

THE GREAT IFAE WELCOME DAY QUIZ

4rd Edition
2025

PART 1: PHYSICS

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Question 1: What is approximately the mass of the top quark (in kilograms)?

(A) $231 \times 10^{-27} \text{ kg}$

(B) $16 \times 10^{-27} \text{ kg}$

(C) $307 \times 10^{-27} \text{ kg}$

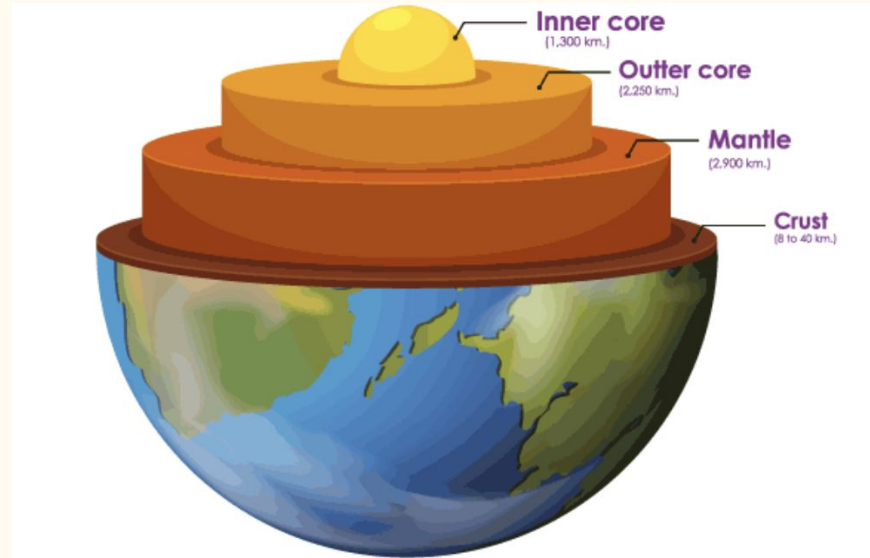
(D) $90 \times 10^{-27} \text{ kg}$

Question 2: In supersymmetry, what is the superpartner of the electron called?

- (A) stron
- (B) secretron
- (C) sectron
- (D) selectron

Question 3: Which layer of the earth generates its magnetic field?

- (A) Crust
- (B) Mantle
- (C) Outer Core
- (D) Inner Core



Question 4: Bananas can be used as an informal measurement of radiation. How many BED (Banana Equivalent Doses) do we experience, on average, every day?

- (A) 10 BED
- (B) 50 BED
- (C) 70 BED
- (D) 100 BED

Question 5: How would you write Einstein's field equation of General Relativity in LaTeX format?

(A) $G = \frac{m_1 * m_2}{r^2}$

(B) $E = m \cdot c^2$

(C) $G_{\mu\nu} + \Lambda g_{\mu\nu} = \frac{8\pi G}{c^4} T_{\mu\nu}$

(D) $G_{\mu\nu} - \Lambda g_{\mu\nu} = \frac{4\pi G}{c^4} T_{\mu\nu}$

PART 2: IFAE

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Question 6: How many people (researchers, engineers, support personnel) are part of IFAE?

- (A) 50
- (B) 100
- (C) 150
- (D) 200

Question 7: What are the three official divisions of IFAE?

- (A) Theory, experimental, engineering
- (B) Theoretical, experimental, technical
- (C) Particle Physics, Cosmology, Applied Physics
- (D) Particle Physics, Astronomy & Cosmology, Applied Physics

Question 8: How long does it take to get from IFAE to Plaça Catalunya (in public transport)?

- (A) 20 minutes
- (B) 45 minutes
- (C) 1 hour
- (D) 2,000 years

Question 9: How old is IFAE this year?

- (A) 29 years old
- (B) 37 years old
- (C) 42 years old
- (D) 34 years old

PART 3: BARCELONA

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Question 10: In which year did the city of Barcelona host the Summer Olympics?

(A) 1998

(B) 2000

(C) 1992

(D) 1988

Question 11: How is this dish called?

- (A) Fish and chips
- (B) Cassoulet
- (C) Caldeirada de peixe
- (D) Escudella i carn d'olla



Question 12: “Castells” are human towers performed during festivals in Catalonia. What is the term for the person who crowns the tower?

- (A) Enxaneta
- (B) Castellero
- (C) Cap de colla
- (D) Pebrot

Question 13: Which Barcelona neighbourhood was a center of resistance during the War of Spanish Succession?

- (A) Gràcia
- (B) Eixample
- (C) Les Corts
- (D) El Born

THE BREAKER

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Who is who?



(1)

(A) (One of the) 2025's Physics Nobel Prize winner

(B) Joan Manuel Serrat

(C) Director of IFAE

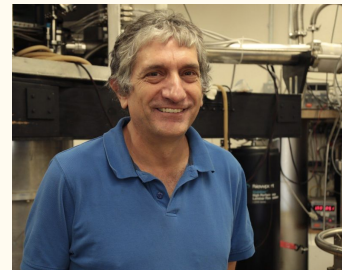
(D) Director-General of CERN



(2)



(3)



(4)

FOR THE GLORY

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What is the highest precision of π that you can recite?

Still a tie...?

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Which park is this?

- (A) Parc de la Ciutadella
- (B) Parc de Torreblanca
- (C) Park Güell
- (D) Parc de Cervantes



Come on...

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I always lose my head in the morning,
but I get it back at night.
What am I?