

1. **This person wrote to George Bush and Saddam Hussein with the words "I come to you with tears in my eyes and God's love in my heart," urging them to end the Gulf War. This figure was motivated by a desire to symbolically quench Christ's thirst. Because no painkillers were administered during surgical procedures in the House of the Dying, this figure was criticized by (*) Christopher Hitchens for glorifying suffering. The extraction of a tumor from Monica Besra was the first recognized miracle of this figure, who needs a second to be canonized. Originally a novice with the Sisters of Loreto, she cared for sufferers of leprosy and founded the Missionaries of Charity. For 10 points, name this Albanian-born nun, much beloved in Calcutta for helping the destitute.**

ANSWER: Blessed Mother Teresa of Calcutta [or Agnes Gonxha Bojaxhiu; prompt on "Mother"; prompt on "Ma"; prompt on "Teresa"]

<Gupta>

2. **This term refers to an anisotropy of the CMB that is caused by the motion of the earth through space. The power radiated by an oscillating one of these is proportional to the fourth power of the frequency, which is a principle used in television antennas. The atomic model of a dielectric posits it as a collection of several of these, which align and create a field opposing the external field. Their electric field falls off as one over the third power of the (*) distance. Placing one of these in an electric field creates a torque equal to the cross product of the field with these configurations' namesake "moment". For 10 points, identify this configuration consisting of a positive and a negative charge bound together.**

ANSWER: dipole [prompt on "polar molecules" due to the dielectric clue]

<Mukherjee>

3. **The AUMA pushed for greater political freedom for non-Europeans in this country. Several people were killed when nationalists in this country displayed flags at Setif in 1946. Natives of this country would have been granted citizenship in the Blum-Viollette proposal, and resistance to European control over this nation was led by Emir Abdelkader. Generals based in this country, such as (*) Maurice Challe, orchestrated a failed 1961 coup against another nation's Michel Debre. This country's war of independence was ended by the Evian Accords, and this country was home to the FLN led by Ahmed Ben Bella. For 10 points, name this North African country, which negotiated independence with Charles de Gaulle following its bloody war with French colonists.**

ANSWER: Algeria [or People's Democratic Republic of Algeria or Democratic and Popular Republic of Algeria]

<Bentley>

4. **This man rewarded his two millionth Twitter follower with a computer and his three millionth with a new house. He denounced critics of his country's water supply as "terrorists" in March 2012. Neptal Segovia was accused of hiding an order to kill this man's older brother in a crossword puzzle. He has demanded the extradition of Eladio Aponte, a special witness in the DEA's investigation of his government's ties to drug trafficking, and has claimed that (*) Muammar Gaddafi was "assassinated." Dan Rather revealed that this man, who will likely face Henrique Capriles in an October election, has metastatic rhabdomyosarcoma and that his latest trip to Cuba for cancer treatment was largely unsuccessful. For 10 points, name this president of Venezuela.**

ANSWER: Hugo Rafael Chavez Frias

<Wynne>

5. In one story by this author, the Cardinal tells a tale called "The Wine of the Tetrarch" while waiting out a flood in a hayloft. In another work by this author, Lorens Löwenhielm and Achille Papin pursue the pious sisters Martine and Philippa forty-nine years before the title figure uses 10,000 francs of lottery winnings to throw them an elaborate dinner. "The Deluge at Norderney" is one of this author's (*) *Seven Gothic Tales*. She also wrote "Babette's Feast" and a novel in which Remi Martin purchases an estate founded by Bror, after which the protagonist returns to Rungstedlund, her family's home north of Copenhagen. For 10 points, name this pseudonymous Danish author who described her time on a coffee plantation in Kenya in *Out of Africa*.

ANSWER: Isak Dinesen [or Karen von Blixen-Fineke; or Karen Christenze Dinesen]

<Carson>

6. One holder of this position received a shield with indecipherable characters that fell from the sky, ending a plague. It has nothing to do with Thrasybulus, but the final holder of this position illustrated a battle strategy by decapitating the tallest poppies in his garden. The first of them saw twelve vultures circling the sky and murdered a rival with a pickaxe after the rival (*) jumped a low wall. The last person to hold this position was overthrown after his son Sextus raped the noblewoman Lucretia. They included Numa Pompilius, originally a Sabine, and the tyrant Tarquinius Superbus. For 10 points, name these monarchs who ruled a city first established by Romulus.

ANSWER: king of Rome [or Roman kings or rex Romae or reges Romae; prompt on "Roman monarchs" or the like so we can rule out "Roman Emperors" as an answer]

<Mukherjee>

7. Boats sail in a gigantic cup in a work by this artist commissioned by Luman Reed. Reed would later commission a series by this artist whose penultimate scene shows a headless statue of a warrior extending a chipped shield as war rages in the background. This artist of *The Titan's Goblet* showed men with bows and arrows in a work subtitled *The Savage State*. One of his best known works was painted "after a Thunderstorm" from (*) Mount Holyoke and shows the Connecticut River. In a painting by another artist that was recently bought from the New York Public Library by Alice Walton, this man is shown on a cliff with William Cullen Bryant. For 10 points, name this artist of *The Oxbow*, a leader of the Hudson River School.

ANSWER: Thomas Cole

<Bentley>

8. One opponent of this man accused him of building hills in the shape of "an Amazon's bosom." He suffered a public relations blow when Kentucky Congressman Landaff Andrews offered to take a dining implement home. During this man's presidency, Allan McNab and Alexander McLeod destroyed the *Caroline*. This subject of Charles Ogle's (*) "Gold Spoon Oration" implemented the Independent Treasury System and was a former leader of the Albany Regency. He ran for the Presidency on the Free Soil ticket in 1848; earlier, he had resigned as his predecessor's Secretary of State in order to end the Peggy Eaton Affair. For 10 points, name this "Little Magician" and President during the Panic of 1837, the successor to Andrew Jackson.

ANSWER: Martin Van Buren

<Hothem>

9. In the active site of chymotrypsin, these phenomena create the oxyanion hole. These phenomena typically occurs over a length scale of 200 picometers, and nylon has several of them between adjacent chains. These phenomena between carbonyl and amide groups are responsible for forming the structure of alpha helices and beta sheets, and they are also present between (*) nucleotide bases on DNA. They are responsible for the high boiling point of water, since one water molecule can form four of these. They are stronger than van der Waals interactions but weaker than ionic or covalent bonds. For 10 points, name these interactions between an electronegative atom and an atom carrying the namesake light element.

ANSWER: hydrogen bonding [or H bonding]

<Mukherjee>

10. The character giving this speech ironically claims to have "neither wit, nor words, nor worth" to "stir men's blood". Its speaker describes thrice presenting its subject with "a kingly crown, which he did thrice refuse." Its speaker, who claims to be a "plain blunt man", incites its audience by showing them a tattered cloak, calling one tear "the most (*) unkindest cut of all". This speech thrice calls out a rival who claims its subject "was ambitious" and mocks that rival as "an honorable man." Its speaker asks the gods to judge how dearly its subject loved Brutus and notes that he came to bury, not praise, its subject. For 10 points, name this speech beginning "Friends, Romans, countrymen, lend me your ears," which is given after Caesar's assassination.

ANSWER: Mark Antony's funeral oration [or Mark Antony's speech at Julius Caesar's funeral; accept "Friends, Romans, countrymen, lend me your ears" speech before it is mentioned; prompt on "Antony's speech" in *Julius Caesar*; prompt on the "funeral oration for Julius Caesar"; accept any synonyms of speech like "oration" or "address"; do not accept answers involving the word "soliloquy"]

<Gupta>

11. Adolphe Fischer and Eduoard Lalo co-composed a D minor concerto for instrument, which was the debut piece performed by Paul Tortelier. This instrument mimics the chanting of a chazzan on Yom Kippur in Max Bruch's *Kol Nidrei*. The first of J. S. Bach's six suites for this instrument begins with a prelude consisting of simple arpeggiated chords. One player of this instrument had her career cut short by (*) multiple sclerosis and recorded Elgar's E minor Concerto for it. This instrument is tuned in perfect fifths and has F holes on either side of its bridge. Its players have included Jacqueline du Pre and Pablo Casals. For 10 points, name this second-deepest instrument of the violin family, played by Yo-Yo Ma.

ANSWER: violoncello

<Gupta>

12. Antonio Damasio used the Iowa Gambling Task to demonstrate the biasing influence of these phenomena in his Somatic Markers Hypothesis. Appraisal theory describes them as governed by external judgments, while Robert Plutchik illustrated them using a color-code wheel. Subjects were told they were receiving an injection of "superoxin" in an experiment on these phenomena, which were linked by Paul Ekman to "microexpressions" in (*) facial muscles. Another experiment found that subjects were more likely to call an attractive researcher after crossing a rickety bridge versus a sturdy one, addressing the role of arousal in Schachter's Two-Factor Theory of these phenomena. For 10 points, name these psychological phenomena which include happiness, anger, and fear.

ANSWER: emotions

<Mukherjee>

13. **Young sediment that has undergone this process has a high beryllium-10 to boron ratio due to cosmic rays. During this process, eclogite is formed from basalt. Sutures are used to infer the polarity of instances of this process. This process is responsible for generating the slab-pull force, and it can result in orogenesis. Places where this process is occurring are noted by arrays of earthquakes originating from (*) Wadati-Benioff zones. This process is responsible for generating volcanic arcs when it occurs at an oceanic convergent boundary. This process begins at trenches, which mark areas of descent, and it consumes crust. For 10 points, name this process where one tectonic plate slides underneath another, which occurs in namesake zones.**

ANSWER: **subduction** [prompt on things like "one plate moving under another", but a word form of **subduction** is needed]

<Mukherjee>

14. **Several officials in this nation were indicted in a scam involving subsidized gold exports to Goldenberg International. Hezekiah Ochuka led a group of air force officers in a coup attempt in this nation, where Smith Hempstone served as ambassador. The Green Belt Movement is headquartered in this nation, where the ODM defeated a constitutional referendum. General (*) China was part of one uprising in this nation, which was put down by Operation Anvil. Daniel Arap Moi succeeded the first president of this nation, who was arrested as part of a state of emergency designed to suppress a Dedan-Kimathi-led revolt against British rule. For 10 points, name this country, which became independent several years after the Mau Mau rebellion.**

ANSWER: **Kenya**

<Mukherjee>

15. **In one of this author's novels, the protagonist imagines the black eyes of women he loves to be shimmering blue. The narrator of one work by this man is inspired by La Berma's performance in *Phedre* and by the paintings of Elstir. He also wrote of a "little band" of girls from Balbec and about Charles Morel, the target of the affections of both Robert de (*) Saint-Loup and the Baron de Charlus. CK Scott Moncrieff provided an English title for his magnum opus, in which a "little phrase" from Vinteuil's sonata represents the relationship of Odette de Crecy and Charles Swann. His most famous work recounts memories inspired by the taste of a tea-soaked madeleine. For 10 points, name this French author of the seven-volume *In Search of Lost Time*.**

ANSWER: Marcel **Proust** [or Valentin Louis Georges Eugène Marcel **Proust**]

<Gupta>

16. **This musician recorded a namesake suite composed by Lalo Schifrin seven years after collaborating with Bud Powell, Charles Mingus, Max Roach, and Charlie Parker on the live album *Jazz at Massey Hall*. He collaborated with Gil Fuller and Chano Pozo on the first jazz standard based on a clave. Another of his songs does not use a walking bass line, was recorded under the name "Interlude", and was written during this man's time with the Earl Hines Band. He worked with Kenny Clarke on the song (*) "Salt Peanuts," and also composed "Manteca" and "A Night in Tunisia". For 10 points, name this bebop pioneer known for his puffed-out cheeks and the angled bell on his trumpet.**

ANSWER: Dizzy **Gillespie** [or John Birks **Gillespie**]

<Carson>

17. A Commission of Government was formed after this polity's 1934 bankruptcy, and was abolished by Joey Smallwood's Confederate Association in 1949. A company that caused a scandal in the British government had made a technological breakthrough at Signal Hill in this polity. This region was claimed for Britain by Humphrey Gilbert and was once populated by the Beothuk people. One early explorer of this region claimed to be able to catch (*) cod with buckets on the rich Grand Banks fisheries to its southeast; that explorer was John Cabot. This region contains L'Anse aux Meadows, which was probably attacked by Skraelings and formed part of Vinland. For 10 points, name this Atlantic Canadian province whose capital St. John's lies on a namesake island across from Labrador.

ANSWER: Newfoundland and Labrador [or Terre-Neuve et Labrador; or Dominion of Newfoundland; or Newfoundland Island; or New Found Land; prompt on "Vinland" before it is read; do not accept or prompt on "Labrador"]

<Liao>

18. One thinker linked this idea to the mere addition paradox and argued that it can result in massive overpopulation in his "repugnant conclusion." One thinker best known for positing this idea asked "the question is not, Can they reason? nor, Can they talk? but, Can they suffer?," in expressing support for animal rights. The traditional perception of this idea is the (*) "act" form, contrasted by later thinkers with the weaker "rule" form. This is the title concept of a book which states that it is better to be a dissatisfied human than a satisfied pig and outlines the Greatest Happiness Principle. For 10 points, name this ethical theory propounded by Bentham and Mill, which seeks to maximize happiness for the most people.

ANSWER: utilitarianism

<Mukherjee>

19. Both the Vero cell line and the HEK293T cell line originate from this organ, which in children is affected by minimal change disease and Wilms Tumor. GFR and serum creatinine are measures of its function. This organ secretes erythropoietin and activates vitamin D by hydroxylation. The calyces of this organ surround its pyramids, and its functional unit uses a countercurrent multiplier mechanism. On section of this organ up-regulates aquaporins in response to (*) ADH. Its functional unit begins with a ball of capillaries called the glomerulus surrounded by Bowman's capsule, which then dips down into the medulla via the Loop of Henle. For 10 points, name this organ whose functional unit is the nephron, which filters the blood to produce urine.

ANSWER: kidney [anti-prompt on "nephron", "glomerulus", "Loop of henle", "Bowman's capsule" "proximal convoluted tube", "distal convoluted tubule", "proximal straight tubule", and "distal straight tubule" until mention]

<Mukherjee>

20. This poet described a "luminary clock against the sky" proclaiming the time to be "neither wrong nor right" in one poem. His poem "The Lesson for Today" is the source of his epitaph, "I had a lover's quarrel with the world." This author of "Acquainted With the Night" wrote of how "Eden sank to grief" and how "dawn goes down to day" in a poem about Nature's "hardest (*) hue to hold" and presented two possible ends of the world in his "Fire and Ice". This author of "Nothing Gold Can Stay" predicted that he'd be "telling this with a sigh, somewhere ages and ages hence" in a poem about a choice made in a yellow wood. For 10 points, name this New England-based poet who wrote "The Road Not Taken" and "Stopping by Woods on a Snowy Evening".

ANSWER: Robert Lee Frost

<Carson>

21. **An ambitious expansion of this navy was ordered in the abortive Plan Z. This navy cleared the way for an amphibious landing at Kerch in its Black Sea operations, and attacked the PQ-17 convoy in the Knights' Move campaign. This navy achieved great success during the First and Second Happy Time. One of this navy's pocket battleships was scuttled after the Battle of the (*) River Plate. One of its largest ships sunk the *Hood* three days before itself being sunk by John Tovey's fleet. After Erich Raeder was replaced as head of this navy, its new commander, Karl Donitz, was named head of the Flensburg Government. For 10 points, name this navy which attacked the Allies using U-Boats on behalf of the Fuhrer's regime.**

ANSWER: the Nazi German Navy [or the Kriegsmarine; or the Nazi Navy]

<Weiner>

22. **The kissing number is used to solve problems involving the close-packing of these figures. Repeatedly slicing and linking tori creates the Alexander horned type of this figure. The Banach-Tarski paradox involves disassembling one of these figures in order to form two. The coordinate system on these figures has a volume element equal to rho squared sin theta d-rho d-theta d-phi, and triangles drawn on the surface of them have angles that sum to greater than (*) 180 degrees. Each point on these figures has an infinite number of great circles running through it. The volume of one of these figures is equal to four-thirds pi r cubed. For 10 points, name these three-dimensional figures which consist of all of the points equidistant from a center.**

ANSWER: sphere [do NOT accept "circles"]

<Mukherjee>

23. **The protagonist of this play used to carry around a pamphlet called "Summons to the Ideal" and, at the end, claims it is his destiny to be the "thirteenth man at the table." In this play, the cynical Relling describes the importance of the "life-lie" for one couple, whose daughter's oncoming blindness indicates that she is actually the child of (*) Werle. In this play, Gregers's revelation of the Ekdal family's secrets prompts Hjalmar's daughter Hedvig to commit suicide. For 10 points, name this Henrik Ibsen play in which Hedvig is told to shoot the title bird.**

ANSWER: *The* Wild Duck [or Vildanden]

<Bollinger>

24. **Ashwatthama traded one of these objects for Lord Krishna's disc, only to find it impossible to lift. Dronacharya administered a test of concentration in which he allowed only his star pupil to use one of these objects because the pupil saw nothing but the eye of a bird. Rama won the hand of Sita by breaking one of these. Helenus prophesied that the Trojan War could only be won if one of these objects could be retrieved from Philoctetes, who used it five times to mortally wound (*) Paris. A drop of molten candle wax falls on the wielder of another of these items, revealing his identity to Psyche. This preferred weapon of Arjuna was used to kill the children of Niobe. For 10 points, name this weapon used by Eros to make people fall in love.**

ANSWER: bows [or bow and arrow; prompt on "arrows"]

<Kandlikar>

1. These dynamic markings are represented by the letters "p" and "f" on a score. For 10 points each:

[10] Name both of these musical dynamic markings, the Italian words for “soft” and “loud.”

ANSWER: **piano** and **forte** [both needed for 10 points, do NOT prompt on partial answer]

[10] This Italian word, inserted before “forte” or “piano” and abbreviated “m,” instructs a performer to play “medium loud” or “medium soft.”

ANSWER: **mezzo**

[10] This musical notation indicates that a note or rest should be sustained longer than usual. It is sometimes referred to as a bird's eye, and is represented by a dot inside of a semicircle.

ANSWER: **fermata**

<Thompson>

2. This event took a violent turn when William Hulton summoned the local Yeomanry to disperse a crowd. For 10 points each:

[10] Name this 1819 event, in which cavalry charged a crowd in Manchester demanding Parliamentary reform. Fifteen people were killed and hundreds were injured in this event, which was given a name referencing a Napoleonic War battle.

ANSWER: **Peterloo** Massacre

[10] Following the Peterloo Massacre, Home Secretary Lord Sidmouth introduced this body of legislation meant to prevent large meetings and curtail insurrection.

ANSWER: **Six** Acts

[10] This was the prime minister at the time of the Peterloo Massacre. He succeeded the assassinated Spencer Perceval and shares his name with a port city west of Manchester.

ANSWER: Earl of **Liverpool** [or Robert **Jenkinson**]

<Cheyne>

3. Bankers Trust popularized an adjustment to return on capital that takes this concept into account. For 10 points each:

[10] The Arrow-Pratt measure quantifies aversion to what "intrinsic uncertainty in possible outcomes" that is often traded off against return?

ANSWER: **risk**

[10] In 1979 Daniel Kahneman and Amos Tversky developed this model of decision making under risk, showing that people are basically risk-averse for gains and risk-seeking for losses.

ANSWER: **prospect theory**

[10] Prospect theory is one competing explanation for this effect in which a person is more willing to persist in a likely unsuccessful endeavor once the namesake irrecoverable investment of time, money, or energy has been made.

ANSWER: **sunk cost** effect [or **sunk cost** fallacy; or **sunk cost** bias]

<Wynne>

4. This character is tailed by a Scotland Yard detective named Fix, who believes him to be a bank robber, and he eventually marries the Indian princess Aouda after his valet rescues her from forced sati. For 10 points each:

[10] Identify this character who, with the help of his valet Passepartout, attempts to win a wager against the other members of the Reform Club by circumnavigating the world in eighty days.

ANSWER: **Phileas Fogg** [accept either underlined portion]

[10] This creator of Phileas Fogg wrote a sequel to Poe's *Narrative of A. Gordon Pym* called *The Sphinx of the Ice Fields*. This French science fiction pioneer also described Professor Lidenbrock's trip down an Icelandic volcano in *Journey to the Center of the Earth*.

ANSWER: Jules Gabriel **Verne**

[10] This Verne novel serves as a sequel to both *20,000 Leagues Under the Sea* and *In Search of the Castaways*. In it, five Northern prisoners of war escape the siege of Richmond in a balloon and travel to the title location, which turns out to be Captain Nemo's hideout.

ANSWER: *The Mysterious Island* [or *L'Ile Mystérieuse*]

<Carson>

5. This thinker commented on the "sky-blue tint" of the soul belonging to healthy-minded religious people. For 10 points each:

[10] Name this author of *The Varieties of Religious Experience*, who is best known for picturing a man trying to chase a squirrel going around a tree in his most famous work.

ANSWER: William **James**

[10] James's best known work is titled for this philosophical tradition that he is considered the founder of. It focuses on the practical effects of philosophical statements.

ANSWER: **pragmatism** [or word forms]

[10] This neo-pragmatist criticized pseudo-problems in philosophy as language games devoid of any application or usefulness in his *Philosophy and the Mirror of Nature*.

ANSWER: Richard McKay **Rorty**

<Mukherjee>

6. This substance is responsible for the formation of caves and sinkholes and is found in the zone of saturation. For 10 points each:

[10] Name this type of water that is found in springs and wells.

ANSWER: **groundwater**

[10] Groundwater under pressure will spontaneously rise above the level at which it is first encountered when it is tapped in this kind of well.

ANSWER: **artesian** well [or **artesian** water; prompt on "confined groundwater" or "groundwater"]

[10] Groundwater is replenished through this process in which water flows through soil or porous rock. It is primarily driven by gravity and differs from seepage, in which water flows into or out of a body of water.

ANSWER: **percolation**

<Wynne>

7. Marian Rajewski initially worked on breaking this code, which was finally completed thanks to the efforts of Bletchley Park. For 10 points each:

[10] Identify this code used by the Nazis during World War II. It consisted of a device with a keyboard, a plugboard, and a set of rotors.

ANSWER: **Enigma**

[10] This British mathematician and pioneer of computation broke the Enigma code. He committed suicide by eating a cyanide-impregnated apple.

ANSWER: Alan **Turing**

[10] Bletchley Park's predecessor, Room 40, decoded this document during World War I. This note from the German ambassador suggested that Mexico join the Central Powers in order to reclaim the Western United States.

ANSWER: the **Zimmerman Telegram**

<Mukherjee>

8. In the second book in which he appears, this character's son Avrumel is revealed to be the eventual successor to the leadership of the Ladover community. For 10 points each:

[10] Identify this Hasidic painter who studies under Jacob Kahn and horrifies his father Aryeh by depicting his mother's suffering in the painting *Brooklyn Crucifixion*.

ANSWER: **Asher Lev** [prompt on "Lev"; accept *My Name is Asher Lev* or *The Gift of Asher Lev*]

[10] This creator of Asher Lev also penned *Davita's Harp* and wrote about Reuven Malter and Danny Saunders, who grow up to become a rabbi and a Freudian psychoanalyst respectively, in *The Chosen*.

ANSWER: Chaim **Potok** [or Herman Harold **Potok**]

[10] Reuven and Danny meet when the latter injures the former during a game of this sport, which is also central to Bernard Malamud's *The Natural*.

ANSWER: **baseball**

<Bentley>

9. K-selection is named for the fact that K-selected species attempt to live near this value. For 10 points each:

[10] Identify this variable which gives the maximum population that a given ecosystem can support at any given time.

ANSWER: **carrying capacity**

[10] The carrying capacity is the horizontal asymptote in this population model developed by Verhulst. It posits an exponential-like growth phase followed by flattening out at the carrying capacity.

ANSWER: **logistic** map [prompt on "sigmoid"]

[10] Important ideas about population growth were developed in the model of island biogeography. That model was posited by McArthur and this man, who also studied the sociobiology of ants and wrote *On Human Nature*.

ANSWER: Edward Osborne **Wilson**

<Mukherjee>

10. His basic design of a base, colonade and entablature was refined in the Guaranty Building he designed in Buffalo. For 10 points each:

[10] Identify this architect who collaborated with Dankmar Adler on the Wainwright Building, an early skyscraper built in St. Louis.

ANSWER: Louis Henri **Sullivan**

[10] A stair-pattern is evoked in the Gage Group, a series of buildings Louis Sullivan designed in this American city. More recently constructed buildings here include the Willis Tower, formerly called the Sears Tower.

ANSWER: **Chicago**, Illinois

[10] Chicago's Hyde Park is home to this Frank Lloyd Wright designed building, built in the Prairie Style. A large fireplace divides the interior, and multiple horizontal slabs are stacked to form different interior levels in this building.

ANSWER: The Frederick C. **Robie House**

<Bentley>

11. Identify the following about the Grand Canal, for 10 points each.

[10] The Grand Canal connected the Yellow River to this other major Chinese river, the longest in Asia.

ANSWER: **Yangtze** River [or **Changjiang** River or **Yangzi** River]

[10] The canal was completed during the reign of the Chinese emperor. He established a court at Ta-tu in what is now Beijing and was succeeded by Temur.

ANSWER: **Kublai** Khan [or **Xubila?** xaan or **Khubilai** Khan or **Qubilai** Khan or **H?bìliè** Khan]

[10] Grain taxes to pay for the upkeep of the Grand Canal were threatened in the late 18th century by this secret society. The rebellion of this group, which sought to restore the Ming dynasty, was not put down until the death of the Qianlong emperor.

ANSWER: **White Lotus** Society [or **White Lotus** Rebellion or **Bailianjiao** or **Pai-lien chiao**]

<Bentley>

12. Not to be confused with etching, this technique was employed in works like *The Battle of the Ten Nudes* by Pollaiuolo. For 10 points each:

[10] Identify this technique where an artist uses a burin to create lines in a copper plate.

ANSWER: Line **Engraving**

[10] Giovanni Battista Piranesi used the techniques of engraving and etching to create works like the *Carceri* as well as exaggerated landscapes of this city. Some such landscapes he depicted in this city include The Arch of Trajan and the Colosseum.

ANSWER: **Rome** [or **Roma**]

[10] Woodcuts saw a revival among members of this artistic movement. These Expressionists included people like Karl Schmidt-Rottluff, Akseli Gallen-Kallela and Emil Nolde in their ranks.

ANSWER: Die **Brucke** [or The **Bridge**]

<Bentley>

13. For 10 points each, name these geographic features of Alaska.

[10] This high peak's Athabaskan name, Denali, also names the national park in which it is located.

ANSWER: Mount **McKinley**

[10] This bay on the Beaufort Sea is the northern terminus of the Trans-Alaska oil pipeline.

ANSWER: **Prudhoe** Bay

[10] The road and pipeline to Prudhoe Bay uses Atigun Pass to cross this range, which separates interior Alaska from the North Slope.

ANSWER: **Brooks** Range

<Hoppes>

14. The country in which this novel is set is ruled by a caricature of Mobutu Sese Seko known as the "Big Man". For 10 points each:

[10] Identify this 1979 novel in which the Indian Muslim Salim sets up a shop at a town in the title location.

ANSWER: A ***Bend in the River***

[10] This Indo-Trinidadian author of *A Bend in the River* described Mohun's attempts to escape from the Tulsis, his controlling in-laws, in his novel *A House for Mr. Biswas*.

ANSWER: Vidiadhar Surajprasad **Naipaul**

[10] Both a Naipaul travelogue subtitled "Impressions of Five Societies" and a Charles R. Johnson novel about Rutherford Calhoun share this title, taken from the section of the triangle trade in which slaves were shipped to the Americas.

ANSWER: *The **Middle Passage***

<Carson>

15. Suleiman the Magnificent was so moved by the devotion of Jews at this site that he ordered Sinan to build an oratory there. For 10 points each:

[10] Name this edifice located at the foot of the Temple Mount in Jerusalem, a popular site for prayer and lamentation. It once surrounded the courtyard of a building razed by the Romans.

ANSWER: **Western Wall** [or **Kotel**; or **Wailing Wall**; or **Buraq Wall**; do not accept or prompt on "Temple of Jerusalem" or other wrong answers]

[10] The Western Wall is the only standing part of this building, which contained the Holy of Holies and was leveled for good in 70 CE.

ANSWER: the Jewish **Temple** of Jerusalem [or First **Temple**; or Second **Temple**; or Solomon's **Temple**, or **Beit haMikdash**]

[10] When the temple stood, an offering of the "first fruits" would occur on this holiday, a "feast of weeks" commemorating Moses receiving the Torah on Mount Sinai.

ANSWER: **Shavu'ot** [or **Shavuot**]

<Jackson>

16. The Boyer-Moore and Rabin-Karp algorithms are various methods for matching these variables, which can use ASCII or UTF-8 encoding. For 10 points each:

[10] Identify these variables which store sequences of letters, digits, and symbols. They are often used to store text.

ANSWER: **strings**

[10] In this operation, usually implemented using the plus sign or an ampersand, two strings are joined together end-to-end. In Java and C# ["C Sharp"], it's often more efficient to use a StringBuilder to perform this operation.

ANSWER: string **concatenation** [or string **appending**]

[10] These entities are a method of searching and matching strings to each other. Replication is achieved in these entities through a Kleene Star, and the dot symbol is generally used in them as a wildcard for all characters except for new lines.

ANSWER: **regular expressions** [or **regexp**]

<Mukherjee>

17. Alvis lists “hush of the winds” and “the foaming” as terms used by these people, one of whom employs the servants Byggvir and Beyla. For 10 points each:

[10] Name this race of gods that includes Freya and Frey. Together with a rival race that beat them, they spit to form Kvasir.

ANSWER: **Vanir** [or **Vena**; or **Wena**]

[10] The Aesir-Vanir war was set off when this action was done to Gullveig three times. In Hindu mythology, Sati does this to herself and names a now-outlawed custom in which grieving widows kill themselves in this manner.

ANSWER: self-**burning** [or self-**immolation**; or jumping into a funeral **pyre**; accept any equivalents that mention a body being put in contact with **fire**]

[10] This silent god assisted Odin in creating humans, but is best known for being a hostage during the truce negotiations between the Vanir and the Aesir.

ANSWER: **Hoenir** [or **Hana**]

<Mukherjee>

18. In one of this man's poems, the first title character asserts that love "builds a heaven in hell's despair", while the second character warbles out some meters in disagreement. For 10 points each:

[10] Name this English author of "The Clod and the Pebble", who asked a little animal "who made thee?" in "The Lamb" and wrote of a creature "burning bright, in the forests of the night" in "The Tyger".

ANSWER: William **Blake**

[10] This Blake poem, often used as a popular hymn, opens "And did those feet in ancient time walk upon England's mountains green?" It asks if the title city was "builded here, among these dark Satanic Mills".

ANSWER: "**Jerusalem**"

[10] Two poems with this title appear in Blake's *Songs of Innocence and Experience*. The first describes "little Tom Dacre" who dreams of angels freeing him from the "coffins of black" of his title profession, while the second describes a "little black thing among the snow, crying 'weep! weep!' in notes of woe!"

ANSWER: "The **Chimney Sweeper**" [do not accept "The **Chimney Sweep**"]

<Bentley>

19. Identify some histories and historians of the United States, for 10 points each.

[10] Among the incidents related in this man's book *Profiles in Courage* is a speech by Lucius Lamar giving a eulogy for Charles Sumner and Robert Taft's criticism of the Nuremberg trials. Biographies of him usually include his tenure as commander of PT-109.

ANSWER: John Fitzgerald **Kennedy** [or **JFK**]

[10] This historian alleged that the founding fathers were seeking to protect their own financial interest in his 1913 work *An Economic Interpretation of the of the Constitution of the United States*.

ANSWER: Charles Austin **Beard**

[10] He described Bacon's rebellion in the chapter "Persons of Mean and Vile Condition" in his *A People's History of the United States* and also wrote *Vietnam: The Logic of Withdrawal*.

ANSWER: Howard **Zinn**

<Mukherjee>

20. This value is equal to one divided by the square root of the product of the permittivity and permeability of free space. For 10 points each:

[10] Identify this value, which, when squared and multiplied by the mass, gives energy. It is equal to approximately three hundred thousand meters per second and is symbolized c.

ANSWER: **speed of light** [in a vacuum]

[10] When a particle moves through a medium faster than the speed of light in that medium, this phenomenon occurs. It is responsible for the blue glow of nuclear reactors.

ANSWER: **Cerenkov** radiation

[10] A possible violation of the speed of light by neutrinos was discovered by this collaboration between CERN and LNGS. Its goal is to observe tau neutrinos from muon neutrino oscillations.

ANSWER: **OPERA** [accept **Oscillation Project with Emulsion-tRacking Apparatus**]

<Mukherjee>

21. The Lotka-Volterra equation states that the population of these species is dependent on the population of prey. For 10 points each:

[10] Identify these organisms that kill prey for food. Methods of avoiding them include camouflage and running really really fast.

ANSWER: **predators**

[10] This behavior can be defined as searching for food. Predation is a subtype of this behavior, and the optimal theory of it states that the organism tries to maximize the ratio of energy obtained to handling time.

ANSWER: **foraging**

[10] This type of evolution occurs when two species are constantly in competition with each other. A good example is prey evolving camouflage and predators evolving better eyes to see them with.

ANSWER: **co-evolution**

<Mukherjee>

22. This man defeated an allied force of Athenians and the Theban Sacred Band at the Battle of Chaeronea, and had earlier conquered Amphipolis after making a secret pact with Athens. For 10 points each:

[10] Name this King of Macedon, who was killed by his bodyguard Pausanias of Orestis, and was succeeded by his son Alexander the Great.

ANSWER: **Philip II** [prompt on "Philip"]

[10] Philip II was known for his use of this military formation, in which troops massed in a rectangle and overlapped their shields to create an impenetrable wall.

ANSWER: **phalanx**

[10] Philip II won the Battle of Crocus Field in the third of these wars, which were fought over the large amount of treasure at the Temple of Apollo at Delphi.

ANSWER: **Sacred Wars**

<Mukherjee>

23. The protagonist of this novel is surprised to learn that crime is thought of as a manifestation of atavism in this novel, and Sawyer brings Dr. Pillsbury to the protagonist early in this novel. For 10 points each:

[10] Name this utopian novel in which Julian West falls asleep in the year 1887 and wakes up in 2000.

Other characters in this novel include Edith and Dr. Leete, who explain the socialist society to Mr. West.

ANSWER: **Looking Backward: 2000-1887**

[10] This author wrote about Higgs, who is guided by Senoj Nosnibor around an ostensibly utopian society that worships the goddess Ydgrun, in his novel *Erewhon*. This author of *The Way of All Flesh* shares his full name with the earlier author of *Hudibras*.

ANSWER: Samuel **Butler**

[10] This sixteenth-century British thinker coined the word "utopia", which he used to title his novel about a crescent-shaped island that is visited by Raphael Hythloday.

ANSWER: Sir Thomas **More**

<Kandlikar>