance", for 10 points, name this American moral and political philosopher who wrote *A Theory of Justice*?
ANSWER: John (Bordley) **Rawls** (accept *The **Law of Peoples*** before "this man")

8. **Orthoclase gives the pink tinge of the Hazards mountain range on this island and an area of cool, temperate rainforest can be found in the Tarkine on this island. Mount Ossa is this island's highest peak. The deciduous beech and Huon pine are native to this island. The North and South Esk meet to form the Tamar River at Launceston on this island, and the largest city on this island is situated on a large natural harbour formed by the estuary of the (*)** Derwent River. A significant heritage attraction on this island is a former convict settlement at Port Arthur. The city of Hobart is, for ten points, situated on which island separated by the Bass Strait from the Australian mainland.
ANSWER: **Tasmania**

9. **This scientist co-names an extension of Euler-Bernoulli beam theory that assumes a mid-surface plane can be used to represent a three-dimensional plate in two-dimensional form is a theory of plates. In addition to that theory also named for A. E. H. Love, this man names an integral theorem which uses Green's identities to solve the homogeneous wave equation at an arbitrary point P. Alongside Robert Bunsen, this man discovered (*)** Rubidium and Caesium. The sum of the currents flowing into a node equals the sum flowing out and the sum of the potential differences around a closed circuit equals zero are the respective current and voltage laws of, for ten points, which German physicist?
ANSWER: Gustav **Kirchhoff**

10. **A man crashes in a town square during a cross-country endurance race in a short film this person directed for Prada. A 75-year plan developed by Anthony leads him on a series of heists with Dignan in this person's directorial debut. In the closing scene of one film directed by this person, brothers Peter, Francis, and Jack ditch their father's (*)** luggage in order to catch a train leaving a station - that film is *The Darjeeling Limited*. Another film directed by this person sees Gustave and Zero pursued by Dmitri after they steal the *Boy with Apple*. *The Royal Tenenbaums* and *The Grand Budapest Hotel* are, for ten points, works by which American film director?
ANSWER: (Wesley Wales) "Wes" **Anderson**

11. **Sami deity Bieggolmai is usually portrayed using shovels to create this phenomenon and the Aztecs built temples in the shape of a cylinder to worship a deity of this phenomenon, Ehecatl. A red-haired green-skinned demon called Fūjin is a Shinto kami of this phenomenon, while in Sumerian religion, (*)** Ninlil became a goddess of this phenomenon after her death. One god of this phenomenon is the father of Bhima and a rides a gazelle which represents swiftness. That deity is the Hindu god Vayu. The four stags of Yggdrasil collectively represented, for 10 points, deities representing this natural phenomenon, as did the Anemoi in Greek mythology.
ANSWER: **wind** (accept **Summer Winds** or "**Storms**"before "Ehecatl") [Do not accept specific winds]

12. **This man's ship, the *Dieulagarde* had to be sold to pay the debts of Clerk of the King's Ships, Robert de Crull. This man invaded Galicia in an attempt to exert his claim to the throne of Castile and León. Late in his life, this man married his long-term mistress Catherine Swynford, while the Peasant's Revolt saw this man's residence at the Savoy Palace destroyed. The House of Commons was forced by this man to impose the (*)** first poll tax in English history, and this man's last military campaign in France saw him fail to capture St. Malo in 1378. This man became de facto leader of England in 1374 due to the illnesses of the Black Prince and Edward III. For 10 points, name this father of Henry IV.
ANSWER: **John of Gaunt**, first duke of Lancaster (prompt on partial answers, prompt on "first duke of Lancaster," prompt on "duke of Lancaster")

13. **This man's first didactic poem was likely a parody of the *Georgics* and featured recipes for cosmetics in elegiac couplets. One poem by this man is the origin of the phrase "the end justifies the means" - that epistle from Phyllis to Demophoon is one of the *Heroides*. In one poem from late in this man's life, he says that having before "happily sung happy songs" now (*)** "*cano tristia tristis.*" That poem was written by this man after he was exiled by Augustus for "carmen et error" . This man's best known work features ill-fated lovers who arrange to meet at Ninus's tomb and concludes with Julius Caesar's apotheosis. For ten points, name this Roman poet of the *Metamorphoses*.
ANSWER: Publius **Ovid**ius Naso

14. **Hendrick Cornelisz Vroom was a prolific painter of these objects. One of these objects appears between a bridge and the artist in Henri Rousseau's full length *Self Portrait*. In one work named for one of these objects, a nude man holds a bowl up as a group of monks sing to a lute - that work is by Hieronymus Bosch. Five of these objects are shown in the background of (*)** Caspar David Friedrich's allegorical painting *The Stages of Life* and figures gesture to a tiny one of these objects on the horizon in Gericault's *The Raft of the Medusa*. A crescent-marked pennant flies from the mast of, for ten points, a painting of one of these objects "of Fools".
ANSWER: **ship**s [or **boat**s, accept specific sorts of ships]

15. **Hans Kundt offered his resignation as the commander-in-chief of one of this war's belligerents following a heavy defeat at the Second Battle of Nanawa. One of the events that led to this war was the capture and burning to the ground of a fort at Pitiantutá Lake. Generals for one of this war's belligerents forced Daniel Salamanca to resign as president in favour of (*)** José Luis Tejada. The first major engagement of this war was the Battle of Boquerón and the belligerents of this war are sometimes erroneously regarded as being puppets of Standard Oil and Royal Dutch Shell. For 10 points, name this 1932-35 war between Paraguay and Bolivia over a semi-arid region.
ANSWER: **Chaco War** (accept **Guerra del Chaco**, **Cháko Ñorairō** or La **Guerra de la Sed**, accept **Bolivia** before "this war")

16. **When there is a 2:1 ratio between a molecule's vibrational and rotational frequency, its motion can be described purely in terms of this phenomenon. The L4 and L5 Lagrangian points are stable due to this phenomenon. An exact balance between the pressure gradient force and this force would result in phenomena**

which travel parallel to (*) isobars which are known as "geostrophic". The coefficient of this force equals double the rotation rate of the earth multiplied by the sine of the latitude. For 10 points, name this non-centrifugal "fictitious" inertial force that acts on objects that are in motion relative to a rotating reference frame.
ANSWER: **Coriolis** force [or effect]

17. **Omar's existential crisis and love affairs are documented in this man's work *The Beggar*. A man is unable to escape from a carnival in one of this man's late short stories, collected in *The Dreams* and *Dreams of Departure*. One character created by this man is unsettled by seeing his father playing the tambourine at a courtesan's house; that character's mother (*)** fractures her collarbone after fainting on her return from a mosque. This author wrote about Randa's family's disapproval of her engagement to Elwan due to the latter's inability to furnish a flat in *The Day the Leader was Killed*. For ten points, name this author of *Palace Walk*, the first novel of the Cairo Trilogy, a Nobel Laureate from Egypt.
ANSWER: Naguib **Mahfouz** [accept *The **Beggar*** before "this man"]

18. **The differentiation of plant root cells into hypertrophied, multinucleate feeding cells is seen most frequently in the context of this phenomenon. The *Sacculina* genus of barnacles is noted for performing the namesake castration of this phenomenon. The "mafia hypothesis" and the "nest-site hypothesis" have both been advanced to explain the (*)** brood form of this phenomenon which is exhibited by the cuckoo. Helminths are a type of worm that classically employ this kind of behaviour. For 10 points name this kind of relationship between two species where one benefits at the expense of another, exemplified by fleas and their hosts.
ANSWER: **Parasitism**

19. **The Morrises are impressed when one character in this novel says "Bartlett pears" with an air of authority. This novel sees one character make another laugh by claiming that a hat will make Mrs. Peters look "like a pig at a fair". Characters in this novel wonder whether an aeroplane has (*)** written with smoke the words "Kreemo" or "Glaxo". One character in this novel has a habit of fiddling with a pocket-knife, while another jumps out of a window on hearing Dr. Holmes climbing the stairs. This novel sees Peter Walsh in London after returning from India and Septimus Warren Smith commit suicide. Clarissa holds a party in, for 10 points, what novel by Virginia Woolf?
ANSWER: *Mrs. Dalloway*

20. **The city is home to the first public beach in the United States and the deadliest nightclub fire in history occurred at the Cocoanut Grove nightclub in 1942 in this city. In 1919, Calvin Coolidge strongly opposed a strike by police officers in this city over recognition of their trade union. Information on this city's (*)** Patriarca crime family was given to the FBI in exchange for protection by Whitey Bulger. An incident where British soldiers killed Crispus Attucks and four others in front of this city's Old State House is known as this city's "Massacre". For 10 points, name this Massachusetts city that saw the destruction of some East India Company cargo in its namesake "Tea Party".
ANSWER: **Boston**

Tiebreaker

21. Nella Cotrupi called this work "hypermetafiction." The protagonist of this work travels to the Latin American republic of Ataguitania, "where everything that can be falsified has been falsified." There he encounters the book *Around an empty grave* by Calixto Bandera. According to this novel, the Cimbrian People's Republic occupied part of the fictional country of Cimmeria, encountered on a quest with Ludmilla. This work's first chapter includes the instructions "Relax. Concentrate. Dispel every other thought." For ten points, name this novel, in which the chapters of different books alternate with a narrative about the reader, a work by Italo Calvino.
ANSWER: *If on a winter's night a travel* [or *Se una notte d'inverno un viaggiatore*]

1.The Fuoss Eigen equation sets this value proportional to e to the power of minus the Coulombic potential energy . For ten points each:
[10] Name this quantity, whose logarithm is equal to minus Gibbs free energy divided by RT. This quantity is the limit of the Reaction quotient as time approaches infinity.
ANSWER: **Equilibrium Constant** [prompt on <u>K</u>]
[10] This equation states the temperature dependence of the logarithm of the equilibrium constant is proportional to minus the enthalpy change over Temperature squared.
ANSWER: **Van't Hoff** equation
[10] The derivation of the Van't Hoff equation requires the use of this equation, which states that the temperature dependence of the delta G over T is equal to minus delta H over T squared.
ANSWER: **Gibbs-Helmholtz** equation

2. One character in this play shoots ten cows with an air rifle as an act of terrorism against the meat industry, then shoots her brother Davey for hurting the cat Wee Thomas. For 10 point each:
[10] Name this play, in which Davey and Donny paint a ginger cat with shoe polish to try and trick Donny's son, the insanely violent INLA soldier Padraic.
ANSWER: The *__Lieutenant of Inishmore__*
[10] Martin McDonagh, the author of *The Lieutenant Padraic*, also wrote this other violent play centred on Katurian, who writes disturbing stories like "The Little Apple Men" and "The Little Jesus."
ANSWER: The *__Pillowman__*
[10] Martin McDonagh set a trilogy of plays on the Aran Islands. This other Irish playwright wrote of his time recovering from Hodgkin's disease in the Aran Islands, and he set *Riders to the Sea* there. This author is probably better known for *The Playboy of the Western World*.
ANSWER: John Millington **Synge**

3. For 10 points each, answer the following on the incredibly strange baseball competition at the Athens Olympics:
[10] The US didn't qualify for the competition after they lost a play-off in qualification to this home country of Yovani Gallardo and "El Toro", Fernando Valenzuela.
ANSWER: **Mexico**
[10] This country won the silver medal at Athens Olympics. The first baseball game in this country was played between Collingwood and Richmond both areas home to teams in an 18-man contact sport popular in this country.
ANSWER: **Australia**
[10] Australia lost the gold-medal match to this country where Barack Obama watched an exhibition game between the Rays and this country in 2016, as part of a historic visit.
ANSWER: **Cuba**

4. Answer the following on national unity governments. For 10 points each:
[10] Name this national unity government formed by the Lord Grenville following the death of Pitt the Younger.
ANSWER: the **Ministry of All the Talents**
[10] The next national unity government would not come for another century, with the Second Asquith Ministry during World War I. This man served as foreign secretary under Asquith, in which capacity he signed the Sykes-Picot Agreement.
ANSWER: Sir Edward **Grey**, 1st Viscount Grey of **Fallodon** [accept either underlined part]

[10] Asquith was succeeded in 1916 by this Welsh-speaking Prime Minister who saw the UK through the end of the First World War.
ANSWER: David **Lloyd George**

5. After sleeping with Mrs Waters, this novel's protagonist becomes concerned he may have committed incest. For 10 points each:
[10] Name this 1749 *Bildungsroman* that sees Squire Allworthy and Squire Western oppose the love between Sophia and the title character.
ANSWER: *The History of **Tom Jones**, a Foundling*
[10] *Tom Jones* was written by this English novelist and dramatist, who parodied Samuel Richardson's *Pamela* in *Shamela*.
ANSWER: Henry **Fielding**
[10] This Fielding novel has numerous parallels with the Aeneid and sees William Booth unjustly imprisoned in Newgate Prison and the eponymous character's nose ruined in a carriage accident.
ANSWER: ***Amelia***

6. The total internal form of this phenomenon occurs when the angle of incidence is greater than or equal to the critical angle. For ten points each:
[10] Name this phenomenon whereby a wave changes direction at the interface between two different media such as a mirror.
ANSWER: **reflection**
[10] P-polarised light will be transmitted perfectly with no reflection if the angle of incidence equals this special angle.
ANSWER: **Brewster's** angle
[10] A set of equations named for this man describe reflection and refraction at the interface between media with different refractive indices.
ANSWER: Augustin-Jean **Fresnel**

7. In the final scene of this play, Shelley "The Machine" Levene attempts to bribe Williamson, who has found out that Levene was behind the theft of some valuable "leads". For 10 points each:
[10] Name this David Mamet play, set in a Chinese restaurant and a real estate sales office.
ANSWER: ***Glengarry Glen Ross***
[10] This character in *Glengarry Glen Ross* is the top salesman in the office. He bullies James Lingk into purchasing a property, an effort unwittingly sabotaged by Williamson.
ANSWER: **Richard** "**Ricky**" **Roma** (accept any underlined answer)
[10] Roma berates Williamson for losing him 6,000 dollars and one of these items, first prize in the office's competition. One of these objects is responsible for the death of Willy Loman in *Death of a Salesman*.
ANSWER: **convertible car** [accept either underlined part or obvious equivalents like "**automobile**"; accept **Cadillac**]

8. The minimum form of this concept is the floor price below which no worker may sell their labour. For 10 points each:
[10] Name this remuneration given to a worker in exchange for a certain amount of work done.
ANSWER: **wage** (accept **pay** or **salary**)
[10] Some employers may pay this type of wage in order to increase productivity or to reduce employee turnover. It is a wage that exceeds the market clearing rate.
ANSWER: **efficiency** wage

[10] This doubly-eponymous theory describes why wages are unlikely to decline and how involuntary unemployment arises because employers are cautious about employing people below the wage equilibrium for fear of shirking.
ANSWER: **Shapiro-Stiglitz** theory or **Shapiro-Stiglitz** efficiency wage model

9. This field of study includes public-key and symmetric-key variants. For 10 points each:
[10] Name this practice and study of techniques to ensure communications between two parties cannot be read by a third party.
ANSWER: **Cryptography** [or **cryptology**]
[10] This key principle in cryptography states that a cryptosystem should be secure even if everything about the system except the key is public knowledge. It was originally formulated by a 19th century Dutch cryptographer and was restated by Shannon as "the enemy knows the system".
ANSWER: **Kerckhoff**'s principle [or law, axiom, assumption, desideratum, etc…]
[10] These functions used in cryptography map an arbitrary sized input to a fixed length alphanumeric "digest," a process which is designed to be very hard to reverse. They are used extensively in digital signatures and authentication.
ANSWER: Cryptographic **hash** functions

10. *Note to moderator, read the answerline for the first bonus part carefully before reading the question so you don't inadvertently reveal the answer to the second bonus part.* The original handwritten score for this symphony reached a record price for a musical manuscript when it sold for £4.5 million in 2016. For 10 points each:
[10] Name this symphony which calls for "the largest possible contingent of strings". It was based on an Andreas Klopstock poem and quotes from its composer's setting of *Des Knaben Wunderhorn*.
ANSWER: ***Resurrection Symphony*** [or ***Symphony No. 2 by Mahler*** - DO NOT READ THIS ALTERNATE ANSWER OUT LOUD BUT ACCEPT IT IF GIVEN]
[10] The *Resurrection Symphony* was written by this Austrian composer. His other symphonies include ones nicknamed *Titan* and *Symphony of a Thousand*.
ANSWER: Gustav **Mahler**
[10] The famous 4th movement of Mahler's *Resurrection Symphony* is an orchestration of this song taken from his *Des Knaben Wunderhorn*
ANSWER: ***Urlicht*** [or ***Primeval light***]

11. This government's early agricultural policy was overseen by the Argentinian-born Richard Walther Darré. For 10 points each:
[10] Name this government which introduced the State Hereditary Farm Law and which organized a National Harvest Thanksgiving Festival attended at its peak by 1.2 million people.
ANSWER: **Third Reich** (accept **Hitler**'s Government or **Nazi** or **National Socialis**t)
[10] Darré's idea of "Blood and Soil" was instantiated in the drive to acquire more land for ethnic German expansion, territory known by this name.
ANSWER: ***Lebensraum***
[10] Darré's agricultural management was far from successful and he lost leverage in part because of a falling out with this predecessor to Göring as minister of Economics, who opposed excessive spending on armaments as President of the Reichsbank in the 1930s.
ANSWER: Hjalmar Horace Greeley **Schacht**

12. Name the following practices in the religious systems of Native American peoples. For 10 points each:
[10] The Native American Church is known for its controversial ritual use of this psychoactive cactus plant, often called "the sacred medicine."
ANSWER: **peyote** [or *L*ophophora ***williamsii***, accept "**peyotl**"]

[10] Wovoka promoted this ritual, supposed to unite the living and the dead, summon a spirit army, expel white colonists, and unify native peoples. Among the Lakota, this practice fostered resistance to US power.
ANSWER: **Ghost Dance** [or **Nanissáanah**]
[10] New Age-loving idiots frequently die of dehydration or suffocation while imitating this practice, originally a purification ritual of various Plains tribes, conducted in special buildings often facing a sacred fire.
ANSWER: **sweat** lodge [accept "**Inipi**"]

13. For 10 points each, answer the following on confirmation theory:
[10] This polymath and co-inventor of calculus can be seen as the father of confirmation theory because he believed that an alphabet of human thought would provide a logical structure for science and resolve ambiguities.
ANSWER: Gottfried Wilhelm von **Leibniz**
[10] This member of the Vienna Circle proposed a system where a measure would be based on the proportion of logically possible circumstances where the proposition and the evidence both held in his *Logical Foundations of Probability*.
ANSWER: Rudolf **Carnap**
[10] In *Fact, Fiction and Forecast*, Nelson Goodman posed a problem for confirmation theory with his "new riddle of induction" which asks why we would reject these two new time-dependent predicates when talking about the colour of emeralds because there are equally as inductively sound as existing colours.
ANSWER: **grue** and **bleen**

14. Despite no fewer than six recantations of his Protestantism, Thomas Cranmer was still executed by this monarch. For 10 points each:
[10] Name this eldest daughter of Henry VIII and Catherine of Aragon, infamous for the nearly three hundred Protestants burned at the stake in her reign.
ANSWER: **Mary I** [accept **Mary Tudor** or **Bloody Mary**, prompt on Mary]
[10] This utterly inept rebellion was sparked by Mary's intention to marry Philip II of Spain. Named for a Kentish landowner, this rebellion occupied Rochester before marching on Southwark and Kingston.
ANSWER: **Wyatt's** Rebellion
[10] When the marriage did take place, Philip was given this purely nominal title by his father, Charles V. The crown of Aragon won this title from René I of Naples, and members of the Houses of Boulogne and Lusignan actually held this office.
ANSWER: **king of Jerusalem**

15. This start of this empire is generally regarded to be when Jayavarman II declared it independent at Phnom Kulen in 804 CE. For 10 points each:
[10] Name this empire centred on modern-day Cambodia that built the temple complex of Angkor Wat.
ANSWER: **Khmer** Empire
[10] Angkor Wat was constructed during the reign of this Khmer king, who invaded Champa and resurrected diplomatic and commercial relations with China.
ANSWER: **Suryavarman II** (prompt on "Suryavarman")
[10] Suryavarman II established diplomatic relations, and apparently exchanged a large jewel, with this kingdom, then ruled by Kulottunga I, who had strengthened the walls of its capital at Gangaikonda.
ANSWER: **Chola** Kingdom

16. One work by this composer is divided into the sections "Train," "Trial," and "Field/Spaceship," and includes scenes entitled "Mr. Bojangles" and "Prematurely Air-Conditioned Supermarket." For 10 points each:
[10] Name this American minimalist composer, whose opera *Einstein on the Beach* is the first of his Portrait Trilogy.
ANSWER: Philip Morris **Glass**

[10] In this final part of the Trilogy, the title character sings with his wife Nefertiti and his mother Tye at the "Window of Appearances." This opera's libretto is in several ancient languages, but the "Hymn to the Sun" is sung in the language of wherever it is performed.
ANSWER: *Akhnaten*
[10] Christopher Hampton wrote the libretto for this Glass opera, in which both Ulysses S. Grant and Robert E. Lee are played by baritones. Its second act intersperses the signing of a document with scenes of racial violence in American history.
ANSWER: *Appomattox*

17. *A Winter in Majorca* describes this writer's vacation with her lover Frédéric Chopin. For 10 points each:
[10] Name this French novelist who wrote *Indiana* and *Consuelo*.
ANSWER: George **Sand** or Amantine-Lucile-Aurore **Dupin**
[10] In this Sand novel, the titular nobleman helps his cousin Edmée escape from his savage relatives, only to extract a promise of marriage from her by threatening rape.
ANSWER: *Mauprat*
[10] Edmée eventually manages to civilise her cousin Bernard de Mauprat, basing his education on this work by her favourite philosopher. A section of this work titled "Profession of Faith of a Savoyard Vicar" proved extremely controversial upon publication.
ANSWER: *Émile, or on Education* [by Jean-Jacques Rousseau]

18. This peninsula is bounded by the Skagerrak, the Kattegat and the German Bight. For ten points each:
[10] Name this north European peninsula shared by Germany and Denmark and home to the cities of Aalborg and Aarhus.
ANSWER: **Jutland** or **Jylland** (accept: "Cimbric" peninsula, "Cimbrian" peninsula, "Cimbricus" Chersonesus, Den "Kimbriske" Halvø and "Kimbrische" Halbinsel)
[10] The northernmost part of Jutland is actually an island separated from the mainland by this body of water that links the North Sea and the Kattegat.
ANSWER: **Limfjord** or **Limfjorden**
[10] After the Little Belt and Great Belt, this third of the Danish straits separates Zealand and its largest city of Copenhagen from Sweden. Until 1857, "Sound Dues" were levied on foreign ships passing through this strait.
ANSWER: **Øresund**

19. Steroids and antihistamines are often used to treat these conditions which can be diagnosed by patch testing. For 10 points each:
[10] Name these conditions that are caused by hypersensitivity to a factor most people are unaffected by. In severe cases these conditions can present as anaphylactic shock.
ANSWER: **allergies** [accept alternate word forms, accept **Type I hypersensitivity**]
[10] This term refers to a predisposition to developing certain types of allergies - classically involving a triad of allergic asthma, eczema and hay fever.
ANSWER: **atopy** [accept alternate word forms]
[10] In type I hypersensitivity allergic reactions, antigens bind to this class of antibody. This class of antibody is unusually found prebound to effector cells such as basophils and mast cells.
ANSWER: Immunoglobulin **E** or Ig**E**

20. Works in this art movement include *La guitare* and *La Femme au Cheval*. For 10 points each:
[10] Name this art movement pioneered by Georges Braque and Pablo Picasso in which things are painted or sculpted in an angular manner.
ANSWER: **Cubism**

[10] This man collaborated with Jean Metzinger on the book *Du "Cubisme"* as well as painting *Man on a Balcony* and *Woman with Phlox*.
ANSWER: Albert León **Gleizes**
[10] Gleizes and Metzinger were key figures in this artistic group associated with the Cubist and Orphist movements. Sometimes called the Puteaux Group, they met in the house of Marcel and Jacques Duchamp.
ANSWER: **Section d'Or**