

DEWAN PUBLIC SCHOOL, HAPUR
HOLIDAY HOMEWORK
CLASS XI
SESSION: 2023 - 24

CLASS – XI

SUBJECT – PHYSICS

CHAPTER -1 (UNITS & DIMENSIONS)

(1 Mark Questions)

1. Which among the following is a Supplementary Quantity ----
 - a. Mass
 - b. Time
 - c. Solid angle
 - d. Luminosity

2. Dimensions of kinetic energy is the same as that of _____
 - a. Acceleration
 - b. Velocity
 - c. Work
 - d. Force

3. The smallest value which is measured using an instrument is known as _____
 - a. Absolute count
 - b. Least count
 - c. Round off value
 - d. Minimum count

4. If the value of work done is $10^{10} \text{ g-cm}^2 \text{ s}^{-2}$, then its value in SI units will be :-
 - (a) $10 \text{ kg-m}^2\text{s}^{-2}$
 - (b) $10^2 \text{ kg-m}^2\text{s}^{-2}$
 - (c) $10^4 \text{ kg-m}^2\text{s}^{-2}$
 - (d) $10^3 \text{ kg-m}^2\text{s}^{-2}$

5. The respective number of significant figures for the numbers 23.023, 0.0003 and 2.1×10^{-3} are :-
(a) 5, 1, 2 (b) 5, 1, 5
(c) 5, 5, 2 (d) 4, 4, 2

6. Candela is the unit of -----

- (a) Sound intensity
- (b) Luminous intensity
- (c) Electric field intensity
- (d) Magnetic field intensity

7. What is the dimensional formula of strain?

- (a) $M^0L^0T^0$
- (b) $M^1L^{-1}T^{-2}$
- (c) $M^0L^0T^{-1}$
- (d) None of the above

8. Which of the following is not a physical quantity?

- (a) Length
- (b) Time
- (c) Electric current
- (d) Kilogram (kg)

9. What is the number of significant figures in 433.00?

- (a) 4
- (b) 2
- (c) 1
- (d) 5

10. Light year is a unit of :-

- (a) Distance
- (b) Time
- (c) Speed of light
- (d) Sound propagation

(2 Marks Questions)

11. If the system of units change, does the dimension of a physical quantity change ? Yes OR No , State your answer with reason .

12. Write the S I units & dimensions of the following quantities :-

- (a) Gravitational constant
- (b) Coefficient of Viscosity

13. (i) $3.0\text{m/s}^2 = \text{----- km/hr}^2$

(ii) $6.67 \cdot 10^{-11}\text{Nm}^2/\text{kg}^2 = \text{----- g}^{-1}\text{cm}^3\text{s}^{-2}$

14. A new unit of length is chosen such that the speed of light in vacuum is unity. What is the distance between the Sun and the Earth in terms of the new unit if light takes 8 min and 20 s to cover this distance?

(3Marks Questions)

15. The velocity (v) of sound through a medium may be assumed to depend on the density (ρ) of the medium and modulus of elasticity (E) ,then deduce by the method of dimensions the formula for the velocity of sound .

- 16. A. Convert 1 joule into ergs .
- B. How many Newtons are there in 1 Dyne ?

17. If the mass of a biggest stone displaced by a flowing river ,depends on velocity v , density (rho) of water and acceleration due to gravity (g) , Prove that the value of mass m is proportional to v^6 .

CHAPTER -2 (MOTION IN A STRAIGHT LINE)

(1 Mark Questions)

18. Displacement between two points is ____
- The shortest path
 - The longest path
 - Equal to distance
 - Greater than distance
19. How many variables are required to define the position of a body in space?
- 3
 - 2
 - 1
 - 0
20. Which of the following is the correct formula for average velocity?
- $v = dx/dt$
 - $v = x/t$
 - $v = xt$
 - $v = t/x$
21. Which of the following can be used to describe how fast an object is moving along with the direction of motion at a given instant of time?
- Instantaneous velocity
 - Instantaneous speed
 - Average velocity
 - Average speed
22. The trajectory of an object is defined as $x = (t-4)^2$, what is the velocity at $t = 5$?
- 2
 - 5
 - 1
 - 4
23. Which of the following is the correct formula for finding acceleration?
- $a = dx/dt$
 - $a = d^2x/dt^2$
 - $a = x/t$
 - $a = d^3x/dt^3$
24. How does the displacement v/s time graph of a uniformly accelerated motion look like?
- A straight line
 - A parabola

- c) A hyperbola
 - d) An ellipse
25. The velocity of a body varies as, $v = 2t+5t^2$. What is the acceleration at $t = 10$?
- a) 102
 - b) 100
 - c) -100
 - d) 50
26. A car moves for 60s covering a distance of 3600m with zero initial velocity. What is the acceleration in m/s^2 ?
- a) 2
 - b) 2.5
 - c) 3
 - d) 4.5
27. Which of the following types of motion can be used for describing the motion of a car on a straight road?
- a) Rectilinear
 - b) Circular
 - c) Periodic
 - d) Harmonic
28. In which of the following states does a body possess kinetic energy?
- a) Rest
 - b) Motion
 - c) When placed on a platform
 - d) In zero gravity

(2 Marks Questions)

29. What are the characteristics of displacement?
30. Differentiate between average speed and instantaneous speed of an object.
31. In which of the following example of motion can the body be considered approximately a point object.
- a) a railway carriage moving without jerks between two stations,
 - b) a monkey sitting on the top of a man cycling smoothly on a circular track
 - c) a spinning cricket ball the turns sharply on hitting the ground
 - d) tumbling beaker that has slipped off the edge of a table?
32. read each statement below carefully and state with reasons and example, if it is true or false. A particle in one dimensional motion:
- I. with zero speed may have non zero velocity
 - II. With constant speed must have zero acceleration

(3 Marks Questions)

33. the displacement of a particle moving along x- axis is given by $x= 18t+15t^2$. calculate
- I. the instantaneous velocity at $t=2$ s
 - II. average velocity between $t= 2$ s and $t = 3$ s
 - III. instantaneous acceleration.
34. A ball is dropped form a height of 90m on a floor. At each collision with the floor, the ball loses one- tenth of its speed. Plot the speed time graph of its motion between $t=0$ to $t= 12$ s.
35. A body travelling along a straight line traversed one- half of the total distance with a velocity v_0 . The remaining part of the distance was covered with velocity v_2 for the other half of time. Find the mean velocity averaged over the whole time of motion.

SUBJECT -CHEMISTRY

1. Which of the following terms are unitless?

- (a) Molality
- (b) Molarity
- (c) Mole fraction
- (d) Mass percent

2. Number of significant Figures in the number 1.065

- (a) 3
- (b) 4
- (c) 2
- (d) 1

3. What will be the molality of the solution containing 18.25 g of HCl gas in 500 g of water?

- (a) 0.1 m
- (b) 1 M
- (c) 0.5 m
- (d) 1 m

4. A pure substance which contains only one type of atom is called ————.

- (a) An element
- (b) A compound
- (c) a solid
- (d) A liquid

5. Formation of CO and CO₂ illustrates the law of ————.

- (a) Law of conservation of mass
- (b) Law of Reciprocal proportion
- (c) Law of Constant Proportion
- (d) Law of Multiple Proportion

6. The prefix 10¹⁸ is ————.

- (a) Giga
- (b) Exa
- (c) kilo
- (d) Mega

7. A Measured temperature on Fahrenheit scale is 200F. What will this reading be on the Celsius Scale?

- (a) 40 °C
- (b) 94 °C
- (c) 93.3 °C
- (d) 30 °C

8. Which of the following pairs of gases contains the same number of molecules?

- (a) 16 g of O₂ and 14 g of N₂
- (b) 6 g of O₂ and 22 g of CO₂
- (c) 28 g of N₂ and 22 g of CO₂
- (d) 32 g of CO₂ and 32g of N₂

9 Which of the following is a homogeneous mixture?

- (a) Mixture of soil and water
- (b) Sugar solution
- (c) Mixture of Sugar ,salt and sand
- (d) Iodised table salt

10. What is the frequency of light having a wavelength of 4.50×10^{-6} cm?

- (a) 2.84×10^{-12} s⁻¹
- (b) 2.10×10^4 s⁻¹
- (c) 4.29×10^{14} s⁻¹
- (d) 1.06×10^{22} s⁻¹

11 Calculate the concentration of nitric acid in moles per litre in a sample which has a density 1.41 g mL⁻¹ and the mass percent of nitric acid in it is being 69%.

12. How much copper can be obtained from 100 g of copper sulphate (CuSO₄)? (Atomic mass of Cu= 63.5 amu)

13. In the reaction, $A + B_2 \longrightarrow AB_2$, identify the limiting reagent, if any, in the following mixtures

(i) 300 atoms of A + 200 molecules of B

(ii) 2 mol A + 3 mol B

(iii) 100 atoms of A + 100 molecules of B

14. Calculate the molarity of a solution of ethanol in water in which the mole fraction of ethanol is 0.040.

15. Calculate the number of atoms in each of the following:

(i) 52 moles of He (ii) 52 u of He (iii) 52 g of He

16. What is the number of photons of light with wavelength 4000 pm which provide 1 Joule of energy ?

17. Calculate the number of electrons which will together weigh one gram.

18. Calculate the wavelength, frequency, and wavenumber of lightwave whose period is 2.0×10^{-10} s

19. What is the number of photons of light with wavelength 4000 pm which provide 1 Joule of energy.

20. Define molality. How does molality depend on temperature.

21. Express the following in scientific notation:

(i) 0.0048

(ii) 6.0012 (iii) 234,000 (iv) 8008 (v) 500.0

(ii) What is the concentration of sugar ($C_{12}H_{22}O_{11}$) in mol L^{-1} if its 20 g are dissolved in enough water to make a final volume up to 2 L?

22. (i) Calculate the total number of electrons present in 1.6 g of methane.

(ii) What is one amu or one 'u'?

(iii) Which of the following are iso-electronic species?

Na^+ , K^+ , Mg^{2+} , Ca^{2+} , S^{2-} , Ar.

CLASS XI BIOLOGY. CHAPTER 1 LIVING WORLD

COMPETANCY BASED QUESTIONS

1. As we go from species to kingdom in a taxonomic hierarchy, the number of common characteristics

- a) Will increase b) Will decrease c) Remain same d) May increase or decrease

2. All living organisms are linked to one another because

- a) They have common genetic material of the same type
b) They share common genetic material but to varying degrees
c) All have common cellular organization (d) All of the above

3. Match the following and write the correct option

- | | |
|------------|-------------|
| a. Order | 1.aestivum |
| b. Family | 2.Mangifera |
| c. Species | 3.Diptera |
| d. Class | 4.Hominidae |
| e. Genus | 5.Aves |

Options a) a-3,b-4,c-1,d-5,e-2.

b) a-1,b-2,c-3,d-4,e-5

c) a-3,b-2,c-1,d-4,e-5

d) a-1,b-5,c-3,d-4,e-2

BIOLOGICAL CLASSIFICATION

MULTIPLE CHOICE QUESTIONS:

- What is true for Archaeobacteria?
(a) All halophiles (b) All photosynthetic (c) All fossils (d) Oldest living beings
- Which one belongs to Monera?
(a) Amoeba (b) Escherichia (c) Gelidium (d) Spirogyra
- Shell of Diatoms is made up of :
(a) CaCO₃ (b) silica (c) magnesium carbonate (d) calcium phosphate
- Which one of the following statements about viruses is correct?
(a) Viruses possess their own metabolic system
(b) Viruses contain either DNA or RNA
(c) Viruses are facultative parasites
(d) Viruses are readily killed by antibiotics
- Incorrect statement about 'Fungi imperfect' is :
(a) no sexual phase (b) species prey on nematodes
(c) include toadstool and puffball (d) include *Aspergillus* used for making soya sauce
- Protista contains
(a) *Euglena, Dinoflagellates and Yeast*
(b) *Amoeba, Paramoecium, Hydra*
(c) *Euglena, Paramoecium, Mushroom*
(d) *Amoeba, Paramoecium and Dinoflagellates*
- Which of the following is not correctly matched?
(a) *Amoeba* - Cyanobacteria (b) *Amoeba* – Protozoa
(c) *Gonyaulax* – Dinoflagellates (d) *Albugo* – Chrysophytes
- With respect to fungal sexual cycle, choose the correct sequence of events
(a) Karyogamy, Plasmogamy and Meiosis
(b) Meiosis, Plasmogamy and Karyogamy
(c) Plasmogamy, Karyogamy and Meiosis
(d) Meiosis, Karyogamy and Plasmogamy
- A dikaryon is formed when
(a) Meiosis is arrested (b) The two haploid cells do not fuse immediately
(c) Cytoplasm does not fuse (d) None of the above
- Naked cytoplasm, multinucleated and saprophytic are the characteristics of
(a) Monera (b) Protista (c) Fungi (d) Slime moulds

CLASS XI BIOLOGY. CHAPTER 1 LIVING WORLD

VERY SHORT ANSWER TYPE QUESTIONS

1. How do living things grow? Explain the term growth in living being.
2. Write the name of any two organisms that show fragmentation.
3. In which organism reproduction is synonymous with growth?
4. Amoeba multiplies by mitotic cell division. Is this phenomenon growth or reproduction? Explain.
5. Mention one difference between museum and zoological parks.
6. Why growth cannot be considered as a defining property of living things?

BIOLOGICAL CLASSIFICATION

VERY SHORT ANSWER TYPE QUESTION:

1. In five-kingdom system of classification of R H Whittaker, how many kingdoms are eukaryotes ?
2. How do lichens act as pollution indicators?
3. Why were cyanobacteria, bacteria and fungi included in plant kingdom, in the earlier classification system ?
4. How are the following shapes of bacterial cells technically described?
 - (i) Elongated, rod like cells
 - (ii) Comma like cells
5. Mention two places where methanogens are present
6. Name the dinoflagellate that causes red tide in the ocean.
7. What maintains the cell shape of Euglena?
8. What technical term is given to the symbiotic association of fungi with
 - (a) algae and (b) roots of higher plants, respectively?
9. What is a dikaryon?
10. Who is credited with the discovery of viruses? Name the virus he found out.

CLASS XI BIOLOGY. CHAPTER 1 LIVING WORLD

SHORT ANSWER TYPE QUESTIONS

1. Name the reproductive structures in the following
A) Fungi. B) Yeast. C) Planaria. D) Amoeba
2. Why do we consider cellular organization as a defining property of living things
3. What are taxonomic keys? Explain
4. How will you differentiate between growth of plants and animals?
5. List out the features which distinguish living things from non-living things.
6. Non-living things also grow. Explain the statement with example.
7. Reproduction cannot be the defining characteristics of living organisms. Justify
8. Which organisms can sense and respond to their environment? How do humans sense their environment?
9. All the organisms are not yet identified on the earth. Justify the statement.
10. Which are the basic processes of taxonomy?
11. Give the name of few nomenclature codes.
12. What makes species a basic taxonomic category?

BIOLOGICAL CLASSIFICATION

SHORT ANSWER TYPE QUESTIONS:

1. State two economically important uses of:
(a) Heterotrophic bacteria (b) Archaeobacteria
2. What is the nature of cell wall in diatoms?
3. Find out what the terms 'algal bloom' and 'red tides' do signify.
4. Who proposed the five-kingdom classification? Name the five kingdom
5. Why are Deuteromycetes commonly known as imperfect fungi? Mention two characteristics of mycelium of such fungi.
6. What is meant by '*contagium vivum fluidum*'? Who gave this idea?
7. Describe the three common steps in the sexual reproduction of fungi
8. What do the terms phycobiont and mycobiont signify?

CLASS XI BIOLOGY. CHAPTER 1 LIVING WORLD

LONG ANSWER TYPE QUESTIONS

1. Define a taxon. What is meant by taxonomical hierarchy? Give a flow diagram from the lowest to highest category for a plant and an animal. What happens to the number of individuals and number of shared characters as we go up the taxonomic hierarchy?
2. What is Herbarium? How do you prepare your own herbarium sheets? What are different tools you carry with you while collecting plants for the preparation of a herbarium? What information should preserved plant materials on herbarium sheet provide for taxonomical studies?

BIOLOGICAL CLASSIFICATION

LONG ANSWER TYPE QUESTIONS:

1. Make a comparative account of the five kingdoms, in Whittaker's classification, on the following characters.(a) Cell wall (b) Body organization.
2. Give a comparative account of the classes of Kingdom Fungi under the following:
(i) Mode of nutrition (ii) Mode of reproduction
3. Describe briefly the four major groups of Protozoa
4. Give a brief account of viruses with respect to their structure and nature of genetic material.Also name two viral diseases in plants.
5. Highlight the criteria considered for five-kingdom system of classification
6. Make a list of algae and fungi that have commercial value as source of food,chemicals,medicines and fodder

CLASS XI BIOLOGY. CHAPTER 1 LIVING WORLD

MULTIPLE CHOICE QUESTIONS

1. Which among the following is a defining character of living things
A) Growth b) Reproduction c) Cellular structure d) Movement
2. Find out the correct way of writing scientific name
a) Mangifera Indica b) oryza sativa c) naja Naja d) *Panther leo*
3. Scientific names of plants are based on agreed principles and criteria provided by
A) ICBN B) IUCN C) ICZN D) WWF
4. Which among the following is the correct order of hierarchal categories.
a) Species, genus, family, order, class, phylum.
b) Species, genus, class, phylum, order, family
c) Family, order, family, species, genus, phylum
d) Species, genus, order, family, class, phylum.
5. Each rank in taxonomic categories is called a -----
a) Species a) Taxa c) Key d) Genus
- 6) A pair of statement in a taxonomical key is called ----- a)
Catalogue b) Couplet c) Lead d) Monograph

HOMEWORK (CLASS 11)

Read the following passage carefully and answer the questions.

The Mastermind quiz is billed as a “battle of minds”. This battle is fought in two halves. In the first, each of four participants faces a barrage of questions, for two minutes, on any topic of his or her choice. In the second round, the questions are on [general knowledge](#). There are two points for each correct answer and zero for wrong answers and passes. In the event of a tie, the person who has passed fewer questions wins.

1. Questions can be bizarre, but they are answered none the less. “It absolutely amazes you that these guys know so much. In KBC, it used to be, that this guy knows so little,” says Basu after the show. Siddhartha Basu was the director of Kaun Banega Crorepati (KBC).
2. This year’s Mastermind final was won by Ramanand Janardhana, a 22 year-old software engineer from Pune. Janardhana had Agatha Christie’s ‘Tommy and Tupence’ novels as his specialist topic. He even knew that Tommy used asofoetida to create a stink in his room.
3. There are, of course, all sorts of quizzers. The diary-toting, Manorama yearbook, wielding variety will typically prepare for a contest by ‘studying’. He knows that the best questions, the ones that get the ‘wah-wahs’, are always repeated. He is a solid quizzer, because he knows the obvious.
4. There is the other kind, like Janardhana, who claim they do nothing extra to prepare for quizzes. They read the papers and magazines, watch TV, and become quizzers because they enjoy the test of recall.

6.It was a test the nation took when KBC fever was at its height. But long before KBC, there were quiz societies across the country, in places from Guwahati to Gandhinagar. Kolkata was the hub of the game; quizzing in India began here in 1967. Even now, the majority of quizzers are from Kolkata. Of the four 2002 Mastermind finalists, two were from that city.

7.Quizzing is big in school and college festivals. It’s the ‘literary’ highlight of all fests. There are even professional quizzers, who, like mercenaries, play for money and the thrill of the game. They represent various organisations at different times.

8.Most quizzers grow out of active quizzing after college. Some, the really hardcore devotees of the game, keep at it. “I don’t get tired of quizzing,” says Pinaki Prasad Roy, a Mastermind finalist. “I get excited.” Roy is a 46-year old finance professional from Kolkata, and has been a quizzer for three decades.

9Curiosity is the most essential quality for a quizzier. A fantastic memory and instant recall help. And for Mastermind at least, the choice of specialist subject is critical. In this year's event, Janardhana took an unassailable lead in the specialist round itself.

A. Answer the following questions by choosing the most appropriate option: 6

1. **The Mastermind quiz is called a 'battle of minds' because.....**

- (a) it is a duel of wits
- (b) the participants are the most intelligent persons
- (c) the participants face a shower of questions
- (d) the mind is on the anvil

2. **The participants in the quiz seem 'masterminds' because.....**

- (a) they seem to know so little
- (b) they have very polished manner
- (c) they show lot of self confidence
- (d) they seem to know so much

3. **Ramanand Janardhana won as.....**

- (a) he had mastery over the specialist topic
- (b) he had gone through the quiz columns in magazines
- (c) he had chinks in his memory/recall
- (d) he knew all the often repeated questions asked by quizmasters

4. **The studious quizzers are called 'solid' quizzers because.....**

- (a) they prepare expected questions
- (b) they know the obvious
- (c) they bank on general awareness
- (d) they enjoy the test of recall

5. **The quality most essential for a quizzier is.....**

- (a) love of learning
- (b) mathematical accuracy
- (c) curiosity to know
- (d) comprehensive learning

5. **The word 'mercenaries' in para 7 means.....**

- (a) those who seek mercy
- (b) those who work on machines
- (c) those who are lively and quick
- (d) those who fight for money

6. **. Answer the following questions in brief: 6**

7. Why did Ramanand Janardhana win mastermind final?

8. Who are called solid quizzers? Why?
9. Which is the most essential quality of a quizzer?
10. How is Kolkata associated with quizzing game?
11. Find the words from the passage which are similar in meaning to these words.
 - (a) Those who fight for money (para 7)
 - (b) Enthusiasts (para 8)

2. Rearrange the following into meaningful sentences.

- (a) Extremely/a/grief/it/is/that matter/unkindly/animals/are/of exploited.
- (b) killed/they are/beaten/chained/and/mercilessly/trained.
- (c) their/heed/but/hears/and/pays/nobody/to/cries.
- (d) friends/auxiliaries/animals/necessary/are our/and/survival/for our
- (e) animal/matters/our vision/a world/should be/where/welfare

3. Prepare the following topics for ASL.

- (a) Corruption in India
- (b) Digital India
- (c) Make in India
- (d) India Of My Dreams
- (e) Indian Tourism
- (f) India : The Land of Great Personalities
- (g) Poverty in India
- (h) My Favourite Book
- (i) Impact of Smart Phones
- (j) Online Learning

HOME SCIENCE

Practical Work:

1. Record your own diet for a day and evaluate this meal in terms of inclusion of the five food groups.
2. To know the various emotions one frequently experiences in a day and observe the situations in which they arise.

Learn all the work done in the class.

PAINTING

Practical Work:

- Best Out of Waste
- Flower Pots from Soft Drink Bottles

HIND. MUSIC VOCAL

Project Work:

1. Introduction of RaagBhairav
2. Notation of DrutKhayal of RaagBhairav
3. Introduction of TeenTaal
4. Leykari of TeenTaal(Thah(Ekgun),Dogun,Tigun,Chaugun).

HOLIDAY HOMEWORK
CLASS – XI
SUB :- PHYSICAL EDUCATION

Multiple Choice Question Answers

Q. 1. Amongst the following which one is the key process in Physical Education?

- (a) Evaluating performance
- (b) Checking competency
- (c) Making efforts
- (d) Developing skills

Q. 2. Amongst the following which one is NOT the aim of social development in Physical Education?

- (a) Obeying of rules and regulations
- (b) Showing sportsmanship
- (e) Cooperation with peers
- (d) Playing for self

Q.3 The number of health and weight control clubshasincreasedtremendously.Thatiswhy teachers of physical education are in great demand. Which of them is a means of Health Related Career Sector?

- (a) Sports Journalism
- (b) Players
- (b) Physiotherapist
- (d) All of these

Q.4 How many verticals are there in Khelo India Programme?

- (a) Ten
- (b) Eleven
- (c) Twelve
- (d) Thirteen

Q.5. The Ministry of Youth Affairs and Sports, Govt. of India launched the Khelo India Programme in

- (a) 2013-2014
- (b) 2014-2015
- (c) 2016-2017
- (d) 2017-2018

Q.6. Given below are the two statements labeledAssertion (A) and Reason (R)

Assertion: Sports are an extremely important component for the overall development or our nation ..

Reason: India, in the last five years has made steady progress in the field of sports.

In the context of above two statements which one of the following is correct.

- (a)Both (A) and (R) are true and (R) is the correct explanation of (A).
- (b) Both (A) and (R) are true and (R) is not the correct explanation of (A).
- (c) (A) is true but (R) is false.
- (d) (A) is false but (R) is true.

Q.7 What is the aim of Physical Education?

Q.8 What is the objective of physical education?

Q.9. Give any two definitions of the aim of physical education.

Q.10 Enlist various careers in the field of physical education.

Q.11 Physical Education uses the body as a means to exhibit our feelings which develop the quality of-

(a) Expression

(b) Creativity

(c) Emotional stability

(d) Intellectuality

Q.12 Given below are the two statements labeled Assertion (A) and Reason (R)

Assertion: The main objective of physical education is physical development.

Reason: Physical education is related to several physical activities.

In the context of above two statements which one of the following is correct.

(a) Both (A) and (R) are true and (R) is the correct explanation of (A).

(b) Both (A) and (R) are true and (R) is not the correct explanation of (A).

(c) (A) is true but (R) is false.

(d) (A) is false but (R) is true.

Q. 13 .Who is the Father of the modern Olympic Games?

(a) Pierre-de-coubertin

(b) Aristotle

(c) John Pele

(d) None of these

Q. 14 .How many rings are there in the Olympics Symbol?

(a) Four

(b) Five

(c) Six

(d) Seven

Q.15 The colour of the Olympic rings are:

(a) Red, Black, Yellow, Green, Blue

(b) Red, White, Saffron, Yellow, Blue

(c) Red, Green, Blue, Yellow, White

(d) Red, Yellow, White, Green

Q.16 The Olympic ideal is:

(a) Faster

(b) Higher

(c) Stronger

(d) All of the above

Q.17 The five rings in the Olympic Flag represent:

- (a) Five continents
- (b) Five countries
- (c) Five colours
- (d) Five years

Q.18 Where is the headquarters of the International Olympic Committee?

- (a) Geneva
- (b) Paris
- (c) London
- (d) Lausanne

Q.19 The values of Olympics are:

- (a) Excellence
- (b) Respect
- (c) Friendship
- (d) All of these

Q.20 Who are the representatives of Olympism around the world?

- (a) IOCs
- (b) NGOs
- (c) NOCs
- (d) IFs

Q.21 The first Olympics is believed to have been played in :

- (a) 776 BC
- (b) 394 AD
- (c) 1898
- (d) 1894

Q.22 The Olympic games were not organised in :

- (a) 1916
- (b) 1940
- (c) 1944
- (d) All of these

Q.23 The Olympic Anthem is also called the :

- (a) Olympic Rhyme
- (b) Olympic Verse
- (c) Olympic Hymn
- (d) Olympic Song

Q.24 The headquarters of IOC is situated in:

- (a) Germany

- (b) Switzerland
- (c) France
- (d) Sweden

Give the Answers in 60 Words

- Q.1 Give any two definitions of physical education.
- Q. 2. Write the concept of Physical Education in your own words.
- Q.3 What is Khelo India Programme?
- Q.4 . What is the vision and mission of Khelo India Programme?
- Q.5. List all the objectives of Khelo-India Program?
- Q. 6. Describe the Olympic flag.
- Q. 7. Describe International Olympic Committee.
- Q. 8. What is Olympism?
- Q. 9. Briefly explain Ancient Olympics.
- Q. 10. Briefly explain Modern Olympics.
- Q. 11. What are OCOGs? Explain briefly.

Give the Answers in 100 Words.

- Q.1. How Physical Education develop neuromuscular coordination?
- Q. 2. Enlist careers in communication media and elaborate any one.
- Q.4. Explain various performance-related careers.
- Q. 4. When was Khelo-India Program started, write in detail.
- Q. 5. Explain the selection criteria of Khelo-India Program.
- Q. 6. Explain the Olympic values.
- Q. 7. Write down the functions of IOC.
- Q. 8. Describe National Olympics Committee.

Assertion-Reason Type Questions

Given below are the two statements labelled as Assertion (A) and Reason (R).

Q.9 Assertion (A) : The Olympic flag is made up of a white silk cloth in which five rings are embedded with each other.

Reason (R) : The Olympic flame is the symbol of peace.

In the context of above two statements, which one of the following is correct?

- (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
- (b) Both (A) and (R) are true and (R) is not the correct explanation of (A).
- (c) (A) is true but (R) is false.
- (d) (A) is false but (R) is true.

Given below are the two statements labelled as Assertion (A) and Reason (R).

Q. 10 Assertion (A) : The most important thing in the Olympics _ is to participate and not only to attain success.

Reason (R) : Winning can be achieved only after participating in the competition.

In the context of above two statements, which one of the following is correct?

- (a) Both (A) and (R) are true and (R) is the correct explanation of (A).

(b) Both (A) and (R) are true and (R) is not the correct explanation of (A).

(c) (A) is true but (R) is false.

(d) (A) is false but (R) is true.

Give the Answers in 200 Words.

Q.1 Explain indetailed the carrier option in physical education

Q 2 .Write down in details about International Olympic Committee.

Q 3. Describe the formation and objectives of Indian Olympic Association.

Q. 4. Explain Ancient and Modern Olympics in detail.

Holiday Homework
Class XI (Mathematics)

1. Draw the Venn diagram of $A' \cap B'$ and $A' \cup B'$.
2. If $a \in N$ such that $aN = \{ax : x \in N\}$. Describe the set $3N \cap 7N$.
3. Find the number of proper subset of a set containing 3 elements.
4. Find the number of subsets containing 6 elements.
5. Two finite sets A and B have m and k elements respectively. If the ration of the number of subsets of A and B is 64: 1 and $n(A) + n(B) = 12$, then find the value of m and k.
6. Let $U = \{1, 2, 3, 4, 5, 6, 7, 8\}$, $A = \{2, 4, 6, 7\}$ and $B = \{1, 3, 4, 6, 8\}$. Prove both De Morgan's Law.
7. Write the set $R = \{(x - 2, x^2) : x \text{ is a prime number less than } 10\}$ in Roster form.
8. Find the number of relations from A to B if $n(A) = 2$ and $n(B) = 3$.
9. If $R = \{(x, y) : x \text{ and } y \text{ are whole numbers, } x^2 + y^2 = 169\}$, find domain and range of R.
10. Find domain and range of the function $f(x) = \sqrt{x^2 - 25}$.
11. Find the domain and range of a function $f(x) = \frac{x-1}{|x-1|}$.
12. If $f(x) = x^3 - \frac{1}{x^3}$, show that $f(x) + f\left(\frac{1}{x}\right) = 0$.
13. Find the domain and range of a function $f(x) = \frac{x-2}{3-x}$.
14. Find the domain and range of a function $f(x) = \sqrt{x-1} + \sqrt{3-x}$.
15. Draw the graph of $f(x) = |x - 1|$.

Activity 1:- To verify distributive law for three given non empty sets A, B and C, that is, $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$ by using Venn Diagram.

Activity 2:- To distinguish between a relation and a function.

Note: Write all the trigonometric values and formulas in your fair register.

Subject:- Computer Science

Chapter-1 (Computer System)

Q1. . Categorise the following data as structured, semistructured and unstructured:

- Newspaper
- Cricket Match Score
- HTML Page
- Patient records in a hospital

Q2. Name the input or output device used to do the following:

- a) To output audio
- b) To enter textual data
- c) To make hard copy of a text file
- d) To display the data or information
- e) To enter audio-based command
- f) To build 3D models
- g) To assist a visually-impaired individual in entering data

Q3. Identify the category (system, application, programming tool) of the following software:

- a) Compiler
- b) Assembler
- c) Ubuntu
- d) Text editor

Q4. Draw the block diagram of a computer system. Briefly write about the functionality of each component.

Q5. . What is the primary role of system bus? Why is data bus is bidirectional while address bus is unidirectional?

Q6. What is Operating Functions? Write down the functions of it.

Q7. Write the main difference between microcontroller and microprocessor. Why do smart home appliances have a microcontroller instead of microprocessor embedded in them?

Chapter-2 (Encoding Schemes and Number System)

Q8. Define the followings:-

- a) ASCII
- b) ISCII
- c) UNICODE

Q9. Express the following in given number system:-

- (a) $(6760)_8 = (\quad)_{10}$
- (b) $(100.25)_{10} = (\quad)_{16}$
- (c) $(6BD)_{16} = (\quad)_{10}$
- (d) $(1010100)_2 = (\quad)_8$
- (e) $(742)_8 = (\quad)_2$
- (f) $(98E)_{16} = (\quad)_2$

Chapter-3 (Boolean Algebra and Emerging Trends)

Q10. What is Truth Table?

Q11. Prove the following Using Truth Table:-

- a) $A \cdot (A+B) = A$
- b) $A + (A \cdot B) = A$

Q12. Draw the Circuit Diagram for the following Expressions:-

- a) $(A + B) (A' + C)$
- b) $A \cdot B + A \cdot C$