NAQT
National Academic Quiz Tournaments, LLC

1. **PT and PTT are lab tests designed to quantify this process that requires molecules known as factor VIII ["eight"] and thrombin.   Vitamin K is named for its role in this process that is impaired in (*)** hemophiliacs. For 10 points—name this process involving platelets that is also called coagulation.

answer: blood <u>clot</u>ting (accept variants; accept <u>coagulation</u> or word forms thereof early)

<292466>

2. **This poem advocates giving its title entity "to the god of storms, the lightning and the gale!"   The "battle shout" and "cannon's roar" sound below a banner in this poem urging us to "tear her (*)** tattered ensign down!"   For 10 points—name this poem about the USS *Constitution* by Oliver Wendell Holmes.

answer: <u>Old Ironsides</u>

<298518>

3. **This country northeast of the Nicholas Channel has its highest point at Mount Alvernia on Cat Island.   Andros is the largest island in this country whose capital is 184 miles east of (*)** Miami.   Tourism dominates the economy of—for 10 points—what Caribbean country with capital Nassau?

answer: (Commonwealth of the) <u>Bahamas</u>

<296793>

4. **Despite this man's defeat at Kennesaw Mountain, he beat Joseph Johnston and then John Bell Hood in an 1864 campaign.   That same year, he called the city of Savannah his "Christmas gift" to (*)** Abraham Lincoln. For 10 points—name this general who burned Atlanta to start his "March to the Sea."

answer: William Tecumseh <u>Sherman</u>

<295889>

5. **Herbert Ives and G. R. Stillwell discovered the "transverse" type of this effect used to calculate the radial velocities of galaxies.   It causes (*)** redshifts, and it is also heard as an ambulance approaches.   For 10 points—name this change in the frequency of waves emitted by a moving source.

answer: <u>Doppler</u> effect (or <u>Doppler</u> shift; accept <u>transverse Doppler</u> effect)

<296116>

6. **The court case *Eltra Corp. v. Ringer* held these entities to be uncopyrightable.   Each has a "weight," and many come with a kerning table.   They are measured in a unit equal to 1/72 of an inch, the (*)** point.   Serifs are ornamental strokes on—for 10 points—what sets of glyphs like Helvetica?**

answer: <u>font</u> or <u>font family</u> or <u>typeface</u> (prompt on "face")

<310623>

7. **One of this group's leaders was Gaspard de Coligny [kah-leen-yee], and most of it was besieged in La Rochelle [lah roh-shel] from 1572-73.   It was targeted by the St. Bartholomew's Day Massacre but granted toleration by the 1598 (*)** Edict of Nantes [nahnt] issued by Henry IV ["the fourth"].   For 10 points—give this term for French Protestants.
answer: Huguenots ["HEW"-guh-notz] (prompt on "(French) Protestants")
<296848>

8. **This organ, the primary site of fetal red blood cell production, contains macrophages called Küpffer [COOP-fir] cells.   It has caudate [KAW-dayt] and quadrate [KWAHD-rayt] lobes, and receives blood via the portal vein. (*)** For 10 points—name this abdominal organ that detoxifies blood and makes bile.
answer: liver
     [The liver produces blood cells until the bone marrow is fully developed.]
<296250>

9. **In this work, Dr. Lanyon helps Gabriel Utterson solve a mystery, and Sir Danvers Carew ["Carey"] is murdered.   One of its characters leaves a note to himself to be read after the effects of a (*)** potion wear off.   For 10 points—name this Robert Louis Stevenson novel about a transformed doctor.
answer: The Strange Case of Dr. Jekyll and Mr. Hyde
<294780>

10. **One of these entities, the Viminal [VIM-ih-nul], is now the headquarters of its country's ministry of the interior.   In ancient times, the Caelian [KAY-lee-in] one overlooked the Baths of Caracalla [kar-uh-KAH-lah]. The Esquiline [ES-kwuh-leen], (*)** Capitoline [KAP-ih-tuh-leen], and Palatine [PAL-uh-teen] are among—for 10 points—what set of landmarks upon which Rome was built?
answer: Seven Hills of Rome (accept variants)
<302765>

11. **The most precise values for this constant are obtained from measuring the speed of sound, and it is roughly the difference in specific heats at constant pressure and volume for argon. (*)** 8.31 joules per mole-kelvin is approximately—for 10 points—what constant equal to PV divided by nT?
answer: (universal) gas constant (or ideal gas constant or perfect gas constant; prompt on "R")
<298981>

12. **This country's capital lies on the St. Paul River, while the Cavalla [kah-VAH-lah] River forms part of its eastern border with Côte d'Ivoire [koht deev-wahr].   South of (*)** Guinea is—for 10 points—what West African nation with capital Monrovia that was founded in 1847 by freed American slaves?
answer: (Republic of) Liberia
<294595>

13. **This composer, who wrote his 1954 *Festive Overture* in just three days, called his Fifth Symphony a response to "justified criticism" of his opera (*)** *Lady Macbeth of Mtsensk* [mit-SENSK].   For 10 points—name this Soviet composer of 15 symphonies who included an "invasion" theme in his *Leningrad* Symphony.
answer: Dmitri (Dmitryevich) Shostakovich [SHOSS-tuh-KOH-vich]
<296494>

14. **This author wrote about the murder of Johan de Witt in Holland in *The Black Tulip*.   In another novel, "Lord Wilmore" and "Sinbad the Sailor" are aliases used by (*)** Edmond Dantès [dahn-tayss] as he takes revenge on those who had him imprisoned.   For 10 points—name this author of *The Count of Monte Cristo*.
answer: Alexandre Dumas [doo-mah] (, père)
<279906>

15. **Pencil and paper ready.   Rachel needs to find the value of k given that a line passing through the points (3, k) ["three comma k"] and (5, 2k) ["5 comma 2k"] has a slope of 6.   She remembers that slope is "rise over run" and thus computes (*)** —for 10 points—what value for k?
answer: k = 12 [$m = (y_2 - y_1)/(x_2 - x_1) = 6$, so $(2k - k)/(5 - 3) = 6$, so $k/2 = 6$, and $k = 12$]
<306767>

16. **In September 2011 this country's president, José Eduardo dos Santos, chose as his successor Manuel Vicente, the head of the Sonangol company.   It is poised to overtake Nigeria as Africa's largest (*)** oil producer.   For 10 points—name this former Portuguese colony with capital Luanda.
answer: (Republic of) Angola (or República de Angola)
<297278>

17. **The Juan Fernández Islands are owned by this nation whose heroes include Bernardo O'Higgins.   In 1945 its native Gabriela Mistral [mih-STRAHL] became the first Latin American Nobel Laureate in Literature. (*)** Santiago is the capital of—for 10 points—what thin country along South America's Pacific coast?

answer: (Republic of) <u>Chile</u> (or República de <u>Chile</u>)

<299194>

18. **This man and his younger brother Tenskwatawa [ten-SKWAH-tuh-wah] founded Prophetstown.   He was killed at the Battle of the Thames [temz], and his confederation lost the Battle of (*)** Tippecanoe ["tippy canoe"].   For 10 points—name this Shawnee chief whose curse affects presidents elected every 20 years.

answer: <u>Tecumseh</u> (accept <u>Tecumseh's curse</u>)

<302245>

19. **One character in this work untangles a parachute from a tree, causing a corpse to fall off a mountain.   Sam and Eric are twins in this work that features rival leaders (*)** Jack and Ralph and the bespectacled Piggy.   For 10 points—name this William Golding novel about a group of stranded boys.

answer: <u>Lord of the Flies</u>

<296543>

20. **This actor voiced the title character in *Rio*, and played a pizza guy who is forced to rob a bank in *30 Minutes or Less*.   He played (*)** Columbus, who joins forces with Woody Harrelson's Tallahassee, in *Zombieland*.   For 10 points—what actor played Mark Zuckerberg in *The Social Network*?

answer: Jesse (Adam) <u>Eisenberg</u>

<296580>

21. **This closest Population I Cepheid [SEH-fee-id] variable to Earth has an alternate name once bestowed upon Thuban [THOO-ban] that will be transferred to Vega [VAY-gah] in some (*)** 12,000 years.   The brightest star in Ursa Minor is—for 10 points—what star with a declination of 89 degrees, making it the current North Star?

answer: <u>Polaris</u> (prompt on "Pole Star" or "North Star")

<301984>

22. **On Easter Sunday, 1282, a rebellion called the Vespers broke out on this island.   Alcibiades [al-sih-BYE-uh-deez] proposed an expedition to capture it, but that campaign was defeated at the Siege of Syracuse. (*)** Palermo is the capital of—for 10 points—what island across the Strait of Messina [meh-SEE-nah] from mainland Italy?

answer: <u>Sicily</u> (or <u>Sicilia</u>; accept <u>Sicilian Vespers</u> before "this island")

<296073>

23. **One activity for this holiday uses a device labeled "noon," "gimel," "hay," and "shin."   It recalls a victory over Antiochus led by Judah Maccabee, and observers use a (*)** shamash to light candles in a menorah on each of its eight nights.   For 10 points—name this wintertime Jewish "Festival of Lights."

answer: <u>Hanukkah</u> or <u>Chanukah</u> [The device is a spinning top called a "dreidel."]

<302789>

24. **The Anti-Injunction Act may moot many challenges to this law prior to 2015, when its penalties kick in.   Although the Federal Circuit upheld it, the Eleventh held its individual (*)** mandate to buy insurance to be unconstitutional.   For 10 points—name this law colloquially called "Obamacare."**

answer: Patient Protection and <u>Affordable Care</u> Act (or PP<u>ACA</u>; accept <u>Obamacare</u> before "Obamacare")

<295204>
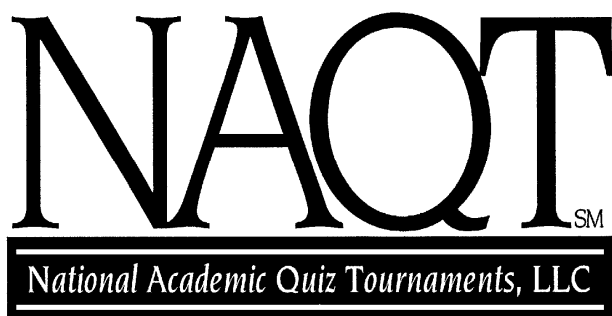
1. For 10 points each—name these defunct American political parties:
A. Presidents William Henry Harrison and Zachary Taylor belonged to this party that opposed Jackson's Democrats.
answer: <u>Whig</u> Party

B. John Adams was the only president from this party that disintegrated after the Hartford Convention.
answer: <u>Federalist</u> Party

C. In 1848 Martin Van Buren ran for president with this party that opposed slavery in the western territories.
answer: <u>Free Soil</u> Party

<270048>

2. A formula for generating certain sets of three numbers is named after Euclid.   For 10 points each—
A. Those "triples" are named after this mathematician, whose eponymous formula is *a* squared plus *b* squared equals *c* squared.
answer: <u>Pythagoras</u> of Samos (accept <u>Pythagorean</u> triple(t)s or <u>Pythagorean theorem</u>)

B. While *a* squared plus *b* squared equals *c* squared has infinitely many solutions, this theorem named for a French mathematician says that if the exponent is greater than two, there are no integer solutions.
answer: <u>Fermat</u>'s <u>last</u> theorem (prompt on "Fermat"; do not accept "Fermat's little theorem")

C. In this type of polynomial equation, like those in Fermat's last theorem, the variables are restricted to integer values.   Finding a general algorithm for solving them was the subject of Hilbert's tenth problem.
answer: <u>Diophantine</u> [dye-uh-FAN-teen] equations

<303184>

3. For 10 points each—give the following about major European ports:
A. Europe's busiest container port, Rotterdam, is in this "Low Country."
answer: (Kingdom of the) <u>Netherlands</u> (or Koninkrijk der <u>Nederlanden</u>; accept <u>Holland</u>)

B. Europe's second-busiest container port is this "Free and Hanseatic" city on the Elbe [EL-buh] that will lose its custom-free transshipment zone in 2012.
answer: (Free and Hanseatic City of) <u>Hamburg</u> (or (Freie und Hansestadt) <u>Hamburg</u>)

C. Europe's tenth-busiest container port, Le Havre [luh hahv], stands at the mouth of this river that flows through Paris.
answer: <u>Seine</u> [sen] River

<301135>

4. For 10 points each—in which comedy by William Shakespeare . . .
A. Do four Athenian lovers get caught up in the schemes of the mischievous fairy Puck?
answer: A <u>Midsummer Night's Dream</u>

B. Does Petruchio vow to woo the fiery Kate so other men may marry her biddable sister Bianca?
answer: The <u>Taming of the Shrew</u>

C. Does Helena set out to marry Count Bertram by obtaining his family ring through trickery?
answer: <u>All's Well That Ends Well</u>

<297942>

5.   The Treaty of Brétigny [bray-teen-yee] briefly halted a war.   For 10 points each—

A.   Name that medieval dynastic war between England and France.   It actually lasted from 1337 to 1453.
answer: Hundred Years' War

B.   At this October 1415 battle in northern France, a force of longbowmen slaughtered French knights.
answer: Battle of Agincourt [ah-zhin-koor]

C.   The Battle of Agincourt was won by this English king, who subsequently married the French princess Catherine of Valois [val-wah].
answer: Henry V of England (prompt on "Henry")
<307975>

6.   For 10 points each—name these devices a physicist might use:

A.   This "counter," a radiation detector invented in 1908, uses a tube filled with low-pressure gas and typically emits a series of clicks.
answer: Geiger(-Müller) counter

B.   This current-measuring device is named for an Italian scientist whose experiments with frog's legs showed that muscles respond to electric stimuli.
answer: galvanometer [gal-vuh-NAH-muh-tur] (prompt on "Galvani")

C.   This type of particle accelerator applies high-frequency alternating voltage across "D"-shaped electrodes. Ernest Lawrence built the first one.
answer: cyclotron
<303205>

7.   For 10 points each—name these mythical individuals involved with the Trojan War:

A.   This son of Troy's King Priam [PRY-um] shot the arrow that fatally wounded Achilles; earlier, he had abducted Helen.
answer: Paris (or Alexander or Alexandros)

B.   This brother-in-law of Helen led the Achaean [uh-KAY-un] troops against Troy.
answer: Agamemnon [AG-uh-MEM-non]

C.   This soothsayer, the daughter of Priam and Hecuba [HEH-"cue"-buh], warned of the Trojan Horse, but she was not believed.
answer: Cassandra
<298090>

8.   In 1967 and 2002 referendums, this territory rejected Spanish sovereignty.   For 10 points each—

A.   Name that territory at the southern tip of the Iberian Peninsula, home to a landmark called "the Rock."
answer: Gibraltar

B.   This nation has controlled Gibraltar since the War of the Spanish Succession.
answer: United Kingdom of Great Britain and Northern Ireland or U.K. (accept any underlined portion; do not accept "England")

C.   This 1713 treaty ending that war granted control of Gibraltar to Great Britain "in perpetuity."
answer: Treaty of Utrecht
<301149>

9.   At a given pressure, this is the temperature at which the liquid-to-gas transition occurs.   For 10 points each—

A.   Name this temperature that is 100 degrees Celsius for water at 1 atmosphere of pressure.
answer: boiling point

B.   Liquids with different boiling points may be separated by this laboratory technique, which can be performed under vacuum for liquids with very high boiling points.
answer: distillation (accept word forms; accept simple distillation or fractional distillation or vacuum distillation)

C.   These mixtures of liquids cannot be separated by distillation, as their vapor phases have the same composition as the liquid phase; they can often be separated by adding another substance.
answer: azeotropes [AY-zee-uh-trohps] or azeotropic mixtures
<301055>

10. For 10 points each—name these comic strips:

A. This comic strip created by Charles Schulz features characters like Snoopy and Charlie Brown.

answer: <u>Peanuts</u>

B. Minor characters in this comic strip include the dinosaurs Dawn and Rex and the world's smartest garbageman.

answer: <u>Dilbert</u>

C. This strip's main character has a dog named Snert and a duck named Kvack. He is married to Helga and takes trips with Lucky Eddie.

answer: <u>Hagar the Horrible</u>

<310214>

11. For 10 points each—give the following about author Alan Paton [PAY-tun]:

A. Paton's works *Too Late the Phalarope* [FAL-uh-rohp] and *Ah, but Your Land is Beautiful* are set in this country.

answer: (Republic of) <u>South Africa</u> (or Republiek of <u>Suid-Africa</u>)

B. In this 1948 novel Absalom Kumalo is sentenced to death for the murder of Arthur Jarvis.

answer: <u>Cry, the Beloved Country</u>

C. Most of Paton's works are set against the backdrop of this South African policy of racial "apartness" that ended in 1994.

answer: <u>apartheid</u> [uh-PAR-tayt]

<301138>

12. At AT&T's Bell Labs, Ken Thompson and Dennis Ritchie developed an operating system whose spiritual descendants include OpenBSD, Mac OS X ["O-S ten"], and Linux [LIN-ukz]. For 10 points each—

A. Name that system with commands like *ls* ["L-S"] and *chmod* ["C-H-mod"].

answer: <u>UNIX</u> [YOO-nix]

B. UNIX was novel in not being written in assembly language; instead, this high-level language was used.

answer: <u>C</u>

C. A key component of UNIX architecture is that "everything," including interprocess pipes, disk drives, directories, and input terminals are treated as these entities.

answer: <u>files</u> (accept <u>everything is a file</u>; prompt on "byte stream")

<301011>

13. One woman is painted in black and white, sitting in a chair, facing the viewer's left. For 10 points each—

A. Name that relation of James Abbott McNeill Whistler.

answer: Whistler's <u>Mother</u> (accept <u>Anna</u> McNeill Whistler or Arrangement in Grey and Black: The <u>Artist's Mother</u>; accept <u>his mother</u> or variants)

B. The title of Whistler's *The Falling Rocket* classifies it as this kind of painting "in black and gold" that is evocative of night. It is also applied to some of Frédéric Chopin's [fray-day-reek shoh-pan'z] compositions.

answer: <u>nocturne</u>s (accept <u>Nocturne in Black and Gold</u>: The Falling Rocket; prompt on "nocturnal")

C. Whistler also created this work of mural art for his patron Frederick Leyland; it depicts the artist and the patron as two of the title birds.

answer: <u>Harmony in Blue and Gold</u>: The <u>Peacock Room</u> (accept either underlined part; prompt on partial answers)

<303170>

14. A polymath is someone who has expertise in several subject areas. For 10 points each—name these American polymaths:

A. This political theorist, scientist, author, and inventor was the first American ambassador to France and organized the first fire department in Pennsylvania.

answer: Benjamin <u>Franklin</u>

B. This screenwriter, actor, and director of film, radio and theater frightened many Americans with his 1938 radio adaptation of H. G. Wells's *The War of the Worlds*.

answer: (George) Orson <u>Welles</u>

C. This Boston University professor of biochemistry has books in nine of the ten top-level Dewey Decimal System categories; he also formulated the Three Laws of Robotics.

answer: Isaac <u>Asimov</u> (or Isaak Yudovich <u>Ozimov</u>)

<278816>

15. In 1964 Tanganyika united with a former British protectorate.   For 10 points each—

A. The result was this east African country with capital Dodoma.
answer: (United Republic of) <u>Tanzania</u> (or Jamhuri ya Muungano wa <u>Tanzania</u>)

B. This island sultanate joined Tanganyika to form Tanzania.
answer: <u>Zanzibar</u>

C. Until World War I, Tanganyika was ruled by this European power that also controlled Togo and Namibia.
answer: <u>Germany</u> (or <u>Deutschland</u>)

<306932>

16. For 10 points each—answer these questions about blood transfusions:

A. In the most common type of transfusion, patients receive packed units of what oxygen-carrying cells to correct anemia?
answer: <u>red</u> (blood) cells or <u>erythrocyte</u>s (prompt on "RBC")

B. Packed red cells are made by removing what protein-rich liquid component of blood that is transfused separately to replenish clotting factors?
answer: <u>plasma</u> (do not accept "serum")

C. What combination of blood type and Rh factor is considered the universal recipient for red blood cell transfusions, and the universal donor for plasma transfusions?
answer: <u>AB positive</u> or <u>AB+</u> (do not prompt on partial answer)

<303179>

17. As of January 1, 2012, the Republican Party was planning to penalize Arizona, Florida, Michigan, New Hampshire, and South Carolina for holding certain events too early.   For 10 points each—

A. Name those events.
answer: (presidential) <u>primaries</u> or <u>primary election</u>s (prompt on "election(s)"; do not accept "caucuses")

B. The Republican National Committee had established this month as the earliest in which primaries could be held.
answer: <u>February</u> 2012

C. The penalty was a loss of influence through forfeiting half of these positions.
answer: <u>delegate</u>s (to the Republican national convention) (do not accept "superdelegates")

<303221>

18. Franklin Roosevelt had a political career before becoming president.   For 10 points each—

A. In 1929 Roosevelt succeeded Al Smith as governor of this state; during his term, he opened the 1932 Winter Olympics at Lake Placid and built Attica prison.
answer: <u>New York</u>

B. Roosevelt had been James Cox's running mate on the Democratic ticket in 1920 when they were defeated by this Ohio Republican.
answer: Warren G(amaliel) <u>Harding</u>

C. As state senator, Roosevelt challenged the bosses of this New York City Democratic political machine symbolized by a tiger.
answer: <u>Tammany</u> Hall (accept <u>Tammany Tiger</u>)

<284405>

19. For 10 points each—in which Ernest Hemingway novel . . .

A. Does young American professor Robert Jordan, while fighting on the Republican side of the Spanish Civil War, fall in love with Maria?
answer: <u>For Whom the Bell Tolls</u>

B. Does Harry Morgan run contraband between Cuba and Florida?
answer: <u>To Have and Have Not</u>

C. Do Jake Barnes, Robert Cohn, and bullfighter Pedro Romero vie for the attention of Lady Brett Ashley?
answer: The <u>Sun Also Rises</u>

<282680>

20. In December 2011, a treaty was signed that, if ratified, would add a 28th member to a group.   For 10 points each—

A. Name that confederation that issues a common currency for 17 of its member states, including Belgium.
answer: EU or European Union

B. The proposed new member is this country with capital Zagreb [ZAH-greb].   This former part of Yugoslavia is led by President Ivo Josipovic [EE-voh yoh-SEE-poh-vich].
answer: (Republic of) Croatia (or Republika Hrvatska)

C. This EU member with capital Ljubljana [loob-LAH-nah] blocked Croatia's membership until an agreement was reached over its disputed border, especially in Piran [pee-RAHN] Bay of the Adriatic Sea.
answer: (Republic of) Slovenia (or Republika Slovenija)

<306092>

21. Karl Marx thought that this system would replace capitalism and precede communism. For 10 points each—

A. Name this economic system which generally involves public or government ownership.
answer: socialism (or socialist)

B. This Russian socialist broke with Stalin and was exiled in the late 1920s before being killed in Mexico in 1940.
answer: Leon Trotsky (or Lev Davidovich Bronshtein)

C. This American known as the father of modern linguistics has spoken in favor of socialism but against the economic system that existed in the Soviet Union.
answer: Noam Chomsky

<306284>

22. For 10 points each—name these reality TV series:

A. This MTV show features The Situation, JWoww [J-"wow"], and other denizens of the Garden State.
answer: Jersey Shore

B. Bravo airs this franchise, which has six different series depicting women in Orange County, Beverly Hills, and other cities.
answer: The Real Housewives

C. Lifetime recently premiered this series, set in Brighton Beach and named after wooden items more formally called matryoshkas [mah-TROOSH-kahz].
answer: Russian Dolls

<297195>

23. The city of Istanbul straddles Europe and Asia.   For 10 points each—

A. Istanbul is in this country on the Anatolian Peninsula.
answer: (Republic of) Turkey (or Türkiye Cumhuriyeti)

B. Istanbul lies on both sides of this strait that connects to the Black Sea.
answer: Bosporus or Bosphorus

C. The Bosporus connects the Black Sea to this Turkish sea called the Propontis [pro-PON-tiss] in ancient times.
answer: Sea of Marmara [MAR-muh-ruh] (or Sea of Marmora)

<303276>

24. Pencil and paper ready.   Alice and Betty are racing.   Alice's position x at any time t is given by $2t$ squared, while Betty's position is given by $8t$.   For 10 points each—

A. At what positive value of t are Alice and Betty tied in the same position?
answer: t = 4 [$2t^2 = 8t$, so $2t = 8$, and $t = 4$]

B. When t equals 4, Alice and Betty are both at what position x?
answer: x = 32 [$2 \times 4^2 = 2 \times 16 = 32$; or, $8 \times 4 = 32$]

C. At what time t did Betty have her largest lead over Alice?
answer: t = 2 [The gap between Betty and Alice for the range 0 to 4 is symmetrical, so the maximum must be at the midpoint; $(0 + 4)/2 = 4/2 = 2$.]

<307275>