# 31

#### FIRST TERMINAL EXAMINATION-2014-2015

## Class-VIII

### Subject-G. Science

Time Allowed: 3 Hrs.

M.M.: 90

Please Check the Total Marks

Do not write any answers on the questions paper. Check the total marks.

#### General Instructions:

- 1. The question paper comprises of three sections A, B and C.
- 2. All questions are compulsory.
- 3. Sections A, B and C are to be attempted in separate sheets.
- 4. In section A, Questions 1 and 2 are of 1 mark, Questions 3-7 are of 2 marks each, Questions 8-11 are of 3 marks each, Question no 12 is of 5 mark each, Question 13 and 14 are of 1 mark each.
- 5. In Section B, Questions 15-17 are of 1 mark each, Question 18 is of 2 marks, Questions 19-22 are of 3 marks each Questions 23 and 24 are of 5 marks each, Questions 25 and 26 is of 1 mark each.
- 6. In Section C Question 27 is of 1 mark, Question 28 is of 2 marks Questions 29-33 are of 3 mark each, Questions 34 and 35 are of 5 marks each, Questions 36 and 37 are of 1 mark each.

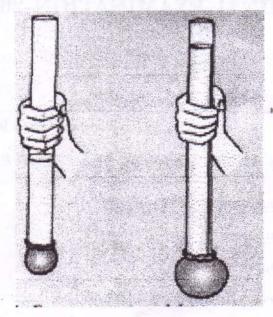
#### Section A (Physics 31 marks)

- Mention two factors on which friction in fluids depend?
  (1)
- 2. What is the cause of friction? (1)
- 3. (a) Why sliding friction is less than static friction?
  - (b) Hubs and axle of ceiling fans have ball bearings. Why? (1+1=2)

## A. Heavy vehicles are provided with broad tyres. Give reason

(b) What do you infer from the following figures about fluid pressure?

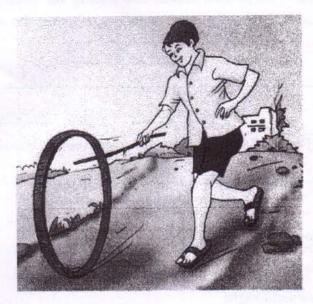
(1+1=2)



- 5. 'Soham is riding a bicycle. Using this example explain how friction is a foe as well as friend?
- 6. Give one word answer for the following:-
  - (a) Number of oscillations per sec
  - The maximum displacement of particles of vibrating body
  - (e) Unit to express frequency
  - (d) Organ that produces sound in humans. (2)
- 7. (a) What is the effect on the
  - (i) Loudness of the sound if the amplitude of the vibrating body is doubled
  - (ii) Pitch of the sound when the frequency of the vibrating body is doubled
  - (b) Why does a child has shriller voice than an adult? (1+1=2)
- 8. Let Define pressure. Give its SI unit.
  - Take an empty plastic bottle and press it so that most of the air inside is expelled out. Now close the lid of the bottle tightly and then try to bring the bottle back to its original shape. Does it come back to its shape? Why?

 $(1\frac{1}{2} + 1\frac{1}{2} = 3)$ 

## 9. (a) Look at the following figure and name the two contact forces acting.



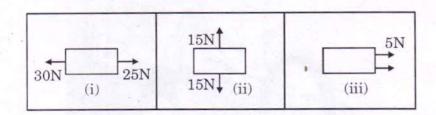
- (b) Give one example of situation in which you push to change the state of motion of objects.
- (c) It is easy to walk down the hilly area than to walk up Justify. (1+1+1=3)
- 10. How do lubricants decrease friction? Give one example of a lubricant.
  - In which case it is easier to drag a mat: when nobody is sitting on it or when a person is sitting on it? Why? (1½ + 1½=3)
- 11. (a) How can we increase the frequency of sound produced by
  - (i) a guitar

- (ii) flute
- Your school is situated in a very crowded and high traffic zone. The school management has decided to shift the school to a place where there is less noise pollution. What value is depicted by them?
- (e) What are infrasonic waves?

(1+1+1=3)

- 12. (a) Calculate the time period if a particle vibrates 60 times in 15 seconds.
  - (b) If an explosion takes place in the space, we cannot hear the sound of it. Give reason.
  - (c) What is the function of eardrum?
  - (d) Why is the speed of sound maximum in solids?
  - (e) How is noise pollution harmful to us? Give two points.

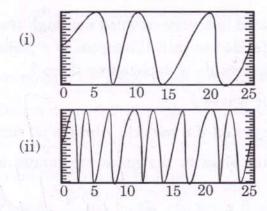
In the following figures two forces are acting on each of the three boxes from 13. different directions choose the correct option showing the sequence of net movement done by them:



- Towards left (a) (i)
  - no net movement (ii)
  - towards right (iii)
- Towards right, (b) (i)
  - towards left, (ii)
  - no net movement. (iii)
- (i) No net movement
  - (ii) towards left,
  - (iii)

towards right. (1)

14. Identify the correct option from the following:



- (i) is high pitch sound than (ii) a.
- (ii) is high pitch sound than (i) b.
- both represent low pitch sound. c.

(1)

#### Section B

#### (Chemistry-29 marks)

Give-one word answer for the following: 15. (a) . Artificial wool (1)(b) Plastic used for coating non stick cookwares 16. What is the green material that deposits on copper vessel during rainy season? (1)Give one example each of exhaustible and non exhaustible natural resources. 17. (1) Name the process of formation of coal. Mention three conditions required for its 18. formation. (2)Give reason for the following:-Rayon is said to be semi synthetic fibre. (a) Synthetic clothes should not be worn in summers. Theromosetting plastic is used in making switches. (c) (1+1+1=3)Inspite of their wide use in our day to day life, plastics should be avoided. Give 20. two points to justify. Give one way to minimise the use of plastic at your level. (2+1=3)21. 'Metals are very hard'. Give an exception to this property. (a) Which property of metal makes its use in the following:-(b) For making wires. (i) (ii) For making bell Kirti took a small piece of aluminium foil in a test tube and added few drops (c) of dil Hydrochloric acid to it. She observed some bubbles coming out of the mixture. Name the gas that is released. (i) Give the test for confirmation of this gas.  $(\frac{1}{2} + 1 + \frac{1}{2} = 3)$ (ii) 22. Why is sodium metal stored in kerosene? (a) What is the nature of metal oxides and non-metal oxides? Give example of (b) each. (1+2=3)

| 23.  | (a)   | Give one word answer for the following:-   |     |
|------|-------|--|-----|
|      |       | (i) A Non metal used in water purification process.  |     |
|      |       | (ii) A very reactive non metal.  |     |
|      |       | (iii) Gas released when a metal reacts with sodium hydroxide.  |     |
|      | (b)   | Give two observations when iron is added to copper sulphate solution. Write the chemical reaction also.                    |     |
|      | (c)   | What will happen if zinc sulphate is stored in copper container. Give reasfor your answer. $(1\frac{1}{2}+2+1\frac{1}{2})$ |     |
| 24.  | (a)   | Why do you think there is a need of conservation of fossil fuels. Give opint.  | one |
|      | (b)   | Give two ways by which we can minimise the use of petrol.  |     |
|      | (c)   | (i) Name the by-product of the coal used in maunfacturing of steel   |     |
|      | 181   | (ii) Give one use of Paraffin Wax.   |     |
|      | (d)   | What is petroleum refining? (1+2+1+1)  | =5) |
| 25.  | Mon   | omer of which of the following polymer gives fruits their smell  |     |
|      | (a)   | Nylon  |     |
|      | (b)   | Cotton   |     |
|      | (c)   | Polyester  | (1) |
| 26.  | Whi   | ch of the following is correct   |     |
|      | (a)   | CNG is more polluting fuel than petrol   |     |
|      | (b)   | Kerosene is not a fossil fuel  |     |
|      | (c)   | Bitumen is used for road surfacing   | (1) |
|      |       | Section-C  |     |
|      |       | Biology 30 marks   |     |
| 27.  | Wha   | at is the fundamental basis of life? Who discovered it?  | (1) |
| 28., | Diffe | erentiate between Rabi and Kharif crops. Give two examples of each.  | (2) |
| 29.  | (a)   | What is the 'Red Data Book'?   |     |
|      | (b)   | Mention any two objectives of 'Project Tiger'. (1+2  | =3  |
| 30.  | Give  | e reasons :  |     |
|      | (a)   | Grains are dried before storing.   |     |

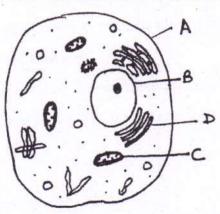
- (b) Farmers leave the field fallow.
- (c) Drip irrigation is preferred over the traditional methods of irrigation. (3)
- 31. (i) Draw a nerve cell and label it.
  - (ii) Give one difference between amoeba and white blood cells (2+1=3)
- 32. (a) Differentiate between extinct and endangered species (Give one example of each.)
  - (b) As a member of the 'Save the Environment' club, Mr. Subramaniyam urges the children not to waste paper. What value is he trying to instill in them? (2+1=3)
- 33. (a) Give two examples of each:
  - (i) Prokaryotic organisms
  - (ii) Nitrogenous fertilizers
  - (b) Seeds are often grown in nurseries and then transplanted to the fields.

    Give any one advantage of this method?

    (2+1=3)
- 34. (a) What is a biosphere reserve?
  - (b) Give two examples of endemic flora of the Panchmani Biosphere reserve.
  - (c) On a visit to the Bharatpur Bird Sanctuary, Sahil came across hundreds of Siberian Cranes.

The guide told him that these cranes visit the sanctuary every year.

- (i) What is this movement of the Siberian Cranes called?
- (ii) Why do the birds come to the sanctuary every year?
- (d) Government has set up many sanctuaries, parks and reserves. Mention the value depicted by the Government. (1+1+2+1=5)
- 35. Observe the animal cell mentioned below and answer the following questions:-



Label (A) and (C). What is the role of nucleus? (2 Points) Write two differences between plant cells and animal cells. (1+2+2=5)(c) A dye used to stain cells to be viewed under a microscope 36. (1)Purple cabbage (a) (b) methylene blue (c) methyl orange In crop rotation method, after wheat is harvested, we sow 37. (1)

rice

(c)

mustard

(b)

(a)

cotton