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SUBJECT:- PHYSICS CLASS:- IXTH DATE:24/06/XX

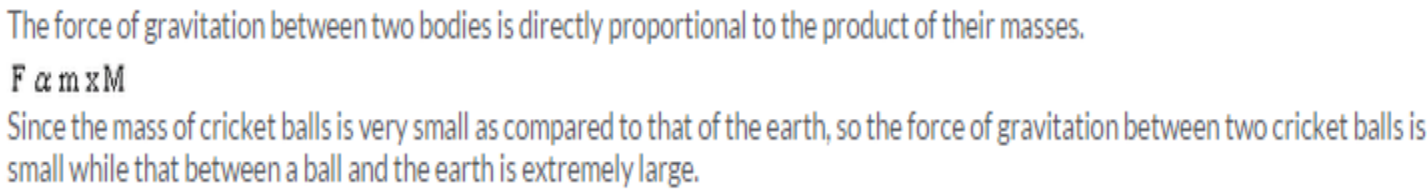
SUBJECT TEACHER:- MR. NEEL NIRANJAN

CHAPTER 3. (GRAVITATION)

Question 29:
Can we apply Newton's third law to the gravitational force ? Explain your answer.
Solution :
Yes, Newton's third law of motion holds good for the force of gravitation. This means that when earth exerts a force of attraction on an object, then the object also exerts an equal force on the earth, in the opposite direction.

Question 30:
Give reason for the following :
The force of gravitation between two cricket balls is extremely small but that between a cricket ball and the earth is extremely large.

Solution :
The force of gravitation between two bodies is directly proportional to the product of their masses.



Since the mass of cricket balls is very small as compared to that of the earth, so the force of gravitation between two cricket balls is extremely small while that between a ball and the earth is extremely large.