CLAIMS

1. A toilet seat apparatus to be placed on an upper part of a toilet bowl having a bowl unit that receives excrement, the toilet seat apparatus comprising:

a toilet seat on which a user sits;

a light emitting unit including a light emitting element that emits light;

a light receiving unit including a light receiving element that receives light; and

a control unit that controls energization of the light emitting element and application of voltage to the light receiving element, wherein

the light emitting unit emits light toward falling feces discharged by the user,

the light receiving unit receives the reflected light from the feces corresponding to the light emitted by the light emitting unit,

the control unit:

performs light reception control including transmitting a control instruction to open an electronic shutter to the light receiving element and energizing the light emitting element so as to permit reception of the reflected light from feces; and

performs control of setting an interval from a start of execution of one light reception control to execution of light reception control subsequent to the one light reception control, to 0.2 milliseconds or more and 600 milliseconds or less.

2. The toilet seat apparatus according to claim 1, wherein

the control unit performs control of setting an interval from a start of execution of the one light

reception control to execution of the subsequent light reception control, to 300 milliseconds or less.

3. The toilet seat apparatus according to claim 1 or 2, wherein

the control unit performs control of setting an interval from a start of execution of the one light reception control to execution of the subsequent light reception control, to 100 milliseconds or less.

4. The toilet seat apparatus according to any one of claims 1 to 3, wherein

the control unit performs control of setting an interval from a start of execution of the one light reception control to execution of the subsequent light reception control, to 50 milliseconds or less.

5. The toilet seat apparatus according to any one of claims 1 to 4, wherein

the control unit performs control of setting an interval from a start of execution of the one light reception control to execution of the subsequent light reception control, to 10 milliseconds or less.

6. The toilet seat apparatus according to any one of claims 1 to 5, wherein

the light emitting unit includes a plurality of light emitting elements each of which emits light,

the plurality of light emitting elements is capable of emitting beams of light of different wavelengths,

the control unit:

energizes only one light emitting element among

the plurality of light emitting elements in the one light reception control, changes the light emitting element to be energized in the subsequent light reception control every time the one light reception control is completed, and

performs control of setting the interval from the start of execution of one light reception control to the execution of the subsequent light reception control to 1.6 milliseconds or less.

7. The toilet seat apparatus according to any one of claims 1 to 5, wherein

the control unit sets energization time of the light emitting element to be different for each of wavelengths emitted by the light emitting element in the light reception control.

8. An excrement detection apparatus to be disposed on a toilet bowl having a bowl unit that receives excrement, the excrement detection apparatus comprising:

a light emitting unit including a light emitting element that emits light;

a light receiving unit including a light receiving element that receives light; and

a control unit that controls energization of the light emitting element and application of voltage to the light receiving element, wherein

the control unit performs light reception control including transmitting a control instruction to open an electronic shutter to the light receiving element and energizing the light emitting element so as to permit reception of the reflected light from feces, the light emitting unit emits light toward falling feces discharged by the user,

the light receiving unit receives the reflected light from the feces corresponding to the light emitted by the light emitting unit, and

the control unit performs control of setting an interval from a start of execution of one light reception control to execution of light reception control subsequent to the one light reception control, to 0.2 milliseconds or more and 600 milliseconds or less.