

Harvard Fall Tournament VII

Round 9

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Tossups

1. This composer dedicated his second piano sonata to Maximilian Schmidhof after Schmidhof committed suicide, while this composer's seventh piano sonata features a "Precipitato" movement containing repeating B-flat triads. This man composed a work Haydn's style, his *Classical Symphony*, as well as a *Scythian Suite*. In another work, gunshots of hunters are heard in the timpani and bass drum, and a duck is swallowed alive. In that piece by this composer of *Love for Three Oranges*, the duck is represented by an oboe, while a clarinet plays the cat and the old grandfather is represented by the bassoon. For 10 points, name this Russian composer of *Peter and the Wolf*.

ANSWER: Sergei (Sergeyevich) **Prokofiev**

2. In the Russian tradition, Ivan Tsarevich was sent to capture the Firebird because it stole one of these objects from his father every night. The guardian of these objects in Norse myth was transformed into a nut during her rescue from Thiazz by Loki, and she was named Idunn. Hippomenes used three of these objects in order to beat Atalanta in a footrace, while Heracles tricked Atlas into retrieving these objects from the Garden of the Hesperides for his 11th labor. One of these objects bore the inscription, "To the fairest," resulting in discord between Hera, Athena, and Aphrodite. For 10 points, name these metallic fruits that caused the Judgment of Paris and the Trojan War.

ANSWER: golden **apples**

3. In this novel, a waitress discounts candy to a penny and receives a large tip from a pair of truckers for her kindness. In a different scene, the Wilsons lend their tent to help make a death more comfortable and get their car fixed in gratitude. A riot at a dance is preempted in a government camp, but trouble emerges as the men work as strike-breakers picking peaches. A former preacher is killed after becoming a union organizer and while the protagonist avenges him, he is forced to leave his family. For 10 points, name this novel featuring Jim Casy and Tom that is about the Joad Family's journey to California after the Dust Bowl, a depiction of the Great Depression written by John Steinbeck.

ANSWER: *The **Grapes of Wrath***

4. This man's father won a victory at Asculum during the Social War, throughout which he served as consul. Along with the Spanish governor Metellus Pius, this man put down the rebellion of Quintus Sertorius. The *Lex Gabinia* gave this man proconsular powers throughout the Mediterranean so that he could fight the Cilician pirates, and this man put an end to the Mithridatic Wars. This leader of the Optimates won a victory at Dyrrachium shortly before being crushed at the Battle of Pharsalus, after which he was assassinated on a boat in Egypt. For 10 points, name this Roman general who joined in the First Triumvirate with Caesar and Crassus.

ANSWER: **Pompey** the Great [Accept Gnaeus **Pompeius** Magnus.]

5. The Hafele-Keating experiment and its follow-ups supported this theory while spending less than \$8,000, and the Mossbauer rotor experiment shows an effect this theory implies at a higher precision than the Ives-Stillwell experiment. It can be accounted for mathematically using the Lorentz Transformation, and can lead to a paradox involving aging and space travel, the Twin Paradox. This theory reconciled Newton's Laws and Maxwell's equations by stating that there is no absolute frame of reference and that the speed of light is constant. For 10 points, name this theory developed by Einstein which shows the relationship between space and time and which preceded general relativity.

ANSWER: **special relativity** [Prompt on "relativity." Do not accept "general relativity."]

6. This man calls down blindness upon Elymas the magician, causing Sergius Paulus to follow his religion. He claims the people surrounding the Areopagus are the offspring of an “unknown god” in an attempt to convert them with the help of his follower Barnabus. This man wrote that people should preach “the unsearchable riches of Christ” and compares the Church to the Body of Christ in another work. In his most famous work, he writes that a person may be “justified by faith alone.” This man of Jewish ancestry from Tarsus was converted on the road to Damascus. For 10 points, name this early Christian Apostle who wrote “love is patient” in his First Letter to the Corinthians.

ANSWER: St. **Paul** the Apostle [Prompt on “Saul.”]

7. Via the doctrine of incompatibilism, it has been stated that Laplace’s demon is an argument against this concept. Philosopher Daniel Dennett defended this concept from that attack by arguing that rather than a concrete future there can only be expectations. William James defined a two stage model for this concept in which options are first determined and then each is evaluated. Famously rejected by Jean Calvin and opposed to the idea of predestination, this concept is defined as the ability of a rational actor to choose a course of action from among various alternatives. For 10 points, name this philosophical idea, the idea that our actions are not predetermined.

ANSWER: **free will** [Prompt on “moral responsibility.”]

8. Processes in this type of environment can be modeled by the Bagnold Formula, which describes saltation and the formation of Aeolian landforms in these environments. Features in this type of entity include Hamadas, Regs, and Ergs, and these entities are often categorized together with xeric shrublands. This type of environment is often situated near mountains due to the rain shadow effect. For 10 points, name this biome characterized by large day-night temperature disparities and extreme dryness, examples of which include the Gobi and the Sahara.

ANSWER: **deserts** [Accept **sand dunes**.]

9. One ruler of this empire referred to by some as “Slayer of Enemies,” Amitrochates, received the ambassador Deimachus. The Mudrarakshasa describes the ascent of this empire that was toppled when its last ruler Brihadratha was killed by the commander of his guard Pusyamitra, who founded the Sunga dynasty. Its first ruler became King of Magadha and defeated Dhana Nanda, and his minister known as Kautilya wrote a treatise on politics and war called the *Arthashastra*. A later ruler issued the Rock Edicts and defeated the Kalinga in a bloody war that caused him to convert to Buddhism. For 10 points, identify this Indian dynasty founded by Chandragupta and later led by Ashoka.

ANSWER: **Mauryan** Empire [Accept **Mauryan** Dynasty.]

10. A common type of one of these systems is the TAE or TBE type, which both use the molecule Tris along with EDTA. Twelve reagent mixtures selected by Good for use in biological research are these types of systems. In the Pinnick reaction, the phosphate type of this system is used, which is a mix of salts of dihydrogenphosphate and hydrogenphosphate. These systems generally form at the half-equilibrium point of a titration. The Henderson-Hasselbalch equation can be used to calculate the pH of one of these systems. For 10 points, name these systems in chemistry which can absorb significant quantities of acid or base without large changes in pH.

ANSWER: **buffers**

11. The capital city of this country is home to a cultural center called the Polyforum named for one its artists, with a rotating stage that displays seven large panels from that man's *The March of Humanity*. Another artist from this country showed herself bleeding on a hospital bed in *Henry Ford Hospital*, painted while her husband was working on his *Detroit Industry*. That man, also from this nation, included images of cells under microscopes and swirling galaxies converging on the titular *Man, Controller of the Universe* and controversially included Lenin in a mural painted for Rockefeller Center. For 10 points, name this country home to Frida Kahlo and Diego Rivera.

ANSWER: **Mexico**

12. The Mutiny of Aranjuez saw one king of this name stage a coup against his father, who fled to France with his minister Manuel de Godoy. That king was restored to the throne through the Treaty of Valencay, which concluded the Peninsular War. In addition to that son of Charles IV, this name belonged to a man who married Germaine of Foix after the death of his first wife, with whom he had defeated Boabdil at the Battle of Grenada and issued the Alhambra Decree that expelled the Jews from his country. That king had also funded the expeditions of Christopher Columbus. For 10 points, give this name belonging to seven Spanish rulers, including the husband of Isabella I.
ANSWER: **Ferdinand** [Accept **Fernando** or **Ferran**, and **Ferrando** from whoever still speaks Aragonese.]

13. This author used the word for an Eastern Orthodox hymn in the title of a novel dedicated to his wife after her death. In addition to *Kontakion for You Departed*, he wrote about a man who is convicted using a seashell as evidence of a tryst. Sophie narrates that novel about her policeman nephew, which begins “Perhaps I could have saved him.” In his most famous novel, the main character receives assistance from Mrs. Lithebe and Theophilus Msimangu and that novel centers around a priest who ventures into the city to find his sister Gertrude and son Absalom. For 10 points, name this South African author who depicted complex race relations in *Too Late the Phalarope* and *Cry, the Beloved Country*.
ANSWER: Alan (Stewart) **Paton**

14. This author of a critique of Irving Fisher’s *The Nature of Capital and Income* discussed the seizure of women as slaves in his essay “The Beginnings of Ownership” and argued against the inclusion of economics as an evolutionary science. This thinker is better known for describing a conflict between engineers and businessmen in his *Theory of Business Enterprise*, which built upon a framework of “predation” and “emulation” introduced in an earlier book. That book originated the idea that people spend excessively in an attempt to impress others, also known as “conspicuous consumption.” For 10 points, name this author of *The Theory of the Leisure Class*.
ANSWER: Thorstein (Bunde) **Veblen**

15. The “Golden Age” of this area occurred in the early to mid-nineteenth century and inspired the actions of Alfred Willis and Edward Whymper. The near complete extinction of the ibex led to the foundation of Gran Paradiso National Park in this region, and this region contains a state called the Tyrol. The Julian Mountains are a part of this region, which is subdivided into the Graian, Bernese, and Pennine ranges and contains the Jura mountains. For 10 points, name this mountain range containing such peaks as Mont Blanc and the Matterhorn and spans Italy, Germany, France, and Switzerland.
ANSWER: the **Alps**

16. This author wrote a play in which Gerald is the illegitimate son of Mrs. Arbuthnot and Lord Illingworth, and another in which the machinations of Lady Cheveley to secure a South American canal through Robert Chiltern are thwarted by Lord Goring. In addition to *A Woman of No Importance* and *An Ideal Husband*, this author wrote a play in which Mrs. Erlynne sacrifices her reputation to preserve the title character’s, and another in which Reverend Chasuble and Miss Prism fall in love. For 10 points, name this author of *Lady Windemere’s Fan*, who wrote of Gwendolyn and Cecily and their lovers Jack and Algernon in *The Importance of Being Earnest*.
ANSWER: Oscar (Finghals O’Flahertie Wills) **Wilde**

17. The function named after this man is equal to zero for non square-free numbers, one for numbers with an even number of prime factors and negative one for numbers with an odd number of prime factors. A statement involving summing over divisors that uses the aforementioned function is his namesake inversion formula. The orientability of a surface is determined by whether it contains a subset homeomorphic to an entity named after this man, which when glued to itself forms a Klein bottle. For 10 points, identify this man who names an object that has only one side which is formed by taking a piece of paper, twisting it, and then gluing the ends together, his namesake strip.
ANSWER: August (Ferdinand) **Möbius**

18. In one of this author's plays, a group of women asks a man to hang them by their girdles from holy statues in order to protect them from the sons of Aegyptus. In another, a woman suckles a snake at her breast. In one of this author's most famous plays, a man clinging to a statue of Athena is defended by Apollo against the Furies. This author wrote of the battle of Eteocles and Polynices in *The Seven Against Thebes*, and wrote about the murder of a Greek hero and his vengeful daughter Electra. For 10 points, name this author of *The Libation Bearers*, *The Eumenides*, and *Agamemnon*, the parts of *The Oresteia*.

ANSWER: **Aeschylus**

19. This city is home to a tall stainless steel spire with wire-clusters imitating stars at the top, a Richard Lippold work entitled *Ad Astra*. Nineteen men wearing helmets and raincoats march across a field in this city in a sculpture group known as *The Column*, part of a war memorial displaying the message, "Freedom is not free." I. M. Pei designed the East Building of the largest art museum in this city, which is also home to a Daniel Chester French sculpture of Abraham Lincoln seated on an armchair overlooking the Reflecting Pool. For 10 points, name this city also home to a block of black granite carved with the names of Vietnam War veterans, as well as the White House.

ANSWER: **Washington**, D.C.

20. This battle saw contention over Redoubts #9 and #10, but the outcome on land could have been very different if not for a naval victory against the fleet of Thomas Graves. The commander of the winning side of this battle denied the losing side the customary Honors of War in revenge for similar dishonor at the Siege of Charleston. The Admiral Comte de Grasse led the naval forces at this battle, and the losing side's commander claimed illness and did not attend the surrender ceremony. For 10 points, name this 1781 battle in which Washington, Lafayette, and Rochambeau defeated Lord Cornwallis's British troops to win a victory that would end the American Revolution.

ANSWER: Battle of **Yorktown** [Accept Siege of **Yorktown**.]

Bonuses

1. This novel includes a "Table of Instructions," which details methods for navigating its 155 chapters. For 10 points each:

[10] Name this novel centering around Horacio Oliveira and La Maga written by Julio Cortazar [cor-TAH-zar].

ANSWER: **Hopscotch** [Accept **Rayuela**.]

[10] Cortazar also wrote a short story titled after the "continuity" of these entities. Jane Austen wrote about a "Mansfield" one of these, and while in New York, Holden Caulfield visits the "Central" one of these.

ANSWER: **parks** [Accept "The **Continuity of Parks**" or "La **continuidad de los parques**" and **Mansfield Park**.]

[10] Cortazar was from this South American nation, also home to Ernesto Sabato and Jorge Luis Borges.

ANSWER: **Argentina** [Accept **Argentine Republic** or Republica **Argentina**.]

2. This character takes darts from his body to throw at opponent, who wounds him with a two edged sword in the Valley of Humiliation. For 10 points each:

[10] Name this character, the lieutenant of Beelzebub, who rules the City of Destruction and takes the form of a dragon with bat wings. He attempts stop a certain character from reaching the House of the Beautiful.

ANSWER: **Apollyon**

[10] Apollyon appears in *The Pilgrim's Progress*, an allegorical work written by this man, who wrote other moralistic works like *Grace Abounding to the Chief of Sinners* and *The Life and Death of Mr Bitter*.

ANSWER: John **Bunyan**

[10] This is the main character of Bunyan's *Pilgrim's Progress*--he attempts to reach the Celestial City while overcoming the wiles of Mr. Worldly Wiseman and demons like Apollyon and the Giant Despair.

ANSWER: **Christian**

3. The theatricality of this work is highlighted by the sculptures of members of the Cornaro family looking upon the scene from theater boxes to either side. For 10 points each:

[10] Name this sculpture in which golden bars of light shine down on an angel who prepares to pierce the titular saint with an arrow, though she is already swooning from the passion of God.

ANSWER: *The Ecstasy of Saint Theresa* [Accept *Saint Teresa in Ecstasy* or *Transverberation of Saint Teresa*; as well as *L'Estasi di Santa Teresa* or *Santa Teresa in estasi*.]

[10] *The Ecstasy of Saint Theresa* was a work by this Italian sculptor, who depicted David in mid-action as he swings his sling toward Goliath.

ANSWER: Gian Lorenzo **Bernini** [Accept Giovanni Lorenzo **Bernini**.]

[10] The rumors that this river from Bernini's *Fountain of the Four Rivers* is cowering from the ugliness of a Borromini church are false. This river is also represented by a pile of coins and a snake appears above it.

ANSWER: Rio **de la Plata** [Accept River **Plate** and La **Plata** River.]

4. This thinker studied altruistic, anomic, and egoistic forms of the title action in his work *Suicide*. For 10 points each:

[10] Name this French sociologist who also wrote *The Elementary Forms of Religious Life*.

ANSWER: (David) Emile **Durkheim**

[10] In a work titled for this concept “in society,” Durkheim wrote that it leads to natural inequality causing social inequality, due to allocation by merit.

ANSWER: the **division of labor** [Accept *The Division of Labor in Society* and *De La Division Du Travail Social*.]

[10] Durkheim also wrote a work about the “normality” of this, examples of which include burglary and murder. In *The Division of Labor in Society*, he described it as an act that offended the “strong and defined states of the collective conscious.”

ANSWER: **crime** [Accept *On The Normality of Crime* or *Sur la normalité de la criminalité*.]

5. Answer the following questions about reaction rates in chemistry. For 10 points each:

[10] Name this energetic barrier, generally represented in the reaction coordinate as a hump, that reactants must surpass before they become products. Catalysts lower this barrier.

ANSWER: **activation energy**

[10] This is the name given to the chemical study of reaction rates.

ANSWER: **kinetics**

[10] This doubly-eponymous model of enzyme kinetics relies on the assumption of the reversible formation of an enzyme-substrate complex. The Lineweaver-Burk plot is generally used to visualize this type of kinetics for an enzyme.

ANSWER: **Michaelis-Menten** kinetics

6. When this property's value equals zero, the Navier-Stokes equations simplify into Euler's equations. For 10 points each:

[10] Name this property that describes an object's resistance to flow.

ANSWER: **viscosity**

[10] Fluid motion can be described as having this property. It is characterized by negligible changes in density and a Mach number less than 0.3.

ANSWER: **incompressible** flow [accept **incompressibility**]

[10] By Bernoulli's equation, this quantity is inversely proportional to velocity. In a static fluid, it is equal to the fluid density times the acceleration due to gravity and the depth of the fluid.

ANSWER: fluid **pressure**

7. Name these terms related to theories of life criticized as religiously motivated. For 10 points each:

[10] The Discovery Institute and other proponents of this theory claim that it better explains certain features of the universe than natural selection and evolution.

ANSWER: **Intelligent Design**

[10] Intelligent design is a specific type of this more general label, which also includes the theory that the Judeo-Christian God fashioned the world in six days.

ANSWER: **creationism**

[10] Michael Behe described certain phenomena, such as eyes, blood clotting, and a mouse trap as having this feature, indicating that the combination of their many parts is necessary for the function they serve, and could not have reasonably evolved through natural selection.

ANSWER: **irreducible complexity**

8. This character is tarred and feathered after helping to sell a black man into slavery on a voyage down the Mississippi river. For 10 points each,

[10] Give the nickname of this character, a con man who travels with the protagonist of the novel in which he appears. He claims to be the displaced lord of Bridgewater and travels with a man called the Dauphin.

ANSWER: the **Duke**

[10] The Duke and the Dauphin appear in a novel named for this character by Mark Twain. This character is adopted by the Widow Douglas, is friends with Tom Sawyer, and voyages down the Mississippi with Jim.

ANSWER: **Huckleberry "Huck" Finn** [accept any combination]

[10] In a Mark Twain short story, a titular creature of this type named Dan'l Webster fails to win a race for gambler Jim Smiley because he is force fed shot powder.

ANSWER: a **frog** [Accept "The Celebrated Jumping **Frog** of Calaveras County" and the like.]

9. The storage of carbon dioxide as malate to concentrate it around RuBisCCO is crucial in this process and it is distinct from a similar counterpart since it doesn't use bundle sheath cells. For 10 points each:

[10] Name this form of photosynthesis which alternates between day and night phases to minimize evapotranspiration.

ANSWER: **CAM** photosynthesis [accept **C**rassulacean **a**cid **m**etabolism photosynthesis]

[10] The reason CAM is able to avoid evapotranspiration is the closure of these structures during daytime. They are manipulated by guard cells.

ANSWER: **stomata**

[10] During the night, malate is stored as malic acid in this large plant cell organelle filled with water to be reconverted back to carbon dioxide during the day.

ANSWER: **vacuole**

10. He killed Paris with the bow and arrows of Heracles, which he had earned because he was brave enough to light the funeral pyre of Heracles. For 10 points each:

[10] Name this Greek hero who was marooned on Lemnos because his wound from a snakebite gave off an unbearable odor.

ANSWER: **Philoctetes**

[10] Philoctetes was rescued from Lemnos by Neoptolemus and Odysseus because of a prophecy that this city would not fall without Heracles' weapons. It is the setting of *The Iliad*.

ANSWER: **Troy**

[10] The arrows of Heracles were potent because they contained the blood of the Hydra. Heracles was assisted in killing the Hydra by this nephew of his, who burned off the necks as Heracles chopped them off.

ANSWER: **Iolaus**

11. The title character of this work is said to be the daughter of the god of wealth, Plutus, and the nymph Freshness. For 10 points each:

[10] Name this allegorical work which advocated Christian Humanism and told of a woman tutored by Drunkenness and Ignorance.

ANSWER: **In Praise of Folly**

[10] In Praise of Folly was written by this eminent Renaissance humanist, the author of works like *Handbook of a Christian Knight* and *Julius Exclusus*.

ANSWER: Desiderius **Erasmus**

[10] During the Protestant reformation, Erasmus was widely respected by both sides. He attempted to mediate between this man and the Catholic Church, although he later split with this author of the 95 Theses.

ANSWER: Martin **Luther**

12. This man won the American presidential election on November 6, 2012. For 10 points each:

[10] Name this member of the Democratic Party who is the 44th President of the United States.

ANSWER: Barack **Obama**

[10] In the second presidential debate, Romney had a gaffe in which he stated that, as Governor of Massachusetts, he had had his staff find this amount of women to work in his committees.

ANSWER: **binders** full of women [Accept clear equivalents]

[10] The man who proposed this state's voter ID law, Mike Turzai, stated that it would "deliver [this] state to Mitt Romney." Obama ended up carrying this state by 5 points, and Democrat Bob Casey won its Senate seat.

ANSWER: **Pennsylvania**

13. This nation gained its independence from Malaysia in 1965 and saw three decades of leadership under prime minister Lee Kuan Yew. For 10 points each:

[10] Name this southeast Asian nation, an Asian Tiger that is also one of the five busiest ports in the world.

ANSWER: Republic of **Singapore**

[10] The city of Singapore was founded by this man on behalf of the British East India Company. He also conquered Java during the Napoleonic Wars.

ANSWER: (Sir Thomas) Stamford (Bingley) **Raffles**

[10] During World War II, Singapore was occupied by this nation, which used collapsible boats to land in darkness and defeat Australian troops.

ANSWER: State of **Japan** [Accept **Nippon**-koku or **Nihon**-koku.]

14. Identify the following composers who wrote piano concertos. For 10 points each:

[10] This Norwegian composer of a famous Piano Concerto in A minor is also known for composing the *Peer Gynt* suite, which contains the sections "Morning" and "In the Hall of the Mountain King."

ANSWER: Edvard (Hagerup) **Grieg**

[10] Grieg's piano concerto was purportedly inspired by the *Piano Concerto in A Minor* of this composer, who also wrote a suite of piano pieces titled *Papillons*.

ANSWER: Robert **Schumann**

[10] This Russian composer's *Piano Concerto No. 2 in C Minor* is enduringly popular, and this man also composed a rhapsody consisting of a series of twenty four variations on a caprice written by Paganini.

ANSWER: Sergei (Vasilievich) **Rachmaninoff**

15. This author wrote a novel in which Eugene de Rastignac sees the title father sacrifice everything for ungrateful daughters. For 10 points each:

[10] Name this novelist who told the story of *Le Pere Goriot* which, along with novels like *Cousin Bette* and *Cousin Pons*, is a part of his huge series of novels known as the Human Comedy.

ANSWER: Honore de **Balzac**

[10] In this novella in the Human Comedy, the title character pursues the castrati Zambinella at a party held by the Lantys. This novella was broken down and analyzed in Roland Barthes' *S/Z*.

ANSWER: Sarrasine

[10] In another novel, Balzac wrote about the “Wild Skin” of these animals. Apuleius wrote about a golden one, and in *A Midsummer Night’s Dream*, Bottom is turned into one of these creatures, a famous example of which is Eeyore.

ANSWER: ass [Accept donkey, chagrin, “The Wild Ass’ Skin,” “La Peau de chagrin,” *The Golden Ass*, or *Asinus aureus*.]

16. Lysimachus, Antigonos, and Seleucus were among the Diadochi, or “Successors,” who fought for control over the lands that this man left behind upon his death. For 10 points each:

[10] Name this Macedonian king and son of Philip II who quickly conquered the largest empire that the world had ever seen.

ANSWER: Alexander the Great [Accept Alexander III of Macedon or Alexandrus ho Megas.]

[10] During his wars against the Persians, Alexander fought this battle which involved the construction of a roughly kilometer-long stone causeway so that his artillery could come within firing range of the besieged island city.

ANSWER: Siege of Tyre

[10] When Alexander died, this general seized his sarcophagus and kept it in Egypt, a territory he retained at the end of the Wars of the Diadochi. Thus, he founded a namesake Egyptian dynasty that ended with Cleopatra in 30 BC.

ANSWER: Ptolemy I Soter [Prompt on “Ptolemy.” Accept Ptolemy Soter or Ptolemy Lagides.]

17. This man painted many characters from the *commedia dell’arte*, including the white-clad clown Pierrot who is shown in this artist’s *Gilles*. For 10 points each:

[10] Name this French artist who also showed many pairs of lovers boarding a ship bound for the birthplace of Venus in his *Embarkation for Cythera*.

ANSWER: Jean-Antoine Watteau

[10] Watteau was a member of this art movement centered in France. Featuring lots of happy flower-motifs and light colors, it also included Fragonard and Boucher.

ANSWER: Rococo

[10] The title goddess holds a dove in her arms while a cupid leans over her bed to grab some necklaces in a Francois Boucher work of this title. A “Rokeby” depiction of that goddess by Velazquez also has this title.

ANSWER: *The Toilet of Venus* [accept anything mentioning Venus and a mirror]

18. During this war, the English broke through the Lines of Brabant defensive system laid down by the Duc de Villeroy, before defeating him at the Battle of Ramillies. For 10 points each:

[10] Name this war that also saw Marlborough’s victory at the Battle of Blenheim and was ended by the Treaty of Utrecht.

ANSWER: War of the Spanish Succession

[10] The war resulted from the death of the heirless Charles II, resulting in conflicting claims between the Bourbons of France and this ruling family of the Holy Roman Empire and later the Austrian Empire.

ANSWER: House of Habsburg

[10] This general commanded the main Austrian army during the war, assisting Marlborough and Blenheim. He later lost the Siege of Philippsburg during the War of the Polish Succession.

ANSWER: Prince Eugene of Savoy

19. For lists with elements in random order, the best possible runtime for an algorithm for it is big O of n times log n, while naive algorithms for it are often big O of n squared. For 10 points each:

[10] Identify this procedure that put elements of a list in ascending or descending order.

ANSWER: sorting

[10] This divide and conquer sorting algorithm cuts a list in half and then recursively sorts the smaller two lists. It then puts the two together, a process which gives it its name. Its worst-case runtime is big O of n log n.

ANSWER mergesort

[10] This sorting algorithm is performed first by constructing a data structure, and then removing the top element from that data structure at each step. Its worst-case runtime is also big O of $n \log n$.

ANSWER: **heapsort**

20. This man first referred to the Soviet Union as an “evil empire” in 1983. For 10 points each:

[10] Name this 40th US President who famously told Mikhail Gorbachev to “tear down this wall” in front of the Brandenburg Gate in 1987

ANSWER: Ronald (Wilson) **Reagan**

[10] Reagan proposed this missile defense system, officially called the Strategic Defense Initiative, which the media gave this pejorative name.

ANSWER: **Star Wars**

[10] In August of 1981, Reagan broke a strike of these government employees, firing 11,345 of them and decertifying their union, PATCO.

ANSWER: **air traffic controllers**