2019 Boston Latin Invitational Scholastic Series (BLISS) I Round 5

Head Edited by Christy Jestin and Nicholas Weiske; Literature Edited by Kelin Carpenter; Written by Lucas Aho, Samuel Cheever, Kyler Hoogendorn Ecker, Aidan Goldberg, Jerry Han, Christy Jestin, David Liu, Kevin S. Qi, Sebastian Suarez, Joseph Terrey, Austin Wang, Nicholas Weiske, Alice Wu, Lily Yang, and Alex Young

Tossups

- 2. This artist created a self portrait in his depiction of St. Bartholomew holding his flayed skin and included a monkey behind another figure. That figure was part of a large work by this man including statues of Rachel and Leah. This man included Rebellious Slave and Dying Slave in his tomb for Pope Julius II. This man's sculpture of (*) Moses is notable for its horns. This man created a marble statue of another Biblical figure with a contrapposto stance. That figure carried a sling over his left shoulder. For 10 points, name this Italian Renaissance artist of David and the Sistine Chapel Ceiling.

 Answer: Michelangelo Buonarroti (accept either underlined portion)

3. In addition to this show's 1983 and 2002 remakes, another will be directed by Jordan Peele. Though scripts were originally meant to be written by members of the public, its writers have included George R. R. Martin and Ray Bradbury, who wrote the episode "I Sing the Body Electric". Donna Douglas is plagued by (*) "ugliness" despite being attractive to a contemporary viewer in one episode. A

"Nightmare at 20,000 Feet." For 10 points, name this science fiction show created and narrated by Rod Serling.

young William Shatner appears to go crazy on an airplane in one of this series' most famous episodes:

Answer: The Twilight Zone

- 4. A throne is often placed atop this goddess' head in depictions while the tyet is a knot symbolizing this deity. This goddess healed the son of a rich woman after he was bitten by the seven scorpions who protected this goddess. In some versions, Anubis was adopted by this goddess, whose husband slept with her sister disguised as this goddess. Ra (*) revealed his secret name to her. This goddess travelled to Byblos, and her sister Nephthys helped her find the severed parts of her husband's body after he was killed by Set. For 10 points, name this Egyptian goddess, the wife of Osiris and mother of Horus. Answer: Isis
- 5. This graduate of Boston Latin School once said "if I am the Devil's child, I will live then from the Devil". This thinker wrote that one should be able to "walk the world over" and "not be able to find a condition inopportune or ignoble". This author of "Nature" theorized a spirit which is in the souls of every human: the (*) oversoul. This thinker gave "The American Scholar" speech at Harvard, and he wrote the phrase "A foolish consistency is the hobgoblin of little minds". This friend of Henry David

Thoreau argued for solitude and nonconformity. For 10 points, name this Transcendentalist author of "Self Reliance".

Answer: Ralph Waldo Emerson

6. The only human cells with these organelles are nurtured by Sertoli cells. The arrangement of these organelles can be described as monotrichous, lophotrichous, or amphitrichous. The axoneme, or center, of these organelles contain microtubules in a (*) "nine plus two" arrangement, referring to nine doublets surrounding one pair in the center. While not cilia, these cells contain a basal body at their base and are part of the plasma membrane. These organelles resemble tails and are often used for motility. For 10 points, name these organelles that help sperm cells move.

Answer: flagella or flagellum

7. In a novel by this author, Tiny makes a fortune in the Alaska Gold Rush, and Lena becomes a dressmaker. That novel is set in Black Hawk, Nebraska. In another work by this author, Frank Shabata kills his wife and her lover, while Carl is driven out of town. Two Catholic priests are sent to New Mexico, in a novel by this writer. This author set a novel in Moonstone, Colorado, in which Thea (*) Kronborg travels to Chicago to become an opera singer. That work is the Song of the Lark. For 10 points, name this author of O Pioneers! and My Antonia.

Answer: Willa Cather

8. The Age of Liberty began upon the death of one of this ruler's enemies. Boris Sheremetev led a delegation to Malta on behalf of this person in order to learn their military tactics. This ruler built a city near Schlüsselburg after fighting in a long war that included the Pruth River Campaign, which cost him land on the (*) Black Sea. He signed the Treaty of Nystad that concluded the Great Northern War against Charles XII and Sweden. His namesake city on the Neva River is known as Russia's window on the west. For 10 points, name this six foot eight Russian king who won the Great Northern War.

Answer: Tsar Peter I the Great (accept either I or Great) or Peter Alexeyevich

9. This person once said "the government has permissible interests in favoring fetal life" in response to one court ruling. Despite this person's later promotion, a majority of Congress members agreed it would be unwise to impeach this person. In his hearing, (*) Lindsey Graham said this person came to the "wrong town at the wrong time." Rachell Mitchell and the Senate Judiciary Committee questioned one of the three women who accused this person of sexual assault. For 10 points, Christine Blasey Ford accused what Supreme Court Justice who popularized the term "boofing" and "likes beer."

Answer: Brett Michael Kavanaugh

10. This element is produced via the Deacon process, a response to the environmental danger posed by the Leblanc process. A now well known organo- one of these was brought to the public spotlight by Rachel Carson in *Silent Spring*. That molecule is known as DDT. Some compounds containing this element have been used as chemical weapons including (*) phosgene and mustard gas. In fact, this element by itself has been used as a chemical weapon due to its ability to form hydrochloric acid in mucus membranes. For 10 points, name this element that occurs naturally as Cl₂ (read as "C-L-2").

Answer: chlorine

11. In 1924, this composer "lobbied shamelessly" to maintain the role of Master of the King's Musick which this composer later took on. After health issues and a lack of practice, this composer's Opus 85 was a failure until 1965. That piece gained popularity years later when Jacqueline du Pre played (*) Cello Concerto in E Minor. Augustus Jaeger was the dedicatee of this composer's "Nimrod" section. This

composer also wrote *The Dream of Gerontius* and *Land of Hope and Glory*. For 10 points, name this British composer of the *Enigma Variations* and *Pomp and Circumstance*.

Answer: Edward Elgar

12. Jack London reported on this conflict during which a Baltic fleet accidently fired on British ships in the Dogger Bank incident. The terms of this war's treaty were protested by riots at Hibiya Park though that side won the war as well as the battle of Mukden. It began when one side gained a port on the Liaodong Peninsula, (*) Port Arthur. After the battle of Tsushima, Teddy Roosevelt negotiated the Treaty of Portsmouth along with Komura Jutaro and Sergei Witte. For 10 points, name this conflict for influence in Korea and Manchuria between nations led by Czar Nicholas II and Emperor Meiji.

Answer: Russo-Japanese War (accept War between Russia and Japan)

13. In one work by this author, Rogozhin kills the protagonist's lover Nastasya. That work about Prince Myshkin is *The Idiot*. In another work, Alyosha kisses his brother, an atheist named Ivan, after he delivers the poem "The Grand Inquisitor". That work by this author includes the bastard son, Smerdyakov. Another work by this man includes the (*) ax murder of Alyona, a pawnbroker. In that work, Porfiry Petrovich investigates the murder committed by Raskolnikov. For 10 points, name this Russian author of *Brothers Karamazov* and *Crime and Punishment*.

Answer: Fyodor Mikhailovich Dostovevsky

14. This river's source is the Chambeshi River though the Lualaba contributes more water. Hydroelectric dams were built on this river at Inga Falls and are named Inga I and Inga II. Another tributary of this river, the Kasai, forms a border with Angola. This river which flows from Lake Tanganyika expands into Malebo Pool. A railroad was built from Matadi to a city formerly called (*) Leopoldville to bypass the unnavigable Livingstone Falls on this river. For 10 points, name this 2nd longest and deepest river in Africa that separates Kinshasa from Brazzaville.

Answer: Congo River or Zaire River (or Nzadi Kongo)

15. Limnic eruptions can occur in these bodies, often killing all life in the vicinity due to the massive release of carbon dioxide. Tarns refer to a type of these bodies which form in glacially-carved cirques. The terms meromictic and holomictic describe how often layers in these bodies are mixed. Though not rivers, the oxbow variety describes (*) meanders in a river which are then isolated from the rest of the river. These bodies differ from lagoons and ponds in location and size respectively. For 10 points, name these bodies of water which are usually surrounded by land, an example of which is Huron or Superior.

Answer: <u>lake</u>s

16. This composer used the Dresden amen from his childhood to represent the grail in one work. This composer wrote an opera concerning a love potion in *Tristan and Isolde*. This composer of *Parsifal* had work performed in an opera house at Bayreuth (bai-Royth). The curse of the title character is relieved by Senta in this composer's opera, *The* (*) *Flying Dutchman*. "Gotterdammerung", "Rhinegold", and the Ride of the Valkyries scene are part of this composer's most famous work. For 10 points, name this German composer of the Ring Cycle.

Answer: Richard Wagner

17. In this book, a woman is turned into a pillar of salt after looking back at a town about to be destroyed. That woman's daughters had children by their drunken father Lot in this book. Another drunken father cursed his son Ham for not covering his naked body. Lot left Haran for Canaan with

his uncle, who fathered (*) Ishmael with his servant Hagar in this book. That uncle Abraham is also promised many descendants in a covenant. In other stories, Noah built a ark for all the animals, and Adam and Eve were expelled from the Garden of Eden. For 10 points, name this first book of the Old Testament. Answer: **Book of Genesis** or **Bereshit** (prompt on **Bible**, **Old Testament**, **Hebrew Bible**, or **Tanakh** before mention; do not prompt on **New Testament**)

- 18. This politician provoked war with Russia when he claimed the right to protect holy sites under the control of the Ottoman Empire. He stationed a garrison to defend Rome from Italian annexation and sent the warship Charlemagne to intimidate the Ottomans under Sultan Abdulmecid, sparking the (*) Crimean War. He defeated the Austrian ruler Franz Joseph at the battles of Solferino and Magenta. Ferdinand Maximilian was installed as the Emperor of Mexico by this French leader. For 10 points, name this monarch of the Second French Empire who shared a name with his uncle Bonaparte. Answer: Napoleon III (or Charles-Louis Napoléon Bonaparte; prompt on Napoleon; do not accept or prompt on Napoleon I or Napoleon Bonaparte)
- 19. This play simply begins "A country. Road. A tree. Evening". One character in this work begins a monologue after being told to "think" but stops when his hat is removed. Another character cannot remove his boot and stays in a ditch all night after he is beaten up. After a boy calls his friend Mister Albert, he tries to kill himself. That character, (*) Gogo, reminisces about throwing himself into the Rhone while talking to Didi. Pozzo and his slave Lucky meet two men performing the title action. For 10 points, name this play by Samuel Beckett in which Estragon and Vladimir anticipate someone's arrival. Answer: Waiting for Godot
- 20. This man wrote the Hulsemann letter supporting the Hungarian revolution of 1848. In defense of his alma mater, he said "there are those who like it", referring to his school in a case versus Woodward. He lost a court case arguing for a state's ability to tax the National Bank; that case was (*) McCulloch v. Maryland. Although he was an abolitionist, his Seventh of May speech defended the Compromise of 1850 and ultimately lost him his Senate seat. For 10 points, name this Massachusetts lawyer and Senator who declared "Liberty and Union, now and forever, one and inseparable!".

Answer: Daniel Webster

21. In Einstein's field equations, this quantity is raised to the negative fourth power. When a particle in a medium surpasses this quantity for that medium, the result is Cherenkov radiation. Vacuum permeability times permittivity equals this constant squared. The (*) meter was recently redefined to be based on a fraction of this quantity. Einstein hypothesized that energy equals mass time this constant squared. This quantity's namesake entity is measured in photons while this quantity is usually expressed in meters per second. For 10 points, name this fastest speed known to man.

Answer: $\underline{\mathbf{c}}$ or <u>speed of light</u> (or $\underline{\mathbf{3}} \cdot \underline{\mathbf{10}^8}$ m/s read as "3 times 10 to the eighth meters per second")

Bonuses

- 1. Over the years, many books and authors have faced condemnation from the Church. For 10 points each:
 - a. This author was criticized by the Church for his negative portrayal of Christianity. He wrote about a mystery surrounding Leonardo Da Vinci and Christ himself in *The Da Vinci Code*.

Answer: Dan Brown

b. This author also generated controversy about the His Dark Materials trilogy. In this author's *The Amber Spyglass*, the protagonists literally kill God.

Answer: Philip Pullman

c. This woman has also been labelled as Anti-Christian because of the tumultuous relations in her adult romance series *Twilight*.

Answer: Stephanie Meyer

- 2. Hope you're hungry. For 10 points each:
 - a. This elephant headed Hindu god is known for his love of ladoos and modaks or sweet dumplings. A recent ad in Australia showing this god eating lamb with other religious figures like Jesus and Ron Hubbard sparked outrage among Hindus.

Answer: Ganesha (or Gajanana or Ganapati)

b. The Greek gods ate this substance along with nectar. In one story, Tantalus stole this substance and nectar for humans.

Answer: ambrosia

c. This man was punished by Demeter with insatiable hunger after cutting down a sacred tree. At first he sold his shapeshifting daughter Mestra everyday to buy food but eventually he was forced to eat himself.

Answer: **Erysichthon** [he was able to survive because she changed back into a human and returned after being sold each day]

- 3. George Washington was a common subject in art. For 10 points each:
 - a. Emanuel Leutze created this most famous depiction. It shows Washington looking out at the water with his leg on the rim of a boat and a flag flying behind him.

Answer: Washington Crossing the Delaware

b. This Grant Wood painting shows Washington admitting to cutting down a cherry tree as a child. In this work, the title author pulls back a curtain to show the incident.

Answer: Parson Weem's Fable

c. This artist of *The Skater* created contemporary depictions of Washington. The Lansdowne portrait shows him with an outstretched right arm while the Athenaeum portrait graces the dollar bill.

Answer: Gilbert Stuart

- 4. Derivatives are so cool. For 10 points each:
 - a. The derivative of a point on a function yields this quantity for the tangent line at that point. This quantity is 0 for the line y=8.

Answer: slope

b. This quantity is squared in the denominator of the derivative of f(x)/g(x) [read as "f of x over g of x"] by the quotient rule.

Answer: g(x)

c. Derivatives are used in this rule. This rule applies to limits in the form 0/0 or ∞/∞ (read as "zero over zero or infinity over infinity".

Answer: <u>L'Hopital's</u> rule (Loh-pi-tahls)

- 5. Name the following Civil War battles. For 10 points each:
 - a. Ulysses S. Grant won this battle in southwestern Tennessee in 1862 because the "Hornet's Nest" provided sufficient cover while his troops regrouped to attack again.

Answer: Battle of Shiloh or Battle of Pittsburg Landing

b. This naval battle is often referred to as the Battle of Ironclads, since it saw the first use of ironclad warships in the USS Monitor versus the CSS Virginia.

Answer: Battle of Hampton Roads

c. This first battle of Grant's Overland Campaign was so named because of the tangled woods in which it was fought.

Answer: Battle of the Wilderness

- 6. Bonds hold the world together. Answer some questions about the chemistry kind. For 10 points each:
 - a. These entities describe the region in which one could possibly find an electron. They come in s, p, d, and f forms. Ionic bonds complete these entities.

Answer: atomic orbitals (do not accept molecular orbitals)

b. This quantity can be determined by how many bonds are formed between two atoms. In a compound such as benzene however, this value can be non-integer.

Answer: **bond order**

c. A bond order of five is most well known in this metal. As a result, it must be stabilized by bulky ligands.

Answer: chromium (accept Cr)

- 7. This soldier elopes with the youngest member of the Bennet family. For 10 points each:
 - a. Name this ladies' man who marries Lydia when his debts are paid by Mr. Darcy.

Answer: George Wickham

b. Mr. Darcy originally treats this second oldest and favorite daughter of Mr. Bennet with indifference.

Answer: Elizabeth Bennet (or Eliza or Lizzy)

c. Mr. Wickham, Lydia, and Elizabeth Bennet are characters in this Jane Austen novel.

Answer: **Pride and Prejudice**

- 8. Pencil and paper ready. You will have 10 seconds per bonus. Consider the circle given by the equation $x^2+y^2=38$ (read as "x squared plus y squared equals thirty-eight"). For 10 points each:
 - a. Give the coordinates of the center of the circle.

Answer: (0,0) (accept the <u>origin</u>) [Because neither x nor y have coefficients, the center of the circle must be on both x=0 and y=0; the only intersection is (0,0)]

b. To the nearest integer, give the length of the circle's diameter.

Answer: **12** or **twelve** [$\sqrt{38} \approx 6$; $2\square 6=12$]

c. To the nearest integer, give the area of the squared inscribed in the circle. Consider the relationship between the radius of the circle and the side of the square or the diameter of the circle and the diagonal of the square.

Answer: <u>76</u> or <u>seventy-six</u> [diagonal of square is same length as diameter; $(2\sqrt{38}/\sqrt{2})^2=4\square 38/2=76$ $(\sqrt{38}\square\sqrt{2})^2=38\square 2=76$]

- 9. Answer the following questions about foreign conquests by Italy. For 10 points each:
 - a. Mussolini invaded this small Balkan state ruled by King Zog I in 1939.

Answer: Albania

b. This African colony known as the "fourth shore" was created in 1930 when Cyrenaica and Fezzan were absorbed by a smaller namesake province.

Answer: Italian Libya

c. This Ethiopian king defeated the first Italian attempt to absorb the country at the battle of Adwa.

Answer: Menelik II (prompt on Menelik)

- 10. This practice was studied in Papua New Guinea. For 10 points each:
 - a. Name this practice practiced by the Trobriand Islanders. One anthropologist wrote about the lack of altruism and the concept of reciprocity in one instance of this practice: the Kula Ring exchange.

Answer: <u>gift-giving</u> or <u>exchange</u> (accept appropriate descriptions and obvious equivalents)

b. This Polish-born anthropologist described the Kula ring exchange in *Argonauts of the Western Pacific*.

Answer: Bronisław Malinowski

c. Malinowski established the dichotomy between these two concepts in *Magic, Science, and Religion*.

Answer: **sacred** and **profane** (accept either order; both parts are necessary)

- 11. Unfortunately, some of the world's wealthiest places are accompanied by its biggest slums. For 10 points each:
 - a. Dharavi is part of this Indian financial hub and heart of Bollywood in Maharashtra. This city is home to a famous cricket ground called Azad Maidan.

Answer: Mumbai

b. Ciudad Nezahualcóyotl (syu-Dhad ne-Tsa-wal-coh-Yo-til)) or Neza is a steadily progressing slum of this capital city where many migrants came after World War II. This city's El Zocalo is officially called Constitution Square.

Answer: Mexico City

c. This city's slum of Kibera is the biggest in Africa, and most of its landowners are absentees from the country's majority group, the Kikuyu. This city replaced Mombasa as the capital city.

Answer: Nairobi

- 12. 2018 brought many new faces and identities into Congress. For 10 points each:
 - a. This woman was elected to represent New York City. Her victory upset the number 4 Democrat in the house, Jim Crowley. She identifies as a Democratic Socialist.

Answer: Alexandria Ocasio-Cortez

b. This woman represents Michigan's 13th district. She is the first Palestinian in Congress and faced controversy in late 2018 after telling her child "We're gonna impeach the mother----er." in reference to the President.

Answer: Rashida Tlaib

c. This woman, along with Tlaib, is the first Muslim in Congress, as well as the first Somali-American. She represents Minnesota's fifth Congressional district.

Answer: Ilhan Omar

- 13. It's bad when you see blood, but it's actually quite useful when you don't. For 10 points each:
 - a. Name these largest blood vessels that send oxygenated blood away from the heart. The carotid and coronary are examples of these.

Answer: **arteries** or **artery** (do not accept or prompt on **arterioles**)

b. This condition occurs when blood clots inside normally healthy blood vessels, blocking circulation. It can cause ischemia (is-Kee-mee-a) or necrosis and comes in a deep vein form.

Answer: thrombosis (accept deep vein thrombosis)

c. Sometimes, these pieces of the clot will break off and travel through the body, becoming potentially deadly if they reach the heart.

Answer: **embolus** or **embolism**

- 14. In this novel's city of Pandemonium, Satan and his minions make a certain plan. For 10 points each:
 - a. Name this epic poem in which Satan tempts Adam and Eve in the Garden of Eden.

Answer: Paradise Lost

b. This blind English author wrote *Paradise Lost*.

Answer: John Milton

c. This pastoral elegy by Milton mourns the drowning of Edward King in the Irish sea.

Answer: *Lycidas*

- 15. Some minority players have been able to succeed in leagues of predominantly one race. For 10 points each:
 - a. This Asian American dominated at Palo Alto, but received no D1 offers except Harvard and had short stints with multiple teams before becoming a household name with the New York Knicks.

Answer: Jeremy Shu-How Lin (accept Linsanity)

b. This Caribbean Canadian learned to play in Montreal and is now a premier defenseman for the Nashville Predators. He has been nominated thrice and won the Norris Trophy in 2013.

Answer: Pernell-Karl Sylvester "P.K." Subban (accept Subbanator)

c. Despite joining the Seattle Mariners at 27, this 10-time Japanese MLB All-Star has over 3,000 hits at an average of .311. He recently joined the team's front office after stints with the Yankees and Marlins.

Answer: Ichiro Suzuki (accept either underlined part)

- 16. Until it surrendered to the Allies in 1945, Japan had several colonies in Asia. For 10 points each:
 - a. This nearby peninsular country was occupied by Japan from 1910-1945. It was later partitioned into north and south portions.

Answer: Korea (or Hanguk or Choson)

b. Japan set up this puppet state in northeastern China with the last Qing emperor, Pu Yi, as head of state.

Answer: Manchukuo (or Manzhouguo)

c. Japan received this island in the Treaty of Shimonoseki in 1895. The short lived republic with this island's alternate name resisted occupation until the city of Tainan surrendered.

Answer: <u>Taiwan</u> or <u>Formosa</u> (accept <u>Republic of Formosa</u>)

- 17. Josiah Willard Gibbs first described the concept of his "free energy" in 1873. For 10 points each:
 - a. Gibbs free energy is part of this branch of physics concerned with heat, pressure, and volume.

Answer: **thermodynamics**

b. This quantity is often defined as the integral of pressure with respect to volume. This quantity is also internal energy plus or minus heat transferred.

Answer: work

c. Pressure, volume, and Gibbs free energy are these kinds of functions. These functions do not depend on how equilibrium was reached.

Answer: state functions

- 18. There are many horns. For 10 points each:
 - a. This three valve brass instrument is usually pitched in B \(\bar{b} \) major. Dizzy Gillespie and Louis Armstrong played this instrument.

Answer: **trumpet**

b. Louis Armstrong switched over from this smaller, mellower brass instrument which was eclipsed by the trumpet. This instrument has a conical bore or tubing rather than the trumpet's cylindrical bore.

Answer: cornet

c. This relative of the cornet and the flugelhorn resembles a euphonium but only has three valves and a narrower bore.

Answer: baritone horn

- 19. In this play, the protagonist dances the tarantella to prevent her husband Torvald from opening a letter. For 10 points each:
 - a. Name this play in which Krogstad blackmails his manager's wife, Nora.

Answer: A Doll's House

b. A Doll's House was written by this Norwegian playwright.

Answer: Henrik Ibsen

c. Nora is angered by her husband Torvald's repeated claims that corrupt individuals like herself and Krogstad will harm these people. She talks with Anna about these people and how easily they get used to new situations.

Answer: her <u>children</u> (accept obvious equivalents)

- 20. Many empires have ruled in India. For 10 points each:
 - a. Akbar the Great was a part of this Muslim empire which was founded by Babur. Shah Jahan, who built the Taj Mahal, and Aurangzeb, who gave Bombay to the British, were rulers of this empire.

Answer: Mughal Empire or Mogul Empire

b. As the Mughals declined, this Hindu empire gained power led by peshwas like Shivaji. After the 3rd Battle of Panipat, they fought 3 wars with the British before falling in 1818 under Baji Rao II.

Answer: Maratha Empire or Maratha Confederacy

c. This Tamil empire, which flourished under Rajaraja I and Rajendra I, invaded the Srivijaya empire and conquered Sri Lanka. It built the Brihadisvara (bri-hah-dis-vah-rah) temple at Thanjavur.

Answer: Chola Empire

- 21. Different cultures celebrate the New Year differently. For 10 points each:
 - a. This holiday celebrates the Jewish New Year. On this day, apples are dipped in honey and the shofar is blown.

Answer: Rosh Hashanah

b. This originally Zoroastrian holiday celebrates the Persian New Year. This holiday is still celebrated during the spring equinox in Iran despite the arrival of Islam.

Answer: Nowruz

c. During this holiday, lanterns are made in the shape of a rabbit or the current zodiac symbol. The Lantern Festival occurs on the fifteenth and last day of this lunar festival, during which many return to family homes.

Answer: Chinese New Year or Chun Jie (chun-jeeay) (or Spring Festival or Yuan Tan)