



GYANODAYA GURUKUL

Affiliated to C.B.S.E., Delhi
Gola Road, Bailey Road, Patna - 801503

Half Yearly Examination – (2019-20)

Class :- VIII
Subject :- SCIENCE

Max. Marks :- 80
Time Allowed :- 3 hr

GENERAL INSTRUCTIONS :-

- Questions are divided into four sections.
- Read the questions carefully and write the answers in the answer sheets provided.
- Do not answer the questions randomly. Attempt all the questions of one section before moving on to another section.
- Do not write anything on the question paper.

SECTION A

1. Multiple choice questions (do any ten)

[1×10 = 10 marks]

- a) In agriculture, broadcasting is used for :
- | | |
|-------------------------|------------------------|
| i. ploughing the fields | ii. rotating the crops |
| iii. removing the weeds | iv. sowing the seeds |
- b) The process of beating out grains from the harvested wheat crop is called :
- | | |
|----------------|--------------|
| i. beating | ii. crushing |
| iii. threshing | iv. weeding |
- c) The process of conversion of sugar into alcohol is called :
- | | |
|----------------------|---------------|
| i. nitrogen fixation | ii. moulding |
| iii. fermentation | iv. infection |
- d) The vaccine for smallpox was discovered by :
- | | |
|----------------------|-------------------|
| i. Alexander Fleming | ii. Edward Jenner |
| iii. Louis Pasteur | iv. Rober Koch |
- e) The man-made fibre made from the cellulose polymer is :
- | | |
|------------|---------------|
| i. nylon | ii. acrylic |
| iii. rayon | iv. polyester |
- f) The non-metal which exists in the liquid state at room temperature is :
- | | |
|--------------|--------------|
| i. fluorine | ii. chlorine |
| iii. bromine | iv. iodine |
- g) The element which is stored under kerosene is :
- | | |
|-------------|----------------|
| i. sulphur | ii. phosphorus |
| iii. sodium | iv. silicon |
- h) The major component of LPG is :

- | | |
|---------------------|-------------|
| i. hydrogen | ii. methane |
| ii. carbon monoxide | iv. butane |
- i) The same force 'F' acts on four different objects having the areas given below, one by one. In which case the pressure exerted will be the maximum ?
- | | |
|-----------------------|-----------------------|
| i. 20m ² | ii. 50m ² |
| iii. 10m ² | iv. 100m ² |
- j) A pressure of 10KPa acts on an area of 0.3 m². The force acting on the area will be :
- | | |
|-------------|------------|
| i. 3000 Pa | ii. 3000 N |
| iii. 300 Pa | iv. 300 N |
- k) If the sliding friction between two surfaces is found to be 8 N, then the static friction between these two surfaces is most likely to be :
- | | |
|----------|----------|
| i. 5 N | ii. 10 N |
| iii. 4 N | iii. 2 N |
- l) The frictional force exerted by a fluid is called :
- | | |
|-----------|-----------|
| i. brag | ii. drab |
| iii. drag | iv. tread |
- m) Which of the following are used to study the growth of foetus inside the mother's womb ?
- | | |
|--------------------|-----------------|
| i. radio waves | ii. X - rays |
| iii. infrared wave | iv. sound waves |

2. Fill in the blanks.(do any ten)

[1×10 = 10 marks]

- a) Crop rotation helps in the replenishment of soil with _____.
- b) The supply of water to crops at different intervals is called _____.
- c) Cholera is caused by _____.
- d) The carrier of malaria causing protozoan is _____.
- e) The full form of PVC is _____.
- f) Metal reacts with acids to produce _____ gas.
- g) A non-metal is used to make an antiseptic solution called tincture _____.
- h) The slow process of conversion of dead vegetation into coal is called _____.
- i) Force has magnitude as well as _____.
- j) Atmospheric pressure _____ with increasing heights.
- k) Shape that are designed to reduce air resistance are called _____.
- l) Friction always opposes _____ between the surfaces in contact with each other.
- m) The unit of frequency is _____.

SECTION B

3. Very short answer type questions.(do any five)

[2×5 = 10 marks]

- a) Name the machine which does the cutting of standing crops and recovers the grain too.
- b) Name any two human disease caused by Fungi.
- c) Which of the two is a thermosetting plastic : PVC or Bakelite ?
- d) Which non-metal is used in water purification process to make drinking water supply germ free ?
- e) What is the full form of CNG ?
- f) Name any two non-contact forces.
- g) Name two common lubricants.
- h) Name that part of ear which vibrates when outside sound falls on it.

SECTION C

4. Short answer type questions.(do any ten)

[3×10 = 30 marks]

- a) What is a crop ? What are the two types of crops based on season ? Give one example of each.
- b) Define manure ? State any two advantages of manure.
- c) What are micro-organisms ? State the name of any two types of micro-organisms with one example of each.
- d) What is meant by food preservation ? Name any four methods of preserving food.
- e) What is rayon ? Give any two uses of rayon.
- f) Define i) Malleability ii) Ductility and iii) Sonorous.
- g) What type of oxides are formed :
 - i. When metals combine with oxygen ? Give one example.
 - ii. When non-metals combine with oxygen ? Give one example.
- h) What are Petrochemicals ? Name any two petrochemicals.
- i) What is force ? State any four effects of force.
- j) What is meant by atmospheric pressure ? Why do mountaineers usually suffer from nose bleeding at high altitudes ?
- k) Explain why
 - i. a pencil will write on paper but not on glass.
 - ii. climbing a greasy pole is very difficult.
- l) State two advantages and two disadvantages of friction.
- m) Define the following terms.
 - i. Amplitude of vibration
 - ii. Time period of vibration
 - iii. Frequency of vibration

SECTION D

5. Long answer type questions.(do any four)

[5×4 = 20 marks]

- a) (i) What is the process of 'transplantation' in agriculture ? Give examples of two crops which are usually grown by this process.
(ii) State two advantages of the process of transplantation in growing crops.
- b) (i) Draw a neat, labelled diagram of nitrogen cycle in nature?
(ii) State two ways in which nitrogen gas of the atmosphere can be 'fixed' in nature to get nitrogen compounds in soil.
- c) Write any five differences in physical properties of metals and non-metals with examples. Also discuss any three exceptions.
- d) (i) How does the pressure of a liquid depends on its depth ? Draw a labelled diagram to show that the pressure of a liquid (say, water) depends on its depth.
(ii) Explain why, the walls of dam are thicker near the bottom than at the top.
- e) (i) What is drag ? Give two examples of a drag force.
(ii) How can you reduce the drag on something moving through the air ?

BEST OF LUCK