

2015 NSC -	Official	Scoresheet
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Round	22 - Finals1	Room	
Bracket			
Reader			

Team							Team									
Player Names																
Q#					Bonus	Steals	Ques. Total	Run. Score					Bonus	Steals	Ques. Total	Run. score
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Final score																
	Substitutions before Tossup 11						Substitutions before Tossup 11									
	Out: In:					Out: In:										
	Out: In:					Out: In:										

Circle winning team above. Clearly mark if game goes to OT/SD. Fill out "Point totals" row completely. If there are substitutions, please note tossups by each player in "20s" and "10s" rows. Below is for Tab Room use only:

RH	RS	ВН	BS	Left	Right	ВН	BS	RH	RS	
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PACE NSC 2015 - Round 22 - Finals I - Tossups

1. A visitor to this place is given a box containing his old age, which he is told never to open, and travels forward 300 years in time when he departs this place. Hoori (HO-oh-ree) marries this realm's princess Otohime, the daughter of its ruler Watatsumi. After traversing this location, the Hare of Inaba is skinned by angry wanizame. A god of this place puts his son-in-law Okuninushi through a series of tests, and earlier transforms a young girl into a comb in order to slay the eight- (*) headed serpent Yamato-no-Orochi. That god of this place tosses a flayed horse at his sister, who flees into a cave. The nose of Izanagi produces a god of storms and this realm who is the brother of Tsukiyomi and Amaterasu. For 10 points, identify this domain ruled by Susanoo.

ANSWER: the <u>ocean</u> [or the bottom of the <u>sea</u>; the <u>sea</u>s; or <u>underwater</u>; or <u>underwater palace</u>; or <u>dragon</u> <u>palace</u>; or <u>umi</u>; or <u>Ryugu-jo</u>; or obvious equivalents; prompt on <u>water</u>; prompt on <u>palace</u>; do not accept "rivers"] <Kim>

2. The expression of an enzyme produced by this system is visually confirmed in a blue-white screen. A scientist who studied this system theorized that it is characterized by the "diauxic growth" model. IPTG is an analog of a compound that induces this system. EIIA shuts down a permease enzyme and the catabolite activator protein, or CAP, inactivates this set of genes during unfavorable (*) environmental conditions. However, when conditions are right, cAMP binds to CAP, promoting this set of genes. Jacob and Monod won the Nobel for discovering this set of genes, which produces beta-galactosidase and is turned off when glucose is available. For 10 points, name this operon in *E. coli* which controls the metabolism of a sugar found in milk.

ANSWER: <u>lac operon</u> [or <u>lactose operon</u>; prompt on <u>operon</u> until mentioned] < Gupta>

3. As Attorney General, a future holder of this position tried to bar the Communist Egon Kisch from entering the country and got the nickname "Pig-Iron Bob" for forcing workers to ship iron to Japan. John Kerr dismissed a holder of this position during a 1975 constitutional crisis. This office was held by a man who gave a radio speech about the Forgotten People and by a Vietnam War enthusiast who disappeared while snorkeling. In 2008, the holder of this position finally acted on the (*) Bringing Them Home report and issued an apology to the Stolen Generations. The longest-serving holder of this position was succeeded by Harold Holt and entered his country into SEATO and ANZUS. For 10 points, name this office held by Robert Menzies, Kevin Rudd, and Tony Abbott.

ANSWER: **Prime Minister** of **Australia** <Bentley>

4. This process "activates" cell sorting in the most common method of flow cytometry. This process corresponds to the decay from S1 to S0 without internal conversion on a Jablonski diagram. This phenomenon is "recovered" after photobleaching in a technique used to study the cell membrane. The Stern-Volmer equation gives the decrease in quantum yield of this process in the presence of (*) quenchers. A common reporter protein which undergoes this process has a serine-tyrosine-glycine motif in a beta barrel. An arrow drawn from the excited to ground state represents this phenomenon, in which electrons absorb energy, and then emit at a lower wavelength, generating light. For 10 points, name this type of luminescence shown by GFP. ANSWER: fluorescence [or word forms; prompt on luminescence] < Silverman>

5. While employed at one of these places, Hollis Lomax clashes with the title character of John Williams's novel *Stoner*. The black conservative Monty Kipps and his liberal rival Howard Belsey are employed at one of these places in Zadie Smith's *On Beauty*. A rash of suicides at one of these places is caused by the arrival of Zuleika Dobson in a Max Beerbohm novella. An employee of one of these places leaves his coworker and girlfriend Margaret Peel in favor of Christine Callaghan after mocking his boss, Ned (*) Welch, during a speech on "Merrie England". Another of these places is where Charles Ryder meets and befriends Sebastian Flyte in *Brideshead Revisited*. For 10 points, identify the setting of Kingsley Amis's *Lucky Jim*, as well as David Lodge's *Campus Trilogy*.

ANSWER: <u>college</u>s [or <u>universities</u>; or <u>college</u> campus(es); or <u>university</u> campus(es); prompt on "campuses" or "schools"] < Carson >

6. In the 1980s, this body of water was the testing ground for a 240-foot-long military aircraft designed to only fly 10 feet above the water's surface, known as its namesake "Monster". Its eastern shore is indented by a hypersaline lagoon known as the Garabogazkol, and its western shore is home to the port of Rasht and the Absheron Peninsula. This body of water causes lake-effect snows to fall on Mount (*) Damavand, the tallest of the Alborz mountains to its south. An oil boom from discoveries in this body of water has brought wealth to Astrakhan and the port of Baku. For 10 points, the Volga River flows into what landlocked Central Asian "sea" east of the Caucasus?

ANSWER: Caspian Sea < Wang>

7. The protagonist of this novel is warned about "cloppers" by Tony Savo. A character in this novel spends five straight days explicating the various "thought units" of a difficult *inyan*, after which he is warned not to use his "scientific" method of reconstruction by his teacher. Another character in this novel tells a story about his brother's death in Auschwitz to explain why he raises his son in silence. After a character in this novel hits another in the face with a (*) line drive at a baseball game, they meet in a hospital, where one reveals his desire to become a Freudian psychologist, rather than a *tzaddik* as his father Reb Saunders wishes. For 10 points, name this novel about two boys, the Orthodox Reuven and the Hasidic Danny, by Chaim Potok.

ANSWER: The **Chosen** < Carson>

8. While serving as resident general of this country, Marshall Lyautey used his "ink blot" strategy of pacification. Before he was thrown to some lions, Bou Hmara was a pretender to this nation's throne. At a conference held in this country, Churchill and FDR first articulated the demand of "unconditional surrender." European powers settled a "question" about this nation at the Algeciras Conference. In the (*) Green March, this country sought to assert its claim to a neighboring territory. Under Muhammad V of the Alaouite Dynasty, this country gained its independence from France, which had established a protectorate over this country after the German gunboat *Panther* arrived here in the Agadir Crisis. For 10 points, name this North African country, site of the Casablanca Conference.

ANSWER: Kingdom of Morocco <Bentley>

9. One member of this movement made illustrations of fashion designs by Madeleine Vionet (vyo-nay) for the *Gazette du bon ton*. That artist also designed a unisex "TuTa" suit and went by the mononym Thayaht. Artists from this movement advocated an "interpenetration of planes" to integrate objects with their surroundings. A painting from this movement represents a dachshund's legs as multiple (*) blurs, and a sculpture from this movement depicts a striding humanoid with flame-like curves flowing from its legs. This movement produced *Dynamism of Dog on a Leash* and *Unique Forms of Continuity in Space*, and its manifesto was written by Filippo Marinetti. For 10 points, name this Italian art movement which included Giacomo Balla and Umberto Boccioni, and emphasized speed and modernity.

ANSWER: **Futurism** [or **Futurismo** or **Futurist**] <Bentley>

10. A proto-socialist, free love-promoting reformer of this religion taught that inequality empowered the "Five Demons" of Envy, Wrath, Vengeance, Greed, and Need. Adherents to this religion perform an "offering to the waters" during the recitation of a text whose seventy-two chapters each correspond to the one of the white threads that make up the sacred girdle. Wholeness, Immortality, and Good Purpose are among the six "divine sparks" in this religion, which posits that the ideals of (*) "asha" and "druj" are in cosmic conflict. A community of its followers in India called the Parsis are virtually the only remaining community to worship at fire temples. For 10 points, name this religion based on the Avesta, which reveres Ahura Mazda and was founded in ancient Iran.

ANSWER: **Zoroastrian**ism [or **Zarathustra**ism; or **Mazda**ism before "Mazda" is read; or **Magian**ism; accept **Mazdak**ism before "Mazda" is read] < Gupta>

- 11. Curved examples of these structures in extensional regimes can be termed listric. Minor examples of these structures are termed antithetic or synthetic depending on their relation to the master. When two of these structures are separated and angled away or toward each other, they form horsts and grabens. These structures are characterized by the rocks breccia, cataclasites, and pseudotachylyte. Brittle (*) deformation characterizes the damage zone surrounding them. Their angle from the horizontal is the "dip". Obliques examples of these zones of visible shear displacement have a non-vertical surface between their hanging walls and footwalls. For 10 points, name these geologic structures that occur in normal and reverse types and include the San Andreas. ANSWER: faults [or shear fractures; or microfaults] < Lasker>
- 12. This man won an election for a university administrative position after his opponent, the Earl of Powis, was killed by his own son during a pheasant shoot. This man took a personal role in amending the designs of Balmoral Castle, which became one of his personal residences. A month before dying of typhoid fever, this man urged moderation in the resolution of the Trent Affair. The Proms are annually held in a concert hall dedicated to this man. With Henry Cole, this man organized an event for which he hired the (*) greenhouse designer Joseph Paxton to build a massive cast iron and glass structure in Hyde Park. This Saxe-Coburg-born man ordered the creation of the Crystal Palace for the 1851 Great Exhibition. For 10 points, name this prince-consort of Queen Victoria.

ANSWER: Prince <u>Albert</u> [or Prince <u>Albert</u> of Saxe-Coburg and Gotha; or Francis <u>Albert</u> Augustus Charles Emmanuel] <Gupta>

13. A 2002 novel of this name is followed by the novels *Bro* and *23,000* in a namesake trilogy by Vladimir Sorokin. Sally Carrol Harper has an epiphany while visiting her fiance Harry Bellamy's family in an F. Scott Fitzgerald story whose title contains this adjective. This substance is said to be "the greatest invention of our time" in a novel that opens with a man facing a firing squad and remembering his (*) father taking him to see it for the first time. The first line of *One Hundred Years of Solitude* mentions this substance, a variety of which causes a global catastrophe when Papa Monzano's corpse, which has been exposed to it, touches the ocean in a Kurt Vonnegut novel. For 10 points, name this substance, which appears in *Cat's Cradle* in its dangerous "nine" form.

ANSWER: <u>ice</u> [prompt on "water" or "frozen water"; accept "The <u>Ice Palace</u>" or <u>ice-nine</u> or <u>lyod</u> or <u>hielo</u>] <Carson>

14. Two characters in this film argue over whether "we" or "are" should be underlined in the campaign slogan "We are the people." This film's director makes a cameo appearance as a man spying on his wife, who is cheating on him with a black man. The main character flirts with a girl employed by Senator Palantine but she rejects him after he takes her to see a Swedish (*) sex education film. After shaving his hair into a mohawk, the main character goes on a rampage to rescue Iris, a child prostitute played by Jodie Foster. In its most famous scene, the main character, Travis Bickle, looks at himself in the mirror and asks "You talkin' to me?" For 10 points, name this Martin Scorsese-directed film starring Robert De Niro as a violent cabbie.

ANSWER: <u>Taxi Driver</u> < Weiser >

15. This type of person is justified in standing above the universal by "assuming the burden of the paradox". It is impossible to tell externally whether a person is of this type, which is likened to a ballet dancer making a graceful leap that other people stumble over. This type of person gets everything back "by virtue of the absurd," unlike people who merely let themselves lose everything. This sort of person is *not* merely a (*) tragic hero according to the pseudonymous Johannes de Silentio, who gives his highest praise to these people in an 1843 philosophy book analyzing a Biblical sacrifice. For 10 points, name this type of person, exemplified by Abraham, who trusts God even more than the "knight of infinite resignation" according to Soren Kierkegaard's Fear and Trembling.

ANSWER: knights of faith [prompt on knight, I guess] < Jackson>

16. This character's horror at the idea of a pistol aimed at himself prevents him from ever dueling, despite a youthful obsession with duels. This man, who delivers a well-received speech on the "reorganization" of his country's "native tribes," finances the education of his son Seryozha, and feels a surge of Christian forgiveness after the birth of a baby girl puts his wife on her apparent deathbed. A cancer-stricken female dog is named after this male character by (*) Tereza in Milan Kundera's *The Unbearable Lightness of Being.* A French mystic advises this man to get a divorce after he sees his wife react to Frou-Frou's fall at a horse race. For 10 points, name this St. Petersburg bureaucrat who is cuckolded in favor of Vronsky in a Leo Tolstoy novel before his wife jumps under a train.

ANSWER: Alexandrovich Karenin [accept either underlined name; do not accept "Karenina"] < Jackson>

17. Near the end of this piece, an *ad libitum* part for a military band is introduced. This piece begins in E-flat major with a *Largo* melody played by just four cellos and two violas. An E-flat minor section of this piece introduces a tambourine that accompanies the folk song "At the Gate, at My Gate." This piece opens with a solemn rendition of the hymn "O Lord, Save Thy People." This piece quotes the (*) French anthem "La Marseillaise" multiple times until it is overcome by the anthem "God Save the Tsar," punctuated by a series of cannon shots. For 10 points, name this overture by Pyotr Ilyich Tchaikovsky that commemorates the Battle of Borodino.

ANSWER: <u>1812 Overture</u> [or The <u>Year 1812</u>; or <u>1812 God</u>; or <u>1812</u> Overture after "overture" is read] < Kim>

18. The 2004 GaWC (GAWK) rankings identified the Alpha++ (plus plus) type of these things. Saskia Sassen introduced the "global" type of these things that have a direct influence on the international economy. Ernest Burgess divided these things into circular areas in his concentric zone model. George Kelling developed the broken windows theory after reading a book that claims (*) mixed-use development and density are ways of "generating diversity" in these things. Poorer people tend to be displaced by new development in these locations in gentrification. Walkability is one desired characteristic when planning these areas, whose roads are often laid out in radial or grid fashion. For 10 points, name these densely populated areas whose sprawl has led to the development of suburbs.

ANSWER: city [or cities; or inner city; or urban areas; prompt on "neighborhoods"] < Jose>

19. This dynasty intermarried into several European royal houses during the reign of Amalia's husband Frederick Henry. Margaret of Parma appointed a member of this dynasty to negotiate an end to a wave of iconoclastic fury known as the Beeldenstorm. That member of this house was killed at the hands of French Catholic Balthesar Gerard in one of the first assassinations by firearm, and led several early raids during the (*) Eighty Years' War, during that "silent" leader served as *stadtholder*. A later member of this cadet branch of the House of Nassau won the Battle of the Boyne and took power in the not-entirely bloodless Glorious Revolution. For 10 points, name this dynasty that the Dutch prince William III belonged to before he became King of England.

ANSWER: House of <u>Orange</u>-Nassau [prompt on <u>Nassau</u> until mentioned] < Gupta>

20. This quantity is represented as the ratio between the linewidths of arrows on Sankey diagrams. The coefficient of performance is approximately the inverse of this quantity. According to the Shockley-Quiesser limit, a bandgap of 1.4 eV corresponds to a maximum of this quantity for a p-n junction in solar cells. This quantity increases slowly as the compression ratio increases, since it is a function only of that ratio and the adiabatic index for many processes. This quantity will be (*) maximized if the hot and cold reservoirs have infinite and zero temperature respectively, and in a Carnot engine, it equals one minus the ratio of those temperatures. For 10 points, name this quantity symbolized eta, which equals the ratio of net work output over heat input, which would ideally be 100% for a thermodynamic cycle.

ANSWER: thermodynamic efficiency [or eta until it is read] < Silverman>

21. These things were placed in the fourth of the Neanderthal graves found in Shanidar Cave. The Samguk Sagi describes a force of knights named for these objects that fought for the Silla Kingdom. Vizier Ibrahim Pasha oversaw an opulent period named for a specific type of these things in the Ottoman court. These objects name the wars fought to gain captives for human sacrifices by the (*) Aztec Empire. A "Hundred" of these things names a campaign that briefly allowed free speech in Communist China. Prices for a specific type of these things skyrocketed during a namesake "mania" in the Dutch Republic. A type of these objects names the ceremonial seat of the Emperor of Japan, the Chrysanthemum Throne. For 10 points, name this sort of plant exemplified by the tulip.

ANSWER: **flower**s [or **tulip**s] <Brownstein>

22. A version of this character modeled on Jean-Paul Sartre is the protagonist of a novel in which he is wounded by a bull after becoming stuck in a tree. He learns about theology from Ork and becomes entranced by the poetry recited by the Shaper in a novel that ends with him surrounded by animals, whispering that he's "had an accident... So may you all." In another literary work, this character is called a "sceadugenga", which is translated as "shadow-stalker" by (*) Seamus Heaney. This subject of a 1971 John Gardner novel is described as a "descendant of Cain", and his wrath is first invoked after he is disturbed by the loud noise of carousing at Heorot. For 10 points, name this scourge of Hrothgar's mead hall whose arm is torn off during his clash with Beowulf.

ANSWER: **Grendel** < Carson>

- 23. The type I receptor for TGF-beta functions as this kind of enzyme, exposing the nuclear localization signal on R-SMAD. A family of these enzymes dimerizes and activates STAT transcription factors. Many proteins interact with these enzymes with the help of SH2 domains. ERK 1 and 2 are activated by a three-tiered system of these enzymes in the pathway named after their (*) MAP variety. These enzymes can be classified as those that act on serine/threonine residues, and those that act on tyrosines. Cyclins regulate the cell cycle by interacting with the cyclin-dependent type of these enzymes, which perform the opposite function as phosphatases. For 10 points, name these enzymes that add a phosphate group to a target protein.

 ANSWER: kinases [accept JAKs; accept Janus kinases; accept just another kinases; accept MAPK before "MAP" is mentioned; accept MAP kinase; accept mitogen-activated protein kinases | <Gupta>
- 24. A play written in this language opens with Daja telling the title character how a Christian knight heroically saved his lover Recha from a burning house. That play in this language contains a parable of a father who does not reveal to his three sons which of the rings he gives them is genuine; that parable of the Abrahamic faiths is told to Saladin by Nathan the Wise. The protagonist of an epistolary novel in this language is overcome with emotion while reading from (*) Ossian, after which he borrows a brace of pistols from Albert and uses them to commit suicide due to his unrequited love for Lotte. For 10 points, name this language of Gotthold von Lessing, also used to write *The Sorrows of Young Werther* by Johann Wolfgang von Goethe. ANSWER: German [or Deutsch] < Bentley>



PACE NSC 2015 - Round 22 - Finals I - Bonuses

1. Interferon-gamma activates the "induced" form of the enzyme that produces this compound, which can be measured in a breath test for asthma. For 10 points each:

[10] Name this compound which binds to guanylate cyclase receptors, stimulating the production of cGMP and then protein kinase G, in a pathway that is promoted by Viagra.

ANSWER: <u>nitric oxide</u> [or **NO**; or <u>nitrogen oxide</u>; or <u>nitrogen monoxide</u>]

[10] Nitric oxide acts as a vasodilator, relaxing this tissue, which is found in the uterus, bladder, and the endothelial walls of blood vessels. It lacks striations and exists as a syncytium, or a multinucleated mass of unseparated cytoplasm.

ANSWER: **smooth muscle** [prompt on **muscle**]

[10] By acting as a vasodilator, nitric oxide regulates this property of blood, which is reported as two values for the systole and diastole, and is typically 120 over 80 millimeters mercury.

ANSWER: blood **pressure** < Gupta >

2. Answer the following about contemporary Indian literature, for 10 points each.

[10] Several delays have pushed back the publication of *A Suitable Girl*, the sequel to this man's immensely long novel *A Suitable Boy*. He is also the author of the verse novel *The Golden Gate*.

ANSWER: Vikram **Seth**

[10] The "love laws" are a recurring motif in this 1997 novel by Arundhati Roy that follows the lives of the incestuous fraternal twins Rahel and Estha.

ANSWER: The God of Small Things

[10] Rahel eventually leaves India to study in this country, which is the setting of *The Golden Gate. The Namesake* and several stories from *The Interpreter of Maladies* involve Indian immigrants to this country, where their author Jhumpa Lahiri herself now lives.

ANSWER: the <u>United States</u> of <u>America</u> [accept either underlined portion; accept <u>US</u>A] < Mehigan >

3. Answer the following about the rules of Renaissance counterpoint, for 10 points each.

[10] This Italian composer of the *Pope Marcellus Mass* is considered the master of the late Renaissance.

ANSWER: Giovanni Perluigi da Palestrina

[10] The classic textbook *Gradus ad Parnassum* by Johann Fux instructs beginning students in five different types of progressively more complex counterpoint, which are known by this name. It is contrasted with "free" counterpoint. ANSWER: **species** counterpoint

[10] Species counterpoint forbids the melody from leaping in this dissonant interval, often called the "Devil in music." A fully diminished seventh chord contains two of these intervals, and one of these is formed by F and B.

ANSWER: tritone [accept augmented fourth or diminished fifth] < Rosenberg>

4. This man was captured as a youth by imperial forces and castrated when he went by the name of Ma Sanbao. For 10 points each:

[10] Name this Muslim eunuch. He captured King Alagonakkara of Sri Lanka and brought him back to China as a prisoner during one of the seven voyages of his Treasure Fleet.

ANSWER: **Zheng He** [or **Cheng Ho**; or **Ma He**]

[10] This emperor commissioned the voyages of Zheng He. He had the Temple of Heaven built after reestablishing his capital at Beijing and commissioned a pre-Kangxi encyclopedia which was completed in 1408.

ANSWER: Yongle Emperor [or Yung-lo; or Ming Chengzu; or Wendi; or Zhu Di]

[10] The Yongle Emperor ruled during this Chinese dynasty, which lasted from the fall of the Yuan until 1644.

ANSWER: Ming dynasty < Bentley>

- 5. Gregory Peck narrated a television ad in the run-up to this event, the subject of a brief prepared by Joe Biden. For 10 points each:
- [10] Name this 1987 event in which the Senate rejected the appointment of a Reagan-favored judge to the position of Associate Justice of the Supreme Court. This event popularized a verb that describes blocking a political appointee.

ANSWER: Robert Heron <u>Bork confirmation</u> hearings [or <u>Bork nomination</u>; or <u>Bork hearing</u>s; or <u>Bork before the Senate</u>; prompt on Robert <u>Bork</u>'s name alone]

[10] Reagan nominated Bork to replace this Alabama justice, the swing vote in *Bowers v. Hardwick* and a dissenter in the death penalty case *Furman v. Georgia*, who drafted a namesake "memorandum" urging corporations to involve themselves in lobbying.

ANSWER: Lewis F. **Powell** [or Lewis Franklin **Powell**, Jr.]

[10] After the girlfriend of one of his aides died from a coat-hanger abortion, Powell sided with the majority in this 1973 decision legalizing abortion, which Bork wanted to reverse.

ANSWER: *Roe* v. Wade <Bentley>

6. Jeffrey Sachs encouraged implementing this type of economic program in Bolivia. For 10 points each:

[10] Name this economic strategy whose name was coined by Milton Friedman. It involves rapid trade liberalization and privatization, drastically reducing state involvement in the economy. Besides Bolivia, it was implemented in Poland after the fall of communism.

ANSWER: shock therapy [or shock treatment; or shock policy; accept word forms like shocking]

[10] An aim of shock therapy was to ease this monetary condition affecting the Bolivian economy. This condition, which causes an extreme devaluation of currency, affected the Weimar Republic from 1921-1924.

ANSWER: <u>hyperinflation</u> [prompt on <u>inflation</u>]

[10] The Bolivian economy was also damaged by the 1985 crash in the market for this natural resource, partially due to increased availability of plastics. This natural resource is extracted from cassiterite.

ANSWER: tin < Rosenberg>

7. Adding a term for the work done by the surroundings and a term for the viscous dissipation to this equation gives its "engineering" form. For 10 points each:

[10] Name this equation which states that an increase in fluid velocity results in a decrease in pressure.

ANSWER: **Bernoulli'**s equation

[10] Bernoulli's equation is a statement of this principle for fluids. Another statement of this principle is the first law of thermodynamics.

ANSWER: <u>conservation of energy</u> [or word forms; prompt on <u>conservation</u> law]

[10] Bernoulli's equation is derived by integrating the Euler equation of motion along one of these constructs. These constructs are parallel to the local velocity vector at all points. A closed loop of them forms a similarly-named "tube".

ANSWER: **streamline**s <Yu>

8. Horst Kohler, the one-time head of this organization, resigned in order to become President of Germany in 2004. For 10 points each:

[10] Name this organization currently headed by Christine Lagarde. Although its headquarters is in Washington, D.C., it is traditionally headed by a European, unlike the World Bank.

ANSWER: **IMF** [or **International Monetary Fund**]

[10] The Interior Minister of this debt-ridden country announced recently that it would not meet its IMF repayments for May or June 2015. This country's left-wing Syriza party has hinted that it might abandon the euro.

ANSWER: Greece [or Hellenic Republic; or Ellada; or Elliniki Dimokratia]

[10] While serving as French finance minister, Lagarde supposedly compiled a namesake list of thousands of Greeks guilty of this crime. The whistleblower Bradley Birkenfeld exposed UBS's complicity in this crime.

ANSWER: tax evasion [or not paying taxes; prompt on tax fraud] <Bentley>

- 9. Characters in this novel include Peter Fallow, an alcoholic British journalist who works for City Light magazine, and Reginald Bacon, a community organizer possibly inspired by Al Sharpton. For 10 points each:
- [10] Name this novel about Sherman McCoy, a Wall Street bond trader whose life falls apart after he hits a young black man named Henry Lamb with his car.

ANSWER: The **Bonfire of the Vanities**

[10] The Bonfire of the Vanities is the best known novel by this New Journalist author of I Am Charlotte Simmons and The Electric Kool-Aid Acid Test.

ANSWER: Tom **Wolfe** [or Thomas Kennerly **Wolfe**, Jr.]

[10] Wolfe's influential article "Radical Chic" depicts a party hosted by Leonard Bernstein as a fundraiser for this group. A leader of this group wrote the essay collection *Soul on Ice*.

ANSWER: the **Black Panthers** [or the **Black Panther** Party; or the **BPP**] <Weiser>

10. Icarius is instructed in the art of producing this substance, but is killed by some shepherds unfamiliar with its usage. For 10 points each:

[10] Identify this substance, whose darkness is frequently invoked by Homer to describe the appearance of the sea.

ANSWER: wine

[10] This Greek god of wine is born out of Zeus's thigh when his mortal mother Semele dies from witnessing the full glory of Zeus.

ANSWER: **Dionysus** [or **Bacchus**]

[10] These followers of Dionysus often go into an ecstatic frenzy, during which they rip Orpheus and the Theban king Pentheus to shreds.

ANSWER: Maenads <Kim>

11. Millipedes and birds partake in phoresy, a subtype of this relationship in which one animal uses another exclusively for transport. For 10 points each:

[10] Name this kind of relationship between two organisms, in which one organism benefits while the other is unharmed.

ANSWER: commensalism [accept word forms]

[10] These plants, such as orchids or Spanish moss, engage in a form of commensal relationship by growing on another plant and deriving their nutrients from the air and rain. Some minimally parasitic plants, like mistletoe, are also grouped into this category.

ANSWER: **epiphyte**s

[10] This crustacean engages in a form of commensalism known as metabiosis by living in the empty shell of a gastropod. Like the related porcelain, king, and horseshoe species, these animals are not true members of infraorder *Brachyura*.

ANSWER: <u>hermit crab</u>s [or <u>Paguroidea</u>; prompt on <u>crab</u>s] <Gupta>

12. An e.e. cummings poem asserts that "when any mortal (even the most odd)" can perform this action's converse, the speaker will "think it strange" that "normal mortals" cannot perform it. For 10 points each:

[10] Name this stated goal, according to Book I, line 26, of *Paradise Lost*. Despite that fact, another poet ironically claimed that "malt does more than Milton can" to perform this task.

ANSWER: to justify the ways of God to man [or justify God's ways to man; or justify the ways of God to men; accept rephrasings that express the same concept]

[10] The aforementioned paean to malt appears in this poem from *A Shropshire Lad*, whose final section describes Mithridates building up a resistance to various poisons. It is usually referred to by its first line, which is followed by the quip "You eat your victuals fast enough".

ANSWER: "Terence, this is stupid stuff" [or Poem LXII; or Poem 62]

[10] A Shropshire Lad, which also contains the poems "To An Athlete Dying Young" and "When I Was One-and-Twenty", was written by this English poet.

ANSWER: A. E. <u>Housman</u> [or Alfred Edward <u>Housman</u>] <Carson>

13. This man penned the "Cassandra letter" during his long period of exile, which began when he resigned his governorship to his general Artur Gorgey. For 10 points each:

[10] Name this revolutionary who legislated the April Laws to try to modernize his country. His insurrection in Hungary was put down shortly after the intervention of Josip Jelalcic, the *ban* of Croatia.

ANSWER: Lajos <u>Kossuth</u> [or Lajos <u>Kossuth</u> de Udvard et Kossuthfalva]

[10] Kossuth led the Hungarian revolution of this year, during which many rebellions occurred across Europe.

ANSWER: <u>1848</u>

[10] The Hungarian Revolution formally ended with the surrender at Vilagos, which was forced by a Russian army commanded by this tsar. His troops had also quelled the 1830-31 November Uprising in Poland.

ANSWER: Nicholas I [or Nikolai I; prompt on Nicholas; prompt on Nikolai] < Bentley>

14. In the background of this painting, a constable on horseback observes the title figures, making sure that they're not collecting more than their allotted amount. For 10 points each:

[10] Identify this painting by Jean-Francois Millet in which three peasant women pick up the remains from a field.

ANSWER: The Gleaners

[10] Several haystacks can be seen in the background of *The Gleaners*. Haystacks were a frequent subject of this French Impressionist, who also painted water lilies at Giverny.

ANSWER: Claude **Monet**

[10] In another Millet painting, a female potato farmer performs this action at dusk while standing next to her husband. A famous Dürer drawing shows just the hands of a man performing this action.

ANSWER: praying [accept word forms] < Bentley>

15. One novel from this country tells of the love between the Christian woman Ligia and the patrician Marcus Vinicius. For 10 points each:

[10] Name this Eastern European country home to the author of a historical trilogy that begins with the novel *With Fire And Sword*, as well as the aforementioned *Quo Vadis*, Henryk Sienkiewicz (sin-KAY-vitch).

ANSWER: Republic of **Poland** [or Rzeczpospolita **Polska**]

[10] This Polish author of the poetry collection *Three Winters* wrote about "ketman," the practice of pretending to support an authority while remaining secretly opposed, in his anti-Stalinist book *The Captive Mind*.

ANSWER: Czeslaw Milosz ("CHESS"-waf MEE-wosh)

[10] This dissident Czech writer and politician parodied bureaucracy with the fictional language Ptydepe in *The Memorandum*. He also wrote about Hugo Pludek in *The Garden Party*.

ANSWER: Václav Havel < Kothari>

16. Raphael created a portrait of this man, whose best known book emphasizes the quality of *sprezzatura*, or apparent effortlessness of action. For 10 points each:

[10] Name this author of a Renaissance manual on proper mannerly conduct, *The Book of the Courtier*.

ANSWER: Baldassare **Castiglione**

[10] Castiglione served in this Italian city while Guidobaldo da Montefeltro was its duke. This setting of the *Book of the Courtier* was once ruled by the Della Rovere family.

ANSWER: **Urbino**

[10] Much later advice on ascending the social ladder was put forth by an American of this surname in *How to Win Friends and Influence People*. A Scottish-born business magnate of this name led U.S. Steel.

ANSWER: <u>Carnegie</u> [or Dale <u>Carnegie</u>; or Andrew <u>Carnegie</u>] <Bentley>

17. In 1941, the Supreme Court of Vermont decided that the public baptism of Jehovah's Witnesses also counted as this practice. For 10 points each:

[10] Name this controversial practice that opens priesthood to a wider swath of the population. It is widespread throughout the Anglican Communion, but strongly opposed by the Roman Catholic Church.

ANSWER: <u>ordination of women</u> [or <u>female ordination</u>; or allowing <u>women</u> to be <u>priests</u> and similar descriptive answers]

[10] Though many female Jehovah's Witnesses serve as full-time ministers, this office is still forbidden to them. Phoebe is the sole female Biblical occupier of this lowest rank of the threefold ministry, whose name is derived from the Greek for "servant" or "helper."

ANSWER: deacon

[10] Although this man's Epistles to the Ephesians and to Timothy are often cited by Catholics opposed to female ordination, he mentions the deaconess Phoebe in his Epistle to the Romans.

ANSWER: **Paul** the Apostle [or **Saul** of Tarsus] < Gupta>

18. This function of two vectors is their magnitude times the cosine of the angle between them. For 10 points each: [10] Name this function, which sums the product of the corresponding components. For example, this function of vectors a,b,c and d,e,f is a times d, plus b times e, plus c times f.

ANSWER: <u>dot product</u> [accept <u>scalar product</u> or <u>inner product</u>]

[10] This is the value returned when two perpendicular vectors are dotted together. Because inner products are positive-definite, v dot v is always greater than or equal to this value.

ANSWER: **zero**

[10] For the function defined by dotting a vector with a given v, the set of all vectors perpendicular to v is this set for the function. Generally, this term denotes the set of vectors mapped to zero by a given linear transformation. ANSWER: **kernel** <Schindler>

19. This singer's ability to read music was widely called into question throughout his career. For 10 points each: [10] Name this overweight Italian tenor who formed part of the "Three Tenors" with Jose Carreras and Placido Domingo. His signature song was "Nessun Dorma" from Puccini's *Turandot*.

ANSWER: Luciano Pavarotti

[10] Pavarotti was acclaimed for his ability to tackle the multiple high C's in this composer's opera La Fille du Regiment. He also composed Lucia di Lammermoor.

ANSWER: Gaetano **Donizetti**

[10] The Three Tenors gave their first concert at the 1990 World Cup under this Indian conductor, who was music director of the Los Angeles Philharmonic for most of the 60s and 70s.

ANSWER: Zubin Mehta < Rosenberg>

20. In the 1960s, this man's limited economic reforms allowed individual enterprises the flexibility to set their own prices. For 10 points each:

[10] Identify this one-time mechanic who seized power following the downfall of Imre Nagy's government.

ANSWER: Janos <u>Kadar</u> [or Janos <u>Czermanik</u> or Janos <u>Csermanek</u>]

[10] Kadar was a Communist leader of this European nation, whose citizens staged a 1956 revolt against the Soviets. The Magyars brought their Finno-Ugric language to this country.

ANSWER: <u>Hungary</u> [or Republic of <u>Hungary</u>; prompt on <u>Magyarorszag</u>]

[10] The Hungarian Revolt was sparked in part due to news of this speech given to the 20th Party Congress, wherein Nikita Khrushchev denounced many of the policies of Stalin.

ANSWER: "The Secret Speech" [or "On the Cult of Personality and Its Consequences"] <Bentley>

21. You can prevent a book from falling by pressing on it against a wall, even though you're only applying a horizontal force. For 10 points each:

[10] The horizontal force you apply on the book is exactly equal in magnitude to this force, which is proportional to the frictional force, and is perpendicular to the surface of contact.

ANSWER: <u>normal</u> force [or <u>N</u>]

[10] If the book does not move, then this quantity equals the weight of the book divided by your applied force. For a stationary object on a ramp, this quantity equals the tangent of the angle of repose.

ANSWER: <u>coefficient</u> of static <u>friction</u> [or static <u>friction coefficient</u>; or <u>mu</u>-sub-s]

[10] If friction can be neglected, and the book is in free fall, then its velocity at any given point will be a function only of the height H it has fallen, and gravitational acceleration g. In terms of g and H, what is its velocity?

ANSWER: the <u>square root</u> of <u>two</u> times <u>g</u> times <u>H</u> [or square <u>root 2 g H</u>; or mathematical equivalents] \leq Silverman \geq

22. The introduction to Allen Ginsberg's *Howl and Other Poems* was written by this man, who opened his collection *Spring and All* with the poem "By the road to the contagious hospital". For 10 points each:

[10] Name this influential American modernist poet, who coined the credo "no ideas but in things" in his five-book epic poem *Paterson*.

ANSWER: William Carlos Williams [or WCW]

[10] "Another poem in *Spring and All* describes this object on which "so much depends." It is "glazed with rainwater" and "beside the white chickens."

ANSWER: the **red wheelbarrow** [prompt on partial answer]

[10] Williams's final collection opens with ten poems inspired by a certain painter, one of which describes how "the whole pageantry of the year was awake tingling" when this boy causes "a splash quite unnoticed."

ANSWER: <u>Icarus</u> < Mehigan>

23. Some of the participants in this revolt were upset that Catholic priests had destroyed their *kivas*, or ceremonial pits. For 10 points each:

[10] Identify this 1680 rebellion led by a man named Popé (po-PAY) in modern day New Mexico.

ANSWER: **Pueblo** Revolt [or **Pueblo** Rebellion or **Pueblo** Uprising]

[10] The Pueblo Revolt successfully thwarted this European country's colonization plans for twelve years. *Padres* from this country founded missions in modern-day California in the 18th century.

ANSWER: **Spain** [or Kingdom of **Spain**]

[10] This Spanish Franciscan missionary once walked 200 miles from Veracruz to Mexico City and founded a series of missions in California including San Carlos Borromeo and the San Diego Mission.

ANSWER: Junipero **Serra** <Bentley>