## Raj Dhuwalia

1.) Their distances from Earth vary from about 1300 to 1800 light years, and the second-faintest member, Alnitak, is near the Flaming Tree and Horsehead Nebulas. At the opposite end, Mintaka is often used to calibrate planetariums because of its coordinates, and it was the background against which interstellar gas was first identified in 1904. The middle one, Alnilam, has a name meaning "girdle," and a line drawn through the M42 and M43 nebulae goes through it. FTP, name this asterism of 3 aligned stars in the constellation of a celestial hunter.

Answer: Orion's Belt or the Belt of Orion (accept close variants, but do not accept or prompt on just "Orion" or "Orion's Sword")
2.) A great light shone from his mouth before he was to be killed, and the fisherman Grim released him and raised him in England. After he hurls a giant stone, he is pushed by Godrich into marrying Princess Goldeboru. When that handy mouth light tells Goldeboru of his destiny, she urges him to claim his Scandinavian throne. Recognized as Birkabeyn's son by the light in his mouth and the cross marked on his shoulder, he later conquers England in addition to ruling Denmark. FTP, name this Dane, the hero of an anonymous Medieval romance, who is not to be confused with psychologist Ellis.

Answer: Havelok the Dane
3.) He hung a photo of William F. Buckley Jr. over his bed and his favorite pastime was watching "Wall Street Week" with his younger brother Andrew. Always the overachiever, in 1985 he entered Leland College where he began espousing the virtues of Reagan's supply side economics, in sharp contrast to the liberal ideals of his parents, the former hippies Elyse and Steven. FTP, identify this habitually overdressed neoconservative and brother of Mallory, portrayed by Michael J. Fox on the show "Family Ties".

Answer: Alex P. Keaton
4.) Barere de Vieuzac, Georges Couthon and Lazare Carnot were some of its lesser known members. Created to preserve the reforms of the Revolution and theoretically subordinate to the Constitutional Convention it held all of its meeting in secret and issued directives to ministers of state and administered the entire country. FTP name this group headed by Robespierre which was responsible for the Reign of Terror.

Answer: Committee of Public Safety
5.) The title character loves Marie, who is seduced by the Drum Major of a military band. After catching the two together at a beer garden, the main character is beaten by the Drum Major. Later he goes walking by a pond with Marie and stabs her for her infidelity. He finally drowns in the pond while trying to wash her blood from his hands. Adapted from a drama by Georg Buchner, FTP, such is the tragic storyline of what opera by Alban Berg?

Answer: Wozzeck or Woyzeck
6.) Her three masts were cut somewhere on the coast of Japan, where the old ones were lost. Her decks resemble the flagstone of Canterbury Cathedral where Becket bled. Though her hull's complexion was darkened like a French grenadier's, she also had a wigwam-like structure made from the jawbones of the Right Whale, and many of her ropes travel through sheaves of sea-ivory. Partly owned by Captains Peleg and Bildad, this is, FTP, what ship which would later go in pursuit of a certain white whale?

Answer: the Pequod
7.) They can be synthesized from carboxylic acids by using organolithium reagents, and they can be synthesized from nitriles with the same reagent followed by acid hydrolysis of the resulting imine. They do not undergo oxidation by permanganate or silver ion, which explains why no silver deposit is produced when a Tollens reagent is added, unlike aldehydes. FTP, name this compound with a carbonyl functional group, an example of which is acetone.

Answer: ketones
8.) It was a giant structure featuring conference rooms, administration offices, and an information center that may sound boring until you realize those things were inside a cube turning at the rate of one revolution per year, a pyramid revolving once a month, and a cylinder completing a revolution every twenty-four hours. Then those shapes were housed inside a 400 -meter high spiral structure. Too bad, it was never built! FTP, what was this proposed Constructivist building dreamed up by Vladimir Tatlin?

Answer: Monument to the Third International
9.) Major rivers in this nation include the Yalpug and Reut, while cities include Tighina, Beltsy, and Tiraspol. Its population is concentrated in three river valleys which are covered in chernozem, a fertile type of soil. The Gagauz inhabit its southern region, while the Transdneistria rebellion plagued it throughout the 1990s. Landlocked, it lies primarily between the Prut and Dniester rivers. FTP, name this nation wedged between Romania and the Ukraine, with capital at Chisinau.

Answer: Moldova
10.) In taped conversations with Robert McNamara released in 2001, President Johnson expressed doubt that the attacks that inspired this legislation even occurred. Repealed by Congress in 1970, it authorized all necessary measures needed to repel further attacks and it was used by Nixon to justify further attacks in Southeast Asia. FTP, identify this act created in response to an attack by North Vietnamese torpedo boats.

Answer: Gulf of Tonkin Resolution
11.) The beginning talks of the author's son Adeodatus by a concubine. Book V remembers how the NeoPlatonists rescued him from his materialism, Book IX gives many details about his mother Monica, and Book VIII recounts his disillusionment with the Manicheans. All this as well as the story of Antony and the increasing influence of the monastic calling ultimately led the author to the baptismal font and Ambrose of Milan. FTP, name this autobiography of St. Augustine.

Answer: Confessions
12.) In vector notation, it equals 2 m times v cross omega, where v is an object's velocity and omega is the angular velocity of the frame. For a fluid in a pipe, the ratio of inertial force to this quantity is the Rossby number, and this pseudoforce causes cyclones to rotate in different directions in the northern and southern hemispheres. FTP, name this pseudoforce which causes the path of a moving object in a rotating frame to curve.

Answer: Coriolis force or acceleration
13.) Chauffeur William Caldera found it while his passenger was hunting quail, but he discarded it a few weeks later. Three years later, Beryl Shinn found it and brought it to Professor Herbert Bolton, who announced its existence in 1937. A 1977 test showed that it was made in the $20^{\text {th }}$ century, not the 1570 s, and Edward Von der Porten recently announced that it was created by E Clampus Vitus, a group of California historians, as a prank. FTP, name this metal object long believed to mark its namesake's claim of the region for England, left while the Golden Hind was under repair.

Answer: Drake's Plate or Drake's Brass Plate or any remotely close variants
14.) The proposed Ningaloo Reef Resort in Australia and Futenna Air Station in Okinawa threaten this mammal's habitat. The only living species of it bears closer resemblance to the extinct Stellar's species than to its living cousins, and it lives in coastal regions of the Indian and Pacific Oceans. Unlike its betterknown relative, it has tusks, it is only found in salt water, and it has a tail with two "whale-like" flukes instead of a round paddle-like tail. But like their relatives, these large, slow mammals are often injured by recreational boaters. FTP, name this member of order Sirenia, the cousin of the manatee.

Answer: dugong (prompt on "sea cow," but do not accept "manatee")
15.) Its name derives from a village in East Bohemia, the site of a VCHZ Synthesia plant. In its "A" variety, PETN is the chief active ingredient, with RDX comprising less than $6 \%$. Today, ethylene glycol dinitrate is added to give it a smell, and a metallic code is added for identification. Unfortunately, it has a very long shelf life, and Libya bought at least 900 tons of it before 1989. FTP, name this plastic explosive, less than a pound of which caused the crash of Pan Am flight 103 over Lockerbie, Scotland.

Answer: Semtex
16.) They believe in the divinity of al-Hakim bi-Amr Allah, the sixth caliph of the Fatimid dynasty of Egypt, and expect him to return someday to inaugurate a golden age. They permit no converts, either to or from their religion, and no intermarriage. Strictly monotheistic and based in Islam, their beliefs include an eclectic mixture of elements from Gnosticism, Neoplatonism, Judaism, and Iranian religion. FTP, what is this highly secretive Middle Eastern religious sect that is named for one of its founders, Muhammad alDarazi?

Answer: Druze
17.) It closes with the moral, "To the vector belong the spoils." Its protagonist is in love, but the object of his love only has eyes for his wild and unkempt rival, with whom she dances day and night. Friends of the sensible, reliable protagonist tell him to find a nice straight girl, but instead he learns to become flexible, capable of angles and curves, and the other title character realizes the Squiggle is just anarchy and sloth. Adapted from a book by Norton Juster, FTP, name this "Romance in Lower Mathematics" directed by Chuck Jones, in which the two title characters are zero- and one-dimensional.

Answer: The Dot and the Line
18.) Despite just two years of active military service, he cleverly used his heavy infantry to stop the Gothic heavy cavalry at Taginae, causing the death of King Totila and the overthrow of Gothic rule in Italy. Two years later, after beating Teias of the Ostrogoths, he used infantry and archers at Casilinum to beat the Alemanni Frankish infantry, and he soon became prefect of Italy despite being nearly eighty years old and nutless. FTP, name this general under Justinian who often conflicted with fellow general Belisarius.

Answer: Narses
19.) Her sons included Ismenus and Alphenor, and she was the wife of King Amphion. Her final fate is usually given as a rock on Mount Sipylus in Phrygia, where melting snow gives the appearance of weeping. Her problems began when she commanded the women of Thebes to worship her instead of Leto, leading to the slaying of her seven sons and seven daughters by the arrows of Apollo and Artemis. FTP, name this queen of Thebes and daughter of Tantalus, the namesake of element \#41.

Answer: Niobe
20.) According to legend, he kidnaps the Princess Elena from Tsar Dalmat because he must exchange her for the Golden-Maned Steed of Tsar Kusman. He needs the Golden-Maned Steed in order to get Tsar Afon's pet which has been stealing his father's apples. FTP, who is this hero of Russian folklore who, with the help of the Gray Wolf, finally retrieves the Firebird?

Answer: Ivan Tsarevich (prompt on Ivan, but accept Ivan the Prince or Ivan the Tsar's Son or equivalents)

## Raj Dhuwalia

1.) FTPE, name these heroines of literature whose patience and long-suffering is really annoying.
(a) This beautiful peasant girl marries a nobleman who tests her faith by pretending to kill her children, throw her out and marry another woman. Her story appears in both the Decameron and the Canterbury Tales.

Ans: Griselda
(b) Griselda's soul sister, this heroine has to watch the object of her affections court the bimbo Blanche Ingram; when she puts up with it, he proposes. Shame he's already married.

Ans: Jane Eyre
(c) Although her heartthrob Edmund is infatuated with the frivolous Mary Crawford, this meek, virtuous heroine of Mansfield Park wins his love in the end, which would so never happen.

## Ans: Fanny Price

2.) Give the scientific names of these microscopic animal phyla FTPE.
(a) These tiny pseudocoelomates are named for their wheel-like crown of cilia.

Ans: Rotifera
(b) These coelomate metazoans with eight stumpy legs are also known as water bears.

Ans: Tardigrada
(c) Sometimes placed in the subkingdom Parazoa with sponges, the single species known from this phylum, Trichoplax adherens, lacks tissues and organs and superficially resembles a large amoeba.

Ans: Placozoa
3.) Identify the painter, 30-20-10.
(30) The Interior of a Gothic Church looking East, The Fight Between Carnival and Lent
(20) Netherlandish Proverbs, Tower of Babel, Landscape with the Fall of Icarus
(10) Peasant Wedding, Hunters in the Snow

Ans: Pieter Bruegel the Elder
4.) FTNSOP ... name that Leakey!
A. F5P, the wife of Louis, she found many Olduvai fossils and the Laetoli footprints.

Answer: Mary Nicol Leakey
B. FTP, this son of Louis and Mary found the Turkana Boy fossil and later became involved in Kenyan politics.

Answer: Richard Leakey
C. For 5 points for one and 15 for both, this mother-daughter duo led the team which found the

Kenyanthropus platyops fossil in 1999.
Answer: Meave and Louise Leakey
5.) Stuff about French guys and balloon travel in the 18 th century, FTP each:
A. These French brothers demonstrated the first working hot-air balloon in 1783.

Answer: Joseph and Etienne Montgolfier
B. Later in 1783, this scientist, the namesake of a gas law, launched a hydrogen balloon which was torn apart by peasants upon landing.

Answer: Jacques Charles
C. He made 60 flights from 1785 to 1808, and his 1793 flight from Philadelphia to New Jersey was the first balloon flight in America. He was the subject of the 1996 children's book The First Air Voyage in America.

Answer: Jean-Pierre Blanchard
6.) Name the American colonial authors of these 17 th-century works, FTP each:
A. The poem "The Flesh and the Spirit" and the collection The Tenth Muse Lately Sprung Up in America.

Answer: Anne Bradstreet
B. The Day of Doom

Answer: Michael Wigglesworth
C. The Wonders of the Invisible World, which includes the author's description of the trial of Martha Carrier.

Answer: Cotton Mather
7.) Name these ancient Greek city-states, FTSNOP:
A. F5P, it was the chief opponent of Sparta in the Peloponnesian War.

Answer: Athens
B. FTP, located on its namesake isthmus connecting the Peloponnesian peninsula to the mainland, it lends its name to a type of column with an elaborate capital.

Answer: Corinth
C. F15P, located on the southwestern Peloponnesus, it is the site of the ancient "Palace of Nestor," where
C. W. Blegen found an ancient script like that at Knossos.

Answer: Pylos
8.) Identify these members of Reagan's Cabinet FTPE.
A. Reagan's first Secretary of State, his speech was a favorite target of derision, once uttering "That's not a lie. It's a terminological inexactitude." After Reagan was shot, he famously showed his ignorance of the line of succession.

Answer: Alexander Haig
B. Secretary of Defense from 1981 to 1987, he shared the view that the Soviet Union posed a serious threat and was largely responsible for huge increases in the defense budget. Answer: Caspar Weinberger
C. Attorney General from 1985 to 1988 , he was a huge proponent of the war on drugs and strongly criticized the Supreme Court for straying too far from the original intent of the founders. Questions over his finances and Iran-Contra led him to resign.

Answer: Edwin Meese
9.) Answer the following concerning a scandal of Art History FTPE.
A. Her father's name was Orazio, and she painted such works as Judith Beheading Holofernes and Susanna and the Elders.

Answer: Artemisia Gentileschi (accept either name as she is commonly referred to by her first name)
B. Artemisia and Orazio both painted in the style of this Italian master, who also did a 1598 version of Judith Beheading Holofernes.

Answer: Caravaggio (accept Michelangelo da Merisi if someone is pretentious enough to give it) C. He was Artemisia's perspective teacher who was accused of raping her and was subsequently tried and imprisoned.

Answer: Augustino Tassi
10.) Identify these dictators who share the distinction of being on David Wallechinsky's " 10 Worst Living Dictators" list, FTP each.
A. Placing \#1, his atrocities include having 150,000 of his people in forced labor camps and kidnaping filmmaker Shin Sang Ok and his wife so they could make propaganda films for him. He recently expelled weapons inspectors from North Korea and announced he's developing nuclear capabilities.

Answer: Kim Jong Il
B. At number 8, this dictator's been working on a comeback since supporting terrorist acts in the 1980 s which led to UN sanctions. In power since 1969 , there are about 78 different ways to spell this guy's name.

Answer: Muammar Al- Qaddafi
C. At number 7, this dictator of Turkmenistan gave himself the name Turkmenbashi or "Father of all Turkmen" while shutting down the opera, ballet and Academy of Sciences. He renamed January after himself and his "Rukhnama" is required reading in all schools.

Answer: Saparmurad Niyazov
11.) Answer these questions about scientific hallucinations FSNOP.
(a) (10 pts) This fictional high-viscosity form of water, first created in the 1960's by condensing in quartz capillaries, turned out to be just regular water mixed with various contaminants.

Ans: polywater
(b) (10 pts) René Prosper Blondlot "discovered" these rays, which could be refracted by aluminum, in 1903, but he failed to detect the difference when Robert Wood removed his aluminum prism.

Ans: N -rays
(c) In 1989 two chemists announced that they had achieved cold fusion by dissolving deuterium atoms in palladium (they hadn't). FFPE, name them.

Ans: Martin Fleischmann and Stanley Pons
12.) Name the gland or organ which produces these hormones, FTSNOP:
A. F5P, ACTH, HGH, and FSH

Answer: (anterior) pituitary
B. FTP, calcitonin

Answer: thyroid
C. FTP, melatonin

Answer: pineal gland
D. F5P, erythropoietin

Answer: kidney
13.) Name these German cities on the Elbe river, FTP each:
A. West-southwest of Berlin, this city was destroyed after a siege in 1631. Two decades later, mayor Otto von Guericke performed a famous scientific demonstration there.

Answer: Magdeburg
B. Further upriver is this town, where you can see the St. Marian church which housed the Cranach Altar, plus one really famous cathedral door.

Answer: Wittenburg
C. Near the Czech border, this city, the "Florence of the North," is home to the Zwinger Terrace. Destroyed in 1945, it was the setting for Vonnegut's Slaughterhouse Five.

Answer: Dresden
14.) Given members from a group of popular toys, name the group FTPE.
A. Messy Tessie, Disgustin' Justin, Smelly Kelly

Answer: Garbage Pail Kids
B. P.C, Party, Pancake, Prize

Answer: Popples
C. Cloudkeeper, Funshine, Tenderheart, Cheer, Friend and Birthday

Answer: Care Bears
15.) Identify members of the Angry Young Men from descriptions FTPE.
A. His play Look Back in Anger expressed the bitter disillusionment with the Establishment that would come to personify the group of English writers.

Answer: John Osborne
B. A factory worker who left school at 15 , he was encouraged by Robert Graves to write his first novel Saturday Night and Sunday Morning. He is best known for the short story "The Loneliness of the Long Distance Runner."

Answer: Alan Sillitoe
C. He wrote science fiction with "New Maps of Hell' and a study "Rudyard Kipling and His World" but he may be best known for the comic novel Lucky Jim.

Answer: Kingsley Amis
16.) Identify these works of John Locke, FTSNOP:
A. F5P, this lengthy essay published in 1690 was written over the course of 20 years; it discusses his concept of the mind as tabula rasa.

Answer: Essay Concerning Human Understanding (do not accept "Treatise Concerning Human Understanding")
B. FTP, published anonymously in 1690, the first of these political works refutes a monarchist theory, while the second discusses the foundation of political obligation.

Answer: Two Treatises of (Civil) Government
C. F15P, published in 1689, this work, first penned in Latin, argued that oppression based on religious beliefs should be greatly reduced. Two sequels to it were part of his argument with Bishop Stillingfleet.

Answer: Letter Concerning Toleration or Epistolia de Tolerentia
17.) FTP each ... name that tariff.
A. This 1930 tariff raised rates to record highs, contributing to the global depression.

Answer: Smoot-Hawley or Hawley-Smoot tariff
B. Passed early in the Taft administration, it lowered some rates from the Dingley tariff, but it angered many Progressives.

Answer: Payne-Aldrich tariff
C. Issued in 1890 and named for a future president, this protective tariff raised some rates as high as $48 \%$.

Answer: McKinley tariff
18.) Name these essays of Ralph Waldo Emerson, FTP each:
A. Published anonymously in 1836, its chapters include Beauty, Idealism, and Spirit, and it became the unofficial manifesto of the Transcendental Club.

Answer: Nature
B. First given as an oration to the Phi Beta Kappa Society in 1837, its title figure is "Man Thinking," influenced by nature and not enslaved to European learning.

Answer: The American Scholar
C. Containing the lines "A foolish consistency is the hobgoblin of little minds" and "Whoso would be a man must be a nonconformist," it urges the titular state over social conformity.

Answer: Self-Reliance
19.) Name these reactive intermediates from organic chemistry, each of which consists of a central carbon bonded to three other atoms, FTP each:
A. Its central carbon has a positive charge, and more highly substituted ones are more stable.

Answer: carbocation [car-bo-CAT-i-on]
B. Unlike the carbocation, this one has a lone pair of electrons on the central carbon, giving it a negative charge.

Answer: carbanion [carb-AN-i-on]
C. The central carbon has one electron, making it neutral. Antioxidants are thought to protect the body from damage caused by these compounds.

Answer: free radicals
20.) Like, answer the following about an opera by Donizetti FTPE.
A. OK, like, it's about this girl who loves this guy, but the guy is her brother's sworn enemy. So, like, the brother convinces the girl that the first guy is unfaithful and tells her to marry this other guy. Then she like finds out the truth, goes crazy and stuff, and kills the second guy and herself. Finally, the first guy is so bummed out that he kills himself, too!

Answer: Lucia di Lammermoor
B. So, like, what was Lucia's brother's name, and all?

Answer: Lord Enrico Ashton
C. And who was that dude she had the hots for?

Answer: Sir Edgardo di Ravenswood

