2019 Boston Latin Invitational Scholastic Series (BLISS) I Round 12

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Tossups

1. This ruler annexed the Nabataean kingdom upon the death of its king. His feud with Chosroes I of Parthia culminated in the sacking of Persepolis. This man had victories at Tapae and later at Sarmizegethusa with the help of his lieutenant Lucius Quietus, subduing a tribe in modern day (*) Romania. This man, the second of the Five Good Emperors, was succeeded by Hadrian in 117 A.D. His victories in Dacia are depicted on a namesake column. For 10 points, name this Roman Emperor under whom the Empire reached the greatest extent.

Answer: Marcus Ulpius Traianus or Trajan

2. Jacques Derrida wrote about the New International in a work named Specters of [this thinker]. György Lukács (George loo-Kotch) built on one of this thinker's treatises with his own theory of reification. This thinker called the unemployed a reserve army of labour. This thinker opposed Hegel by saying that society had a base and a (*) superstructure. This thinker's 200th birthday was recently celebrated by man of his contemporary supporters. That aforementioned treatise argued that workers were alienated from their labor. That work is Das Kapital. For 10 points, name this man who worked with Friedrich Engels to write the Communist Manifesto.

Answer: Karl Marx

3. One poem by this author opens "I made a fire; being tired/Of the white fists of old/Letters and their death rattle". That poem, "Burning The Letters", appears in this poet's *Collected Works*, for which this poet received the Pulitzer Prize for Poetry in 1982, 19 years after her (*) suicide. This poet used the pseudonym Victoria Lucas to write her only novel. That novel is about Esther Greenwood's electroconvulsive therapy. One of her most famous poems describes "A man in black with a Meinkampf look". For 10 points, name this author of "Daddy" and *The Bell Jar*.

Answer: Sylvia Plath

4. A work by this composer includes the Celebrant singing "A Simple Song". This composer of MASS wrote one work dedicated to JFK and later adapted by a Holocaust survivor, the Kaddish Symphony. This composer included "Glitter and Be Gay" and "Make Our Garden Grow" in an operetta based on a (*) Voltaire novella, Candide. This man conducted a series of educational "Young People's Concerts" as director of the New York Philharmonic. His most famous work includes the songs "A Boy Like That", "I Feel Pretty", and "Maria". For 10 points, name this conductor and composer of West Side Story.

Answer: Leonard Bernstein [yet another great BLS alumnus]

5. A naming convention for these compounds is based on two German words meaning "opposed" and "together". That practice is the E-Z naming convention. A similar but more restrictive naming convention uses cis-trans notation to denote isomers of these systems. Diazenes are analogous to these systems, but use nitrogen rather than carbon. Despite its name, acetylene (uh-set-il-een), is an (*) alkyne (al-kain), rather than one of these. These unsaturated compounds require at least two carbon atoms.

For 10 points, name these compounds consisting of a carbon carbon double bond, the simplest of which is ethylene.

Answer: <u>alkenes</u> (prompt on <u>double bonded systems</u> or similar but not <u>double bonds</u> as they are not compounds)

6. No less than 12 assassination attempts were made against this ruler, who built the Pont-Neuf in Paris. He added the Grande Galerie to the Louvre and constructed the Place des Vosges. He financed Samuel de Champlain's voyages and (*) converted to Catholicism to become king of France, declaring "Paris is well worth a mass." Known as "the Great", this baptised Catholic was raised as a Protestant. This King of Navarre was almost assassinated in the St. Bartholomew's Day Massacre. For 10 points, Catherine de' Medici plotted against what Good King of France?

Answer: <u>Henry IV</u> of France (or <u>Henri-Quatre</u>, <u>Good King Henry</u>, <u>Henry the Great</u> before mention or <u>Henry III of Navarre</u>; do not accept or prompt on <u>Henry III of France</u>)

7. In one song, this artist concludes by telling his audience to let their ambition carry them. In another, he rap-sings about his relationship with a certain celebrity, declaring that he is just "bad, bad news." However, he gets a title skin condition when she comes around. That celebrity is (*) Kylie Jenner. Some songs by this rapper include "COFFEE BEAN", "90210" (read as "nine-oh-two-one-oh"), and "goosebumps". While his real name is Jacques Webster, this artist has the nickname La Flame. For 10 points, name this rapper whose latest album ASTROWORLD included the hit "SICKO MODE".

Answer: <u>Travis Scott</u> (or <u>Cactus Jack</u>; accept <u>Jacques</u> Berman <u>Webster</u> II or <u>La Flame</u> before mention)

8. This formation can be used to determine the contact angle between a liquid and a solid. In some types of plastic tubes, this formation is unobservable. Whether this formation is convex or concave depends on the liquid. Examples of liquids that result in convex versions of this formation include mercury. It is due to this formation that (*) graduated markings on beakers are inaccurate. Graduated cylinders are narrow to minimize the effects of this formation. For 10 points, name this curve that forms due to surface tension and is used to make measurements in containers.

Answer: meniscus

9. Ernest Munch proposed a mechanism for transport in this tissue in which a certain material moves from sources to sinks through plasmodesmata as per the Pressure Flow Hypothesis. Active transport in this tissue is called translocation while most transport is done via (*) hydrostatic pressure. This tissue forms from the apical meristem, and it's still alive when mature. This tissue is the innermost layer of bark, and it's formed by companion cells and sieve tube elements. For 10 points, name this tissue which transports sugar and other nutrients unlike xylem.

Answer: phloem

10. The appellant in this case was seen the night before in a pool room with a bottle of wine. The original defendant, H.G. Cochran, retired during the trial. Hugo Black delivered the unanimous decision, which cited Powell v. Alabama. Jacob Bruce defended this case, which was successfully argued by the future justice (*) Abe Fortas. This ruling was extended to apply to police interrogations after Miranda v. Arizona. For 10 points, name this Supreme Court case heard by Earl Warren that required states to provide legal counsel to defendants.

Answer: Clarence Earl Gideon v. Louie L. Wainwright, Corrections Director

11. This group killed the boy Apsyrtus and cut his body into pieces to slow down his father. Amycus, a king of Bebryces, was killed by a blow to the ear from a member of this group. Heracles forced Polyphemus to search for Hylas when all three left this group. This group helped the blind seer Phineus when (*) Zetes and Calais chased away the Harpies. The leader of this group sent a dove through the Clashing Rocks and yoked a fire breathing bull before fleeing with Medea. For 10 points, name this group of great Greek heroes who sought the Golden Fleece with Jason.

Answer: Argonauts

12. A castle in this novel is set on fire by the daughter of its original lord. This novel is said to have greatly contributed to the modern perception of Robin Hood. A character in this novel who was thought to be dead appears and urges the title character to marry (*) Rowena. The protagonist of this novel fell out of favor with his father by supporting the Norman King Richard, who first appears as the Black Knight. This novel follows an Anglo-Saxon after the Third Crusade. That man is Sir Wilfred. For 10 points, name this historical novel by Sir Walter Scott.

Answer: Ivanhoe

13. This city names a seismic zone near the Mississippi River. This city received the Egyptian Temple of Debod as gratitude for this city's country helping with construction on the Aswan Dam. The Bridge of Segovia spans across the Manzanares River in this city. Twelve grapes are eaten on the New Year in this city's Puerta del Sol. This city was originally built to protect nearby (*) Toledo. This city contains a modern art museum named for Queen Sofia and the Prado. Philip II commissioned several works in this city. For 10 points, name this capital city of Spain.

Answer: Madrid (accept New Madrid Seismic Zone)

14. Young children intently stare at a bust of Vladimir Lenin in this artist's *Russian Classroom*. Many nationalities, religions, and ages pray together in this artist's *The Golden Rule*. Four men in suits wearing yellow armbands and the n-word appear in a work by this artist showing Ruby Bridges going to school. That work is *The* (*) *Problem We All Live With*. This artist created Rosie the Riveter. A woman holds a Thanksgiving turkey appears in *From Want*, one painting in this artist's *Four Freedoms* series. For 10 points, name this American artist who created covers for the Saturday Evening Post.

Answer: Norman Rockwell

15. The first symphony by this composer has an unusual third movement with a gavotte. This composer included the "Dance of the Knights" in a ballet. This man's very difficult 2nd piano concerto has the markings narrante and colossale. Fata Morgana curses the Prince to have the title desire in another composition by this man. This man wrote the ballet (*) Romeo and Juliet and Love for Three Oranges. This man used the oboe to represent the duck and a bassoon to represent the grandfather in one piece. For 10 points, name this composer of Peter and the Wolf.

Answer: Sergei Sergeyevich Prokofiev

16. One servant in this work only communicates through sign language. That man is Grimaud, and another servant is Planchet. A title character enters the priesthood while another retires to marry his wealthy mistress. The protagonist loves his landlord's wife, Constance Bonacieux, who is later killed by a woman with a (*) fleur-de-lis. Comte de Rochefort and Milady de Winter work against the Duke of Buckingham for Cardinal Richelieu in this work. The title characters say "all for one, and one for all". For 10 points, D'Artagnan joins the title men, Athos, Porthos, and Aramis, in what novel by Alexandre Dumas? Answer: *The Three Musketeers* (or *Les Trois Mousquetaires* (lay trwa mus-kuh-ter))

17. This treaty granted Switzerland complete independence from the Holy Roman Empire. The Peace of Münster, which was a part of this series of treaties, ended a conflict between Spain and the Dutch Republic, granting the latter independence. By recognizing an earlier treaty, all signatories of this treaty were allowed to choose their own form of (*) western Christianity. That earlier treaty was the Peace of Augsburg. Sweden obtained Verden, Wismar, Bremen, and much of Pomerania, which was split with Brandenburg-Prussia. For 10 points, name this treaty of 1648 that concluded both the 80 Years' War and the 30 Years' War.

Answer: Peace of Westphalia

18. Lew Allen led a commission to find the cause of an error near this object's relatively flat edge. In 1993, COSTAR was used to make corrections to this device's spherical aberration. Early galaxies appeared in this device's namesake Ultra Deep Field and Deep Field. In 2021, a similar item named for (*) James Webb will succeed this device. This object's namesake used his namesake constant in a law relating distance and the speed of the expansion of the universe. For 10 points, name this member of NASA's four Great Observatories named for an American astronomer.

Answer: **Hubble Space Telescope**

19. This figure grew up in Kapilavastu with his father Suddhodana. Kaundinya predicted that this man would not be a king, and he later followed this man as one of the Five Companions before becoming an arhat. This figure's mother gave birth 10 months after her dream of a six tusked white elephant piercing her womb. In Hinduism, this man is the ninth (*) avatar of Vishnu. After his charioteer showed him four men suffering, this man found the Middle Way and developed the Four Noble Truths. For 10 points, name this man who achieved enlightenment after sitting under the Bodhi tree.

Answer: **Buddha** or **Shakyamuni** or **Siddhartha Gautama** (accept either underlined portion)

20. The switched variety of these devices can be used like resistors in integrated circuits. These devices cannot function past the breakdown voltage. The time constant equals resistance times the namesake quantity of these devices in RC circuits. These devices can be made by placing a (*) dielectric between parallel plates. Leyden jars are an early example of these devices. The namesake quantity of these devices is equal to charge over voltage and is commonly measured with farads. For 10 points, name these devices which store electrical charge.

Answer: capacitors

21. A character in this novel dies of carbon monoxide poisoning while driving to visit her husband in the hospital. Characters in the title location accidentally see young girls showering in this novel. The main character becomes obsessed with the writings of Kilgore Trout, and he becomes (*) "unstuck in time" after being abducted by a race of aliens called the Tralfamadorians. The protagonists witness the firebombing of Dresden. For 10 points, Billy Pilgrim appears in what novel by Kurt Vonnegut?

Answer: Slaughterhouse-Five or The Children's Crusade: A Duty-Dance with Death

Bonuses

- 1. Answer the following about the War of 1812. For 10 points each:
 - a. Jean Lafitte, a pirate, supported American efforts against Edward Pakenham at this siege of a certain southern city. Andrew Jackson led forces at this battle.

Answer: Battle of New Orleans

b. A fleet built at Presque Isle Bay was used to obtain victory at this naval battle where the US commander led from the USS Lawrence and then the Niagara.

Answer: Battle of Lake Erie

c. This warhawk showed great support for the war and was present at the signing of the Treaty of Ghent which concluded it. He is also known for his support of the American System.

Answer: Henry Clay

- 2. The adrenal glands are above this organ. For 10 points each:
 - a. Name these bean shaped organs which filter blood.

Answer: kidneys

b. This term describes the functional unit of a kidney. It includes a glomerulus.

Answer: **nephron**

c. This capsule in the nephron tubule performs the first step of filtration by taking blood from the glomerulus. It is named for the English surgeon who discovered it.

Answer: Bowman's capsule

- 3. One of the Millenium Prize problems is to smooth out the solution to these equations. For 10 points each:
 - a. Name these doubly eponymous nonlinear partial differential equations which describe the motion of fluids.

Answer: Navier-Stokes equations

b. The Navier Stokes equations apply to flow named for this quantity. This quantity refers to a fluid's resistance to flow and can be thought of as thickness.

Answer: viscosity

c. When heat conductivity and viscosity are zero, the Navier Stokes equations simplify to what similar set of equations.

Answer: Euler's equations

- 4. Museums are pretty cool. For 10 points each:
 - a. This British Museum in this city is home to one of the world's largest collection, which includes the Elgin Marbles.

Answer: London

b. The Pergamon Museum and the Neues (noy-Es) Museum are on Museum Island in this city's Spree River. Those two buildings are part of this city's State Museums.

Answer: Berlin

c. The Museo del Barro features collection of indigenous clay art and contemporary work by South American artists in this capital city of Paraguay.

Answer: **Asuncion**

- 5. There are many branches of Protestant Christianity. For 10 points each:
 - a. George Fox founded this group which believes in God's existence in all people. William Penn established a colony for these pacifists who do not have official ministers.

Answer: Quakers (or Religious Society of Friends or Friends Church)

b. Ann Lee or Mother Ann founded this offshoot of the Quakers which practices celibacy and gains members through adoption. The hymn "Simple Gifts" was created by this group.

Answer: Shakers (or United Society of Believers in Christ's Second Coming)

c. John Wesley founded this sect which follows its namesake quadrilateral. George Whitefield preached for this group which has an African Episcopal denomination in the U.S.

Answer: **Methodism** or **Methodists**

- 6. This work shows a square at an angle within a larger square with a slightly different shade. For 10 points each:
 - a. Name this Kazimir Malevich work named for the title single color used throughout the painting.

Answer: White on White

b. Malevich worked in this art movement based on limited use of colors and geometric shapes. Malevich also created *Black Circle* and a far more elaborate work titled for this movement.

Answer: **Suprematism**

c. Malevich was from this modern day country. Malevich earlier created work for The Blue Rider exhibition which included several relocated artists like Wassily Kandinsky from this country.

Answer: Russian Federation

- 7. This author created a famous boy with a lightning shaped scar. For 10 points each:
 - a. This British writer is best known for creating such characters as Dumbledore and Lord Voldemort.

Answer: JK Rowling (or Joanne Rowling)

b. The first Harry Potter novel was published in 1997 as *Harry Potter and the Philosopher's Stone*. A year later in 1998, it was published in the United States with what title?

Answer: *Harry Potter and the Sorcerer's Stone*

c. In *Harry Potter and the Goblet of Fire*, what Central European country is defeated by Ireland in the finals of the Quidditch World Cup?

Answer: **Hungary**

- 8. Signature moves have defined basketball players since the days of Dr. Naismith. For 10 points each:
 - a. Kareem Abdul-Jabbar said he learned this move in the 5th grade. Unlike similar moves, it must be performed while airborne. Joel Embiid recently used this move against the Portland Trail Blazers.

Answer: skyhook

b. This move's most notable user created it with his longtime German coach after his 2007 MVP season calling it the "white version" of the Dream Shake. It helped him win the 2011 NBA Finals.

Answer: <u>Dirkleg</u> or <u>One-Legged Fadeaway</u> (accept any answers mentioning (Dirk or One-legged) and (jumper or fadeaway); prompt generously)

c. Jason Williams a.k.a. White Chocolate used this move in the 2017 NBA Celebrity Game and most notably with the Sacramento Kings. It is done in motion with the left hand setting it up for the the namesake part of right.

Answer: Elbow Pass (prompt on No-Look Pass)

- 9. A zither is played in six of these pieces by a certain composer. For 10 points each:
 - a. Name these pieces composed in 3/4 time by Johann Strauss Jr. Strauss Jr. was called the king of this type of dance.

Answer: waltzes

b. Strauss also wrote several of these dance pieces, including one named *Pizzicato* and another named *Tritsch-Tratsch*, meaning chit-chat.

Answer: polkas

c. This Strauss waltz was inspired by Franz Joseph's visit with Wilhelm II. It was originally titled *Hand in Hand*.

Answer: Emperor Waltz or Kaiser Waltz (or Kaiser Walzer)

- 10. While they could not write, the Inca were nonetheless a well-organized empire. For 10 points each:
 - a. These devices, made of variously colored strings with knots, were used to record information.

Answer: quipus

b. Because they lived in mountainous land, this type of farming was used. Its stair step pattern allowed for more complete use of the hilly terrain.

Answer: terraced farming

c. Although this technology was used in toys, there is no evidence that any Mesoamericans used this fundamental technological development for practical use. The President recently compared this item to a wall.

Answer: the wheel

- 11. Name these things related to the Bifrost Bridge and Ragnarok. For 10 points each:
 - a. During Ragnarok, the jotunn will attack this realm of the gods across the Bifrost.

Answer: Asgard

b. Because of his weight, Thor is actually not allowed to use the Bifrost to cross between realms and attack this creature. This creature will let go of its tail which circles a certain realm to begin Ragnarok.

Answer: Midgard serpent or Jormungardr

c. During Ragnarok, giants from this realm of fire led by Surtr will break Bifrost Bridge.

Answer: **Muspelheim** or **Muspell**

- 12. Iranian government has changed significantly over the last century. For 10 points each:
 - a. This Middle Eastern term for "king" was used to describe the rulers of the Pahlavi dynasty.

Answer: Shah

b. This "Supreme Leader" of Iran seized power from Mohammad Reza Pahlavi and led a revolution in 1979.

Answer: Grand Ayatollah Sayyid Ruhollah Musavi Khomeini

c. This reformer was overthrown in Operation Ajax by the CIA and Kermit Roosevelt. He had attempted to nationalize Iran's oil industry.

Answer: Mohammad Mosaddegh

- 13. Sometimes mail can be dangerous. For 10 points each:
 - a. In October 2018, the Secret Service discovered a bomb sent to this former Secretary of State and unsuccessful presidential candidate.

Answer: Hillary Rodham Clinton (prompt on Clinton; do not accept or prompt on Bill Clinton)

b. Another pipe bomb was sent to this Hungarian born philanthropist. This man, accused of "turning in his fellow Jews" during the Holocaust by Roseanne Barr, is a frequent target of criticism from the far right.

Answer: George Soros

c. This Democrat and U.S. Representative from California was also the target of pipe bombs. This woman is known for addressing issues in the African-American community and attacked President Obama's inaction in 2011.

Answer: Maxine Moore Waters

- 14. This man wrote under the pen name Johannes de Silentio or John of Silence. For 10 points each:
 - a. Name this Christian Danish existentialist philosopher who wrote *Either/Or*.

Answer: Soren Aabye Kierkegaard

b. Kierkegaard called this man a Knight of Faith for his willingness to sacrifice his son.

Answer: **Abraham** or **Abram**

c. That observation by Kierkegaard appears in this book which takes its title from a verse in the letter to the Philippians.

Answer: Fear and Trembling

- 15. Answer some questions about home cleaning chemicals. For 10 points each:
 - a. Name this chemical which is usually sold with a 5 to 10 percent concentration. It has formula NH₃. (read as "N-H-3")

Answer: <u>ammonia</u> (or <u>azane</u>)

b. Give the formula of sodium perchlorate or bleach, a common chemical sold by Clorox with molar mass 74.4 grams per mole.

Answer: NaClO₄ (read as "N-A-C-L-O-4") (do not accept or prompt on bleach)

c. At home, it is best to avoid mixing hydrogen peroxide with this chemical used commonly in nail polish remover. You should do so in order to avoid the formation of a dangerous explosive.

Answer: <u>acetone</u> (or <u>dimethyl ketone</u> or <u>propanone</u>; prompt on C₃H₆O (read as "C-3-H-6-O"))

- 16. This poem begins "The sea is calm tonight". For 10 points each:
 - a. The titular location of this poem is world famous for its "White Cliffs" that overlook the English Channel.

Answer: "Dover Beach"

b. This English poet wrote "Dover Beach". His other poems include "The Scholar-Gipsy".

Answer: Matthew Arnold

c. Arnold wrote this work as an elegy to this English poet, Arthur Hugh Clough. This work is named for a shepherd created by Virgil.

Answer: "Thyrsis"

- 17. Answer some questions about alternating current. For 10 points each:
 - a. Name this effect which causes current to be stronger at the surface of a conductor.

Answer: Skin effect

b. Alternating current was pioneered by this Serbian scientist who built his namesake coils.

Answer: Nikola Tesla

c. Tesla worked for this AC based company which was attacked by Thomas Edison in the "War of Currents".

Answer: Westinghouse Electric Company

- 18. This novel graphically described the Chicago meatpacking industry. For 10 points each:
 - a. In this novel, the protagonist Jurgis Rudkus goes to jail for attacking Phil Connor, a factory boss who raped Jurgis' wife, Ona.

Answer: *The Jungle*

b. This muckraking novelist wrote *The Jungle*. His other work includes *The Brass Check* and *King Coal*.

Answer: **Upton Sinclair**

c. In *The Jungle*, this Democratic party boss is involved in the housing scam which defrauds the Rudkus family.

Answer: Mike Scully (accept either underlined portion)

- 19. The Balkan Wars caused significant turmoil. For 10 points each:
 - a. This nationalist party assassinated Nazim Pasha, the Chief of Staff of the Ottoman forces, during a coup over the frustration of losing the traditional Ottoman capital of Edirne to Bulgaria.

Answer: **Young Turks**

b. The London Peace Conference concluded the First Balkan War. It discussed the territory of this modern day country with capital in Tirana which declared independence prior to the conference.

Answer: Republic of Albania

c. This nation, with a capital at Podgorica, acquired Sandžak (san-Jak) in its war with the Ottomans.

Answer: Kingdom of Montenegro

- 20. Pencil and paper ready. You will have 10 seconds per bonus. Consider the number 2019. For 10 points each:
 - a. 2019 is divisible by which prime number less than 10.

Answer: $\underline{3}$ or $\underline{\text{three}}$ [(2+0+1+9)/3=4; clearly not divisible by 2 or 5; 2019/7=288 3/7]

b. What is the smallest power of 3 greater than 2019? Both the power and the number are acceptable.

Answer: <u>seven</u> or $\underline{3^7}$ (read as "three (raised) to the seventh") or $\underline{2187}$ or <u>two thousand</u>, <u>one hundred and</u> <u>eighty-seven</u> [729<2019<2187 or 3^6 <2019<37)

c. Given that it is possible to draw 2019 diagonals from each vertex of a convex polygon, how many sides does the polygon have?

Answer: **2022** or **two thousand and twenty-two** [2022-3=2019; If there are n sides or vertices in a convex polygon, n-3 diagonals can be drawn to each of the other vertices- excluding the two adjacent vertices as those "diagonals" are just sides]

- 21. This character first appears as a dog. For 10 points each:
 - a. A scholar signs a contract with blood with this demon to eventually go to Hell. Till then, this demon will help him do things like seduce Gretchen.

Answer: Mephistopheles

b. Mephistopheles appears in this German author's *Faust*.

Answer: Johann Wolfgang von Goethe (Ger-tuh)

c. In Goethe's *The Sorrows of Young Werther*, Werther loves this fiancee of Albert. Thomas Mann wrote a novel about Goethe titled *[this woman] in Weimar*.

Answer: <u>Lotte</u> (law-tuh)