

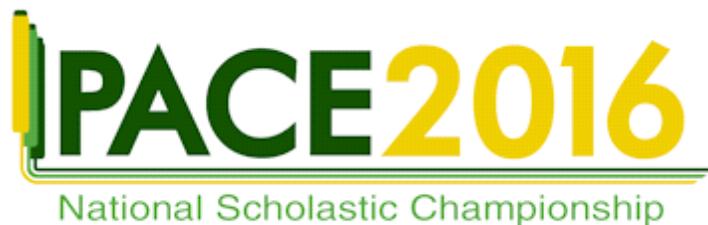
2016 NSC - Official Scoresheet

Round	02	Room	
Bracket			
Reader			

Team									Team								
Player Names																	
Q#					Bonus	Steals	Ques. Total	Run. Score					Bonus	Steals	Ques. Total	Run. score	
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OT																	
Player 20s																	
Player 10s																	
Point totals																	
Final score																	
	Substitutions before Tossup 11								Substitutions before Tossup 11								
	Out:				In:				Out:				In:				
	Out:				In:				Out:				In:				

Circle winning team above. Clearly mark if game goes to OT/SD. Fill out "Point totals" row completely. If there are substitutions, please note tossups by each player in "20s" and "10s" rows. Below is for Tab Room use only:

RH	RS	BH	BS	Left	Right	BH	BS	RH	RS
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PACE NSC 2016 - Round 02 - Tossups

1. It isn't Ampere's Law, but James Clerk Maxwell corrected instabilities in this equation by adding a horizontal line underneath the saturation dome. A parameter in this equation exactly equals $9/8$ times R times critical temperature times critical volume. This equation is directly modified to give the (*) Redlich-Kwong equation. It introduced the hard-sphere model. Solutions to this equation give three roots, including one for liquids and one for vapors. Since it accounts for particle volume and molecular interactions with two parameters labelled a and b , this equation works better than the ideal gas law. For 10 points, name this equation of state whose Dutch namesake also characterized a set of intermolecular attractive forces.

ANSWER: **van der Waals** equation of state [prompt on cubic equation of state] <Silverman>

2. A savanna between this country's western border and the Rupununi River is said to be the former site of Lake Parime and El Dorado. This present-day country is where the One-Cent Magenta stamp, which is now valued at nearly 9.5 million dollars, was issued. The sugar-producing region of Demerara is one of this country's three original counties. An airstrip in this country's city of Port Kaituma was where the (*) Red Brigade assassinated Congressman Leo Ryan. A mass-suicide by cyanide-laced Flavor Aid brought an end to a Peoples Temple commune in this country nicknamed "Jonestown." This country's eastern neighbor is a former Dutch colony named Suriname. For 10 points, name this country whose capital is Georgetown and which is the only former British colony in South America.

ANSWER: **Guyana** [or **British Guiana**; do not accept "French Guiana"] <Golimlim>

3. A war between these two countries was sparked when one refused to set off a cannon of white smoke for the other's yacht *Merlin*. One of these countries sailed up a river to burn thirteen of the other country's ships in the Raid on the Medway. A group of nobles from one of these countries known as the Immortal Seven sent a letter to the ruler of the other. By the Treaty of Nonsuch, one of these countries agreed to support the other in exchange for two towns captured by the (*) Sea Beggar pirates. A stadtholder from one of these countries accepted the Bill of Rights from the other's legislature. During the second war between these two countries, one seized New York from the other. For 10 points, name these two maritime countries, both ruled by William III of Orange.

ANSWER: **England** and the **Netherlands** [or Great **Britain** and the **Netherlands** or **United Kingdom** and the **Netherlands** or **England** and the **Dutch**] <Bentley>

4. In a Yue (you-EH) Minjun parody of this painting, maniacally laughing men in white t-shirts and blue shorts stand around a rock. A statue of the dead Hector on a Roman sarcophagus inspired the pose of a pants-less man wearing one blue sock in the bottom left of this painting. This painting of a "modern subject" features an imaginary row of houses in front of a cathedral on its right. This painting likely inspired the character of Gavroche with a (*) boy in a velvet hat who carries two pistols. On the left of this painting, a dandy in a top-hat holds a rifle next to a youth grabbing a stone. The title woman of this painting wears a Phrygian cap and carries the tricolor flag. For 10 points, name this painting which depicts the July Revolution of 1830, by Eugene Delacroix.

ANSWER: **Liberty Leading the People** [or **Liberty on the Barricades**; or **La Liberté guidant le peuple**] <Bentley>

5. These species are classified under the E.C. system with four distinct numbers. The burst phase model explains the behavior of these species, which can be tracked with para-nitrophenolate formation. The Briggs-Haldane derivation assumes a low concentration of these species. A mass balance around this species, coupled with the (*) quasi-steady state assumption, is used to define their maximum velocity. An increase in their concentration decreases the y-intercept on a Lineweaver-Burke plot, and their reaction rate is always first-order according to the Michaelis-Menten equation. Induced fit and lock-and-key models describe them. For 10 points, name these proteins whose names usually end in "ase," which catalyze biological reactions of substrates.

ANSWER: **enzymes** [prompt on catalysts prompt on proteins] <Silverman>

6. A child named Little Chuck Little almost pulls a knife on a member of this family who constantly has lice in his hair and only attends the first day of Caroline Fisher's first grade class before becoming delinquent. The oldest child of this family grows red geraniums outside her home and saves nickels to purchase ice cream for her siblings. After one member of this family is humiliated at a trial, he terrorizes the widow Helen. The sheriff (*) Heck Tate puts in his report that the head of this family "fell on his own knife" after attacking a child. It is strongly implied that Mayella, a member of this family, is beaten by her father for trying to seduce Tom Robinson. For 10 points, Bob is the drunken patriarch of what disgraceful family in *To Kill a Mockingbird*?

ANSWER: **Ewell** [pronounced "you"-ull; but accept phonetic pronunciations] <Jose>

7. A member of this organization was acquitted in the Supreme Court Case establishing the standard of "imminent lawless action" for restricting free speech, *Brandenburg v. Ohio*. This organization lost credibility after its leader D.C. Stephenson was convicted for the abduction, rape, and murder of a young woman. This organization was restarted after Mary Phagan was supposedly (*) murdered by Jewish factory manager Leo Frank, after which it peaked at 5 million members in the 1920s. In 1963, members of this organization killed four girls by bombing the 16th Street Baptist Church in Birmingham. D.W. Griffith glamorized this organization in his film *Birth of a Nation*. For 10 points, name this white supremacist organization whose members are known for wearing white hoods.

ANSWER: **Ku Klux Klan** [or **KKK**] <Wang>

8. In his study *Seeds in the Heart*, Donald Keene suggests that a chapter of this work was ordered destroyed since it told its readers to "flee the world." A poem called "Song of Unending Sorrow" is referred to repeatedly by this book, whose chapter "The Mayfly" describes the third daughter of the Eighth Prince becoming a nun after she decides not to throw herself into a river. This book's protagonist is caught sleeping with "The Lady of the Misty Moon" while in the house of the (*) Minister to the Left, and that protagonist is implied to have died during a blank chapter called "Vanished into the Clouds." This novel's title character is called "Shining" and is unfaithful to his wife Lady Aoi. For 10 points, name this novel about Heian court life by Lady Murasaki.

ANSWER: *The Tale of Genji* [or *Genji Monogatari*] <Jose>

9. This process may have "Forced Moves" or "Good Tricks" according to a book that likens a theory of it to a "universal acid." That theory of this process is dismissed in a 1907 book that proposes the *élan vital* (vee-TAHL) as a source of human culture. Daniel Dennett called this process a "Dangerous Idea" in a book named after its formulator, and a "creative" form of it was posited by Henri Bergson. The (*) Wilberforce-Huxley Debate centered on a book that popularized this concept, which borrows a term from Herbert Spencer to propose a mechanism for common descent. Its creator applied this theory to humans in *The Descent of Man*. For 10 points, name this biological theory introduced in Charles Darwin's *On the Origin of Species*.

ANSWER: Darwinian evolution [or natural selection; or Darwinism before "Darwin"] <Jose>

10. A six-headed creature in this myth system arose when the legs of a sleeping giant mated with each other. The first clouds in this myth system were formed by taking the brains of a creature sometimes called Blainn and throwing them into the sky. A giant in this myth system is nourished by four rivers of milk produced by an animal that licked salty stones to create the first god. The first giant in this myth system was created in a (*) gap between the land of fire and the land of ice. The creation of this myth system's first man and woman, Ask and Embla, is described in the *Gylfaginning*, which also describes a cow named Audhumla and a giant named Ymir. For 10 points, name this system of myths featuring gods called the Vanir and Aesir.

ANSWER: Norse mythology [accept Scandinavian mythology; accept Icelandic mythology; prompt on Germanic mythology] <Jose>

11. A leader of this country used the slogan "Seek ye first the political kingdom" after being freed from prison by Charles Arden-Clarke. Conservative advocates for this country's independence called for "Independence in the Shortest Possible Time," in contrast with the slogan "Independence Now" used by the Convention People's Party. While visiting China in 1966, the first leader of this country was overthrown by Joseph Ankrah. That leader used revenue from this country's cocoa exports to fund the hydroelectric (*) Akosombo Dam. This country was ruled by Pan-Africanism advocate Kwame Nkrumah, and it was named for a medieval trading empire centered on Kumbi Saleh. For 10 points, name this West African country, formerly called the Gold Coast, whose capital is Accra.

ANSWER: Republic of Ghana [prompt on the Gold Coast before "Gold" is read] <Brownstein>

12. This composer included an Air marked "Andante religioso" in the fourth movement of a suite imitating Baroque music, which he later arranged for string orchestra. He wrote a piano collection whose final movement, "Remembrances," is a tweaked version of the opening "Arietta." This composer was influenced by Robert Schumann to write a piano concerto that begins with a solo timpani roll crescendoing into a loud A minor chord played by the soloist. This composer of (*) *Lyric Pieces* and the *Holberg Suite* used a songlike flute solo to depict the sunrise in the "Morning Mood" movement of a suite that later portrays its protagonist being chased by trolls in the title "Hall of the Mountain King." For 10 points, name this composer of the *Peer Gynt* Suite.

ANSWER: Edvard **Grieg** [or Edvard Hagerup **Grieg**] <Kim>

13. In a story in this language, a philosopher who studies Spinoza in an attic on Market Street is nursed back to health by Old Dobbe. In a story in this language, the protagonist is told that there is no God but only a "thick mire" by the "Spirit of Evil." An author used this language to write about a man who "strikes it rich" when he receives a cow from two women whom he finds lost in the woods. In a story in this language, a baker's dying wife Elka reveals that her six children aren't (*) his, prompting him to urinate in his bread dough. This language was used to write "Gimpel the Fool," as well as stories about Tevye the Milkman. For 10 points, name this language used by Isaac Bashevis Singer and Sholem Aleichem, as well as other Ashkenazi Jewish writers.

ANSWER: **Yiddish** <Brownstein>

14. It's not a chemical reaction, but the temperature dependence of this process in a solid can be modeled using the Eyring equation and transition state theory. Two particles with opposite charges can undergo this process in an "ambipolar" fashion. Either ion implantation or this process are the main methods used in industry to dope semiconductors. The heat equation is sometimes named for this process, since (*) convection and this process are governed by the same mathematical laws. The flux of this phenomenon is equal to minus a namesake coefficient times the gradient of concentration according to Fick's Law. For 10 points, osmosis is an example of what form of passive mass transport, in which atoms move from high to low concentration?

ANSWER: **diffusion** [prompt on mass transport or passive transport] <Busse>

15. The *shmura* type of this item is produced under special supervision. The explanation for this item's purpose is given by the declaration *Ha Lachma Anya*. Many Hasidim abstain from the *gebrochts* type of this item, which has absorbed liquid. Wet precursors of this product may only be left out for 18 minutes. Fruit juice is often used in place of water to produce the (*) "egg" type of this item, which may not actually use eggs. A half-piece of this item that is set aside for later is known as an *afikoman*. It's not wine, but Manischewitz (man-uh-SHEV-its**) popularized the mass production of this food, which commemorates the fact that during the Exodus, the Jews had to flee Egypt before their bread could rise. For 10 points, name this unleavened flatbread eaten during Passover.**

ANSWER: **matzo** [or **matzah**; or **matzot**; or **matzas**; prompt on answers of unleavened flatbread; prompt on flour] <Gupta>

16. In a memoir partially titled for one of these objects, the narrator swims across the Amazon River to spend the night at a leper colony. The narrator travels cross-country with his son Chris in a book whose title references these things. A group associated with these objects was led by Sonny Barger and killed Meredith Hunter at the Altamont Speedway during a Rolling Stones concert. (*) Che Guevara travelled around South America on one of these vehicles as a medical student. These vehicles are central to the film *Easy Rider* and the aforementioned Robert Pirsig book about *Zen and the Art of [their] Maintenance*. For 10 points, the Outlaws and the Hells Angels are gangs associated with what kind of vehicles manufactured by Harley-Davidson?

ANSWER: **motorcycles** [or **motorbikes**; or **choppers**; or **hogs**; prompt on **bikes** or **cycles**] <Weiser>

17. This work's composer later reused the lyrics that begin its final chorus "Wer ein holdes Weib errungen" for one of his symphonies. Robert Schumann took his "passionate" pseudonym from this opera's male lead. Its Act 1 Finale opens with a crowd joyfully singing "O Welche Lust." At the beginning of its second and final act, its male lead sings "God! How dark it is here" before remembering (*) "Spring days of life" in the aria "In des Lebens Frühlingstagen." This opera's last scene is often preceded by the last of three overtures named for the female lead. This opera ends as Don Pizarro is dragged off to prison, and a crowd celebrates how Florestan was saved from jail by Leonore cross-dressing as the title boy. For 10 points, name this only opera by Ludwig van Beethoven.

ANSWER: ***Fidelio*** <Reed>

18. Along with the Wool Act, an act which allowed the import of this product from Europe contributed to Scotland's worsening relations with England prior to the 1707 Act of Union. Decades after his country secured a market for this product in England by the Methuen Treaty, the Marquis of Pombal created a national company to regulate its quality. The Duke of Clarence was allegedly killed using the Malmsey variety of this product. This good was exported from (*) Oporto in Portugal as part of a trade with English wool. A region known for producing this good was once an independent duchy which was ruled by Philip the Good and Charles the Bold; that duchy also handed Joan of Arc over to the English. For 10 points, name this product, varieties of which are named for Burgundy and Champagne.

ANSWER: **wine** [or **Burgundy** wine; or port **wine**; or **vinho**; or **vin**; prompt on **alcohol**] <Brownstein>

19. Laguerre's method for finding these quantities is one of many algorithms that "polishes" them by repeatedly "deflating" a function. An algorithm that finds these quantities successively computes " x sub n " by subtracting the expression " f of x sub 0 divided by f prime of x sub 0 " from " x sub n minus 1." An upper bound on the number of these quantities can be found with Descartes' (*) Rule of Signs. There is no general method for finding these quantities for expressions higher than the fourth degree according to the Abel-Ruffini theorem. These quantities, which can be found using the Newton-Raphson method, are defined as inputs to a function such that it outputs zero. For 10 points, name these quantities that are given by the quadratic formula for trinomials.

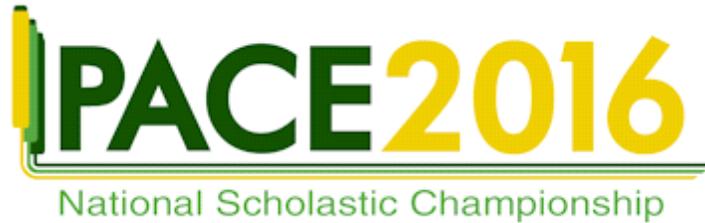
ANSWER: **roots** [or **zeroes** before the word "zero" is read] <Jose>

20. The speaker of this poem compares its setting to a "savage place" haunted by a "woman wailing for her demon-lover," and it analogizes some huge flying rock fragments to "chaffy grain beneath the thresher's flail." This poem's speaker imagines himself with "flashing eyes" and "floating hair" as a consequence of his eating honey-dew and drinking "the (*) milk of Paradise." This poem's final section describes its speaker's vision of an Abyssinian maid playing on a dulcimer and singing of Mount Abora, and it begins with a description of a site where "Alph, the sacred river ran, through caverns measureless to man." A "stately-pleasure dome" is decreed in Xanadu in, for 10 points, what poem by Samuel Taylor Coleridge named for a Mongol ruler?

ANSWER: "**Kubla Khan**" <Jose>

21. This book recounts the story of Eutychus, a man in Troas who falls from a window and is immediately revived. In this book, a Pharisee named Gamaliel advises a council to leave some other men alone, and an Ethiopian eunuch converts to Christianity. At the opening of this book, lots are drawn and Matthias is chosen to replace a man who had died. Philip meets the Samaritan sorcerer (*) Simon Magus in this book, which also chronicles the stoning of Stephen, the first martyr. Ananias restored the life of Saul of Damascus in this book, which described how he converted to Christianity and became Paul the Apostle. For 10 points, Luke is said to have written what fifth book of the New Testament named for the deeds of Jesus's disciples?

ANSWER: **Acts** of the Apostles <Jose>



PACE NSC 2016 - Round 02 - Bonuses

1. Answer the following about Ancient Egyptian agriculture, for 10 points each.

[10] Irrigation canals were dug in order to control and store the water generated from this annual event. Egyptians would plant their crops in October after the end of this event.

ANSWER: **flooding** of the **Nile** [or obvious equivalents indicating the **overflow** or **inundation** of the **Nile** River; prompt on **floods**]

[10] Egyptian farmers started using the *shaduf* to lift water during the 18th dynasty, whose pharaohs included this woman. Many statues of this female pharaoh were destroyed by her stepson Thutmose III.

ANSWER: **Hatshepsut**

[10] This crop was harvested prior to the wheat harvest, and unlike wheat could be pulled up from the ground with one's hands. This crop was pulled up early to produce higher-quality royal linen, and was the chief crop used to make Egyptian clothing.

ANSWER: **flax** [or common **flax**; or **linseed**; or *Linum usitatissimum*; or Egyptian **flax** plant] <Bentley>

2. Measurements of this value are a key part of the psychology research program called behavioral genetics. For 10 points each:

[10] Name this quantity that measures the extent to which differences between individuals in a population can be attributed to differences in genes.

ANSWER: **heritability** [or word forms]

[10] Many studies of heritability use sets of these people to partition the effects of genetic and environmental variation. Sets of these people can be dizygotic or monozygotic, and have identical genetic codes in the latter case.

ANSWER: **twins** [or monozygotic **twins**; or dizygotic **twins**; or identical **twins**; or fraternal **twins**; or **n-tuplets**]

[10] Name *both* the lower bound *and* the upper bound on measurements of heritability. Elsewhere in social science, these are the lower and upper bounds on R^2 ("**R squared**") in simple linear regression.

ANSWER: **0.0** and **1.0**, inclusive <Jackson>

3. The main male character of this story sacrifices his savings for a hunting rifle so that his wife can purchase a dress for a fashionable ball. For 10 points each:

[10] Name this story that closes with Mathilde Loïse learning from her friend Madame Forrestier that the title object was made of paste after she had spent many years working to pay off a debt she accrued to replace it.

ANSWER: "The **Necklace**" [or "La **Parure**"]

[10] This French author known for his twist endings wrote "The Necklace."

ANSWER: Guy de **Maupassant**

[10] Maupassant's other short stories includes this unusually supernatural tale, in which the narrator comes to believe he is being tormented by the title vampiric creature.

ANSWER: "The **Horla**" [or "La **Horla**"] <Jose>

4. Answer the following about food in Japanese mythology, for 10 points each.

[10] This indigenous religion of Japan worships many *kami* associated with food and agriculture, such as the harvest god Tano and Uke Mochi, who produces food from her own body.

ANSWER: **Shinto** [or **kami-no-michi**]

[10] This androgynous *kami* of rice, sake, and millet is sometimes said to be the husband or wife of Uke Mochi. Pure-white foxes called *kitsune* serve as his messengers.

ANSWER: **Inari** [or **O-inari**; or **Inari** Okami]

[10] Tsukuyomi, the brother of this female *kami*, killed Uke Mochi because he was so disgusted with her unsanitary food preparation. This goddess once hid inside a cave after her brother vandalized her rice fields, and had to be lured out with Uzume's dancing.

ANSWER: **Amaterasu** [or **Amaterasu** Omikami] <Jose>

5. A chain of one of these institutions called Corinthian went bankrupt in May 2015 and was found to have lied about its job placement rates. For 10 points each:

[10] Identify these institutions, which in the past 15 years have disproportionately caused an increase in debt in younger Americans.

ANSWER: **for-profit universities** [or **for-profit colleges**; prompt on colleges or universities]

[10] The Department of Defense recently announced that it would no longer provide funds to study at this largest for-profit university chain, owned by the Apollo Group, which has greatly expanded since its first class of eight students in Arizona in 1976.

ANSWER: University of **Phoenix**

[10] Although one can receive a Pell Grant to attend one of these types of trade schools, data on their notoriously low salary rates for graduates isn't available on the Obama administration's College Scorecard website. One can train to be an esthetician or a desairologist at these schools.

ANSWER: **cosmetology** schools [or **beauty** schools] <Bentley>

6. The immigration of the Windrush generation is depicted in *The Lonely Londoners*, a novel by this nation's Sam Selvon. For 10 points each:

[10] Name this country home to C. L. R. James, the author of *The Black Jacobins*. A novel by a writer born in this country depicts the shopkeeper Salim's life in an area ruled by the "Big Man."

ANSWER: **Trinidad** and Tobago

[10] Mobutu Sese Seko may have inspired this author's depiction of the "Big Man" in his novel *A Bend in the River*. This Trinidadian author also wrote *A House for Mr. Biswas*.

ANSWER: V. S. **Naipaul** [or Vidiadhar Surajprasad **Naipaul**]

[10] Naipaul's *In a Free State* contains two sections about a man traveling to this African country, the home of Naguib Mahfouz and the setting of Lawrence Durrell's Alexandria Quartet.

ANSWER: **Egypt** <Kothari>

7. During saponification, this reaction breaks ester bonds in triglycerides to form a soap. For 10 points each:

[10] Identify this cleavage of a carbon-oxygen bond by the addition of a water molecule. Phosphates are usually removed by this reaction.

ANSWER: **hydrolysis**

[10] During saponification, fat droplets are removed from soap by this technique, where a volatile substance is constantly boiling and condensing back into the reaction vessel.

ANSWER: **refluxing**

[10] The most common ingredient in soap is the sodium salt of stearic acid, which contains this many carbons. Stable metal complexes are predicted by using a rule named for this many electrons.

ANSWER: **eighteen** electron rule <Jose>

8. Max Beckmann completed nine works of this type during his lifetime, including *The Argonauts* and *Departure*. For 10 points each:

[10] Identify this type of work, usually made up of a central scene and two hinged wings. The Portinari Altarpiece is an example of a work of this type.

ANSWER: **triptych**

[10] This Netherlandish artist used the triptych form to divide his *Garden of Earthly Delights* into scenes of paradise, a sinful life on Earth, and damnation.

ANSWER: Hieronymus **Bosch** [or Jheronimus **Bosch**; or Jheronimus **van Aken**; or Joen **van Aken**]

[10] Paradise and damnation also flank this other triptych by Hieronymus Bosch. In the central scene of this painting, a concert takes place on the title vehicle, which is crushing several people as it makes its way across the landscape.

ANSWER: *The **Haywain** Triptych* <Bentley>

9. The color charge was introduced to explain why three of these particles with otherwise identical quantum numbers could coexist. For 10 points each:

[10] Name these particles that have six possible flavors. One of these particles combine with its antiparticle to form a meson.

ANSWER: **quarks**

[10] This is the lightest flavor of quark. A proton contains two of these quarks, whereas a neutron contains one.

ANSWER: **up** quark

[10] This quantity was introduced to differentiate between two particles, like the proton and neutron, that behave identically under the strong nuclear force but differently under the electromagnetic force.

ANSWER: **isospin** [or **isotopic spin** or **isobaric spin**] <Reinstein>

10. Answer the following about education reform in 19th century America, for 10 points each.

[10] This member of the Massachusetts Board of Education reformed much of the public school system, making the school day longer and setting up "normal schools" for teachers to be trained.

ANSWER: Horace **Mann**

[10] This so-called "Schoolmaster of the Republic" improved the textbooks of the early 19th century. This creator of widely used "reading lessons" edited a dictionary that he co-names with George Merriam.

ANSWER: Noah **Webster**

[10] In 1837, this college in Ohio started to admit both men and women into its program. This college became involved in the abolition movement under its president Charles Grandison Finney.

ANSWER: **Oberlin** College <Jose>

11. The bidirectional variant of this algorithm is sometimes named cocktail shaker sort. For 10 points each:

[10] Name this simple sorting algorithm that checks to see if two elements of a list are in order and swaps them if they are not. It proceeds down the list and repeats until no swaps have been made on a single pass.

ANSWER: **bubble** sort [or **sinking** sort]

[10] Bubble sort has this worst case asymptotic runtime. Please express your answer with a tight bound using either big O or big Theta notation.

ANSWER: **n^2** [or big O of **n^2** or big Theta of **n^2** ; do not accept or prompt on "n"]

[10] John von Neumann developed this divide-and-conquer sorting algorithm in which a list of unsorted numbers is split recursively, sorted, and then recombined using the namesake operation.

ANSWER: **mergesort** <Jose>

12. This author, who coined the term "Bible Belt," noted that "down there, a poet is now almost as rare as an oboe-player" in an essay attacking the anti-intellectualism of the American South, entitled "The Sahara of the Bozart." For 10 points each:

[10] Name this author who wrote for the *Baltimore Sun* and founded *The American Mercury* with George Jean Nathan.

ANSWER: Henry Louis **Mencken** [or H. L. **Mencken**]

[10] H. L. Mencken was one of the co-founders of *Black Mask*, the first magazine to serialize this Dashiell Hammett novel which opens with Sam Spade learning of the death of his partner Miles Archer.

ANSWER: *The **Maltese Falcon***

[10] Mencken once described the value of this novel about a friend of Tom Sawyer and the runaway slave Jim as "worth the whole work of Emerson with two-thirds of the work of Whitman thrown in."

ANSWER: *The Adventures of **Huckleberry Finn*** <Jose>

13. A concert overture incorporated into this suite begins with woodwinds playing the chords E major-B major-A minor-E major, a motif repeated as a character recites the "If we shadows have offended speech" at its conclusion. For 10 points each:

[10] Name this orchestral suite that also includes the fairy lullaby "Ye Spotted Snakes." Its wickedly fast scherzo ends on a devilish flute solo.

ANSWER: incidental music to *A **Midsummer Night's Dream***

[10] This early Romantic composer wrote that incidental music to *A Midsummer Night's Dream*, along with the *Italian Symphony* and many *Songs Without Words*.

ANSWER: Felix **Mendelssohn**-Bartholdy

[10] Both Mendelssohn's third symphony and his concert overture *Fingal's Cave* were inspired by his visit to this country.

ANSWER: **Scotland** [prompt on Great **Britain**; prompt on **United Kingdom** of Great Britain and Northern Ireland or **UK**; do not accept or prompt on "England"] <Kothari>

14. This man's daughter, the princess Anna, wrote a history of his reign. For 10 points each:

[10] Name this emperor who fought against Robert Guiscard and the Normans at the Battle of Dyrrachium. He also sent ambassadors to meet with Pope Urban II at the Council of Piacenza.

ANSWER: **Alexios** I Komnenos [or **Alexius** I Comnenus]

[10] Anna's *Alexiad* describes how Alexios' appeals led to this 1096 campaign, which successfully captured Jerusalem. This campaign began with cries of "God wills it!" at the Council of Clermont.

ANSWER: the **First Crusade**

[10] The *Alexiad* also discusses Alexios's reluctant execution of a leader of the Bogomils, a dualistic heresy that originated among these people. Basil II earned his nickname by defeating these people at Kleidon.

ANSWER: **Bulgarians** [or **Bulgars**; or **Balgari**] <Brownstein>

15. The speaker of this poem warns that "A honey tongue, a heart of gall, is fancy's spring, but sorrow's fall." For 10 points each:

[10] Identify this poem whose speaker declines "to live with thee and be thy love." This poem is a response to a poem written by Christopher Marlowe.

ANSWER: "The **Nymph's Reply to the Shepherd**"

[10] "The Nymph's Reply to the Shepherd" was written by this 16th century English poet. He attacked "men of high condition" and "church and court" in his poem "The Lie" and was ultimately executed for treason.

ANSWER: Sir Walter **Raleigh** [or Sir Walter **Ralegh**]

[10] In a poem describing a vision of the tomb of Petrarch's Laura, the speaker of a Raleigh poem suddenly comes across this figure. This allegorical figure, also known as Gloriana, titles an epic poem by Edmund Spenser.

ANSWER: the **Faerie Queene** <Bentley>

16. A subclass of these organisms contains only one living member, the ginkgo. For 10 points each:

[10] Name this group of plants which produce "naked seeds," in contrast to the flowering plant angiosperms. Conifers and cycads are examples of them.

ANSWER: **gymnosperms**

[10] Cycads also produce cones called strobili that contain hundreds of these structures. These structures are the site of meiosis in plants, forming namesake haploid cells, and four of them are located in each anther of an angiosperm.

ANSWER: **sporangia** [or **microsporangia**; or **megasporangia**]

[10] During alternation of generations, a spore eventually develops into this multicellular organism by mitosis. In vascular plants, it is haploid, unlike its larger counterpart.

ANSWER: **gametophyte** <Jose>

17. Answer the following about Jewish mysticism, for 10 points each.

[10] This prominent Jewish mystical movement is rooted in the teachings of the *Zohar*. It teaches that God has ten emanations called *Sephirot*, and many of its practitioners wear a red string on their left wrist.

ANSWER: **Kabbalah** mysticism

[10] Rabbi Lawrence Kushner helped to revive Kabbalah among this liberal Jewish denomination, the most numerous in America.

ANSWER: **Reform** Judaism

[10] The followers of this 18th-century mystical rabbi became known as the Hasidim. After receiving a vision from Elijah on his sixteenth birthday, this man preached a monistic view of God in what is now western Ukraine.

ANSWER: **Ba'al Shem Tov** [or **Besht**; or **Yisroel ben Eliezer**] <Alston>

18. This country encouraged athletic achievement with programs such as Prepared for Labor and Defense, or the GTO. For 10 points each:

[10] Name this country whose Olympic highlights include the violent "Blood in the Water" match with a southern neighbor. It hosted the widely-boycotted 1980 Summer Olympics.

ANSWER: **Soviet Union** [or **USSR**; or **Union of Soviet Socialist Republics**; or **CCCP**; prompt on **Russia**]

[10] This capital of the USSR was the site of the 1980 Olympics, as well as frequent "physical culture" parades in Red Square.

ANSWER: **Moscow** [or **Moskva**]

[10] The Soviet Union also hosted massive sports competitions named for this person every four years in Moscow. A revolutionary group named for this person was led by Karl Liebknecht and the author of the "Junius pamphlet."

ANSWER: **Spartacus** [or **Spartakiads**; or **Spartacist League**] <Brownstein>

19. A magnificent blue and gold copy of this structure can be found opposite the Market gate of Miletus in the Pergamon Museum. For 10 points each:

[10] Name this gate that was once built into the wall that surrounded Babylon. It is named for a deity.

ANSWER: **Ishtar Gate**

[10] The Pergamon Museum can be found in this country, whose other architecture includes the "Mad King's" New Swanstone Castle.

ANSWER: Federal Republic of **Germany**

[10] Babylon's Etemenanki was one of these types of buildings. One of these stepped "sacred mountains" extended to almost 20 meters in height in ancient Ur.

ANSWER: **ziggurats** <Bentley>

20. This man's principle of the identity of indiscernibles states that two distinct objects cannot have all of their properties in common. For 10 points each:

[10] Name this philosophical polymath who grounded his thought in the principle of sufficient reason and the principle of contradiction. His "mill argument" aims to show that an assembly of physical parts cannot constitute a mind.

ANSWER: Gottfried Wilhelm **Leibniz** [or Gottfried Wilhelm von **Leibniz**]

[10] Gottfried Leibniz is credited with developing this branch of mathematics independently from Isaac Newton. Leibniz's notation is used to express integrals in this field.

ANSWER: **calculus**

[10] Leibniz also argued that the basic units of the universe are these simple, "windowless" entities, which are non-extended and hence immaterial.

ANSWER: **monads** <Jose>

21. This composer withdrew his only opera, *The Maiden in the Tower*, after its fourth performance, after which it wasn't heard publicly for nearly a hundred more years. For 10 points each:

[10] Name this composer of such nationalistic music as the *Karelia Suite* and *Finlandia*.

ANSWER: Jean **Sibelius** [or Johan Julius Christian **Sibelius**]

[10] *Finlandia* is a piece in this genre of orchestral music. Pieces in this genre are typically only in a single movement and illustrate a work of art or literature.

ANSWER: **tone poem** [or **orchestral poem**; or **symphonic poem**]

[10] Like *Finlandia*, this symphony by Sibelius became popular among Finnish patriots, since it was composed in Italy and thought to have escaped Russian influence. Its slow movement was inspired by a vision of Don Juan.

ANSWER: Symphony No. **2** in D major [or Sibelius's **second** symphony] <Alston>