Packet 10
American Quiz Bowl League — N1

1. **This commodity was traded to Vasco da Gama when he visited the Malabar Coast. The production of this good in the Banda and Maluku Islands led to massive profits for the (*)** Dutch East India Company. In the Roman Empire, examples of this commodity like clove and mace were traded. For 10 points, name these goods which include nutmeg and cinnamon.
ANSWER: **spice**s [accept black **pepper**; accept **clove**s; accept **nutmeg**; accept **mace**; accept **cinnamon**]
<Sheidlower>
<History - Other>

2. **A *tangzhong* paste is used to soften the texture of the milk variety of this food. An Irish type of this food is named for its baking soda leavening. This food is topped with a caprese salad in (*)** *bruschetta.* Eggs and sugar are used to make a type of this food called brioche. For 10 points, what food uses a wild yeast starter in its sourdough type?
ANSWER: **bread** <Benti>
<Trash - Other>

3. **Silica is used in the "thin layer" form of this technique. The retention factor is the ratio of the distance traveled by the target substance to the solvent front in this technique. This technique uses a (*)** mobile and stationary phase. For 10 points, name this lab technique that separates mixtures, such as a paper type that separates colors of ink.
ANSWER: **chromatography** [accept types of **chromatography**] <L>
<Science - Chemistry>

4. **This symphony's *Largo* second movement features a prominent English horn solo, later adapted into the spiritual "Goin' Home." This symphony was written while its composer was living in America, and was supposedly inspired by African American spirituals and (*)** Native American music. For 10 points, name this final symphony of Antonín Dvořák.
ANSWER: Symphony "From the **New World**" [or Antonin **Dvořák**'s Symphony No. **9** in E minor]
<Benti>
<Fine Arts - Great Composers and their Works>

5. **In the Little Albert experiment, John Watson showed evidence for this concept. This phenomenon was studied in an experiment by Ivan Pavlov in which (*)** dogs salivated at the ring of a bell. For 10 points, name this type of learning that works by pairing a stimulus with a response, which comes in "classical" and "operant" varieties.
ANSWER: **conditioning** [or classical **conditioning**; or operant **conditioning**; prompt on Learning before mentioned] <Mandavia>
<Social Science - Psychology>

6. **This novel's protagonist gets a job in Mike Scully's organization and converts to socialism after seeing his father Antanas drown in a mud puddle. This novel's protagonist moves to Packingtown from (*)** Lithuania yet can only find work in unkempt factories. For 10 points, name this novel that exposed Chicago's meatpacking industry by Upton Sinclair.
ANSWER: The **Jungle** <Sheidlower>
<Literature - American>

7. **This composer incorporated his hymn "Gott erhalte Franz den Kaiser" into his *Emperor* String Quartet. The slow movement of a symphony by this composer is (*)** interrupted by a sudden G-major chord, and was thus given its title. For 10 points, name this Austrian "father" of the string quartet who wrote the "Surprise" symphony.
ANSWER: Franz Joseph **Haydn** <Sheidlower>
<Fine Arts - Great Composers and their Works>

8. **This thinker dedicated his book *The Passions of the Soul* to Queen Christina of Sweden, whom he tutored. This thinker envisioned an evil demon who creates a perfect illusion to deceive the mind in his (*)** *Meditations on First Philosophy*, which features his *cogito*. For 10 points, name this French philosopher who claimed "I think, therefore I am".
ANSWER: Rene **Descartes** <Kulkarni>
<Philosophy - Philosophy>

9. **Following the Battle of Abukir, Napoleon imported one of these animals named Marengo. Caligula planned to make one of these animals named Incitatus a consul. Alexander the Great was accompanied in (*)** battle by one of these animals named Bucephalus. For 10 points, name these equestrian animals often used by cavalry units.
ANSWER: **horse**s <Sheidlower>
<History - Other>

10. **The Higgs mechanism generates this quantity for gauge bosons. Photons have a value of 0 for this quantity, and a device used to measure this quantity is the triple-beam balance. (*)** Density is this quantity divided by volume. Force is equal to this quantity times acceleration. For 10 points, name this quantity measured in kilograms.
ANSWER: **mass** [do not accept or prompt on "weight"] <Jai>
<Science - Physics>

11. **This man targeted Jews as a part of the fabricated "Doctor's Plot." The NKVD secret police carried out the "Great Purge" under this man. This man's country was invaded in Operation (*)** Barbarossa by Nazi Germany. This leader sent an assassin to kill his former rival Leon Trotsky. For 10 points, name this leader of the Soviet Union during World War II.
ANSWER: Joseph **Stalin** [or Joseph Vissarionovich **Stalin**] <Kulkarni>
<History - European>

12. **The protagonist of this work encounters a leopard, a lion, and a she-wolf the week before Easter. Paolo and Francesca appear in this work whose narrator encounters a gate stating "Abandon all hope, ye who enter here." (*)** Virgil (VUR-jil) guides the narrator of this work through the circles of Hell. For 10 points, name this first part of Dante's *Divine Comedy*.
ANSWER: The **Inferno** [prompt on The *Divine Comedy* before mentioned] <Bowman>
<Literature - European>

13. **Regular expressions are used in algorithms that search these data structures. Combining these structures is called concatenation. In many languages, these structures are initialized by placing (*)** quotation marks around their contents. In C, these structures are treated as character arrays. For 10 points, name these data structures that hold text.
ANSWER: **string**s <Bowman>
<Science - Comp Sci>

14. **The top half of a 1793 painting by this artist depicts only a black wall. A man slumps to his side in a painting by this artist, which contains a bloody letter from Charlotte Corday. Three (*)** brothers salute their father while their sisters weep in this man's painting *The Oath of the Horatii*. For 10 points, name this painter of *The Death of Marat*.
ANSWER: Jacques-Louis **David** <Sheidlower>
<Fine Arts - Painting>

15. **Many of these poems are collected in a travelogue titled *The Narrow Road to the Deep North* and are descended from the similar *renga*. The sound of a frog jumping into an old pond is one of many of these poems penned by their "master," (*)** Matsuo Basho (mot-SOO-oh bosh-oh). For 10 points, a 5-7-5 syllable pattern constitutes what Japanese poems?
ANSWER: **haiku** [or **hokku**; accept **haibun**] <Ganeshan>
<Literature - World>

16. **The Front Range and the Bitterroot Range are both branches of this larger mountain range. This mountain range's highest peak is Mount Elbert. The (*)** Tetons and Pikes Peak are also located in this mountain range, which names a national park in Colorado. For 10 points, name this large mountain range that runs from Canada down to New Mexico.
ANSWER: **Rocky** Mountains [or the **Rockies**] <Bowman>
<Geography - North American>

17. **The Eve hypothesis suggests a universal common female ancestor because this organelle's DNA is inherited matrilineally. This organelle's matrix is home to a process called the electron transport chain in which (*)** ATP is created, which takes place after the Krebs cycle. For 10 points, name this organelle commonly called the "powerhouse of the cell."
ANSWER: **mitochondria** <Kodali>
<Science - Biology>

18. **This man gave the "I've Been to the Mountaintop" speech while supporting a sanitation workers' strike. This man proclaimed "Thank God almighty we are free at last!" in a famous address in (*)** Washington, D.C. This man was assassinated by James Earl Ray in Memphis. For 10 points, name this civil rights activist who gave the "I Have a Dream" speech.
ANSWER: Martin Luther **King** Jr. [accept **MLK**; do NOT accept or prompt on "Martin Luther"] <Kulkarni>
<History - American>

19. **This politician once said that "Ping-pong was invented on the dining tables of" his country. This politician became stuck on a zip line before the 2012 Olympic Games, which occurred while he was (*)** mayor of the host city. This politician took over his current post from Theresa May. For 10 points, name this current Prime Minister of Britain.
ANSWER: Boris **Johnson** <Terman>
<Current Events - European>

20. **The cult of the Mnevis bull worshiped a form of this god. This god turned his eye into the goddess Sekhmet to punish humanity. This god is commonly merged with the creator god Amun, as well as the later god (*)** Horus. This god's domain was seen as a ball of dung rolled across the sky by the scarab Khepri. For ten points, name this Egyptian god of the sun.
ANSWER: **Ra** [or **Re**] <Terman>
<Mythology - Egyptian>

TIEBREAKER:
An inequality named for this shape is a requirement of distance metrics. This shape is a 2-simplex. Heron's formula finds the area of these shapes. The (*) Law of Sines relates the side lengths and inner angles of these shapes. These shapes are the faces of a tetrahedron. For 10 points, name these shapes whose interior angles add up to 180 degrees.
ANSWER: **triangles** <Jai>
<Science - Mathematics>