PACE Partnership for Academic Competition Excellence

2016 NSC - Official Scoresheet

Round	06	Room	
Bracket			
Reader			

Team					Bonus	Steals	Ques. Total	Run. Score	Team					Bonus	Steals	Ques. Total	Run. score
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
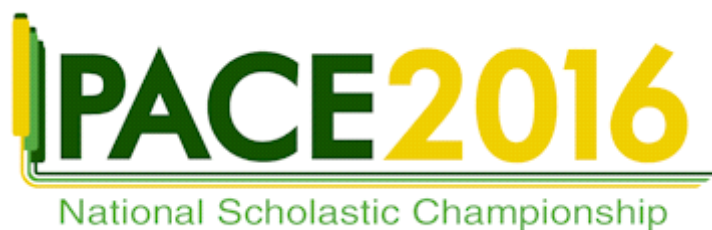
1. **In a 1-D or 2-D crystal below the Peierls temperature, standing waves named for density and this quantity are formed. This quantity's density is multiplied by the speed of light in the time-like component of a four-vector which is symbolized *J*. The flux of the polarization density through a surface equals the "bound" value of this quantity enclosed within the surface. This quantity's conservation is expressed by a continuity equation derived by applying the divergence theorem to (*)** Ampere's Law. The quantization of this quantity was demonstrated in an experiment where Robert Millikan studied the motion of oil droplets. The force between "point" examples of this quantity is given by Coulomb's Law. For 10 points, what electrical quantity is thus measured in Coulombs?
ANSWER: electric **charge** [prompt on Q, accept **charge** density waves before "four-vector"]
<Busse>

2. **This dynasty unsuccessfully attempted to restore the Le Dynasty by invading Hanoi in the aftermath of the Tay Son Rebellion. This dynasty forced coastal towns to move up to 10 miles inland, to prevent supplies from reaching the warlord Koxinga on Taiwan. Early in its rule, this dynasty defeated its former ally Wu Sangui in the Revolt of the Three Feudatories, allowing the (*)** Kangxi Emperor to consolidate power. This dynasty came to power by driving the peasant rebel Li Zicheng from Peking, a month after the last emperor of the previous dynasty hung himself on a tree behind the Forbidden City. This dynasty was founded by an alliance of Jurchen tribesman who renamed themselves the "Manchu." For 10 points, name this dynasty that succeeded the Ming.
ANSWER: **Qing** Dynasty <Wang>

3. **The Georgian dancer Vakhtang Chabukiani popularized a namesake variation danced by this character. This male character dances a "Grand Adagio" popularly known as the "Love Duet." In the first version of the ballet, this man's mother interrupts the opening waltz, in which he celebrates his birthday. The Drigo, Ivanov, and Petipa revival changed the ending such that this character chooses to die and is reunited with his lover in heaven. At the urging of his friend (*)** Benno, this man takes his crossbow on a hunt. This character ignores a vision while dancing with a woman who looks exactly like his love interest, named Odile. The sorcerer Von Rothbart puts a spell on this character's beloved Odette. For 10 points, name or give the title of this protagonist of *Swan Lake.*
ANSWER: Prince **Siegfried** [or the **Prince**] <Gupta>

4. At this novel's end, the protagonist gives birth to a baby girl who she decides will go to Vassar one day. Vida Sherwin and Guy Pollock elect this novel's protagonist as part of a group that eventually puts on a performance of *The Girl of Kankakee* after Bernard Shaw is deemed to be too "highbrow." This novel's protagonist spends two years in Washington D.C. after the failure of her work with women's groups like the (*) Jolly Seventeen and the Thanatopsis Club. This novel's opening is set in Minneapolis, where the main character's future husband Will courts her before they resettle in Gopher Prairie. Carol Kennicott tries to change the humdrum townspeople in, for 10 points, what novel by Sinclair Lewis named for a small-town road?
ANSWER: ***Main Street*** <Jose>

5. A form of this action can be performed to make up for adding or omitting a *fard* act, and is called the one "of forgetfulness." This action does *not* accompany a funerary ritual that includes reciting four *takbirs* and is called *janazah*. The last verse of Sura 7, "The Heights," is the first of fourteen or fifteen verses of the Qur'an whose recitation involves an extra one of these actions. Iblis was sent to hell for refusing to do this to (*) Adam when all of the other angels did. It may be considered *shirk*, or polytheism, to perform this physical action towards a human being. Instances of this action called *ruku* and *sujud* are performed during *salat*, in addition to standing and sitting. For 10 points, identify this physical posture that Muslims take while praying.
ANSWER: **bow**ing [accept equivalents like **prostrat**ion or **genuflect**ion; accept **ruku** until it is read; accept **sujud** or **sajdah** until "sujud" is read; prompt on prayer or salat or salah] <Yu>

6. A man stands on the shoulders of the title giant in this artist's painting *Blind Orion Searching for the Rising Sun*. Paul Freart de Chantelou commissioned the second of this artist's two Seven Sacraments series. Two men carry a shrouded body in the foreground of a pastoral landscape by this artist which depicts *The Funeral of Phocion*. Two of the three shepherds in one of his most enigmatic paintings point at the title (*) inscription on a tombstone in the featureless landscape where Zeus was born. In a painting by this artist, an infant blows bubbles beneath a two-headed statue and four figures link hands performing the title dance. For 10 points, name this 17th century French artist of *Et in Arcadia Ego* and *Dance to the Music of Time*.
ANSWER: Nicolas **Poussin** <Bentley>

7. During this century, the Roman Empire was auctioned off to the highest bidder, Didius Julianus, who reigned for only nine weeks before being murdered. Clodius Albinus was proclaimed emperor during this century, but he was killed at the Battle of Lugdunum. An emperor of Rome during this century was strangled in his bath by Narcissus, which kicked off a succession crisis during the so-called Year of the (*) Five Emperors. That crisis was resolved near the end of this century when Septimius Severus came to power. The Roman Empire reached its greatest extent in this century when it conquered and annexed Dacia. The Pax Romana came to an end in this century when Marcus Aurelius died. For 10 points, name this century, during which Trajan and the Five Good Emperors ruled.
ANSWER: **2**nd century AD [accept **100**s] <Jose>

8. To treat tuberculosis, bedaquiline inhibits this protein in bacteria. A subunit of this protein is composed of three subunits in a 1:2:10 stoichiometric ratio and is named for its affinity to oligomycin. In brown fat, thermogenin bypasses this protein. V-class enzymes, which catalyze the normal reverse reaction as this enzyme, (*) acidify lysosomes. According to Paul Boyer's Nobel Prize-winning model of this protein, a ring rotates around a central stalk, acting as a molecular motor. This enzyme couples the diffusion of protons down the electrochemical gradient to oxidative phosphorylation. For 10 points, name this protein that spans the inner mitochondrial membrane at the end of the electron transport chain, which produces the "energy currency" of the cell.
ANSWER: **ATP synthase** [or **ATP synthetase**; or **adenosine triphosphate synthase**; or **adenosine triphosphate synthetase**; do not accept or prompt on "ATP"] <Silverman>

9. A play by this author features a ceremony in which the protagonist sells a telescope to the Venice arsenal. That play by this author ends with Andrea smuggling a *Discourse* which the blind title character had written and hidden in a globe while under house arrest. A character created by this author tells fortunes by drawing black crosses from a helmet. In a play by this author, a girl obsesses over Yvette's red boots and is (*) shot off a roof for beating a drum to warn a town of approaching troops. This author of *Galileo* tried to prevent audience identification with characters in his "epic theater." In one of his plays, Swiss Cheese and Katrin are children of the title canteen wagon owner. For 10 points, name this playwright of *Mother Courage and Her Children*.
ANSWER: Bertolt **Brecht** [or Eugen Bertolt Friedrich **Brecht**] <Brownstein>

10. A god who lived in this realm holds a container of jewels symbolizing his fertility, uses a mount called Makara, and was often paired with a god of truth and justice named Mitra. Hoori travels to this realm while attempting to retrieve an object belonging to his brother, and ends up marrying Otohime, the daughter of the god of this place. The Maori hero Paikea got his name by (*) riding large inhabitants of this place. Rama angrily attacks this location using a bow and arrow when its god refuses to respond to his meditative requests; eventually, that god, Varuna, helps Rama access Lanka. Urashima Taro rescues a turtle and is taken to a palace in this location belonging to its Shinto god Ryujin. For 10 points, identify this realm also home to the Leviathan and Poseidon.
ANSWER: **sea**s or **ocean**s [prompt on water] <Carson>

11. The XENON research project uses a dual phase time projection chamber to search for this component, whose distribution is plotted on a Navarro–Frenk–White profile. The cusp-core problem has led to the suggestion that this component is self-interacting. Plots of orbital velocities of bodies against radial distance on a galactic rotation curve lead to the inference of this component, which (*) Fritz Zwicky postulated after studying the Coma Cluster. Mordehai Milgrom developed MOND, or Modified Newtonian Dynamics, as an alternative to this entity. Axions are candidates for its "cold" form, while its "hot," ultra-relativistic form would be contributed from neutrinos. For 10 points, name this currently undetected hypothetical substance that might comprise most of the mass of the universe.
ANSWER: **dark matter** halo [after "Navarro-Frenk-White profile" is mentioned, prompt on mass <Jose>

12. This leader exhumed Prince Lazar's coffin and had it repeatedly reburied in various villages after giving the Gazimestan speech. This person initiated the "anti-bureaucratic revolution" in order to overthrow his mentor as leader of the LCS. This leader's capital was targeted by Operation Allied Force, during which a Chinese embassy was mistakenly destroyed. This leader backed forces which committed the (*) Srebrenica **(sreh-bren-IT-sah)** massacre during a conflict which ended when he signed the Dayton Accords on that group's behalf. NATO bombed his country during his war with the KLA, and crimes during that war prompted his extradition to The Hague, where he died of heart failure in 2006. For 10 points, name this president of Serbia who led Yugoslavia during the Kosovo War.
ANSWER: Slobodan **Milosevic** [prompt on Sloba] <Brownstein>

13. Wolfgang Amadeus Mozart's string quintet in this key is considered a companion piece to the one in G minor. Mozart's D major Flute Concerto No. 2 is a reworking of his oboe concerto, which is in this key. Both of Georges Bizet's symphonies are in this key, which Mozart used for a piano concerto best-known for its F major Andante second movement's usage in the 1967 film *Elvira Madigan*. The "Wedding March" from (*) Mendelssohn's *A Midsummer Night's Dream* suite is in this key. A Mozart symphony in this key ends with a five-voice fugue and was given a mythological nickname by Johann Peter Salomon. Schubert's "Little" sixth and "Great" ninth symphonies are in this key. For 10 points, give this key of the *Jupiter Symphony*, which has no sharps or flats.
ANSWER: **C** major [do not accept "C minor"] <Kim>

14. A man named for this animal responded to a mass shooting in the Council House by leading the Great Raid of 1840. Members of a group nicknamed for this animal were accused of killing a bartender and a policeman in the Brownsville Affair. The term *pishkun* refers to their namesake "jumps," cliffs that these animals were forced to run off. Slow-moving (*) "sporting car" trains allowed passengers to shoot at these animals. This animal provided the nickname for African-American cavalry units who fought in the Indian Wars, and the nickname of a man who traveled with Annie Oakley as part of his Wild West show. For 10 points, name this animal that roamed the Great Plains before it was hunted to near-extinction.
ANSWER: **buffalo** [or American **bison**] <Brownstein>

15. While searching for oil off this island's coast, Exxon drilled the world's longest borehole in 2011. After visiting a prison colony on this island, Anton Chekhov wrote his only work of non-fiction, a sociological piece criticizing the penal system. In 1983, Korean Air Lines Flight 007 was accidentally shot down off this island's western shore by the (*) Soviet Union. This island lies east of the Strait of Tartary and north of the La Pérouse Strait. Its city of Korsakov was rebuilt as the city of Ōtomari after this island was divided in two by the Treaty of Portsmouth. The Soviet Union reclaimed this island's southern half from Japan in the last days of World War II, along with the nearby Kuril Islands. For 10 points, name this large Russian island north of Hokkaidō.
ANSWER: **Sakhalin** [or **Karafuto**] <Wang>

16. Long before Quine, this philosopher used a distinction between "walking" and "hurrying" to illustrate the indeterminacy of meaning in *De Magistro*. This man's claim that he learned to speak by inferring the names of things is critiqued at the opening of Wittgenstein's *Philosophical Investigations*. This philosopher, who proposed a psychological analogy for the Trinity, found himself unable to explain **(*)** time and concluded that it was a distension of the mind, which God lies beyond. He coined the term "just war" in a work whose title construct triumphs over the Earthly City. He was a Neoplatonist and a Manichaean before eventually converting to Christianity. For 10 points, name this philosopher who wrote *The City of God* and *Confessions*.
ANSWER: Saint **Augustine** of Hippo [or Saint **Augustinus**; or Saint **Austin**; or Blessed **Augustine**; or Aurelius **Augustinus** Hipponensis] <Kothari>

17. This institution rose to national prominence under Charles William Eliot, who published its namesake "Classics" series that ran 50 volumes. George Vaillant tracked members of this institution over 75 years in the longitudinal Grant Study. This location lends its name to a computer architecture used by Howard Aiken's Mark I **(one)**. Robert Putnam, Stephen Walt, and Joseph Nye are members of this institution's **(*)** John F. Kennedy School of Government, named for an alumnus. In 2005, the then-head of this institution suggested that women may have a "different availability of aptitude at the high end." From 2001 to 2006, this institutions was headed by former Clinton Treasury Secretary Lawrence Summers. For 10 points, name this Ivy League university in Cambridge, Massachusetts.
ANSWER: **Harvard** University <Bentley>

18. In the first line of a poem, this character cries "Courage!" and claims that "this mounting wave will roll us shoreward soon." This character then arrives in a "land in which it seemed always afternoon." Describing his son, this character concludes, "He works his work, I mine." In the opening of another poem, this character notes that "I am become a name" and regrets having to "mete and dole unequal laws unto a savage race." In that poem, this character decides "to **(*)** sail beyond the sunset," even though he is not "that strength that in old days moved earth and heaven." For 10 points, identify this unnamed leader in Tennyson's "The Lotos-eaters" who also narrates a dramatic monologue ending with his resolution to "strive, to seek, to find, and not to yield."
ANSWER: **Ulysses** [or **Odysseus**] <Mehigan>

19. The von Neumann **(NOY-mahn)** hierarchy is defined using transfinite recursion starting with this mathematical construct. For any topological space, this entity and the whole space will always have the property of being "clopen," or being open and closed simultaneously. The Cartesian product of any object *A* with this other object will always itself yield this object. In a vacuous truth, the universal quantifier is applied to this entity. The **(*)** power set always includes this construct, which has a cardinality of zero. The intersection of two disjoint sets yields this object, and it is always the subset of any given set. A circle with a slash through it represents, for 10 points, what set that contains no elements and is sometimes called the "null set?"
ANSWER: **empty** set [or **void** set; accept **null** set before the word "null" is read; prompt on set until the word "clopen"] <Jose>

20. A character in this novel asks to be brought a copy of Cherbuliez's *Paule Méré*, whose plot mirrors that of this work. Another character in this novel talks about a doctor in Schenectady, Mr. Davis, who sought to cure her dyspepsia. Mrs. Costello, the aunt of this novel's protagonist, is shocked that her nephew accompanies the title character from Vevey to the Chateau de (*) Chillon. Mrs. Walker ostracizes the title character because she walks about Rome too much with Italian men like Mr. Giovanelli, and that character eventually contracts malaria after a nighttime visit to the Colosseum. For 10 points, name this novella in which Frederick Winterbourne falls for an innocent American girl traveling in Europe, written by Henry James.

ANSWER: ***Daisy Miller****: A Study* <Kothari>

21. Daniel Buren added colorful panels to one of this artist's buildings to create a giant kaleidoscope known as the Observatory of Light. The Cowles Conservatory in the Walker Art Center contains this artist's glass sculpture *Giant Standing Fish*. This artist, who designed the Fondation Louis Vuitton, used a "deconstructivst" approach to a building that he designed with Vlado Milunic. The Science Fiction Museum and Hall of Fame is attached to a building that (*) Microsoft founder Paul Allen commissioned from this man. In Prague, this artist designed a building whose two distinct towers evoke the movement of feet, called the Dancing House. For 10 points, name this modern architect who designed the Experience Music Project in Seattle and the Walt Disney Concert Hall in Los Angeles.

ANSWER: Frank **Gehry** [or Frank Owen **Gehry** or Frank Owen **Goldberg**] <Jose>
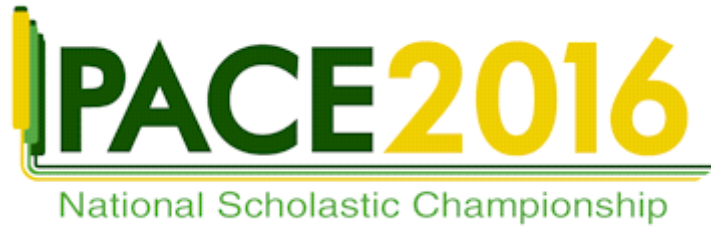
1. This emperor tried to get the Senate to make his horse Incitatus a consul. For 10 points each:
[10] Name this Julio-Claudian emperor who came to power in 37 AD after succeeding his adoptive father Tiberius.
ANSWER: **Caligula** [or **Gaius Julius Caesar** Augustus Germanicus; do not prompt on partial answers]
[10] Suetonius claims that Caligula's campaign against Britain ended with troops being ordered to perform this action in order to obtain "spoils of the sea."
ANSWER: collecting sea**shell**s [or collecting **conchae**]
[10] This force of bodyguards used by the Roman Emperor conspired with the Senate to have Caligula assassinated and replaced with Claudius. Sejanus was the prefect of this force during the reign of Tiberius.
ANSWER: **Praetorian** Guard [or **Praetoriani**] <Jose>

2. One of these constructs named for Friedrich Sander features two lines that originate from the corners of a parallelogram that appear to differ in length, even though they really do not. For 10 points each:
[10] Name these deceiving images used by psychologists to test how perception deviates from reality.
ANSWER: **optical illusion** [prompt on illusion]
[10] Subjects who see the "cube" illusion named for this Swiss scientist are unable to focus on either of its two possible orientations for more than a few seconds.
ANSWER: Louis Albert **Necker** [accept **Necker** cube]
[10] This school of psychology believed that stimuli are perceived as a sum of all their parts, thus suggesting that optical illusions work by flipping between different perceptions of whole sets of stimuli.
ANSWER: **Gestalt** psychology <Jose>

3. When out on the town, this character "glittered when he walked" but eventually went home and "put a bullet through his head." For 10 points each:
[10] Name this title character of a poem published in the collection *The Children of the Night* who, despite being "richer than a king" killed himself "one calm summer night."
ANSWER: **Richard Cory** [accept either]
[10] "Richard Cory" was written by this American poet, who described a man who "loved the Medici, albeit he had never seen one" in the poem "Miniver Cheevy."
ANSWER: Edwin Arlington **Robinson**
[10] Robinson's other poems include one about this lonely resident of Tilbury Town, who "raised up to the light the jug that he had gone so far to fill" during the "party" he imagines having with himself.
ANSWER: Mr. **Flood** [accept "Mr. **Flood**'s Party"] <Jose>

4. Caroline Shaw has vocalists quote Sol Lewitt in the final movement of her *Partita for 8 Voices*, which is in this form. For 10 points each:
[10] Name this musical form that, like the chaconne, consists of a series of variations on a bass ostinato, often in triple meter.
ANSWER: **passacaglia**
[10] This English composer was a fan of passacaglias, including them in operas like *The Turn of the Screw*, *Billy Budd*, and *Peter Grimes*.
ANSWER: Benjamin **Britten** [or Edward Benjamin **Britten**]
[10] Britten also wrote a passacaglia as the final movement of a "symphony" with this solo instrument, premiered by Mstislav Rostropovich. This low stringed instrument was also played by Yo-Yo Ma.
ANSWER: **cello** [or violon**cello**] <Kothari>

5. The Beavis effect describes the tendency to overestimate the phenotypic variance associated with these things. For 10 points each:
[10] Name these DNA loci that covary with continuous, polygenic traits. They are often mapped using recombinant inbred lines.
ANSWER: **quantitative trait** loci [or **QTL**s]
[10] Polygenic traits do not follow the patterns of inheritance of this cleric-scientist, who discovered the Laws of Segregation and Independent Assortment while working with pea plants.
ANSWER: Gregor Johann **Mendel** [or Řehoř Jan **Mendel**]
[10] In crops, QTL mapping is often used in tandem with marker-assisted selection, which is based on this lab technique. Master mixes for this technique usually include a forward and reverse primer, dNTPs, and a heat-resistant DNA polymerase.
ANSWER: **polymerase chain reaction** [or **PCR**] <Kothari>

6. The first type of antenna built to detect this phenomenon is the Weber Bar, which is an aluminum cylinder that starts pulsating when it is hit by this type of radiation. For 10 points each:
[10] Name this type of radiation which is thought to be caused by ripples in the curvature of spacetime.
ANSWER: **gravitational** radiation [accept **gravitational wave**s; accept **gravity** radiation; do not accept or prompt on "gravity waves"]
[10] This theory first developed by Albert Einstein, which is governed by a set of equations relating the curvature of spacetime to matter and energy, predicts the existence of gravitational radiation. It is more complex than its "special" counterpart.
ANSWER: **general relativity** [accept **GR**; prompt on relativity]
[10] Gravitational radiation is thought to have been emitted by the Hulse-Taylor one of these systems. The barycenter is the center of mass of these kinds of systems.
ANSWER: **binary** star system <Jose>

7. Doctor Howard Archie mentors the protagonist of this novel and grows rich from investing in silver mines. For 10 points each:
[10] Name this novel, whose final section "Ten Years Later" follows Thea Kronborg as she magnificently performs the lead role in the opera *The Valkyrie*.
ANSWER: *The **Song of the Lark***
[10] *The Song of the Lark* was written by this author, who set many of her novels, such as *My Antonia*, in Nebraska.
ANSWER: Willa **Cather**
[10] Nebraska is also the setting of this Cather novel whose protagonist marries Carl Linstrum shortly after the violent end of her brother Emil's romance with the married Marie Shabata.
ANSWER: ***O Pioneers!*** <Jose>

8. This error is similar to affirming the consequent. For 10 points each:
[10] Name this logical error, in which an inference of the form "not p therefore not q" is made, given that p implies q.
ANSWER: **denying the antecedent** [accept **inverse** error, or other answers that mention "inverse"]
[10] Denying the antecedent is one of these mistakes in reasoning which render an argument unsound. Informal kinds of these, like hasty generalization, have premises that don't support the conclusion.
ANSWER: **fallacy**
[10] In this kind of often fallacious reasoning, a person attacks another person's character or motives rather than the substance of her argument.
ANSWER: argumentum **ad hominem** <Jose>

9. Elmgreen and Dragset installed a fully stocked store of this brand in the middle of the desert near Marfa, Texas as an art project. For 10 points each:
[10] Name this Italian fashion house whose subsidiaries include Miu Miu. Its famous products include minimalist black nylon bags and the cross-hatched leather Saffiano bag.
ANSWER: **Prada** S.p.A.
[10] Like Versace and Dolce & Gabbana, Prada is headquartered in this fashion capital of Italy. This city in Lombardy has the largest metropolitan area of any Italian city.
ANSWER: **Milan** [or **Milan**o]
[10] Adama Ndiaye founded a fashion week in this city to compete with similar European events in cities like Milan and Paris. This city's island of Goree housed a major slave trading port under the Wolof dynasty.
ANSWER: **Dakar**, Senegal <Kothari>

10. For 10 points each, answer the following about the economic history of the Middle East.
[10] Much of the prosperity of the Middle East during the Middle Ages can be attributed to this network of trade routes that connected the Far East with the Middle East. It is named for a good produced by a type of worm.
ANSWER: **Silk Road**
[10] The western terminus of the Silk Road was this largest city in Syria. The world's largest covered market, the Souq Al-Madina could be found in this city and was its major marketplace.
ANSWER: **Aleppo**
[10] Along the Silk Road, travelers could stay in these inns, which were similar to *khans*. These inns could also be found along the Royal Road and the Grand Trunk Road.
ANSWER: **caravansaries** <Jose>

11. While studying in Paris under the medieval scholar Tubal Holofernes, this character caused over two hundred sixty thousand men to drown by urinating from Notre Dame cathedral. For 10 points each:
[10] Identify this literary character with a ravenous appetite, the son of Grangosier.
ANSWER: **Gargantua**
[10] Rabelais' follow-up to *Pantagruel* was titled the *Pantagrueline Prognostication* and was a parody of these types of works. Benjamin Franklin anonymously published several editions of this type of work under the pen-name Poor Richard.
ANSWER: **almanac**s
[10] Gargantua builds one of these institutions called Theleme for John of the Funnels where the presiding rule is "Do What You Like".
ANSWER: an **abbey** [or a **monastery**] <Bentley>

12. A methylene bridge links an atom of this metal to an atom of titanium in Tebbe's reagent. For 10 points each:
[10] Name this element which is predominantly used in the manufacture of soda cans.
ANSWER: **aluminum** [accept **aluminium** or **Al**]
[10] This process, named for the American and French chemists who discovered it independently, is the main industrial process for producing aluminum. About five percent of the U.S.'s electric energy is spent on this process.
ANSWER: **Hall–Héroult** (ay-ROO) process
[10] This molten ore is used as a solvent for alumina in the Hall–Héroult process. Historically mined in Greenland, this ore was once used to make lye.
ANSWER: **cryolite** <Jose>

13. This king began a mania for Chinese art in England by installing a Chinese drawing-room in Carlton House. For 10 points each:
[10] Name this monarch known for his lavish tastes and affairs with Lady Hertford and Lady Conyngham. This man became Prince Regent due to the insanity of his father.
ANSWER: **George IV** [or **George** Augustus Frederick **IV**; prompt on George]
[10] George IV introduced the Pains and Penalties Bill in order to perform this action on his queen, Caroline of Brunswick. The Matrimonial Causes Act of 1937 made it easier for women to initiate this procedure on the grounds of adultery.
ANSWER: **divorce** [or **annulment**; or **dissolution of marriage**]
[10] George IV helped make this English city a popular seaside destination by building the Royal Pavilion there. Quack doctor Richard Russell convinced people they'd get healthier by bathing in the sea water at this city.
ANSWER: **Brighton** <Bentley>

14. Htin Kyaw succeeded this man in March 2016. For 10 points each:
[10] Name this president of Myanmar who had previously been a prime minister and general. This man was criticized internationally for his approach to the Rohingya people, but praised for releasing many political prisoners.
ANSWER: **Thein Sein** [prompt on partial answer]
[10] In his role as prime minister, Thein Sein released this Nobel Peace Prize laureate from house arrest. This woman, who claims to control Htin Kyaw, cannot become president because her sons and former husband are British.
ANSWER: Aung San **Suu Kyi**
[10] Thein Sein was criticized after 2012 riots in Rakhine, which heavily implicated this anti-Islamic Buddhist group led by Ashin Wirathu.
ANSWER: **969** Movement <Reinstein>

15. In a one sentence short story by Lydia Davis, this author is "indignant that Scotland has so few trees." For 10 points each:
[10] Name this author of *A Journey to the Western Islands of Scotland*, who light-heartedly defined "monsieur' as "a term of reproach for a Frenchman" in his *Dictionary of the English Language*.
ANSWER: Samuel **Johnson**
[10] Johnson expanded his biography "The Life of Mr Richard Savage" into a collection named for, and describing, the lives of these kinds of people, other examples of whom include Abraham Cowley and James Thomson.
ANSWER: **poet**s [accept *The **Lives of the** Most Eminent English **Poets***]
[10] Johnson's own life was chronicled by this man, his biographer, who wrote *The Journal of a Tour of the Hebrides* during his Scottish voyage with Johnson.
ANSWER: James **Boswell** <Jose>

16. Identify the following about the artist Jacob Lawrence, for 10 points each.
[10] Some of Lawrence's greatest works were made when he was living in this neighborhood. Lawrence studied at its Community Art Center under Augusta Savage, and was championed by Alain Locke, the so-called "Dean" of a "renaissance" named for this neighborhood.
ANSWER: **Harlem**
[10] Lawrence described his style as the "dynamic" form of this art movement. Juan Gris made paintings in the Analytic branch of this movement.
ANSWER: **cubism** [or **cubist** art]
[10] Lawrence is perhaps best known for this series on the life of African Americans who moved north. A couple sit at a bare table beneath a pot hanging from an enormous nail in the tenth entry in this series, "They were very poor."
ANSWER: *The **Migration** Series* [or the **Migration** of the Negro] <Bentley>

17. This device was first demonstrated in 1851, the same year that Charles Wheatstone demonstrated another device demonstrating the rotation of the Earth. For 10 points each:
[10] Name this pendulum named for the French scientist who built the first one.
ANSWER: **Foucault** pendulum
[10] Give the measure in degrees of the latitude north or south of the Equator at which a Foucault pendulum takes exactly two days to return to its original position.
ANSWER: **30** degrees
[10] Leon Foucault also used to be the namesake of these electric currents which he studied by rotating a copper disc in a magnetic field. This term was originally used to describe the motion of water.
ANSWER: **eddy** currents <Reinstein>

18. Films produced during this era include *The Birth of a Nation* and *Four Horsemen of the Apocalypse*. For 10 points each:
[10] Name this period of Hollywood film, during which Charlie Chaplin directed, produced and starred in *City Lights*. Actors in this period often used miming since dialogue could not be easily conveyed.
ANSWER: **silent** era
[10] The silent era effectively ended when this film premiered. In it, Al Jolson's character says "Wait a minute, wait a minute, you ain't heard nothin' yet!"
ANSWER: *The **Jazz Singer***
[10] The aging former silent film star Norma Desmond memorably states "I am big, it's the pictures that got small" in this Billy Wilder film, in which the screenwriter Joe Gillis becomes her kept man.
ANSWER: ***Sunset Boulevard*** <Jose>

19. This man was stabbed to death in 1769 by a member of the Peoria tribe. For 10 points each:
[10] Name this chief of the Ottawa tribe and victor at the Battle of Bloody Run. Fort Pitt was besieged during a war named for this man.
ANSWER: **Pontiac** [or **Obwandiyag**]
[10] Pontiac's War was launched in the aftermath of this global conflict. George Washington marched in the Braddock Expedition and fought at the Battle of the Monongahela during this war.
ANSWER: **French and Indian** War [or **Seven Years**' War]
[10] This British general helped spark Pontiac's Rebellion by forbidding the sale of weapons to Native Americans. This man successfully laid siege to the fort of Louisbourg during the French and Indian War, and infamously ordered smallpox-infected blankets to be used against Pontiac's forces.
ANSWER: Jeffery **Amherst**, 1st Baron Amherst [or Geoffrey **Amherst** or Jeffrey **Amherst**]
<Bentley>

20. Answer the following about the philosophical notion of *kenon*, or "void," in ancient thought, for 10 points each.
[10] In his *Letter to Herodotus*, this philosopher believed that "bodies" moved in a void, since motion is not possible without "nothingness." This man taught in a school called "The Garden" and believed that pleasure was the highest good.
ANSWER: **Epicurus**
[10] Epicurus believed that these entities filled the void. Both Democritus and Leucippus proposed that the universe was composed of these fundamental units.
ANSWER: **atom**s
[10] This Roman Epicurean argued that atoms "swerved" in the void to create the "possibilities" of the universe in a long philosophical poem.
ANSWER: **Lucretius** <Jose>

21. For 10 points each, answer the following about inquiline species, organisms which use other organisms for housing.
[10] It is usually classified as this kind of symbiotic relationship, in which one party benefits but the other is unharmed.
ANSWER: **commensal**ism [or word forms]
[10] On the other hand, this inquiline species is no longer commensalistic, but instead acts as brood parasites. These birds lay their eggs in the nests of reed warblers, and then their newborn chicks push rival eggs out of the nest.
ANSWER: European **cuckoo** birds
[10] A chapter on inquilinism in ants is discussed in the EO Wilson book of this name subtitled "The New Synthesis." That book gave its name to this study of the relationship between evolution and behavior.
ANSWER: **sociobiology** [or ***Sociobiology**: The New Synthesis*] <Jose>