## 2019 Boston Latin Invitational Scholastic Series (BLISS) I Round 1

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## Tossups

1. Fireworks left over from July 4th were used as weapons in this event. This event's leader Hugh O'Donnell appealed to Whitelaw Reid for help. Governor Pattison called upon the militia after both Sheriff William McCleery and Frederick Heinde's regiment of (*) Pinkerton Soldiers failed to put an end to this strike. In this event, the Amalgamated Association of Iron and Steel Workers fought back against Henry Clay Frick's anti-unionist policies. For 10 points, name this protest opposing the Carnegie Steel Company.
Answer: Homestead Strike
2. The "dark" type of these have relatively high densities and are able to block out visible light that would otherwise pass through them. H II regions are a type of these formed from the ultraviolet radiation of young stars. The Pillars of Creation are part of one of these named Eagle. These come in emission and (*) planetary varieties, depending on the way they are formed. These structures can be formed after a supernova, such as the one observed by Chinese astronomers in 1054. For 10 points, name these interstellar clouds of dust and ionized particles, an example of which is the Crab.
Answer: nebulae (anti-prompt on emission nebulae or planetary nebulae before mentioned)
3. This artist showed a giant white church tower in The Midnight Ride of Paul Revere. This artist showed the title boy with two women bathing in one corner of the painting. That work is Arnold Comes of Age. An often parodied work by this man shows the Dibble House in Iowa. This man showed three crossdressing men drinking tea in front of a painting showing (*) Washington on a boat in his own Daughters of the Revolution. This man's most famous work was modelled by his sister and dentist, who holds a pitchfork. For 10 points, name this artist of American Gothic.
Answer: Grant Wood
4. In this play, a woman smashes a lute over the head of a suiter. One character hits a priest and drinks communion wine during his wedding. Two admirers disguised as music and Latin tutors attempt to woo the daughter of the Lord of Padua. In this play, Hortensio marries a rich widow, and despite Gremio's lies, (*) Lucentio successfully wins the beautiful and desirable Bianca, who is a daughter of Baptista. In this play, the drunk commoner Christopher Sly is dressed as a nobleman. For 10 points, name this play by William Shakespeare in which Petruchio performs the title action on his wife Katharina.
Answer: The Taming of the Shrew
5. One of these landforms in South Asia is in the Sindh and Punjab provinces of Pakistan and the Indian state of Rajasthan, and another in the Middle East is home to the oryx and contains an erg called the Rub Al-Khali. One of these is located in the Tarim Basin in the Xinjiang (shin-jiang) region of northern (*) China. Mountain ranges like the Himalayas can cause these phenomena due to their large rain shadows. The Altai Mountains lie to the north of one of these areas in Mongolia. For 10 points, name these landforms, exemplified by the Thar, Taklimakan, Arabian, and Gobi.
Answer: deserts
6. This NBA player's father wanted him to play professional volleyball while he was a teen in Yaounde (ya-un-Day), but he started playing basketball after seeing a Hakeem Olajuwon (oh-la-Joo-wahn) tape. This player came to America with the help of Luc Mbah a Moute (Moo-tay), a fellow Cameroonian. He played for the $\left(^{*}\right)$ Kansas Jayhawks before being selected with the 3rd overall pick in 2014. He turned down Rihanna after becoming a 2018 NBA All-Star Game starter and often encourages fans to trust. For 10 points, name this center for the Philadelphia 76ers, who nicknamed himself "The Process".
Answer: Joel Hans Embiid (em-Beed) (accept The Process before mention)
7. This ruler benefited from the skills of the military engineer Seigneur de Vauban. He overran Habsburg controlled Franche-Comté and the Low Countries in the War of Devolution. His Minister of Finances regulated the guilds, established a royal manufacturing company, and strengthened the navy. That minister, (*) Jean-Baptiste Colbert, was recommended to this ruler by Cardinal Mazarin. He built the palace of Versailles and consolidated French absolutist rule. For 10 points, name this "Sun King" of France who, after 72 years and 110 days, became the longest serving monarch in European history. Answer: Louis XIV (or Louis Dieudonné, Louis the Great, Louis le Grand; accept the Sun King or Roi Soleil before mentioned; prompt on Louis)
8. A common one of these things used in gel electrophoresis is known as TAE, which stands for Tris/Acetate/EDTA (read as "E-D-T-A"). Their namesake capacity denotes their effectiveness and is calculated using a cologarithm. Another way of calculating their efficacy is through the use of the (*) Henderson-Hasselbalch equation. These things can be made by mixing a weak acid with its conjugate base, an example of which is acetic acid and sodium acetate. Human blood creates one of these using the bicarbonate ion and carbonic acid. For 10 points, name these solutions that resist changes in pH .
Answer: buffer systems or buffer solutions
9. This novel ends with the protagonist crying at dawn near a valley. A landowner named James reads his son's articles on racial injustice and decides to donate milk from his farm and rebuild a church. Matthew and Johannes Pafuri assist a murder in this novel. The protagonist leaves Ndotsheni after receiving a telegram from fellow priest (*) Theophilus Msimangu about his daughter Gertrude. This work's protagonist travels to Johannesburg and learns that his son Absalom is on trial for killing Arthur Jarvis. For 10 points, name this novel about Stephen Kumalo by Alan Paton.
Answer: Cry, the Beloved Country
10. Members wear the sedreh and kushti after being initiated into this religion through the navjote (nav-Joht) ceremony. The dead must cross the Chinvat Bridge, and this religion's practitioners place their dead on Towers of Silence to be eaten by scavenger birds. The Gathas and the Avesta are sacred texts of this religion whose Indian followers or (*) Parsis (par-Sees) worship at fire temples. In this dualistic religion, the evil Angra Mainyu or Ahriman opposes the good Ahura Mazda. The central prophet of this religion was Zarathustra. For 10 points, name this monotheistic former Persian state religion.
Answer: Zoroastrianism (or Mazdayasna)
11. This man named a track after John McLaughlin in an album with many edits and electric pianos. Cannonball Adderley came up with the title of this man's "In a Silent Way". This man worked with Gil Evans on an adaptation of Joaquin Rodrigo's Concierto de Aranjuez for (*) Sketches of Spain. This man worked with Charlie Parker in bebop and later collaborated with John Coltrane. This man created
the works "So What", "Freddie Freeloader", and "Blue in Green". For 10 points, name this jazz trumpeter who created the albums Birth of the Cool and Kind of Blue.
Answer: Miles Dewey Davis III
12. This man's Philosophy of Revolution describes power spheres in Asia and Africa. He was part of the Free Officers Movement along with Mohammed Naguib (Na-geeb). He overthrew King Farouk I but later argued against that ruler's execution. Major projects during this man's rule included Helwan City and the (*) Aswan Dam. He resigned after his nation's loss in the Six Day War against Israel. This leader humiliated Great Britain when his forces nationalized the Suez Canal, and he was an early supporter of pan-Arabism. For 10 points, name this Egyptian president who was succeeded by Anwar Sadat.
Answer: Gamal Abdel Nasser
13. This disease is historically named after the forest in Uganda in which it was first discovered. The 2013 outbreak of this disease in French Polynesia started when a woman began exhibiting dengue-like symptoms. It can cause Guillain-Barre syndrome, which consists of muscle weakness, and it's transmitted most commonly by members of the genus Aedes. In (*) 2016, an outbreak of this disease in the Americas caused a scare during the Rio Olympics. For 10 points, name this virus which can cause microcephaly or abnormally small heads in babies.
Answer: Zika virus
14. In this work, a thief steals from a barrow, and a second barrow is later built to honor the protagonist. A descendant of Shield Sheafson requires the aid of the title character, who later becomes king of his people after Hygelac and his son dies. The first antagonist of this story is killed by the title character, who $\left(^{*}\right)$ rips his arm off. The title character of this poem has a sword called Naegling which he breaks over the head of a dragon. That man saves a great mead hall called Heorot belonging to King Hrothgar. For 10 points, name this epic poem translated by Seamus Heaney about a warrior who kills the demon Grendel.
Answer: Beowulf
15. One work by this architect is the Museum of Islamic Arts on an island near Doha, Qatar. This architect used disjointed solids, a spiral, and a pyramid for the Rock and Roll Hall of Fame in Cleveland. Another work by this architect experienced problems after the wind blew off glass panes. That building is the John (*) Hancock Tower. This man designed the JFK Presidential Library. Another work by this man is rumored to have exactly six hundred and sixty-six glass panes. For 10 points, name this Chinese-American architect of the glass pyramid outside the Louvre.
Answer: I.M. Pei (or Ieoh Ming Pei)
16. Ymir had one of these animals who fed him. That animal, who was born from melting ice and licked salty stones, was named Audhumla. Cadmus was told to build a city where one of these animals rested. In the Ulster cycle, an argument between Ailill and Medb comparing these animals led to a raid on the town of $\left({ }^{*}\right)$ Cooley. Jupiter took the form of a white one of these animals before approaching Europa. Shiva's attendant, Nandi, was one of these animals, which are sacred to Hindus. The Minotaur was part human and part this animal. For 10 points, name these bovines.
Answer: cattle or bulls or cows (accept bovines before mention)
17. The pop group BTS faced criticism in 2018 for being rooted in the Korean form of this ideology after releasing an atomic bomb T-Shirt. Frauke Petry led a party that follows this ideology. When a reporter asked Donald Trump about this concept, he said it was "such a (*) racist question", but also
said he was proud to practice this ideology. Emmanuel Macron contrasted this ideology with patriotism. For 10 points, name this ideology practiced by groups including Alternative für (foor) Deutschland (doitch-lahnd), White America Inc, and the Ku Klux Klan.
Answer: nationalism (prompt on answers mentioning right wing or conservatism and word forms)
18. This thinker contrasted organic and mechanical solidarity in complex and primitive societies. This pioneer proposed a scientific discipline of social facts. This thinker argued that totemic religion contributed to the collective consciousness in early societies. This man referred to a deficiency of social morals as $\left(^{*}\right)$ anomie. He noticed that a certain action was more common in Protestants than in Catholics and proposed egoistic, altruistic, fatalistic, and anomic motivations for that action. For 10 points, name this French sociologist who wrote The Division of Labor in Society and Suicide.
Answer: David Emile Durkheim
19. This decay of this particle is predicted to be on the scale of $10^{33}$ and will make progress towards a grand unification theory if ever observed. This particle's antiparticle was discovered after bombardment of a copper target, which had been hypothesized by Dirac in 1933. Contrary to what chemical notation may suggest, these particles do not actually exist $\left(^{*}\right)$ freely in solution and will almost instantly combine with water to make hydronium ions. For 10 points, name these positive subatomic particles contrasted with electrons and neutrons.
Answer: protons
20. This man was good friends with Francisco de Miranda, whom he met while studying history in London. At the Guayaquil (Gwa-ya-keel) Conference, he met to discuss future plans with another general. This man began his Admirable Campaign when he issued the $\left(^{*}\right.$ ) Cartagena Manifesto. When Spain lost the Peninsular War and Chile declared its independence, this man helped establish a National Congress. He envisioned a state named Gran Colombia. For 10 points, name this revolutionary nicknamed El Libertador for gaining independence from Spain for much of South America.
Answer: Simon Bolivar
21. In this play, the protagonist threatens to whip his new servant should she leave his house. One man despises another for taking 300 acres of arable land. Another character in this play drank blood with a woman from Barbados. The protagonist cannot remember the 10 Commandments when interrogated. A character is (*) crushed by stones when he asks for "more weight". That man is Giles Corey. Abigail Williams has an affair with John Proctor in this play that begins after girls dance in the woods with the slave Tituba. For 10 points, name this play by Arthur Miller that satirizes McCarthyism.
Answer: The Crucible

## Bonuses

1. Time travel is a fascinating concept. For 10 points each:
a. In this novel by Mark Twain, a man named Hank Morgan travels back in time more than a thousand years.
Answer: A Connecticut Yankee in King Arthur's Court or A Yankee at King Arthur's Court
b. In this H.G. Wells novel, the protagonist builds a machine to visit the future and encounters two different species of humans: the Eloi and the Morlocks.
Answer: The Time Machine
c. In this novel by Madeleine L’Engle, the protagonist Meg travels to the planet Camazotz to rescue her father.

## Answer: A Wrinkle in Time

2. A poster for this piece showed Hokusai's The Great Wave off Kanagawa. For 10 points each:
a. Name these orchestral sketches including "The Play of the Waves" and "Dialogue of Wind".

Answer: La Mer or The Sea
b. La Mer is by this French composer of the symphonic poem Prelude to the Afternoon of a Faun and "Clair de lune".
Answer: Claude Debussy
c. "Clair de lune" is the third movement of this Debussy piano suite. This suite's fourth movement is "Passepied".
Answer: Suite Bergamasque
3. Many religions have festivals of light. For 10 points each:
a. This Jewish holiday commemorates the rededication of the Second Temple in Jerusalem and is celebrated with the 9 candle menorah.
Answer: Hanukkah or Chanukah
b. This Hindu holiday is celebrated with firecrackers and sparklers. Other traditions include cleaning houses and making colorful floor patterns called rangoli
Answer: Diwali or Deepavali
c. This Scandinavian holiday remembers a young Christian girl in December and is celebrated with processions of star boys and this holiday's namesake girls, who wear candles in their hair.
Answer: St. Lucy's Day or St. Lucia's Day
4. This thinker theorized that all atoms had a clinamen or swerve. For 10 points each:
a. Name this Roman author of De Rerum Natura, an early encyclopedia.

## Answer: Lucretius

b. Lucretius was a member of this school of thought. This school, often contrasted with Stoicism, tries to rid life of pain and embraces pleasure.
Answer: Epicureanism
c. Epicurus accepted the Democritus' concept of atomism and taught that everything was made of atoms and this concept. Aristotle denied the existence of this concept.
Answer: void (prompt on equivalents like space, nothingness or vacuum)
5. Name the following American Presidents who have or have not fought in wars. For 10 points each:
a. This president created and served in the 42 nd Ohio Regiment. He was elected to Congress while serving but was killed by Charles Guiteau (gih-Toh) early in his presidency.

## Answer: James Abram Garfield

b. This president evaded the Vietnam War draft several times by obtaining one deferment for bone spurs and another four for education while attending the Wharton School of Finance at UPenn.
Answer: Donald John Trump Jr.
c. This president ran on the motto of "Tippecanoe and Tyler too" recalling his victory against the Shawnee tribe in Indiana.
Answer: William Henry Harrison
6. Answer these questions about famous mathematicians. For 10 points each:
a. This Greek mathematician is often referred to as the "father of geometry".

Answer: Euclid
b. This female mathematician is considered to be the first computer programmer. This daughter of Lord Byron worked with Charles Babbage.
Answer: Ada Lovelace (accept either underlined portion; or Ada King, countess of Lovelace or Augusta Ada Byron)
c. This British mathematician is best known for his contributions in the field of recreational mathematics, including his "Game of Life" popularized by Martin Gardner.
Answer: John Conway
7. The namesake protagonist of this novel travels to many places. For 10 points each:
a. This novel by Jonathan Swift details the many voyages of the title man. His first journey sees him shipwrecked on an island of people all shorter 6 inches in height.
Answer: Gulliver's Travels
b. This is the name of that island, where Gulliver assists the inhabitants in subduing the Blefuscudians.

## Answer: Lilliput

c. On another voyage, Gulliver finds these human-like beings that are ruled by Houyhnhnms (hoo-ihms), a nation of talking horses.
Answer: Yahoos
8. Forces can be tricky, and some may not even exist! For 10 points each:
a. This pseudoforce can be seen in a turning car and is utilized by a common laboratory machine used for separating mixtures by density.
Answer: centrifugal force
b. This force is not a pseudoforce, but it can be considered the opposite of the centrifugal force. It can be demonstrated by spinning a string with a rock at the end..
Answer: centripetal force
c. Psuedoforces arise only when viewing a scenario through a non-inertial or rotating one of these.

Answer: reference frames or frames of reference (prompt on frames)
9. Jan Vermeer has painted several women wearing blue and/or yellow. For 10 points each:
a. This most famous work shows the subject looking back at the viewer and wearing a long hanging headscarf. She is wearing a blue and yellow headscarf and an orange dress.
Answer: Girl with a Pearl Earring
b. This painting shows a servant woman pouring the title liquid into a pot. That pot is on a table with pieces of bread in this painting. She is wearing a blue apron, a yellow shirt, and an orange skirt.
Answer: The Milkmaid or The Kitchen Maid
c. This possible self portrait of Vermeer shows the title woman in a nun's habit, a blue jug, and a red jacketed man touching and paying another woman. That woman is wearing a bright yellow shirt.

Answer: The Procuress [a procuress is essentially a female pimp]
10. The African continent has a rich linguistic culture. For 10 points each:
a. Amharic (am-Hey-rik) is a Semitic language spoken in this East African country bordering Somalia with capital at Addis Ababa.
Answer: Federal Democratic Republic of Ethiopia (or ye'Ītiyoṗpiya Fēdēralawī Dēmokirasīyawī Rīpebilīk)
b. Malagasy (ma-luh-Ga-see) is an Austronesian language spoken in this island nation in the Indian Ocean with capital at Antananarivo.

## Answer: Republic of Madagascar (or Repoblikan'i Madagasikara)

c. Shilha is a Berber language spoken in this West African country bordering Western Sahara with capitals at Rabat and Casablanca.

## Answer: Kingdom of Morocco (or Royaume du Maroc)

11. Over time, populations of organisms may be separated for long periods of time and develop their own traits. For 10 points each:
a. Name this process, the divergence of two species, which can be caused by geographical factors.

Answer: speciation
b. While not peripatric speciation, this term refers to speciation due to physical separation.

Answer: allopatric speciation
c. This other type of speciation can occur when a new species evolves from an old one, despite being in the same geographical region. The apple maggot is a notable example of this type of speciation.
Answer: sympatric speciation
12. In this novel, Alex and his droogs terrorize the streets with ultraviolence. For 10 points each:
a. Name this Anthony Burgess novel about a society with extreme youth violence.

Answer: A Clockwork Orange
b. Burgess constructed this fictional vernacular using slang from the Russian, English, and German languages.
Answer: Nadsat
c. At the beginning of $A$ Clockwork Orange, Alex drinks this ultraviolence inducing liquid, mixed with drugs.
Answer: milk plus
13. All about elements, some questions should be. For 10 points each:
a. This element, also known as wolfram, is best known for its use in lightbulb filaments.

Answer: tungsten or $\underline{\mathbf{W}}$
b. This element is a fuming red brown liquid at room temperature.

Answer: bromine or $\mathbf{B r}$
c. This element was discovered in 2002 but wasn't named till 2016. It has atomic number 118 and symbol Og.
Answer: $\underline{\mathbf{o g a n e s s o n}}$ (accept $\underline{\mathbf{O g}}$ before mention)
14. Answer these questions about memes that were popularized on Twitter. For 10 points each:
a. In a video that spread across Twitter and other platforms in 2016, a high schooler named Daniel is pointed out to be wearing what type of shoes? Ellen gave Daniel a lifetime supply of these shoes.
Answer: white Vans (prompt on partial answer)
b. After the release of this 2018 movie on Netflix, Twitter users began making memes, many of which featured blindfolds. These memes helped this movie become one of Netflix's most successful movies yet.
Answer: Bird Box
c. In April 2018, a video of this 11-year boy was filmed yodeling Hank Williams' "Lovesick Blues" in the middle of a Walmart.
Answer: Mason Ramsey (prompt on Walmart yodeling kid)
15. Answer the following questions about Italian city states. For 10 points each:
a. This city was at one point ruled by a council of so-called Captains and Defenders in a republic named for the patron saint of this city, Saint Ambrose.
Answer: Milan (or Milano)
b. This realm expanded greatly under Cesare Borgia (Chey-sa-ray Bor-ja), who added the territories of Urbino and Romagna (ro-Man-ya).
Answer: Papal States (also accept The Papacy, State of the Church, Ecclesiastical States, Pontifical States, or Roman States; do not accept or prompt on answers including Vatican or Holy See)
c. This Tuscan city saw the short rule of a Dominican friar named Savonarola who seized control of the city in a fervor of religious fanaticism but was quickly thrown out after excommunication.
Answer: Florence (or Firenze (fee-Ren-tsay))
16. Wildfires in this state have lowered the stock of Pacific Gas and Electric or PG\&E. For 10 points each:
a. Name this state where the Woolsey Fire affected areas of Los Angeles.

Answer: California
b. This other California fire is the deadliest in state history. It recently destroyed the town of Paradise, which is a retirement community. This fire is named for the street where it started despite sounding like one word.
Answer: Camp Fire
c. This former California governor will be replaced by Gavin Newsom. This governor was attacked for having earlier vetoed a 2016 wildfire bill. He is known for speaking out about climate change.
Answer: Gov. Jerry Brown
17. Pencil and paper ready. You will have 10 seconds per bonus. Consider a right triangle $A B C$ with right angle at C and $\cos \measuredangle \mathrm{A}$ (read as "cosine of angle $\mathrm{A} "$ ") measuring $12 / 13$. For 10 points each:
a. What is $\sin \Varangle \mathrm{C}$ (read as "sine of angle C ")?

Answer: 1 or $1 / 1$ or one over one
b. What is the length of side B if side C is 39 units long?

Answer: 36 units $[B=C \cdot \cos \measuredangle A=39 \cdot 12 / 13=36]$
c. Given an angle D with measure 2 A , what is $\cos \measuredangle \mathrm{D}$ (read as "cosine of angle D")

Answer: $119 / 169$ or $\mathbf{1 1 9}$ out of 169 or one hundred and nineteen out of/over one hundred and sixty-nine $\left[\cos 2 \theta=\cos ^{2} \theta-\sin ^{2} \theta=2 \cos ^{2} \theta-1=1-2 \sin ^{2} \theta \quad(12 / 13)^{2}-(5 / 13)^{2}=2(12 / 13)^{2}-1=1-2(5 / 13)^{2}=119 / 169\right]$
18. The Hindu preserver god Vishnu's 10 avatars are known as the Dasavatara (das-Uh-vuh-ta-ruh). For 10 points each:
a. This 8th avatar is blue skinned and advises Arjuna (uhr-Joo-na) in the Mahabharata. In other stories, he plays the flute, wears a peacock feather, steals and eats butter, and courts Radha.
Answer: Krishna
b. Though inconsistent, the Puranas say this final avatar will bring the world from the Kali Yuga to a new Satya Yuga or Golden Age. He carries a fiery sword atop a white horse.
Answer: Kalki or Kalkin
c. This avatar's name means Rama (Ra-ma) with an axe, a reference to his Brahmin-Kshatriya duality. He kills King Arjuna (uhr-Joo-na) and many warriors after they steal a cow from his father, Jamadagni (ja-Muh-duhg-nee).

## Answer: Parashurama

19. This group was given permission by the Tokugawa Shogunate to operate a trading post on the artificial island of Dejima. For 10 points each:
a. Name this company that competed with the British East India Company. Its name is abbreviated VOC in its native language.
Answer: Dutch East India Company
b. The Dutch East India Company operated out of this modern capital city on the island of Java.

Answer: Jakarta (do not accept or prompt on Batavia; do not reveal otherwise)
c. The Dutch East India Company was nationalized by this French puppet state which Napoleon established after invading the Dutch Republic. This state's name is similar to Jakarta's Dutch name.

## Answer: Batavian Republic or Batavian Commonwealth

20. Name these works by the legendary writer Leo Tolstoy. For 10 points each:
a. In this most famous work, Prince Bezukhov plots to kill the invading Napoleon after the Battle of Borodino.
Answer: War and Peace
b. In this Tolstoy novella, the title magistrate slowly dies from a sickness and dreams of being pushed into a sack. His servant Gerasim supports him through his struggles.
Answer: The Death of Ivan Ilyich
c. This other Tolstoy novella borrows its name from a Beethoven piece which the protagonist's wife played with her violinist lover, before being killed with a dagger.
Answer: Kreutzer Sonata
21. Name these women in Egyptian history. For 10 points each:
a. This 18th dynasty pharaoh's successor and step son tried to erase her from history.

Answer: Hatshepsut
b. This woman succeeded her father Ptolemy XII Auletes along with her brother Ptolemy XIII Theos Philopator.
Answer: Cleopatra VII Philopator
c. This mother of Tutankhamun led a monotheistic religion along with her husband in Amarna.

Answer: Nefertiti

