



Navyug Vidyalaya, Bhagalpur

Class-IX

Assignment-III Session (2020-21)

Subject- Physics (Rahul Kumar- 7004893322)

1. What do you mean by force?
2. Write various functions of force.
3. Define balanced and unbalanced force.
4. Who was Newton? What was his contribution?
5. State Newton's 1st law of motion.
6. What is the S.I unit and C.G.S unit of force?
7. Write some consequences of Newton's 1st Law.
8. State Galileo law of inertia.
9. A certain force accelerates 10kg. Object with an acceleration of 5m/s^2 . Calculate the force applied.
10. State Newton's 2nd law of motion. Write its mathematical form.
11. On what factors does inertia of an object depend?
12. What is difference between inertial mass and gravitational mass.
13. State Newton's 3rd law of motion.
14. Write few applications of Newton's 3rd law of motion.
15. A force of 20 n displaces an object by an acceleration of 5m/s^2 . Calculate the mas of object.
16. What is momentum? Write its unit.
17. Which physical Quantity is expressed by the rate of change of momentum?
18. Define impulse.
19. Define the term "free fall".
20. Define one Newton.

Subject - Chemistry (H.R. Gupta 6200083843)

[A] Very short Answer Questions (VSAQ)-

1. Why are liquids called fluids?
2. Which state of matter has neither definite shape nor volume?
3. What is the physical state of water at 25°C ?
4. In which state of matter particle motion in maximum?
5. Define Diffusion.

[B] Short Answer Questions (SAQ)-

6. Compare the intermolecular forces between particles of a solid and a gas.
7. Explain the following characteristics of gases:
i) Compressibility ii) Gas pressure
8. What is matter and write two examples of it.
9. Give reason to justify:
i) Wood is a solid ii) Water is liquid at room temperature.
10. Rubber band can change its shape when it is stretched. Is it a solid?
11. You must knowing about a sponge. It is a solid but we can compress it easily. Why?
12. Write physical nature of matter.
13. Out of solid ,liquid and gas, which state has:
a) Maximum spaces between molecules
b) Maximum tendency for diffusion.
14. Name the physical state of matter:
a) Which can be easily compressed?
b) Which is the most rigid?
15. Arrange solids, Liquids and gases in order of increasing:
a) Density b) Fluidity c) Diffusion

16. Convert the following temperatures to the Celsius scale:
i) 300k ii) 10k iii)-300k iv)275k v)-273k
17. Distinguish between solid and gas on the basis of following properties:
i) Shape and Volume ii) Compressibility iii)Density iv)Fluidity v)Diffusion
18. Explain an activity to demonstrate that particles of matter are continuously moving.
19. Define the following:
i.) Sublimation ii)Evaporation iii) Dry Ice iv) Melting Point v)Boiling Point
20. Explain the following:
a) Latent heat of fusion b)Latent heat of Vaporisation.

Subject- Biology (Rahul Jha 9631022032)

CHAPTER : The Fundamental unit of Life

1. Fill in the blanks:
(a) The nuclear region of prokaryotic cell is called_____.
(b) The term protoplasm was coined by_____.
(c) Amoeba can change their_____continuously.
(d) The additional protective layer in plants present outside the plasma membrane is called_____.
(e) Cells were discovered by Robert Hooke in_____.
2. True or False questions:
(a) Viruses are non-cellular living organism.
(b) Amoeba is a multicellular organism.
(c) Cell wall is present in all cells.
(d) A dilute solution is called hypertonic solution.
(e) Central vacuole occupies 10-20% of plant cell volume.
3. What is eukaryotic cell?
4. Name two factors on which shape of the cell depends.
5. What is protoplasm?
6. What is meant by selectively permeable membrane?
7. What is endocytosis?
8. What would happen if plasma membranes ruptures?
9. Name two cell organelles, which contain their own genetic material.
10. Name the following:
(a) Kitchen of a cell
(b) Power house of cell
11. What is the chemical composition of cell wall in plants?
12. What is the main function of each of the following organelles?
(a) Ribosome (b) Chloroplast
13. Name the cell organelle in which following structures are present.
(a) Cristae (b) Centriole (c) Chromosome
14. Name the nucleic acids that are present in an animal cell.
15. Draw a diagram of animal cell and label its, various parts.
16. Lysosomes are also called digestive bags. Why?
17. What are the genes? Where are they located in the cell?
18. What are centrioles? Write about their function.
19. What are three main functional regions of the cell?
20. Why cell is called structural and functional unit?

Subject- Maths (Arun Singh 8210432541)

Q.No. 1 to 10 MCQ and other subjective:

1. In $\triangle ABC$, it is given that base=12cm and height=5cm. Its area is

- (a) 60cm^2 (b) 30cm^2 (c) $15\sqrt{3}\text{cm}^2$ (d) None
2. The lengths of sides of a Δ are 20cm, 16cm and 12cm. The perimeter of Δ is
 (a) 48cm (b) 50cm (c) 60cm (d) None
3. Each side of an equilateral Δ is 8cm. The area of Δ is.
 (a) $8\sqrt{3}\text{cm}^2$ (b) $16\sqrt{3}\text{cm}^2$ (c) $32\sqrt{3}\text{cm}^2$ (d) None
4. Each side of an equilateral Δ is 8cm. The height of Δ is
 (a) $4\sqrt{3}\text{cm}$ (b) $8\sqrt{3}\text{cm}$ (c) $16\sqrt{3}\text{cm}$ (d) None
5. The height of an equilateral Δ is 6cm. Its area is
 (a) $12\sqrt{3}\text{cm}^2$ (b) $6\sqrt{3}\text{cm}^2$ (c) 18cm^2 (d) None
6. Each side of equilateral Δ is 10cm. The perimeter of Δ is
 (a) 30 cm (b) 40 cm (c) 60 cm (d) None
7. The area of an equilateral Δ is $81\sqrt{3}\text{cm}^2$. Its height is
 (a) $9\sqrt{3}\text{cm}$ (b) $6\sqrt{3}\text{cm}$ (c) $18\sqrt{3}\text{cm}$ (d) None
8. The base of a right triangle is 48 cm and its hypotenuse is 50 cm. The area of Δ is
 (a) 168cm^2 (b) 252cm^2 (c) 336cm^2 (d) None
9. The area of an equilateral Δ is $36\sqrt{3}\text{cm}^2$. Its perimeter is
 (a) 36cm (b) $12\sqrt{3}\text{cm}$ (c) 24 cm (d) None
10. The sides of a Δ are 3 cm, 4 cm and 5 cm. Its semi - perimeter is
 (a) 6 cm (b) 8 cm (c) 10 cm (d) None
11. Find the perimeter and area of a Δ Whose sides are 52 cm, 56 cm and 60 cm respectively.
12. The lengths of sides of a Δ are in the ratio 3 : 4 : 5 and its perimeter is 144 cm. Find area of a triangle and height corresponding to the longest side.
13. The difference between the sides at right angles in a right - angled triangle is 14 cm. The area of triangle is 120cm^2 . Find the perimeter of the triangle.
14. Find the area of the quadrilateral ABCD in which $AB = 9\text{cm}$, $BC = 40\text{cm}$, $CD = 28\text{cm}$, $DA = 15\text{cm}$ and $\angle ABC = 90^\circ$.
15. The adjacent sides of a parallelogram ABCD are $AB = 34\text{cm}$, $BC = 20\text{cm}$ and diagonal $AC = 42\text{cm}$. Find the area of the parallelogram.
16. The diagonals of a rhombus are 48 cm and 20 cm long. Find area and perimeter of the rhombus.
17. The base of an isosceles triangle measures 80 cm and its area is 360cm^2 . Find perimeter of the triangle.
18. The sides of a triangle are in the ratio 5 : 12 : 13 and its perimeter is 150 m. Find area of the triangle.
19. Find the area of a trapezium whose parallel sides are 11 m and 25 m long, and non - parallel sides are 15 m and 13 m long .
20. Find the area of a rhombus one side of which measures 20 cm and one of whose diagonals is 24 cm.

Subject- History (N. Dubey 9431609372)

1. What do you understand by the word "Revolution"?
2. Describe the incident which sparked the Revolution.
3. What did the French Revolution of 1789 stand for?
4. Explain the terms liberty, Equality and Fraternity.
5. What was the immediate cause of rioting in Paris?
6. Name the three main social classes of 18th century France.
7. List any three taxes levied on the Third Estate.
8. What work did women of the Third Estate do?
9. Why was the third Estate considered the unprivileged class?
10. List the names of at least three philosophers who inspired the Revolution.
11. Which assembly in France alone had the authority to vote on new taxes?

12. When and where did Louis XVI convert the assembly of the Estates General?
13. On what principal was voting conducted in the Estates General?
14. What was the main aim of the National Assembly?
15. What was the main objective of the draft constitution of 1791?
16. Explain the term "active citizens".
17. What is meant by the term "natural and inalienable rights"?
18. List four rights mentioned in the declaration of the Rights of Man and citizen.
19. Explain the term republic.
20. What is meant by the term "Directory"?

Subject - Geography (G.N. Jha 9431872861)

1. What influence the duration of the day and night as one moves from south to north?
2. What is the standard meridian of India?
3. Which countries are bigger than India in size?
4. What is the importance of the Suez canal?
5. Name the states of India sharing border with Pakistan, China and Bangladesh.
6. Indian ocean is named after India. Justify the statement.
7. Why is India called a subcontinent? How is it separated?
8. How many states and Union Territories India has?
9. "Our country has cultural linkage with entire Asian-Countries through the age". Explain the statement.
10. What is the Time lag between Arunachal Pradesh and Gujarat? How is a uniform time set all places?
11. What is Island and peninsula?
12. The central location of India at the head of the Indian ocean is considered of great significance. Why?
13. Name the Eastern and western coast of India?
14. Name the Eastern states and western state of India?
15. Describe the size and extent of India.
16. Explain why Ahmedabad and Kolkata are able to see the noon sun exactly overhead in a year but not Delhi.
17. What are Tectonic Plates?
18. What is Gondwana?
19. Name western most point and Eastern most point of India.
20. Name the state with longest coastline.

Subject- Economics (S.S. Suman 9934228288)

1. What are the main purpose of the palampur village story?
2. What do you mean by land and capital?
3. What is working capital? Give examples.
4. How is palampur connected with neighbouring villages and towns?
5. What are Factors of production?
6. What are the other activities carried in palampur?
7. Give two examples of Non farming activities.
8. Give three differences between traditional farming methods and modern farming method?
9. What is the role of market in the expansion of non-farming activities?
10. Give differences between Rabi crops and Kharif crops.
11. How do the medium and large farmers obtain capital for farming? How is it different from the small farmers?
12. What were the factors that helped in achieving green revolution in India?

Subject- Political science (S.C. Pandey 9576265515)

1. What do you mean by one person ,one vote ,one value?

2. In Fiji ,the electoral system does not give equal voting right to all. Give example.
3. What do you mean by rule of law and respect of rights?
4. In which year did Zimbabwe gain independence?
5. Who controls TV and radio in Zimbabwe?
6. How elections are owned by the president in Zimbabwe?
7. Is a democratic government rules within limits set by constitution?
8. Write summary definition of democracy with any four examples.
9. Explain the major arguments against democracy.
10. Write any five arguments in favour of democracy.
11. What can we expect from a good democracy ?
12. Write the name of the country where direct democracy exists.
13. Why do we prefer democracy better than other form of government?
14. In what three ways does the democracy in a country enhance the dignity of an individual .
15. Will you prefer democratic government ? Give argument in support of your statement.

Subject- English (S. Kumari 7250400855)

Chapter - 1 – the fun they had

1. Answer the following questions in 30 - 40 words each.
 - (i) Who was Tommy and Margie? How old are they?
 - (ii) What did Margie write in her diary?
 - (iii) Describe the book that Tommy had found in the attic.
 - (iv) Had Margie ever seen a book before?
 - (v) What things about the book did Margie find strange?
 - (vi) What do you think a tele book is ?
 - (vii) Where was Margi's' School ? Did she have any Classmates?
 - (viii) What did Margie hate the most about her school ?
 - (ix) What subjects did Tommy and Margie learn ?
 - (x) What kind of teachers did Margie and Tommy have?
 - (xi) Why did Margie's mother send for the county inspector?
 - (xii) Why Was Margie doing badly in Geography? What did the county Inspector do to help her?
 - (xiii) Did Margie have regular days and hours for School ?If so, why?
 - (xiv) How did the county Inspector disappoint Margie ?
 - (xv) How does Tommy describe the old kind of school ?
2. Answer the following questions in about 100 - 150 Words .
 - (i) Do you agree with Margie that schools today are more fun than the school in the story? Give reasons for your answer ?
 - (ii) Why did Margie hate School ?. Why did she think the old kind of school must have been fun?
 - (iii) Can you imagine a school without teachers and books ? Give your opinion on the basis of the lesson the fun they had?

Subject - Hindi (C.N. Jha 9334006244)

- I.
 - (i) वाक्य किसे कहते हैं?
 - (ii) वाक्य के मुख्य अंग कितने और कौन-कौन हैं?
 - (iii) अर्थ की दृष्टि से वाक्य के कितने भेद होते हैं?
 - (iv) वाक्य में प्रयुक्त होनेवाले शब्द को क्या कहते हैं?
 - (v) वाक्य के भेदों के नाम लिखकर प्रत्येक के एक-एक उदाहरण दें।
- II.
 - (i) कबीर किस काल के कवि हैं?
 - (ii) कबीर का जन्म कब और कहाँ हुआ था?
 - (iii) कबीर के पालन करने वाले माता-पिता के नाम लिखें।
 - (iv) कबीर किस भाषा के कवि हैं?

- (v) कबीर की भक्ति किसके प्रति थी।
- (vi) कबीर की सभी रचनायें कहाँ या किस पुस्तक में संकलित हैं?
- (vii) कबीर ईश्वर को कहाँ-कहाँ ढूँढता फिरता है?
- (viii) कबीर ने ईश्वर प्रप्ति के लिए किन प्रचलित विश्वासों का खंडन किया है
- (ix) कबीर ने ईश्वर को 'सब साँसों' की स्वाँस में क्यों कहा है?
- (x) 'ज्ञान की आँधी' से साधक को क्या-क्या लाभ होते हैं?

- III. संवाद लेखन- चिकित्सक और रोगी के मध्य का संवाद अपनी भाषा में लिखें।
- IV. वाद-विवाद प्रतियोगिता में प्रथम आने पर अपने मित्र को बधाई-पत्र लिखिए।

Subject - Sanskrit (C.N. Jha 9334006244)

- I. मूर्धा, तालु एवं दन्त से उच्चरित एक-एक वर्ण लिखें।
- II. 'क्षत्रिय', 'यज्ञ' एवं 'ब्रह्मणम्' शब्दों में वर्णों को अलग करें।
- III. 'दीर्घ एवं गुण सन्धि को परिभाषा लिखें एवं दो-दो उदाहरण दें।
- IV. इनके सन्धिविच्छेद करें :- सज्जनः, संस्कृतिः, जगदीश्वरः, तल्लीनः, अत्रैव, देवर्षिः।
- V. संस्कृत में अनुवाद करें:-
 - (i) यह मेरी माँ है।
 - (ii) हमलोग समय पर कार्य करते हैं।
 - (iii) तुम्हारा घर कहाँ है?
 - (iv) वेलोग कल यहाँ आएँगे।
 - (v) ईश्वर संसार के रक्षक हैं।
 - (vi) अब तुमलोग जाओ।
- VI. 'अस्' एवं 'कृ' धातु के रूप लट् एवं लोट् लकार में लिखें।
- VII. निम्नलिखित अनुच्छेद को पढ़कर समझें और उसपर आधारित प्रश्नों के उत्तर संस्कृत में निर्देशानुसार लिखें:-
पुरा कस्मिंश्चिद् ग्रामे एका निर्धना वृद्धा स्त्री न्यवसत्। तस्याश्चैका दुहिता विनम्रा मनोहरा चासीत्। एकदा माता स्थाल्यां तण्डुलान्निक्षिप्य पुत्रीमादिदेश-
सूर्यातपे तण्डुलान् खगेभ्यो रक्ष। किञ्चिद् कालान्तरे एको विचित्रः काकः समुड्डीय तामुपाजगाम।
I. एकपदेन उत्तरत-
(i) वृद्धा स्त्री कीदृशी आसीत् (ii) वृद्धायाः कीदृशी दुहिता आसीत्?
II. पूर्णवाक्येन उत्तरत-
(i) पुत्री माता किम् आदिदेश? (ii) किञ्चिद् कालान्तरे किम् अभवत् ?
III. निर्देशानुसार उत्तरत-
(i) अनुच्छेद 'जननी' इत्यास्य पदस्य पर्यायपदं किम्?
(ii) 'दुहिता विनम्रता' अनयोः पदयोः विशेषणपदं किम्?

Students are instructed to complete the assignment-2 carefully and submit it till 25 May, 2020 on the Whatsapp no. of your respective subject teachers. It is compulsory to attempt all questions. In case of any doubt, you can call the concerned subject teacher on the provided contact number. The marks obtained will be counted in your Internal Assessment. For any problem related to school app or downloading of assignment please contact :- 9470283176