## PACE NSC 2011

Edited by Mike Bentley, Matt Bollinger, Rob Carson, Kyle Haddad-Fonda, Hannah Kirsch, Trygve Meade, Bernadette Spencer, Guy Tabachnick, and Andy Watkins

Packet 4

Tossups

1. In this work, a character wrongly considered insane is subjected to the exorcism of Doctor Pinch. One subplot in this play sees a courtesan demand the gold chain promised her, which the blacksmith Angelo gave to the wrong man. One character in this play must pay one thousand pounds or be executed for entering the city of Duke Solinus. At the end of this play, the Abbess is revealed to be Emilia, the former wife of (\*) Egeon, and two servants named Dromio reunite. For 10 points, name this Shakespeare play about twins who are confused for one another.

ANSWE*R*: The <u>Comedy of Errors</u> <Bollinger>

2. This work defines "aeviternity" as the mean between time and eternity, since aeviternal things have beginning and no end. It also claims that heavenly bodies are moved by immaterial beings called "separate substances." This work separates concupiscible passions from irascible ones, sets out natural law as the mentally-innate part of eternal law, and puts forward three conditions for (\*) just war. This document written in objection-contrary-response format cites many authorities, referring to Aristotle only as "The Philosopher." Its quinquae viae, or Five Ways, prove God's existence. For 10 points, name this tome defending all of Christian doctrine, the masterwork of Saint Thomas Aquinas.

ANSWER: <u>Summa Theologica</u> [or Aquinas's <u>Summa theologiae</u>] <Jackson>

3. Binary codes with this property have generator polynomials that include a factor of 1 + x. If a finite group *does not* have this property, then the Feit-Thompson theorem guarantees that it is solvable. Permutations that possess this property form a subgroup of all permutations called the (\*) alternating group, and they all have Levi-Civita symbol equal to positive one. Functions with this property have Fourier expansions that consist only of cosines, since for cosines f(x) = f(-x) ("eff of x equals eff of negative x"); by definition, such functions exhibit reflectional symmetry over the y-axis. For 10 points, name this property shared by numbers divisible by two.

ANSWER: <u>even</u> <Watkins>

- 4. In January 2011, this man denied an affair with Aquilina Pamberi. In December 2010, an inquiry into whether he had committed treason was launched because of conversations that were leaked by WikiLeaks. In 2009, this man's wife died in what may have been an assassination attempt when a truck struck his car. One of this man's current deputies is Arthur (\*) Mutambara, who leads a breakaway faction of his party. In 2008, this man briefly hid at the Dutch embassy in his country after he pulled the Movement for Democratic Change out of a presidential runoff that he described as a "violent sham." For 10 points, name this leading opponent of Robert Mugabe who currently serves as the prime minister of Zimbabwe. ANSWER: Morgan Richard Tsvangirai (SHANG-gih-"rye") <Haddad-Fonda>
- 5. This artist used a distinctive technique to create the song "Countdown," having earlier exhibited it on the album *Blue Train*. This man's quartet included bassist Jimmy Garrison and pianist McCoy Tyner. On songs like "Everytime We Say Goodbye", this performer played the more obscure soprano saxophone. One of this man's albums is a four-part suite comprised of "Acknowledgement," "Restitution," "Pursuance," and "Psalm." This man composed using his namesake (\*) "changes," and Ira Gitler dubbed his technique "sheets of sound." He included "Naima" on *Giant Steps* and recorded the song "My Favorite Things". For 10 points, name this jazz saxophonist of *A Love Supreme*.

ANSWER: John William <u>Coltrane</u> [prompt on <u>Trane</u>] <Rosenthal>

6. In one of this author's novels, a five-day battle between rival clans ends when the guns of both communities are destroyed. In that novel, a convert to Christianity attempts to kill a sacred python. This author described the explosion of a man's gun, which kills his younger son not long after he loses his adopted son as punishment for domestic violence during the (\*) Week of Peace. He wrote about Captain Winterbottom in one novel, about the scholarship provided the U.P.U. for Obi's study in England in another, and about the Umuofia clan in a third. For 10 points, identify this author of *Arrow of God*, *No Longer and Ease*, and its prequel about Okonkwo, *Things Fall Apart*.

ANSWER: Albert Chinualumogu "Chinua" <u>Achebe</u> <Gupta>

7. In a dream, this leader asked God for "an understanding heart to judge Your people," and he purchased cypress and cedar from Hiram for one project. During the reign of his son, Samaria split off; that son was Rehoboam. Anointed by Zadok, writings attributed to this man include (\*) Proverbs, Ecclesiastes, and Song of Songs. One story states that he advised two prostitutes arguing over who was the mother of a baby to cut that baby in half. Because he was a man of peace, this leader was allowed to build the First Temple, unlike his father. For 10 points, name this wise King of Israel who welcomed the Queen of Sheba, the son of Bathsheba and Solomon.

ANSWER: **Solomon**, son of David [or **Shlomo** ben David] <Greenthal>

8. One form of this phenomenon involving a spinning rod inducing the inward motion of polymer solutions is called the Weissenberg effect. In thin layers, this phenomenon results in structures called Bénard cells. If the (\*) Grashof number is much greater than the square of the Reynolds number, only the "forced" type of this process happens to any appreciable extent. It contrasts with processes relying on photons and on atom-to-atom energy transfers. For 10 points name this process of heat and mass transfer unique to fluids.

ANSWER: convection

<Watkins>

9. The third movement of this work opens with alternating E flat and A flat chords, and English horns feature prominently in the trio of that movement, a scherzo. A C major trio follows the development of a C minor "procession theme" in this composition's second movement, a funeral march. In the recapitulation of its first movement, a solo horn enters with the theme four bars before the rest of the orchestra. The last movement of this work uses a melody that its composer had placed in (\*) *The Creatures of Prometheus*. Two *tutti* sforzando chords open this symphony in E flat major, which was rededicated "to the memory of a great man" instead of to Napoleon Bonaparte. For 10 points, name this symphony by Ludwig van Beethoven nicknamed "Eroica."

ANSWER: <u>Symphony</u> No. <u>3</u> in <u>E flat major</u>, "<u>Eroica</u>," by Ludwig van <u>Beethoven</u> [need <u>Beethoven</u> before mentioned; prior to being mentioned, either <u>Eroica</u> Symphony or <u>Symphony</u> No. <u>3</u> or <u>Symphony in E flat major</u> are acceptable answers] <Kirsch>

10. This man's father, Antoine, was killed fighting Protestants at Rouen after abandoning the Protestant cause; as a result, this mangrew up at Béarn under the influence of his mother, Jeanne d'Albret. Early in life, this man personally led a charge at the Battle of Arnay-le-Duc. He married Margaret of Valois in the "secret nuptials." This man built the Louvre and was ably served by the (\*) Duke de Sully. Because he had been excluded from succeeding one office by the Treaty of Nemours, he fought a war against two rivals who shared his first name. Murdered by François Ravaillac, this man famously stated "Paris is well worth a mass" to end the Wars of Religion. For 10 points, identify this father of Louis XIII, the first Bourbon king of France.

ANSWER: <u>Henry IV</u> of France [or <u>Henri IV</u> or <u>Henry III of Navarre</u>; prompt on just "Henry of Navarre" or "Henry of Bourbon" or "Prince de Béarn"; do not accept or prompt on just "Henry III"]
<Bentley>

11. In this work, the diminutive Corsican, Paoli, smashes one character's face in for making advances on a young boy. A climactic scene in this novel is sparked by the sight of the root of a chestnut tree under a park bench. The protagonist of this novel realizes that he wants to write a novel while he is listening to the jazz song "Some of These Days." The protagonist of this novel is researching the (\*) Marquis de Rollebon in Bouville, although he abandons his research due to the title condition. For 10 points, name this novel consisting of the diary entries of Antoine Roquentin, written by Jean-Paul Sartre.

ANSWER: Nausea [or La Nausée]

<Nediger>

12. Acids of this element are used with a palladium catalyst to carry out the Suzuki reaction. Its hydrides add in THF solution to alkenes and are oxidized by peroxides in a reaction named for Brown. The structures of those hydrides of this element can be predicted using (\*) Wade's rules. It may be found in the fibrous mineral ulexite. Its enriched 10 isotope is used to capture thermal neutrons in nuclear reators. Along with helium-3, this element is used to detect ionizing radiation in Geiger counters, and it violates the "octet rule" since it can form bonds using only its three valence electrons. For 10 points, name this metalloid with atomic number 5 and symbol B.

ANSWER:  $\underline{boron}$  [accept  $\underline{B}$  before mention; accept element  $\underline{number 5}$  or equivalents before mention]

<Kirsch>

13. In one of this artist's paintings, the inclusion of a stag's skull foreshadows the fate of a man who glances past a red curtain at a group of women around a stone bath. In that work's follow-up, a woman shoots a bow at a figure being devoured by hounds. In another work, this painter of *Diana and Actaeon* showed a constellation above a ship fading in the distance as one figure jumps from a chariot drawn by two cheetahs. In one of his paintings, Cupid stirs the water of a (\*) sarcophagus between one nude and one clothed woman. The painter of *Bacchus and Ariadne* and *Sacred and Profane Love* showed a dog curled at the feet of a reclining nude in another work. For 10 points, name this painter of *Venus of Urbino*.

ANSWER: <u>Titian</u> [or Tiziano <u>Vecelli</u>o]

<Austin>

14. In a paper describing the economy of professional beekeeping, James Meade argued that this statement could not possibly hold true for bargaining involving pollination. Judge Learend Hand applied a version of this statement to the case *US v. Caroll Towing*. The "invariance" version of this statement is sometimes negated by the wealth effects that change prices and distributions, while the (\*) "efficiency" version of this theorem is designed to abate the need for Pigouvian taxes. First stated in the work *The Problem of Social Cost*, for 10 points, name the theorem that states that, when trade in an externality is possible and there are no transaction costs, bargaining will lead to an efficient outcome regardless of the initial allocation of property rights.

ANSWER: **Coase**'s Theorem

<Meade>

15. According to legend, the first man to hold this office was personally responsible for prohibiting the adoption of German as a national language. One holder of this office stepped down from it in the wake of dealings with Tongsun Park in Koreagate; that man was Carl Albert. First held by Frederick Muhlenberg, the longest tenured holder of this office often went by the nickname "Mr. Democrat." Charles Crisp tried to use the (\*) disappearing quorum tactic against one holder of this office, which was held by Sam Rayburn during the New Deal era. Once held by "Czar" Reed, this position's holder is second in line to the presidential succession. For 10 points, name this position held by people like Nancy Pelosi and John Boehner ["BAY-ner"].

ANSWER: <u>Speaker</u> of the House [or <u>Speaker</u> of the United States House of Representatives] <Bentley>

16. This vitamin promotes cathelicidin production. A polymorphism of the gene coding for this vitamin's binding protein is associated with Graves' disease, and this vitamin's receptors are highly expressed in activated T and B cells. It amplifies natural killer cell activity, and overconsumption of it can cause hypertension and kidney stones. The liver converts it to calcidiol, which the kidneys convert to the (\*) secosteroid hormone calcitriol. Deficiency of this vitamin causes osteomalacia in adults and rickets in children, both of which are characterized by softening of the bones. For 10 points, name this vitamin that can be obtained through drinking milk or being exposed to sunlight.

ANSWER: vitamin **D** 

<Kirsch>

17. All residents of the central locale of this story agree that the "fellows of Red Dog" are not to be trusted. One character repeatedly notes that the title character "rastled with" his finger and refers to him as "the d—d little cuss." The title character is referred to as "Stumpy's boy" or "The Cayote" until (\*) Oakhurst suggests a new name. The North Folk River engulfs the title location overnight in this short story, which ends with Kentuck dying with the already-dead title character in his arms. For 10 points, name this short story that opens with Cherokee Sal giving birth to the title character in a camp located in a valley written by Bret Harte.

ANSWER: "The <u>Luck of Roaring Camp</u>" <Gaurav Kandlikar>

18. Participants in this event included law professor Jerome Schurff and theologian Johann von Eck. The subject of this event stated, "My conscience is captive to the Word of God," although that subject is falsely quoted as saying, "Here I (\*) stand. I can do no other." Following this meeting, one participant was sheltered by Frederick the Wise in Wartburg Castle. It took place the year after the bull *Exsurge Domine* was issued by Pope Leo X, who therein listed forty-one errors from *The Ninety-Five Theses* and other writings. For 10 points, name this 1521 meeting at which Martin Luther was condemned for heresy.

ANSWER: Diet of Worms of 1521

<Nediger>

19. After one of these events, Hindus take a cold bath with their clothes on. One of these occurred after Vishnu used his discus to behead a demon trying to steal the *amrita*; thus, these events are said to be caused by the demon Rahu. In China, people banged on drums and fired cannons during these events to frighten away the Dragon. Another of these events occurs after the horses Arvakr and Alvsior are caught. The serpent (\*) Apep causes these in Egyptian myth. At Ragnarok, one of these events signals the final success of Skoll. For 10 points, name these celestial events, one of which occurs after a wolf devours the sun.

ANSWER: solar <u>eclipses</u> [or <u>eating</u> the <u>sun</u> before it is read]

<Bollinger>

20. Sylvain Salnave overthrew Fabre Geffrard to become leader of this country in 1867. At the Battle of Fort Riviere in this nation, rebel Cacos were defeated by US Marines under Smedley Butler. One revolutionary leader in this country was imprisoned after signing a peace treaty with Charles Leclerc, although this nation's independence was secured by men like (\*) Henri Christophe and Jean-Jacques Dessalines. A later ruler of this country used the Tontons Macoutes, or bogeymen, to suppress the people he ruled; that man went by the nickname Papa Doc. For 10 points, name this Caribbean country long dominated by the Duvaliers, which moved towards independence under Toussaint Louverture and which suffered a devastating earthquake in 2010.

ANSWER: Haiti

<Bentley>

21. This character notes that in his twenty-eight years of life, he has never found a man that "knew how to love himself." This man sings "King Stephen was a worthy peer," a drinking song he learned while in England. After his wife twice refuses his order to go home, he calls her a "villainous whore" before stabbing her and running offstage, only to reappear as a prisoner. He calls (\*) reputation "an idle and most false imposition" and warns another man to beware "the green-eyed monster" while attempting to convince that man that Cassio is sleeping with Desdemona. For 10 points, name this villain from Othello.

ANSWER: **Iago** 

<Wynne>

22. Disasters befalling this industry included one in St-Hilaire, Quebec. Hugh Allan, who was trying to expand this industry, bribed Canadian politicians like John Macdonald, who was turned out of office in the scandal. An early British pioneer in this industry called his company the Great Western and was named Isambard Kingdom Brunel. Congressman (\*) Oakes Ames distributed stock from a company in this industry in a scandal during the Grant Administration. In Russia, a major endeavor in this industry begun under Alexander III brought prosperity to Vladivostok and operates across Siberia. For 10 points, name this industry, controlled in the United States by companies like the Union Pacific and Amtrak. ANSWER: the railroad transport industry [or steam locomotive industry; prompt on **transportation** industry]

<Bentley>

23. Glomus cells serve as chemoreceptors in this structure's namesake bodies, and sufferers of Turner's syndrome usually have malformations of a valve leading to it. The right auricle helps support and cover it at its origin. Coarctation, or congenital narrowing, of this structure causes high pressure in the limbs, and sufferers of (\*) Marfan syndrome often have dissection or aneurysm of this structure. Its descending portion connects the point at which it divides into the iliac arteries to its namesake arch, and it originates at the exit of the left ventricle. For 10 points, name this largest artery of the body.

ANSWER: aorta

<Kirsch>

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Packet 4

## Bonuses

1. The namesake of these riots later was charged with libeling Marie Antoinette. For 10 points each:

[10] Identify this series of riots that took place in England in 1780 in response to the passage of the Catholic Relief Act two years earlier.

ANSWER: Gordon Riots

[10] The Gordon Riots took place during the reign of this British monarch. A litany of complaints against this monarch was drafted by Thomas Jefferson and placed in the Declaration of Independence.

ANSWER: <u>George III</u> [or <u>George III</u> William Frederick; or <u>Georg III</u> Wilhelm Friedrich] [10] This man served as prime minister during the Gordon Riots. His government was also responsible for the 1774 Coercive Acts.

ANSWER: Frederick <u>North</u>, 2nd <u>Earl of Guilford</u>, <u>Baron Guilford</u> [or Lord <u>North</u>; accept any underlined answer]

<Bentley>

2. Important figures in this religion include Dogen, the founder of its Soto school, and Bodidharma, who introduced this practice to China. For 10 points each:

[10] Identify this sect of Buddhism whose other schools include Obaku and Rinzai. This division of Mahayana is widespread in Korea, Vietnam, and Japan.

ANSWER: **Zen** Buddhism

[10] Members of the Soto school of Zen Buddhism engage in seated meditation to achieve this goal, a form of long-term enlightenment contrasted with brief experiences of *kensho*.

ANSWER: satori

[10] One method for achieving satori involves the contemplation of these enigmatic sayings. Examples include the question "What is the sound of one hand clapping?"

ANSWER: koans

<Surya>

- 3. This man journeys to Heorot at the request of Hrothgar. For 10 points each:
- [10] Name this slayer of Grendel and eponymous hero of an eighth-century epic poem.

**ANSWER: Beowulf** 

[10] This character kills Aeschere, Hrothgar's dearest advisor, in revenge for the death of Grendel, rather than making Hrothgar pay wergild.

ANSWER: Grendel's mother

[10] Before diving into the lake to fight Grendel's mother, Beowulf says that this warrior, who had just given Beowulf the sword Hrunting, would inherit Beowulf's estate.

ANSWER: Unferth

<Wynne>

- 4. This artist's works include a bust of Cosimo de Medici and a neat autobiography. For 10 points each:
- [10] Name this sculptor who made a gold and enamel salt cellar for Francis I of France.

ANSWER: Benvenuto Cellini

[10] In this bronze Cellini work, the title figure has winged sandals and stands on top of the body of his enemy with a sword in his right hand and a body part crudely cut from the body in his left.

## ANSWER: Perseus with the Head of Medusa

[10] This artist's *Rape of the Sabine Women* stands near *Perseus with the Head of Medusa* in Florence's Loggia dei Lanzi. It shows three twisting, vertical bodies, the topmost with her hand outstretched in anguish.

ANSWER: Giambologna [or Jean Boulogne]

<Tabachnick>

- 5. Identify the following about some military units charged with protecting heads of state, for 10 points each.
- [10] Cassius Chaerea, a member of this group of bodyguards who were tasked with protecting the Roman Emperor, assassinated Caligula in 41 CE.

ANSWER: **Praetorian** Guard [or **Prætoriani**]

[10] Commanded by a *hazarapat*, these bodyguards to the Achaemenid Emperor were among the troops that fought at Thermopylae. Although one would think their name derives from these troops being hard to kill, it instead refers to the fact there were always 10,000 of them.

ANSWER: the Ten Thousand **Immortals** [or Persian **Immortals**]

[10] Known for bearing axes and being comprised largely of Scandinavians, these troops were the guards of the Byzantine Empire. This unit was established by Basil II.

ANSWER: Varangian Guard

<Bentley>

- 6. The "dry" type of this illness manifests with nervous symptoms like numbness in the extremities and muscle weakness, while the "wet" type mostly affects the cardiovascular system. For 10 points each:
- [10] Name this vitamin B1 deficiency.

ANSWER: beriberi

[10] The "wet" type of this disease involves abnormal blood vessel growth, while the "dry" type involves loss of photoreceptors. It results in loss of vision at the center of the visual field, where its namesake structure is located.

**ANSWER:** macular degeneration

[10] The macula is the central region of this structure of the eye, a thin layer of light-sensitive tissue that contains rods and cones and sends visual signals to the optic nerve.

ANSWER: retina

<Kirsch>

- 7. This poem's third, fifth, and seventh sections begin with the thrice-repeated words "Shine!" "Blow!" and "Soothe!" respectively. For 10 points each:
- [10] Name this poem in which a boy watches two birds near his home and later sees the male bird mourn his mate when she fails to return.

ANSWER: "Out of the Cradle, Endlessly Rocking"

[10] This poem by the same author notes that "Crowds of men and women attired in the usual costumes" will make the same journey for generations to come. It begins "Flood-tide below me! I watch you face to face."

ANSWER: "Crossing Brooklyn Ferry"

[10] This American author of "Out of the Cradle, Endlessly Rocking" included "I Sing the Body Electric" and *Song of Myself* in *Leaves of Grass*.

ANSWER: Walter Whitman

<Jackson>

- 8. One of these works by Gabriel Fauré calls for a boy soprano in the "Pie Jesu" section. For 10 points each:
- [10] Name these masses for the dead. Mozart left one unfinished at his death that was later completed by Franz Sussmayr.

ANSWER: **Requiem** masses

[10] The opening *Introit* of a requiem is typically followed by this text which, unlike the rest of the mass, is in Greek rather than Latin.

ANSWER: Kyrie eleison [or Lord, have mercy; accept translation variants]

[10] Fauré's requiem omits this poetic sequence. Its subsections include "Tuba mirum" and "Lacrimosa," and Verdi's setting of it uses a bass drum and timpani passage to depict thunder.

ANSWER: <u>Dies Irae</u> [or <u>Day of Wrath</u>; accept translation variants]

<Rosenberg>

- 9. The theocratic component of this theory is subdivided into Animistic, Polytheistic, and Monotheistic components. For 10 points each:
- [10] Name this sociological theory, also containing Metaphysical and Positivity components, which purported to describe the natural evolution of every society.

ANSWER: the law of **Three Stages** [accept clear knowledge equivalents]

[10] Name the author of *Course in Positive Philosophy*, the French sociologist to whom the Law of Three Stages is due.

ANSWER: Auguste **Comte** 

[10] Another sociologist to describe the evolution of communities was this German, who posited that they were split into communities and societies based on organization and solidarity in *Gemeinschaft and Gesellschaft*.

ANSWER: Ferdinand Tönnies

<Meade>

10. Methionine is the direct precursor to this substance in plants. For 10 points each:

[10] Name this gaseous plant hormone that induces fruit ripening.

ANSWER: <a href="mailto:ethylene">ethylene</a> [or <a href="mailto:ethylene">ethene</a>]

[10] This other group of plant hormones stimulates growth by promoting the binding of a calmodulin complex to DNA. These hormones cause stem elongation, dormancy, and germination.

ANSWER: gibberellins

[10] Gibberellins were first identified during a study of this disease of the rice plant in which an infectious fungus constantly produces gibberellins and causes out-of-control growth.

ANSWER: foolish seedling disease [or bakanae]

<Kirsch>

11. Alfons Beck introduces the protagonist to alcohol in this work. For 10 points each:

[10] Name this novel, about a boy bullied by Franz Kromer who befriends the title figure, who teaches Emil Sinclair to worship Abraxas.

ANSWER: <u>Demian</u>: The Story of Emil Sinclair's Youth

[10] This last novel by the author of *Demian* concerns Joseph Knecht, a member of the Castalian Order who seeks to master the title form of recreation.

ANSWER: The Glass Bead Game

[10] Name this German author of novels such as *Klingsor's Last Summer*, *The Glass Bead Game*, and *Demian*.

ANSWER: Hermann Hesse

<Watkins>

- 12. A man with long white hair buries his head in his lap in this artist's *Silence*. For 10 points each:
- [10] Name this Swiss-English Romantic artist, another of whose works features a swarthy, frowning creature sitting on a woman lying down with outstretched arms.

ANSWER: Henry Fuseli [or Johann Heinrich Füssli]

[10] This aforementioned painting by Henry Fuseli depicts a succubus bedeviling a sleeping woman, who is evidently going through the title experience.

ANSWER: The Nightmare

[10] On the left side of *The Nightmare*, the head of one of these animals is seen in front of a curtain. Its eyes are blank, giving it a demonic, if comical, look.

ANSWER: **horse** [accept equivalents]

<Bentley>

- 13. Identify the following Platonic dialogues, for 10 points each.
- [10] In this dialogue, several partygoers express their opinion on the nature of love. Aristophanes suggests that humans are constantly searching for a previously removed other half.

ANSWER: **Symposium** 

[10] The title figure of this dialogue attempts to convince Socrates to escape from jail, which he refuses to do because it would break the law.

ANSWER: Crito

[10] In this dialogue, the title figure presents an account of the creation of the universe by a "divine Craftsman."

ANSWER: **Timaeus** 

<Angelo>

- 14. When these objects act on the language they're written in, they're known as bootstrappers. For 10 points each:
- [10] Identify these constructs from computer science that turn source code into machine-readable instructions.

ANSWER: compilers

[10] Programs in this Sun-developed language are usually compiled to byte code rather than assembly. This allows programs written in this language to easily run on multiple architectures or in namesake applets.

ANSWER: Java

[10] Java applications run via this type of program that interprets the byte code and makes calls to underlying hardware and operating system components. PASCAL also used one to run p-code.

ANSWER: **virtual machine** [or **VM**]

<Bentley>

- 15. Answer the following about creations of Hephaestus, for 10 points each.
- [10] In Hesiod's version of the story, Hephaestus is the creator of this notably curious first woman, the wife of Epimetheus, who was given a box and told never to open it.

ANSWER: Pandora

[10] This wife of Cadmus was given a necklace made by Hephaestus as a wedding gift. As this woman was the daughter of Hephaestus's wife Aphrodite with Mars, the necklace was cursed.

ANSWER: Harmonia

[10] Hephaestus created this bronze robot to defend the isle of Crete. It has one vein closed off by one nail, which is removed by Medea.

ANSWER: Talos

<Angelo>

- 16. The number of immigrants from this country into the United States greatly increased following the signing of the Burlingame Treaty. For 10 points each:
- [10] Identify this country, whose immigrants were later barred from entering the United States with a namesake exclusionary act in 1882.

ANSWER: China

[10] Several Chinese immigrants were killed at the Rock Springs Massacre in 1885 in what is now this state. A few years earlier it had become the first state to grant women the right to vote.

ANSWER: Wyoming

[10] Chinese immigration was finally allowed again in higher numbers following the passage of the Immigration and Nationality Act of this year, which got rid of the National Origins Formula of 1921. A landmark Voting Rights act was also passed in this year.

ANSWER: 1965

<Bentley>

- 17. For 10 points each, identify these Christian minorities that have had a rough year in the Middle East.
- [10] This monophysite Christian community makes up about ten percent of Egypt's population and is led by Pope Shenouda III. Twenty-three members of this religion were killed in Alexandria by a bomb in a church on New Year's Day.

ANSWER: **Copts** [or the **Coptic** Orthodox Church; accept **qibt** or **aqbat**]

[10] Since 2009, thousands of these people have fled attacks in Mosul in Iraq. They are mostly Nestorians who speak a modern dialect of Aramaic, and their name indicates to their supposed descent from the likes of Sargon and Ashurbanipal.

ANSWER: <u>Assyrians</u> [or <u>Assyrian</u> Church of the East; accept <u>ashuri</u> or arguably <u>Assyro-Chaldean</u> or <u>Chaldo-Assyrian</u>, but obviously don't read those answers aloud]

[10] This other major Christian community in Iraq is distinguished from the Assyrians by their adherence to the Catholic Church. Most speak Arabic as a first language, including Saddam Hussein's former prime minister, Tariq Aziz.

ANSWER: <u>Chaldeans</u> [or <u>Chaldean</u> Catholic Church; accept <u>kaldani</u>] <Haddad-Fonda>

- 18. This statement was derived from an experiment in which a magnetic field was moved across a current loop. For 10 points each:
- [10] Identify this law which states that a changing magnetic field induces an electric field.

ANSWER: **Faraday**'s law

[10] While Faraday's law gives the strength of an induced current, this law tells you that the induced current will flow in a direction such that it opposes the change in flux.

ANSWER: Lenz's law

[10] Changing the current in a loop of wire will also generate a change in flux in the source loop due to self-inductance, leading to this effect, which is part of why a motor already spinning consumes less energy than one starting or changing direction.

ANSWER: **back-emf** [or **back-electromotive** force]

<Rosenberg>

- 19. Jafar discovers that his slave is responsible for a murder in "The Three Apples," one of the tales in this work. For 10 points each:
- [10] Name this work, which also contains tales about Sinbad the Sailor and Ali Baba.

ANSWER: <u>One Thousand and One Nights</u> [or The <u>Arabian Nights' Entertainment</u>; or The <u>Arabian Nights</u>; or any reasonable combination thereof]

[10] This man's risqué translation of *The Arabian Nights* was the second unabridged translation into English, after that of John Payne.

ANSWER: Sir Richard Francis Burton

[10] Another classic Middle Eastern tale is that of Rostam and Sohrab, which is recounted in the *Shahnameh*, an epic by this Persian poet.

ANSWER: Ferdowsi

<Nediger>

- 20. This island is home to the unique rongorongo script, and Jacob Roggeveen's crew members were the first Europeans to visit it. For 10 points each:
- [10] Identify this remote island, whose inhabitants, speakers of Rapa Nui, are best known for erecting a series of moai statues.

ANSWER: **Easter** Island [or Isla de **Pascua**]

[10] The ecological disaster at Easter Island is traced in this 2005 book by the author *The Third Chimpanzee*. Subtitled *How Societies Choose to Fail or Succeed*, it also chronicles the decline of the Maya civilization.

ANSWER: <u>Collapse</u>: How Societies Choose to Fail or Succeed

[10] Collapse is a work by this author of Guns, Germs and Steel.

ANSWER: Jared Mason Diamond

<Bentley>

- 21. This poem argues that it is not "valid to discriminate against 'business documents and school-books." For 10 points each:
- [10] Identify this work that describes "imaginary gardens with real toads in them," and states of the title concept, "I too dislike it: / there are things that are important beyond all this fiddle."

ANSWER: "Poetry"

[10] "Poetry" is a work by this American author of "In the Public Garden," "The Fish," and "O To Be a Dragon."

ANSWER: Marianne Moore

[10] Marianne Moore is sometimes identified with this movement emphasizing clarity of expression. Other poets associated with this movement include Amy Lowell and Ezra Pound.

ANSWER: imagism

<Surya>

22. Figurehead holders of this title included Kujo Yoritsune. For 10 points each:

[10] Identify this title, also held by Japanese military dictators like Tokugawa Ieyasu.

ANSWER: **shogun** [or **shogunate**]

[10] This first Shogunate began after Minamoto Yoritomo defeated the Tairas at the Battle of Dannoura in 1185. It was late dominated by the Hojo family.

ANSWER: **Kamakura** shogunate

[10] The Onin War ended the Ashikaga Shogunate and began this period of Japanese history, also called the Sengoku Period.

ANSWER: <u>Warring States</u> period [or era of the <u>Warring States</u>] <Bentley>

- 23. This type of chemistry is contrasted with flow chemistry. For 10 points each:
- [10] Name this type of chemistry wherein reactions are carried out within discrete vessels.

ANSWER: **batch** chemistry

[10] Following a batch reaction, a series of steps is taken to quench reagents and to separate the product from side-products using acid-base extractions and similar procedures. That series of steps is given this name.

ANSWER: work-up

[10] Following an extraction, residual water may be removed using drying agents, such as the sodium and magnesium salts of this anion.

ANSWER: sulfate

<Watkins>