## Carleton/Minnesota Deep Bench 1997 Questions by Iowa State University

1. He was born into a poor farming family, but, luckily for humanity, was sent to Oxford to study to become a preacher. While there, he studied mathematics and was strongly influenced by the works of Euclid, Bacon, and Descartes. After much reticence, he decided to publish some of his famous findings, in 1687's Philosophiae Naturalis Principia Mathematica. FTP, name this mathematician and scientist, responsible for a universal method of scientific inquiry, the calculus, and his namesake laws of motion.

answer: Isaac Newton\_

2. He believed that the only checks on population growth were war, famine, disease and "moral restraint" and proposed that population is the principal generator of economic progress and, at the same time, is the perennial barrier to social improvement. FTP name the economist who used this idea along with his theory of population outgrowing capital to publish his influential "Essay on Population."

answer: Thomas Robert \_Malthus\_

3. Built in the 1200s, this church entered the technological age in 1993 with an internet-based, 3-D virtual reality tour of its frescoes as well as a tour of the cathedral itself. This may now give one of the best impressions of the cathedral, since much of it was destroyed in a September earthquake. FTP, name this Italian church, famed for its frescoes by Giotto, and named for the 13th century saint who founded the Poor Clares.

answer: Basilica of St \_Francis of Assisi\_ (or \_Francesco di Assisi)

4. This philosophical work has the subtitle "How One Becomes What One Is." The last chapter is entitled "Why I Am a Destiny," and in the third chapter, "Why I Write Such Good Books," Nietzsche describes his book \_Twilight of the Idols\_ as "How to Philosophize with a Hammer." FTP, identify this work whose Latin title asks the reader to "Behold the Man."

answer: \_Ecce Homo\_

5. This 1915 novel was revised from an 1898 version entitled "The Artistic Temperament of Stephen Carey." In the final version, the protagonist loses his religion after a visit to Heidelberg, moves to Paris, becomes a painter, returns to England after the death of a fellow Bohemian, meets Mildred who later becomes a prostitute, and finishes medical studies and becomes a county doctor. FTP, identify this Somerset Maugham novel about the club-footed Philip Carey.

answer: Of Human Bondage.

6. She became UN high commissioner for human rights this past summer, and since she was a human rights lawyer before becoming a politician, she should be well fitted for her job. She has already met with China's foreign minister, and has clashed with Laurent Kabila over investigations in the Congo, indicating her seriousness about her new job. FTP, name this former president of Ireland.

answer: Mary Robinson\_

7. The list of these was compiled around the second century BC. The first reference to the idea is found in the histories of Herodotus as long ago as the 5th century BC. The final list was compiled during the Middle Ages. FTP, give the name commonly applied to this list of the world's top tourist attractions, which included The Statue of Zeus at Olympia and The Hanging Gardens of Babylon.

answer: The Seven Wonders of the Ancient World

8. Laplace said of this man's creations that they, "by shortening the labours, doubled the life of the astronomer." His versions of the functions differed slightly from those in use today, though, in that his used a base of 1 / e and involved a constant 10^7. FTP, name this Scottish mathematician, also known for his eponymous "bones," and inventor of the logarithm.

answer: John Napier\_

9. It tells the story of a glitch in space-time, rewinding space time from 2001 to 1991 and requiring everyone to relive the decade exactly as it was. Along the way, it provides some of its author's typical satirical humor in observations about mindless television and new educational methods. FTP, name this novel, which author Kurt Vonnegut says is his last.

answer: Timequake

10. In a recent press release, this band's lead singer announced that he believes the band's October 14th release to be the best punk album EVER, and that he will personally refund the cost of the album to anyone who doesn't agree in three years. Big claims from a band whose commercial successes put them at odds with the core of the punk movement. FTP, name this band, responsible for the smash hits \_Insomniac\_ and \_Dookie\_.

answer: \_Green Day\_

11. A central figure in the Symbolist Movement, his view of the human life cycle as an eternal metamorphosis is expressed in his \_Frieze of Life\_, which includes a shockingly erotic depiction of the Madonna. FTP, name this painter, whose works were published in the Revue Blanche with poetic commentaries by Strindberg, and who is most famous for another portion of the \_Frieze of Life\_ known as \_The Scream\_.

answer: Edvard \_Munch\_

12. His work arose from attempts to solve Hilbert's Entscheidungsproblem: could there exist, at least in principle, any definite method or process by which all mathematical questions could be decided? The 1936 work \_On Computable Numbers with an application to the Entscheidungsproblem\_ answers that question in the negative, through the development of his eponymous "machine." FTP, name this scientist and suicide, a father of computer science.

answer: Alan (Mathison) \_Turing\_

13. With her political abilities, some historians believe that she would have been a better ruler for Spain than her sister, Juana the Mad. Instead she was sent to England to marry Henry VII's eldest son Arthur. Eventually, she would marry the husband she would become famous for refusing to divorce. FTP, name this mother of Queen Mary I and wife of King Henry VIII.

answer: \_Catherine of Aragon\_

14. After getting enough money to leave his homeland for Rome, he wrote \_Brand\_, a narrative poem which was converted into a play in 1885 and went on to his final plays \_When We Dead Awaken\_ and \_The Master Builder\_ . FTP, name this Norwegian playwright known for \_A Dolls House\_ and \_Ghosts\_.

answer: Henrik \_Ibsen\_

15. Born in 1952 as an odd assembly of features, the body was not included, and had to be provided by the buyer from food on hand. Later, he received a plastic head. FTP, name this popular tuber who appeared in Disney's \_Toy Story\_.

answer: \_Mr. Potato Head\_

16. They are formed by oligodendrocytes in the brain and spinal cord, and Schwann cells outside of the brain and spinal cord. It has been found that axons not covered with this don't conduct impulses as quickly. FTP, name these sheaths formed by two types of glial cells, the gaps between which are known as nodes of Ranvier.

answer: \_myelin\_ sheaths

17. Supposedly recorded by Cid Hamete Benengeli, in the second part of the novel, the two main characters bump into people who've read the first part. Digressions include the governance of the island of Barataria which happens to not be an island, and the title character's investigation of the caves of Montesinos. FTP, identify this novel about an idealistic knight errant and his squire Sancho Panza.

answer: \_\_Don Quixote\_\_de la Mancha

18. Original name needed. An ancient Roman holiday, it was Christianized to honor the memory of a martyr slain in the year 270 on February 14th. During this celebration, boys and girls would be paired up until the following year. FTP, name this holiday celebrated to honor the gods, that was later renamed Saint Valentines Day.

answer: \_Lupercalia\_

19. He recently opened a musical in Vienna entitled *Dance of the Vampires*, but more noteworthy is the fact that his lawyer recently met with the Los Angeles District Attorney's office, which caused a rumor that he might be allowed back into the U.S. after 20 years. FTP, name this director of *Tess* and

Chinatown who has been in exile since having sex with 13-year-old Samantha Geimer.

answer:

Roman Polanski

20. His unusually large skull was of great interest to phrenologists of his time, but today he is better known for his effect on the development of the classical sonata by expanding C.P.E. Bach's three-part form in his more than 80 string quartets and 104 symphonies. FTP, name this close friend of Mozart, teacher of Beethoven, and employee of the Esterhazy family.

answer:

Franz Joseph Haydn

21. He scored the series-winning goal against the Washington Capitals with a turnaround slapshot in the fourth overtime of the longest game in NHL history, giving the New York Islanders a 4 games to 3 victory in the first round of the 1987 playoffs. FTP, name this star center for the Islanders and the Buffalo Sabres who recently agreed to a contract with the New York Rangers.

answer:

Pat \_Lafontaine\_

22. It was not the Rosetta Stone, but it was an inscribed tablet, discovered in 1868, subsequently broken, but with most of its fragments now in the Louvre. Dated to around 830 BC, this stone contains the earliest non-biblical reference to Yahweh, the God of the Israelites. FTP, name this stone, named not for a town in Utah near Arches National Monument, but for cousins of the Hebrews living in ancient times east of the Dead Sea.

answer:

The \_Moab\_ite Stone\_

ACCEPT: Stone of \_Mesha\_

23. The name's the same. William served as superintendent of Indian affairs and governor of the Missouri Territory. His brother George fought Indians in Ohio and captured British posts in what is now Michigan, Illinois and Indiana, most notably at Vincennes. FTP, give the common last name of these men, one of whom helped command a certain expedition to the West, along with Thomas Jefferson's private secretary.

answer: \_Clark\_ (William and George Rogers)

24. Its birth story begins with Poseidon's anger by over a certain king's failure to sacrifice a bull to him, whereupon he caused Queen Pasiphae to lust after the animal. This union resulted in the birth of, FTP, what creature who devoured people in King Minos' labyrinth before finally being slain by Theseus?

answer:

Minotaur

TIEBREAKER: His war experiences are the basis for many of his short stories, which are distinguished by their exceptionally grim and cynical plots and outcomes, such as in "A Horseman in the Sky," in which a Federal scout deliberately shoots his Confederate father, or "Killed at Resaca," in which a lieutenant commits heroic suicide because his sweetheart accused him of cowardice. FTP, name this author, better known for his bitterly realistic "An Occurrence at Owl Creek Bridge."

answer:

Ambrose Bierce

EXTRAS:

26. Mordvinia, Chuvashia, Udmurtia, Bashkortostan, Ingushetia, Adygeya, Kalmykia, Komi, Altaya, Khakassia, Buryatia, Yakutia, North Ossetia, Dagestan, and Tatarstan are all, FTP, republics of what nation, which also includes Chechnya?

answer:

The Russia n Federation

27. Two answers required. This system of notation employs two German descriptors to specify the location of alkene double bonds. It is a more precise alternative to the cis-trans method of specifying double bonds of alkenes and is based on the Cahn-Ingold-Prelog system. FTP, give the two words that define this 'easy' notation system.

answer:

entgegen and zusammen (prompt on E-Z)

Qualifying recently returned to the 33 fastest drivers instead of reserving two-thirds of the spots for IRL drivers. Normally held on the Sunday of Memorial Day weekend, this past year's race suffered a two day rain delay. FTP, name this "Greatest Spectacle in Racing" whose latest winner was Arie Luyendyk.

answer:

\_Indianapolis 500\_ ACCEPT: \_Indy 500\_

29. Kesa, Kangha, Kachh, Kirpan and Kara are the five symbols associated with this faith, whose founder opposed idolatry and the caste system and taught monotheism in what is now the state of Punjab. FTP, name this religious group whose name means "disciple," established by Guru Nanak in

the 15th century A.D. to unite warring Hindus and Muslims.

answer:

Sikh ism

30. According to legend, it was founded in the 10th century B.C. by Menelik I, though the first recorded kingdom in the area, Aksum, was established by Arab traders in the first century

A.D. Located in East Africa, it contains the Great Rift Valley and is bordered by six countries, including Sudan, Kenya and Djibouti. FTP, name this country whose capital city is Addis Ababa.

answer: \_Ethiopia\_