Terrapin Invitational Tournament 2013: "Make your own judgments, but we wrote this set in good faith" Packet by Tamil Tiger Mothers (Max Schindler, Ben Zhang, Jialin Ding, Haohang Xu)

Tossups

1. Following the death of this period's first leaders, Wada Yoshimori and members of his family were accused of treason and exiled. During this period, Yasutoki established a board of councilors called *hyojoshu* and appointed Kujō Yoritsune as leader. This period saw a revolt of *sōhei* forces stopped at the third battle of Uji, leading its instigator to be exiled to the Oki Islands. This government was led by a family that employed the Rokuhara Tandai, and it was faced with Go-Toba's abortive Jōkyū War. The tri-force enthusiasts Hōjō Clan also vied for power during this period. The defeat of the Taira clan in the Gempei War established this government, though Ashikaga Takauji established his own *bakufu* when this government ended. For 10 points, identify this first Japanese shogunate which ruled until 1333.

ANSWER: <u>Kamakura</u> shogunate [accept "period" or "bakufu" in place of "shogunate"] [edited]

2. One repeated motif in this work is the tritone C and F sharp, which bells play in the background as a soprano describes "lightning from the east" and "the Chariot Throne." This piece premiered one night after the opera *King Priam*, and its penultimate movement features the request *Dona Nobis Pacem* while the tenor describes a roadside crucifix. It closes with a *libera me* as bells punctuate the singing of a child's chorus and an adult's chorus. Organ cluster chords support children singing about God's promise to Abraham in this work's *Offertorium*. This work was written for the reconstruction of Coventry Cathedral and incorporates Latin texts and the poetry of Wilfred Owen. For 10 points, identify this piece for the dead by Benjamin Britten.

ANSWER: War Requiem [edited]

- 3. For a plug flow reactor, this quantity is equal to the area under the curve on a Levenspiel plot. Application of Maxwell–Boltzmann statistics to a gas only applies if the thermal de Broglie wavelength is much smaller than the cube root of this quantity divided by the number of particles. This quantity is a natural variable for both the internal energy and the Helmholtz free energy. The compressibility factor is expressed in terms of a power series in the inverse of this quantity in the virial expansion. One term of the Van der Waals equation contains the Van der Waals a parameter divided by this quantity squared, while another term contains the parameter b, which represents the value of this quantity for gas particles. This quantity is held constant in an isochoric process. Boyle's law states that the product of pressure and this quantity is constant. For 10 points, give this quantity often measured in liters.

 ANSWER: volume [accept molar volume until "liters"] [edited]
- 4. In one story set during the eve of this conflict, a spy opens his safe only to discover that its contents have been replaced with the book *Practical Handbook of Bee Culture*. A romance with Richard Leighton during the height of this conflict is discussed in Vera Brittain's *Testament of Youth*. George Winterbourne enlists to fight in it Richard Aldington's *Death of a Hero*, and the "last Tory" Christopher Tietjens fights in it throughout the course of the novels *Some Do Not...* and *No More Parades*. A veteran of this conflict spends some time in a park with his wife Lucrezia before committing suicide in *Mrs. Dalloway*. A poet who fought in this conflict wrote "there's some corner of a foreign field that is forever England." For 10 points, Rupert Brooke, Siegfried Sassoon, and Wilfred Owen were participants in what conflict?

ANSWER: <u>World War I</u> [accept equivalents like the <u>First World War</u>] [edited]

5. The Ava Bridge crosses this river at Sagaing, while other bridges cross at Dedaye and Chauk. Its westernmost distributary passes through the city of Pathein. The Myitsone Dam is under construction on this river two miles downstream from the confluence of the Mali and N'mai Rivers in Kachin State, whose cities of Myitkyina and Bhamo lie along this river. The Chindwin is the chief tributary of this river, which lies between the Arakan Mountains to its west and the Salween River to its east. Home to a namesake beakless dolphin, this river rises in the Himalayas and flows into the Andaman Sea after passing by Mandalay. For 10 points, identify this river which flows through Myanmar.

ANSWER: <u>Irrawaddy</u> River [edited]

6. Though it's not glutamate, DARPP-32 is expressed in medium spiny neurons with this molecule's receptors and is phosphorylated by those receptors, thus becoming an inhibitor of protein phosphotase 1. Bupropion blocks reuptake of this and another molecule by binding to this molecule's transporter. That transporter is important in all four of this molecule's major pathways, which include the mesolimbic and the mesocortical. Tuberoinfundibular neurons secrete this neurotransmitter to inhibit Prolactin, which counteracts one of its effects. It is a precursor to other catecholamines like epinephrine and is mainly produced in the substantia nigra. One theory of schizophrenia is that it is related to hyperactive receptors of this compound. For 10 points, name this neurotransmitter which is used to treat Parkinson's disease.

ANSWER: **dopamine** [edited]

- 7. According to the historian Doukas, Notaras was incredibly eager to betray his ideals during this event until the opposing side demanded his son be used as a sex slave. In its aftermath, Gennadius Scholasticus was chosen to fill Athanasius II's post. Legend has it that one building during this event had its walls miraculously moved, so priests humming the liturgy could remain undiscovered. To prevent complications during this battle, the winning commander subdued the nearby Demetrius of Mesembria and Thomas of Morea. Sixty oxen were used to haul the cannon of Hungarian engineer Orban to this battle, in which one side hauled their fleet over land after chains were laid at the entrance of the Golden Horn. In its aftermath, Mehmed II repeatedly searched for the body of Constantine XI to prevent a new uprising. For 10 points, identify this 1453 siege that spelled the end of the Byzantine Empire. ANSWER: Siege of Constantinople [or Battle of Constantinople]
- 8. A commonly used one of these things, named for Alan and Nadeem Kaufman, includes an "Atlantis" phase involving nonsense symbols. After the breakout of World War I, Robert Yerkes issued many of *these* termed "Alpha" and "Beta" to soldiers. Although they were formally introduced by Lewis Terman, the most commonly used ones today include the WAIS-3, which was developed by David Wechsler. One of the most commonly used ones on the Internets, Raven's Progressive Matrices, measures a general "g factor" posited by Charles Spearman. The first ones were developed from the work of Binet and Simon, who sought to rank a student's problem-solving abilities. For 10 points, identify these examinations that may determine how smart you are.

ANSWER: <u>intelligence test</u>s [do not accept intelligence quotient, IQ, or just "intelligence"; accept things like <u>tests</u> <u>of intelligence</u>]

[edited]

9. One poem by this author describes the air "over Sicily" that is "still flashing with the landward gulls." In a different poem, he asserts "For all the history of grief," there is "an empty doorway and a maple leaf." That poem asserts a certain entity should "be motionless in time as the moon climbs." He ended one poem with the line "the shadow of the night comes on," and that poem describes Ecbatan, Kermanshah, Beghadad, Palmyra, Lebanon, Crete, and Spain. That poem is addressed to a figure "face down beneath the sun." After making a comparison of a

poem to a palpable and mute globed fruit, this author stated a poem "should not mean but be." For 10 points, name this American author of "You, Andrew Marvell" and "Ars Poetica," who also wrote the play *J. B.* ANSWER: Archibald <u>Macleish</u> [edited]

10. The Avenue in the Rain depicts many people holding umbrellas while standing under these objects; a different painting by Childe Hassam shows many of them and is entitled Allies Day 1917. A beige colored one with a crescent moon motif on it can be found tied to a tree in Bosch's Ship of Fools. By dipping a canvas in beeswax, a monochromatic one was produced by an artist known for stacking three of them on top of each other. A tri-colored one of these objects can be seen in the hands of a figure that holds a musket with her other hand in a painting commemorating the July Revolution. For 10 points, Liberty Leading the People shows the title figure holding an unfurled form of what object that represents France?

ANSWER: **flag**s [accept specific answers]

11. Two answers required. The breakup of this couple causes holy water to turn into black water and wine to turn into blood. The seventh letter of Ovid's *Heroides* concerns this couple, one of whom recalls that the voice of one of the Eumenides spoke at their wedding. One of them is served by the honorable maid Barce, who assists her in burning a bridal bed, clothing and weapons of the other. Their wedding is marked by a rainstorm mixed with hail and occurs after the two of them fled into a cave. The female member of this couple had rejected the hand of a Gaetulian prince named Iarbas and is advised by her sister Anna. That woman had fled Tyre after the death of her husband Pygmalion and founds a city in ancient Libya. For 10 points, name this couple that consists of the queen of Carthage and the hero of a poem by Virgil.

ANSWER: <u>Dido</u> and <u>Aeneas</u> [accept in either order; accept <u>Elissa</u> for Dido]

12. One poet from this country wrote an oriental romance in which the title character is a daughter of Aurangzebe that journeys to Kashmir to marry Aliris. That poem is *Lalla Rookh*. It is the birthplace of an author who wrote a poem in which Strephon breaks into Celia's dressing room, only to discover that she shits. A different poet from this country wrote "Though Hamlet rambles and Lear rages, [tragedy] cannot grow by an inch or an ounce." That poem begins with a description of what "hysterical woman say" about the palette and the fiddlebow. That author from here wrote "I know that I shall meet my fate somewhere among the clouds" in a different poem. It is the home country of the author of "Lapis Lazuli," who also wrote the lines "things fall apart / the center cannot hold." For 10 points, identify this home country of Jonathan Swift and William Butler Yeats.

ANSWER: <u>Ireland</u> [prompt on "Great Britain" or "United Kingdom"] [edited]

13. This mathematician names a surface in spacetime which intersects every non-spacelike curve in that spacetime exactly once, and a value named for him appears in the Kramers–Kronig relations. A weaker form of Sylow's first theorem is his theorem which states that if a prime number p divides the order of G, then G has a subgroup of order P. He names a theorem stating that the integral of a function on a simply connected region is equal to the sum of the function's G sub negative one Laurent coefficients at each pole in the region. Any complex differentiable function will satisfy the pair of differential equations named for him and Riemann, and he is the first namesake of an inequality on vector spaces. For 10 points, name this French mathematician whose namesake sequence converges in a complete space.

ANSWER: Augustin-Louis Cauchy

14. In his book *Open Sky*, Paul Virilio formulates the discipline of dromology as an application of this discipline's principles to human life. This discipline's hole argument was discussed at length by the "three Johns" and asks whether substantivalism is a valid theory. In a discussion about privileging a certain quantity over others that are

vitally necessary to us, Luce Irigaray argues that the central statement of this study is sexed. This study's founder formulated the Mach principle to explain the necessity of inertia. Alternatives to this idea include Brans–Dicke theory. The inauguration of this theory dismissed the notion of a single "absolute space" and was partially introduced in the paper "On the Electrodynamics of Moving Bodies." For 10 points, identify this branch of physics concerned with space and time whose central equation is energy equals mass times the speed of light squared. ANSWER: relativity [or relativistic mechanics, or relativistic physics; accept general relativity and special relativity; prompt on "physics"] [edited]

15. One candidate in this election declared that it was time to "renew our compact with freedom," and that candidate had defeated primary candidates like Howard Baker and Lowell Weicker. A third party candidate in the election ran alongside Patrick Lucey, and that candidate was a former Illinois representative who had lost in the Republican primary. This year, which included the candidacy of John Anderson, also memorably saw one candidate ask if you "were better off now than you were 4 years ago." One candidate in this election was criticized for giving the "malaise" speech and mishandling the Iranian hostage crisis. For 10 points, name this year, which saw Ronald Reagan win his first term by defeating the incumbent Jimmy Carter.

ANSWER: election of <u>1980</u> [edited]

16. In one of this composer's operas, which was inspired by South Indian folk tales and Mozart's *Die Zauberflöte*, Kumudha transforms into the title object to help her poor family. An aria in one of this composer's operas includes a slow oboe solo in 5/4 time and borrows its name from a work of Erik Satie. Act II of that opera by this composer opens with the chorus "Hagar and the Angel" and ends when a character is shot by Molqi. An opera by this composer of *A Flowering Tree* opens with the chorus singing "The people are the heroes now" in an airfield before the "Spirit of '76" lands, and includes a part in which the title character attends a performance of *The Red Detachment of Women*. For 10 points, name this composer of the operas *The Death of Klinghoffer* and *Nixon in China*.

ANSWER: John <u>Adams</u> [edited]

17. The spin of these particles was confirmed experimentally by determining the distribution of the Ellis–Karliner angle. SCET provides a framework for doing calculations when these particles are at low energies or moving in the same direction as particles they interact with. The clearest evidence of these particles' existence came from the decay of a quark resonance into three jet events at DESY's PLUTO experiment, and they are depicted using a spiral in Feynman diagrams. These bosons and quarks form a namesake plasma or "soup," and are responsible for an interaction approximately 39 magnitudes more effective than gravity. For 10 points, identify these gauge bosons which help hold atomic nuclei together by mediating the strong force.

ANSWER: **gluon**s [edited]

18. Near the beginning of this work, a pair of characters appear on stage while trying to hunt for a sable antelope. Before that, a stage director talking to an actress appears on stage asking what play shall they perform. It ends with a blessing that the child of the royal couple will conquer seven continents since his nickname means "Tamer of Everything." In its seventh act, two characters observe streams of golden liquid flowing down a mountain as they ascend to a heavenly paradise while on a chariot. After its title character loses her fortune, a fisherman saves the day by bringing in a fish that has swallowed a certain object. Its plot is set in motion when the title character receives a ring from King Duśyanta, so that he may later remember who she is. For 10 points, identify this play by Kālidāsa.

ANSWER: *The <u>Recognition</u>* of Śakuntalā [accept <u>Śakuntalā</u> or <u>Shakuntala</u>; accept *The <u>Ring</u> of Recognition* before "ring"; accept <u>Abhijñānaśākuntala</u>m] [edited]

19. The author of this work discusses his plans to travel to Spain in order to preach, stopping by a certain city along the way. Its sixteenth chapter references Tertius, who transcribed the work for its author. Its second chapter claims that a Jew is led to salvation not by circumcision but by his faith. Unlike twelve similar works, it was written to a city its author had never visited. A commentary on this work was written by Karl Barth This book refutes the idea that we should "go on sinning so that grace may increase," stating that we were crucified with Christ and are now dead to sin. It states that "the wages of sin is death, but the gift of God is eternal life" and that "all have sinned and fall short of the glory of God." For 10 points, identify this book of the New Testament preceding First Corinthians and succeeding Acts, an epistle written by Paul to an Italian city.

ANSWER: *Epistle to the Romans* [edited]

20. During his rule, public outrage reached a maximum when a now-beatified father was beaten and then murdered by the SB. He imposed a dictatorship by creating the Military Council of National Salvation, sometimes abbreviated WRON. This man attempted to instigate Operation Krkonoše, which would have featured the Soviet Union invading his country. He has been tried numerous times for atrocities committed during his installation by martial law, the most recent trial is one stemming from charges from the IPN. Before his presidency, he was struck with a case of photokeratitis, which is why he continuously wears sunglasses in public. He appointed Józef Glemp as Primate to resolve tension between his government and a trade union that engaged in the so-called round table talks. For 10 points, name this Communist president of Poland who was succeeded by Lech Wałęsa.

ANSWER: Wojciech <u>Jaruzelski</u> [edited]

Extras

21. One song in this play includes the refrain "Toroddle, toroddle, toroll." The prologue to this play begins by declaring that the "Comic Muse, long sick, is now a-dying," and was written by David Garrick. Two servants in this play are consistently called "blockhead" by their master, who continually tells tales of working with the Duke of Marlborough. One subplot in this play involves two characters planning on stealing some jewels and absconding to France, while two other characters in this play are fooled into thinking that Mr. Hardcastle is an innkeeper. Constance Neville marries George Hastings at the end of this work, whose friend, Marlow, mistakenly believes Kate to be a maid. For 10 points, name this comedy featuring the mischievous Tony Lumpkin by Oliver Goldsmith.

ANSWER: She Stoops to Conquer

22. Walter Bright developed a programming language denoted by this letter which, unlike the similar C++, does not require forward declarations. A charm quark and any lighter antiquark can form mesons denoted by this letter. AM radio stations are better received during the daytime because the layer of the ionosphere denoted by this layer disappears at night. Sirius B is of the stellar class designated by this letter, which generally refers to white dwarfs. Along with L, this letter describes chirality by relating molecules to glyceraldehyde, and the lowest layer of the mantle is called "this double-prime." The vitamin of this letter can be synthesized from cholesterol when the body is exposed to sunshine. For 10 points, name this letter which denotes a flavor of quark that forms protons and neutrons with up quarks.

ANSWER: d

Bonuses

- 1. Endgames with two of these pieces of opposite colors are known to be drawish. For 10 points each:
- [10] Identify these chess pieces that stand to either side of the king and queen at the beginning of the game and can be fianchettoed. Along with knights, they comprise the minor pieces.

ANSWER: bishops

[10] A fianchettoed kingside bishop is the hallmark of this variation of the Sicilian Defense that often results in a Yugoslav Attack. Its name comes from the resemblance of black's pawn structure to a certain creature.

ANSWER: the **Dragon** Variation

[10] This Russian super-grandmaster employed the Dragon to good effect in his 1995 world championship match against Viswanathan Anand. He later lost his world champion title to Vladimir Kramnik in 2000.

ANSWER: Garry Kasparov

- 2. He puts a locket of his hair around his around his lover's neck when she dies. For 10 points each:
- [10] Identify this character who carries on a stormy romance with Catherine Earnshaw in Emily Brontë's *The Wuthering Heights*.

ANSWER: Heathcliff

[10] The narrative of *Wuthering Heights* begins when Heathcliff takes on this wealthy boarder, who falls asleep one night and is awakened by what is supposedly the ghost of Catherine. He narrates some of the novel to the reader.

ANSWER: Lockwood

[10] This other character from *Wuthering Heights* is the brother of Catherine who loses his father's favor when he brings Heathcliff home. His wife Frances drinks herself to death, he nearly murders his own child Hareton, and then drinks himself to death.

ANSWER: **Hindley** [prompt on "Earnshaw"]

- 3. A whole section on Wikipedia devoted to the color of this planet ends up concluding that its color is actually butterscotch. For 10 points each:
- [10] Name this planet home to Olympus Mons, which was also studied by Spirit and Opportunity.

ANSWER: Mars

[10] This 4000-km long network of canyons on Mars may have been formed by liquid water in the planet's past. It was named after a 1971 probe that visited the planet.

ANSWER: Valles Marineris [or Mariner Valleys]

[10] The most notable period of time on Mars is probably this epoch, which is ultimately named for the fact that it may have been covered in water.

ANSWER: Noachian Epoch

- 4. This colony allied with the Massachusetts Bay colony to fight in the Pequot War. For 10 points each:
- [10] Name this colony settled around 1620, whose famous residents included Myles Standish and folks who had arrived on the Mayflower.

ANSWER: Plymouth Bay Colony

[10] Sassacus was one of the few survivors of the biggest colonial victory of the Pequot War, a "massacre" which saw the burning of a village located on the banks of this Connecticut river.

ANSWER: Mystic River

[10] This Native American tribe, from present day Rhode Island, allied with the colonists, but were not thrilled with the brutality at Mystic River. After the war, they squabbled over the conquered land with the nearby Mohegan.

ANSWER: Narragansett

5. The Vilna Ga'on related these entities to worlds like the current one and the world after the revival of the dead. For 10 points each:

[10] Identify this religious grouping, supposedly representing God's four promises in Exodus. An extra one is sometimes said to represent an unanswered question about our redemption, so a door is opened for a guy who never consumes it.

ANSWER: four (or five) **cups of wine** during the *seder*

[10] Those four cups of wine are drunk during the *seder*, the ritual meal that begins this Jewish holiday, which commemorates the Israelites' escape from Egypt.

ANSWER: **Passover** [or **Pesach**]

[10] The best part of the *seder* is when the younglings race around the house, searching for this larger part of the middle piece of *matza*, set aside near the beginning. It's supposed to be the last thing eaten during the *seder*, and its name is Greek for "dessert."

ANSWER: afikoman

6. The Beveridge Curve plots it against the job vacancy rate. For 10 points each:

[10] Name this quantity which measures the number of people who desire a job, but lack one. Periods of recession typically have high quantities of it.

ANSWER: <u>unemployment</u> rate [accept <u>joblessness</u> rate]

[10] This type of unemployment occurs when an individual expends time to find an alternative job. New entrants to a labor market often experience it.

ANSWER: <u>frictional</u> unemployment [accept <u>search</u> unemployment]

[10] This economic model, named for two economists, posits that diligent workers should be paid an efficiency wage to prevent "shirking." Unfortunately, since the pay is above that of the market-clearing price, unemployment will result.

ANSWER: Shapiro-Stiglitz model [accept in reverse order]

7. Supply the following things that complete a line in Shakespeare's sonnets. For 10 points each:

[10] Shakespeare states "Thou art more lovely and temperate" in a poem that asks the addressee "Shall I compare thee to" one of these days.

ANSWER: summer's day

[10] Sonnet 55 boldly proclaims "Not marbles, nor the gilded monuments of princes shall outlive this powerful" thing, suggesting the true power of Shakespeare's verse.

ANSWER: rhyme

[10] In "My mistress' eyes are nothing like the sun," Shakespeare compares her hair to these objects after noting "her breasts are dun."

ANSWER: black wires

8. The sustained A played by the trumpet which begins this opera's overture represents the war call of the Colonna family. For 10 points each:

[10] Name this opera in which the title Roman tribune sings the prayer "Allmächt'ger Vater" before being killed in the burning capitol along with his sister Irene and her lover Adriano.

ANSWER: *Rienzi*, the Last of the Tribunes [accept *Rienzi*, der Letzte der Tribunen]

[10] Duke Gottfried of Brabant is turned into a swan by the evil Ortrud in this opera by the composer of *Rienzi*. A notable "Bridal Chorus" from this work is played at Elsa's wedding to the title knight of the Holy Grail.

ANSWER: Lohengrin

[10] *Rienzi* and *Lohengrin* are operas by this German composer of *Tristan und Isolde*, who included *The Valkyrie* and *Siegfried* in his "Ring Cycle."

ANSWER: Richard Wagner

- 9. This man, who was known as the comte d'Artois after birth and was sometimes called "the Beloved," passed the Anti-Sacrilege act while in office. For 10 points each:
- [10] Identify this king, the husband of Marie Therese of Savoy, who began an 1830 invasion of Algeria. He was deposed after a revolt that consisted mostly of the "Three Glorious Days."

ANSWER: Charles X [or Charles Philippe; prompt on "Charles"]

[10] Charles X was replaced by Louis Philippe in a revolution named after this month. Radical Jacobins like Robespierre were rounded up and executed in the Thermidorian Reaction that took place in this month.

ANSWER: July

[10] Many of the royalist policies of Charles X were instituted by this man, his statesman. He was the one who crafted the July Ordinances that eventually drove him and his master from power.

ANSWER: Jules Armand de Polignac

- 10. This molecule is used as a ligand in Zeise's salt. For 10 points each:
- [10] Name this very common industrial building block, the simplest alkene. This molecule with chemical formula C2H2 serves as a plant hormone that increases the rate of fruit ripening.

ANSWER: ethylene [accept ethene]

[10] Ethylene is often the ligand involved in this phenomenon, which occurs when a metal atom returns electron density to a ligand's LUMO. This often strengthens its bond to the metal while weakening an internal ligand bond, causing a decrease in its IR frequency.

ANSWER: pi backbonding [accept pi backdonation]

[10] The central metal atom of an organometallic complex typically has this many valence electrons, the maximum that can fill valence orbitals without entering an antibonding one. When counting them, you should treat the metal as a neutral species and define ligands as one- or two-electron donors.

ANSWER: <u>18</u>-electron rule [accept <u>16</u>-electron rule] edited

- 11. One of the donors of this work, the Engelbrechts, is depicted in the left panel. For 10 points each:
- [10] Name this triptych, whose right panel shows Joseph making mousetraps, and the center of which depicts an angel standing in front of Mary while a tiny baby Christ flies in the window accompanied by rays of light.

ANSWER: **Mérode** altarpiece [or triptych]

[10] This Flemish artist painted the Merode Altarpiece. If he is in fact the Master of Flémalle, then he also painted the Werl Triptych.

ANSWER: Robert Campin

[10] The two surviving panels of the Werl Triptych are located in the Prado, an art museum in this country. The painter of *Third of May 1808* and *Saturn Devouring his Son*, was born in this country.

ANSWER: Spain

- 12. Vannozza dei Cattanei was the mother to four members of this family. For 10 points each:
- [10] Identify this Renaissance-era family whose members included Cesare, Lucrezia, and their depraved father, Pope Alexander VI.

ANSWER: House of **Borgia**

[10] Lucrezia's first husband, Giovanni, hailed from this rival family, which overthrew the Visconti family to acquire Milan in the mid-15th century.

ANSWER: House of Sforza

[10] Alfons de Borja, uncle of Alexander VI, served under Alfonso V of Aragon before becoming the third pope of this name. The second pope of this name resolved much of the investiture controversy with the Concordat of Worms.

ANSWER: Calixtus

- 13. Its peaks include Mount Odin, Mount Asgard, and Mount Thor. For 10 points each:
- [10] Identify this largest Canadian island that lies across the Davis Strait from Greenland and across the Hudson Strait from Quebec. It is a part of the territory of Nunavut.

ANSWER: Baffin Island

[10] The largest city on Baffin Island, Iqaluit, lies at the end of this bay, which is flanked by the Hall Peninsula and the Meta Incognita Peninsula.

ANSWER: Frobisher Bay

[10] Frobisher Bay is actually an inlet of this larger sea, which is named after the easternmost region of mainland Canada.

ANSWER: Labrador Sea

- 14. Answer the following about the work of Roger Penrose. For 10 points each:
- [10] Penrose is well known for his work with this other British physicist on singularities. This scientist argued that vacuum fluctuations may cause radiation to be emitted from black holes and wrote *A Brief History of Time*.

ANSWER: Stephen Hawking

[10] Penrose lends his name to processes of this type, which tessellate the plane in two-dimensional shapes. Those named after Penrose are aperiodic but self-similar, and generally possess a five-way rotational symmetry.

ANSWER: tilings [prompt on "tessellations"]

[10] Penrose tilings of the second type include two shapes which make one side of a triangle slightly more concave or slightly more convex. The first is the kite, and the second is given this name.

ANSWER: <u>dart</u> [prompt on "Robinson Triangles"]

15. The loathsome protagonist of this novel blows up the ship on which Ippolito Nievo is sailing. For 10 points each: [10] Identify this recent novel by Umberto Eco about Simone Simonini, who also supposedly forged the *Protocols of the Elders of Zion*.

ANSWER: The Prague Cemetery [or Il cimitero di Praga]

[10] In this other novel by Eco, William of Baskerville and Adso of Melk investigate a number of murders carried out by Jorge of Burgos, who found the second book of Aristotle's *Poetics*.

ANSWER: The Name of the Rose [or Il nome della Rosa]

[10] Eco also wrote this other novel narrated by the unreliable title character, who narrates his search for Prester John to Niketas, a man this man talks to during the fourth crusade.

ANSWER: Baudolino

- 16. President Juan Manuel Santos has begun peace talks with this group after the 2011 death of its leader, Alfonso Cano. For 10 points each:
- [10] Identify this Marxist guerrilla group formed by the PCC in the aftermath of *La Violencia* that now fights alongside the ELN for control of Colombia.

ANSWER: <u>FARC</u> [or <u>Revolutionary Armed Forces of Colombia</u>—People's Army; or <u>Fuerzas Armadas</u> <u>Revolucionarias de Colombia</u>—Ejército del Pueblo]

[10] Although this Maoist guerrilla group still plagues neighboring Peru, its membership has declined since the capture of its leader Abimael Guzmán in 1992.

ANSWER: **Shining Path** [or **Sendero Luminoso**]

[10] Though formerly a coalition of guerrillas, this left-wing political party has held the presidency of El Salvador since 2009.

ANSWER: <u>FMLN</u> [or <u>Farabundo Martí National Liberation Front</u>; or <u>Frente Farabundo Martí para la Liberación Nacional</u>]

- 17. One characteristic example of this style is the "high, chilly clicks" of the xylophone in the adagio third movement of *Music for Strings, Percussion, and Celesta*. For 10 points each:
- [10] Identify this style, which is used by name to label the fourth piece in the composer's *Out of Doors*. It is used by a certain composer to create a "symphony of fear."

ANSWER: <u>night music</u> [or <u>éjszaka zenék</u>]

[10] This composer incorporated "night music" style pieces into such work as the aforementioned *Music for Strings*, *Percussion, and Celesta*. His other works include *The Miraculous Mandarin* and *Duke Bluebeard's Castle*.

ANSWER: Béla Bartók

[10] Beginning with six études, this book of 153 pieces for piano by Bartók was intended for the composer's son Peter and continuously increase in difficulty.

ANSWER: Mikrokosmos [or Mikrokozmosz]

- 18. This thinker discussed the use of sentimentalism and normative ethics in his masterpiece of ethics, *An Enquiry Concerning the Principles of Morals*. For 10 points each:
- [10] Identify this Scottish author of *A Treatise of Human Nature* whose argument against skepticism and against miracles are discussed in *An Enquiry Concerning Human Understanding*.

ANSWER: David Hume

[10] Section 7 of Hume's An Enquiry Concerning Human Understanding discusses Hume's theories surrounding the human perception of this relationship between events. Hume posits that this relationship is unknowable and that it is only through habit that humanity has some sense of it.

ANSWER: causality [accept cause and effect]

[10] Hume's *Treatise of Human Nature* also argues that mankind possesses a moral sense based on human passion, to make ethical choices. That idea was first extensively described in this philosopher's *An Inquiry Concerning Virtue*. He also wrote *Characteristics of Men, Manners, Opinions, Times*.

ANSWER: Earl of **Shaftesbury** or Anthony **Ashley-Cooper**

- 19. It includes "Delta Autumn" and "Pantaloon in Black," For 10 points each:
- [10] Identify this collection which includes a story in which Sam Fathers dies at the hands of bear named Old Ben. The author's recurring character of Gavin Stevens narrates the title story.

ANSWER: Go Down, Moses

[10] This American author of *The Sound and the Fury* wrote *Go Down, Moses*.

ANSWER: William Faulkner

[10] William Faulkner also wrote this novel, which depicts the events leading up to and aftermath of Popeye's rape of Temple Drake. It was followed up with *Requiem for a Nun*.

ANSWER: Sanctuary

- 20. Except for the mandible, the bones of this structure are connected by sutures. For 10 points each:
- [10] Identify this part of the human skeleton which houses the brain and contains eye sockets.

ANSWER: cranium [or skull]

[10] This part of the cranium houses the upper teeth and is connected to the zygomatic bones of the cheeks. This structure forms the jaw with the mandible.

ANSWER: maxilla

[10] Some parts of the cranium, such as the bones of the face, are formed from mesenchyme produced by these multipotent stem cells which are derived from ectoderm. These cells also produce chromaffin cells, odontoblasts, and Schwann cells.

ANSWER: <u>neural crest</u> cells [prompt on "stem cells"]

Extras

- 21. This man developed a deep feud with Gawain after killing Gaheris and Gareth. For 10 points each:
- [10] Name this knight whose affair with Queen Guinevere sparked the downfall of Arthur's kingdom.

ANSWER: Lancelot du Lac

[10] This daughter of King Pelles seduces Lancelot under the guise of Guinevere in order to produce a knight capable of attaining the Holy Grail. Her son with Lancelot, Galahad, successfully accomplishes the quest.

ANSWER: Elaine of Corbenic [do not accept "Elaine of Benoic"]

[10] This castle of Lancelot was renamed after the gravestones surrounding it disappeared. After rescuing Guinevere from the stake, he took her to this place, which was later besieged by Arthur.

ANSWER: **Joyous Gard** [accept **Dolorous Gard**]