# THE SOUTH POINT <br> Holidays' Homework 2023-24 <br> Class: IX 

Subject: English<br>Section-A (Reading Skills)<br>( Let's Read, Comprehend and Answer )<br>* Select the Articles/ Write -ups on "Cleanliness". "Sports, "Science", "Food Habits", "Politics", "Ill- Effects of Smoking", " Obesity", "Women Empowerment" and Education" and "Rising Population" each containing 150-200 words from the English newspaper. Cut the Articles and paste them in your Holidays' Homework notebook.<br>* Frame six questions on each of them and write their answers also.

## Section-B (Writing Skills)

## ( Let's Compose )

Descriptive Paragraph

1. Describe the personality traits of someone that you like (for example: smile, style of dress, language etc.) 2.Choose a dish to eat; then, write a description of it that includes how it looks, smells and tastes.

## Short Story

1. Mahesh wrote only a few lines and couldn't complete the story he wanted to write. On the beginning that Mahesh made, write a complete story.

A woodcutter was chopping down trees on the bank of a river. His hands were so much wet with his sweat that he lost his grip.
2. Sneha wanted to write a story but could not go beyond a line or two. Taking help from ,the information given below along with the lines Sneha wrote, develop a complete story.

$$
\begin{aligned}
& \text { Mr. Aggarwal was a very wealthy businessman. One day he was alone sitting at his dining table } \\
& \text { when... } \\
& \text { Outline: Thief entered........ Mr. Aggarwal thanked........ to give company....... birthday } \ldots \ldots . \text {.... } \\
& \text { gave him good food and drinks....... gave a purse full of silver coins.......... years passed by...... } \\
& \text { fortunes changed....... business was ruined....... Mr. Aggarwal became poor...... } 50 \text { th } \\
& \text { birthday.......... alone....... no food......... no drinks....... bell rang ....... a man emerged....... } \\
& \text { recognised....... the old thief....... came with fruits, sweets and drinks and a bag full of money. }
\end{aligned}
$$

## Diary Entry

1- You went on a trip to Kerala. Write a Diary Entry describing the trip, how you went, itinerary, places visited and the overall experience.
2- You attended a Webinar hosted by your favourite writer. Write a Diary Entry describing the event and the speaker.

## Section-B (Grammar)

## (Let's Hone Grammar Skills)

Tenses- (Integrated Grammar) (10 exercises)
Subject -Verb Concord (Integrated Grammar) (10 exercises)

## Section-C (Literature)

## (Let's Check Literary Flavour)

Note:- Read the below given Chapters:
‘The Fun They Had' , 'The Lost Child’ ,'The Sound Of Music' , ‘The Adventures of Toto’
Poem:- 'The Road Not Taken' , 'Wind'
Frame 10 short questions on each of them and then write their answers also.
Art -Integrated Activity
Select any one Novelist and one Poet of Manipur and Haryana each and write about their life, education, works, honours and awards on A-4 size sheets. Paste their photographs also.
*Plan a get-together to be held at your place.
*Make a list of the things you will require usings 'Determiners'.
Ex. I called up all my friends for the party.
Some of them didn't come.
My mother bought few packets of chips for us.
*Click photographs and paste them on A-4 size sheets. Now write a Diary Entry in not more than 120 words describing the fun you had at the party.

## हिंदी

1. मणिपुर पर एक परियोजना तैयार करें।
2. शिक्षा का महत्व' बताते हुए दो मित्रों के बीच संवाद लिखें।
3. आपने कभी भी कोई घटना देखी है उसको आधार बनाकर एक लघु कथा लिखिए।
4. ग्रीष्मावकाश में घूमने जाने की योजना बताते हुए मित्र को ई-मेल लिखिए।
5. आपके विद्यालय में एक खेल प्रतियोगिता होने जा रही है इसकी जानकारी देते हुए खेल प्रेमियों को एक सूचना लेखन लिखें।
6. अर्थ के आधार पर वाक्य भेद पर एक मॉडल तैयार करें।
7. पुस्तक क्षितिज पाठ-3 'ल्हासा की ओर'
8. पुस्तक क्षिजित पाठ-2 'वाख', 'रसखान के सवैये' के प्रश्न-उत्तर लिखें व याद करें उत्तर पुस्तिका में
9. पुस्तक कृतिका पाठ-2 'मेरे संग की औरतें' पढें व पाँच प्रश्न-उत्तर छाँअन्य पुस्तिका में लिखें। नोट- सभी कार्य A-4 साइज शीट पर सुलेख सहित करें। सभी कार्य करना अनिवार्य हैं।

चैक करवाने के प्च्चात एक फाइल में सुरक्षित रखें।

## MATHEMATICS

## Revision Work:

NCERT Book - Revise Chapter-1,3,4,5,6
NCERT EXEMPLER- Ex 1.1 Complete,
Ex. 1.3 9,11,12,13 (iii), 14(v), (vi),
Ex. 1.4 1,3,5,7
Ex. 3.1 Complete
Ex. 3.3 1,2,4
Ex. 4.1 Complete
Ex. $4.3 \quad 6,8,9,10$
Ex. 5.1 Complete
Ex. 5.3 Complete
Ex. 6.1 Complete
Ex. 6.3 1,2,5,8

## Lab Manual

| Activity | Page No. |
| :---: | :---: |
| 1 | $1-3$ |
| 2 | $4-6$ |
| 10 | $30-32$ |
| 12 | $36-38$ |
| 27 | $79-82$ |
| 19 | $56-58$ |

Project Work : Make project on given topic
Topic: Number Systems, Co ordinate Geometry, Lines and Angles, Introduction to Euclid's Geometry

## SOCIAL SCIENCE

## * Learn and revise the following chapters:

Geo Ch-1 India Size and Location, Ch-2 Physical Features of India
Eco Ch-1 The Story of Village Palampur, Ch-2 People As A Resource
D.P. Ch-1 What is Democracy? Why Democracy?

* Pre-Reading Task

Read the following chapters and find out at least 15 extra questions (1 mark)
from each chapter and write in your fair notebook.
D.P. Ch-2 Constitutional Design, Ch-3 Electoral Politics

History Ch-1 French Revolution

* Make a project on any one of the (Natural Disaster) topic given below:

Floods, Cyclones, Droughts, Landslides, Earthquakes, Volcanic Eruptions, any other.

* On the outline map of the world, locate the following:

North America, Atlantic Ocean, Europe, Asia, Pacific Ocean, Australia and Africa and paste in the Scrap Book.

## * Find out which type of Government is present in the following

Countries: Pakistan, England, USA and Syria. Write in detail about your research and prepare comments on any one country and it's types of governments in the Scarp Book. (3-4 Pages)

Science (Chemistry)

1. Solve the following questions in your notebook:-

| Chapter <br> No. | Chapter Name | NCERT Exercise Questions |
| :--- | :--- | :--- |
| 1 | Matter in our Surroundings | Q. 1, 2, 3, 5, 6, 7, 8, 9 <br> Intext Questions: <br> Page No. 3: Q. 2, 3 <br> Page No. 10: Q. 2, 3, 4, 5 |

Note: Also Learn Chapter 1.

## Practical Work

## Preparation of:

1. A true solution of common salt, sugar and alum.
2. A suspension of soil, chalk powder and fine sand in water.
3. A colloidal solution of starch in water and egg albumin/ milk in water and distinguish between these on the basis of:
a. Transparency
b. Filtration criterion
c. Stability

Also, solve the following assignments in your notebook:

OBJECTIVE QUESTIONS

## A. Multiple Choice Questions <br> I. NCERT Exemplar Problems

1. Which one of the following sets of phenomena would increase on raising the temperature?
(a) Diffusion, evaporation, compression of gases
(b) Evaporation, compression of gases, solubility
(c) Evaporation, diffusion, expansion of gases
(d) Evaporation, solubility, diffusion, compression of gases
2. Seema visited a Natural Gas Compressing Unit and found that the gas can be liquefied under specific conditions of temperature and pressure. While sharing her experience with friends she got confused. Help her to identify the correct set of conditions
(a) Low temperature, low pressure
(b) High temperature, low pressure
(c) Low temperature, high pressure
(d) High temperature, high pressure
3. The property to flow is unique to fluids. Which one of the following statements is correct?
(a) Only gases behave like fluids
(b) Gases and solids behave like fluids
(c) Gases and liquids behave like fluids
(d) Only liquids are fluids
4. During summer, water kept in an earthen pot becomes cool because of the phenomenon of
(a) diffusion
(b) transpiration
(c) osmosis
(d) evaporation
5. A few substances are arranged in the increasing order of 'forces of attraction' between their particles. Which one of the following represents a correct arrangement?
(a) Water, air, wind
(b) Air, sugar, oil
(c) Oxygen, water, sugar
(d) Salt, juice, air
6. On converting $25^{\circ} \mathrm{C}, 38^{\circ} \mathrm{C}$ and $66^{\circ} \mathrm{C}$ to Kelvin scale, the correct sequence of temperature will be
(a) $298 \mathrm{~K}, 311 \mathrm{~K}$ and 339 K
(b) $298 \mathrm{~K}, 300 \mathrm{~K}$ and 338 K
(c) $273 \mathrm{~K}, 278 \mathrm{~K}$ and 543 K
(d) $298 \mathrm{~K}, 310 \mathrm{~K}$ and 338 K
7. Choose the correct statement of the following
(a) conversion of solid into vapours without passing through the liquid state is called vaporisation.
(b) conversion of vapours into solid without passing through the liquid state is called sublimation.
(c) conversion of vapours into solid without passing through the liquid state is called freezing.
(d) conversion of solid into liquid is called sublimation.
8. The boiling points of diethyl ether, acetone and n-butyl alcohol are $35^{\circ} \mathrm{C}, 56^{\circ} \mathrm{C}$ and $118^{\circ} \mathrm{C}$ respectively. Which one of the following correctly represents their boiling points in Kelvin scale?
(a) $306 \mathrm{~K}, 329 \mathrm{~K}, 391 \mathrm{~K}$
(b) $308 \mathrm{~K}, 329 \mathrm{~K}, 392 \mathrm{~K}$
(c) $308 \mathrm{~K}, 329 \mathrm{~K}, 391 \mathrm{~K}$
(d) $329 \mathrm{~K}, 392 \mathrm{~K}, 308 \mathrm{~K}$
9. Which condition out of the following will increase the evaporation of water?
(a) Increase in temperature of water
(b) Decrease in temperature of water
(c) Less exposed surface area of water
(d) Adding common salt to water
10. In which of the following conditions, the distance between the molecules of hydrogen gas would increase?
(i) Increasing pressure on hydrogen contained in a closed container
(ii) Some hydrogen gas leaking out of the container
(iii) Increasing the volume of the container of hydrogen gas
(iv) Adding more hydrogen gas to the container without increasing the volume of the container
(a) (i) and (iii)
(b) (i) and (iv)
(c) (ii) and (iii)
(d) (ii) and (iv)

## II. Additional Questions

1. What is the correct term for the phase change from gas directly into solid?
(a) Evaporation
(b) Sublimation
(c) Fusion
(d) Condensation
2. When a crystal of copper sulphate is added to water in a beaker, water becomes blue. This is an example of
(a) diffusion
(b) evaporation
(c) sublimation
(d) effusion
3. When heat is supplied by a burner to boiling water, then the temperature of water during vaporisation
(a) rises slowly
(b) rises rapidly
(c) first rises and then becomes constant
(d) does not rise at all
4. A gas can be liquefied by
(a) lowering the temperature
(b) increasing the temperature
(c) increasing the pressure
(d) both by increasing the pressure and lowering the
5. A liquid boils at $100^{\circ} \mathrm{C}$. Its temperature can also be expressed as
(a) $87.5^{\circ} \mathrm{F}$
(b) 373 K
(c) 173 K
(d) $132^{\circ} \mathrm{F}$
6. The three states of water; ice, water and steam can be arranged in the decreasing order of interparticle forces as
(a) ice < steam < water
(b) water < steam < ice
(c) ice < water < steam
(d) steam < water < ice
7. When water solidifies to ice, then heat is
(a) absorbed
(b) evolved
(c) may be evolved or absorbed
(d) no change in heat
8. Evaporation decreases by
(a) increase in temperature
(b) increase in humidity
(c) increase in wind speed
(d) increase in surface area
9. Which of the following state has maximum energy?
(a) ice
(b) water
(c) steam
(d) all have same energy
10. Which of the following is not matter?
(a) Cold drink
(b) Cold
(c) Hot coffee
(d) Air
11. The three states of matter are:
(a) melting point, boiling point and freezing point
(b) ice, liquid water and water vapour
(c) solid, liquid and gas
(d) sublimation, condensation and evaporation
12. Freezing involves the conversion of
(a) solid to liquid state
(b) liquid to gaseous state
(c) liquid to solid state
(d) solid to gaseous state
13. Which of the following is not a matter?
(a) Chair
(b) Air
(c) Smell
(d) Cold drink.
14. 300 K temperature may be written in Celsius scale as
(a) $300^{\circ} \mathrm{C}$
(b) $127^{\circ} \mathrm{C}$
(c) $27^{\circ} \mathrm{C}$
(d) $573^{\circ} \mathrm{C}$.
15. The physical state of water at $10^{\circ} \mathrm{C}$ is
(a) Solid
(b) liquid
(c) gas
(d) may be solid or liquid.
16. The substance which can readily sublime is
(a) Ammonium chloride (b) Sodium chloride
(c) Hydrochloric acid
(d) Chlorine gas.
17. The large volumes of gases can be put into small volumes of cylinders because of their property known as
(a) Sublimation
(b) Compressibility
(c) Evaporation
(d) Solidification.
18. The temperature at which a liquid changes into gas is
known as
(b) transition point
(a) melting point
(c) boiling point
(d) Kelvin point.
ter at normal atmospheric
19. The boiling pressure is
(a) 273 K
(b) 373 K
(c) 100 K
(d) $0^{\circ} \mathrm{C}$
(a) 273 K . fhe following factor does not increase the rate of evaporation?
(a) increase of temperature
(b) increase in wind speed
(c) increase in surface area
(d) increase in humidity
20. Which of the following is not correct regarding gases?
(a) Gases exert pressure
(b) Gases are more compressible than liquids
(c) Gases have very weak tendency to diffuse
(d) Gases have weak intermolecular forces of attraction.
21. In the sublimation process
(a) a solid changes directly to vapour state
(b) liquid changes to vapour state
(c) solid initially melts and then changes to vapour state
(d) vapour changes to the liquid state.
22. The standard room temperature is taken as
(a) 273 K
(b) $0^{\circ} \mathrm{C}$
(c) 298 K
(d) 373 K
23. Which of the following statements is not correct ?
(a) Steam produces more severe burns on the skin than the boiling water.
(b) Water at room temperature is a liquid.
(c) Ice at 273 K causes less cooling than water at the same temperature.
(d) We can sip hot tea from a saucer faster than from a cup.
24. Match the conversion in Column I with its term in Column II.

## Column I

$(\mathrm{P})$ Gas $\longrightarrow$ Liquid
$(\mathrm{Q})$ Solid $\longrightarrow$ Liquid
$(\mathrm{R})$ Solid $\longrightarrow$ Gas
(S) Liquid $\longrightarrow$ Gas
(a) P-1, Q-3, R-2, S-4

Column II

1. Evaporation
2. Sublimation
3. Condensation
(c) $\mathrm{P}-3, \mathrm{Q}-4, \mathrm{R}-2, \mathrm{~S}-1$
(b) P-4, Q-3, R-1, S-2
4. Match the property (column I ) with the stateststale
(d) P-2, Q-4, R-1, S-3 (column II).

Column II
(P) strongest interparticle 1. Liquid forces of attraction
(Q) easily compressible
(R) tendency to flow
(S) have fixed volume but no fixed shape
(a) $\mathrm{P}-4, \mathrm{Q}-3, \mathrm{R}-2, \mathrm{~S}-1$
(c) $\mathrm{P}-4, \mathrm{Q}-1, \mathrm{R}-3, \mathrm{~S}-2$
2. Liquid and gas
3. Gas
4. Solid
(b) P-4, Q-1, R-2,, $\mathrm{S}-3$
(d) $\mathrm{P}-3, \mathrm{Q}-2, \mathrm{R}-1, \mathrm{~S}-4$

## SCIENCE (BIOLOGY)

## Assignment (A)

## SECTION-A

1. Name the organelle which is associated with protein synthesis.
2. Name the longest human body cell.
3. Name the membrane which covers the vacuole in plant cell.
4. What are the two components of chromosome?
5. What will happen when raisins are kept in water?

## SECTION-B

6. Name the nucleic acids that are present in an animal cell.
7. Define 'diffusion' and 'osmosis'.
8. List two similarities between mitochondria and plastids.
9. Why are lysosomes known as "suicidal-bag of a cell"?
10. Bacteria don't have chloroplast but some bacteria are photoautotrophic in nature and perform photosynthesis. Which part of bacterial cell performs this?

SECTION-C
11. Match the following ' $A$ ' and ' $B$ '.

| Column A | Column B |  |
| :---: | :---: | :---: |
| a. Smooth endoplasmic reticulum | I. | Amoeba |
| b. Lysosome | II. | Nucleus |
| c. Nucleoid | III. | Bacteria |
| d. Food vacuoles | IV. | Detoxification |
| e. Chromatin | V. | Suicidal bag |

12. What kind of plastid is more common in?
(a) roots of the plant
(b) Leaves of the plant
(c) flowers and fruits.
13. Name the organelles which show the analogy written as under
(a) Transporting channels of the cell-
(b) Powerhouse of the cell.
(c) Packaging and dispatching unit of the cell
(d) Digestive bag of the cell.
(e) Storage house of the cell-
(f) kitchen of the cell.
(g) control room of the cell
14. In brief state what happens when
(a) dry apricots are left for sometime in pure water and later transferred to sugar solution's?
(b) a Red Blood cell is kept in concentrated saline solution?
(c) the plasma membrane of the cell breaks down?
(d) Rheo leaves are boiled in water first and then a drop of sugar syrup is put on it?
(e) Golgi apparatus is removed from the cell?
15. Why does the skin of your finger shrink when, you wash clothes for along time.

Assignment - B
16. Draw the diagram of a Plant cell and Animal cell.
17. What is active transport? Differentiate between active and passive transport.
18. Draw the diagram of mitochondria. Write its function.
19. Draw a well-labelled diagram of bacterial cell.
20. With the help of labelled diagram, explain the structure of nucleus.

## Science (Physics)



1. An object has moved through a distance. Can it have zero displacement? If yes, support your answer with an example.
2. A farmer moves along the boundary of a square field of side 10 m in 40 s . What will be the magnitude of displacement of the farmer at the end of $2 \min 20$ from his initial position?
3. Which of the following is true for displacement?
(i) It cannot be zero.
(ii) Its magnitude is greater than the distance travelled by the object.
4. Distinguish between speed and velocity.
5. Under what condition (s) is the magnitude of average velocity of an object equal to its average speed?
6. What does the odometer of an automobile measure?
7. What does the path of an object look like when it is in a uniform motion?
8. During an experiment, a signal from a spaceship reached the ground station in five minutes. What was the distance of the spaceship from the ground station? The signal travels at the speed of light, i.e., $3 \times 10^{8} \mathrm{~m} / \mathrm{s}$.
9. When will you say a body is in
(i) uniform acceleration?
(ii) non-uniform acceleration?
10. A bus decreases its speed from $80 \mathrm{~km} / \mathrm{h}$ to $60 \mathrm{~km} / \mathrm{h}$ in 5 s . Find the acceleration of the bus.
11. A train stating from a railway station and moving with uniform acceleration attains a speed of $40 \mathrm{~km} / \mathrm{h}$ in 10 min . find its acceleration.
12. What is the nature of distance-time graphs for uniform and non-uniform motion of an object?
13. What can you say about the motion of an object whose distance-time graph is a straight line parallel to the time axis?
14. What can you say about the motion of an object, if its speedtime graph is a straight line parallel to time axis?
15. What is the quantity which is measured by the area occupied below the velocity-time graph?
16. A bus starting from rest moves with a uniform acceleration of $0.1 \mathrm{~m} / \mathrm{s}^{2}$ for 2 min . Find (i) the speed acquired, (ii) the distance
travelled.
17. A train is travelling at a speed of $90 \mathrm{~km} / \mathrm{h}$. Brakes are so as to produce a uniform acceleration of $-0.5 \mathrm{~m} / \mathrm{s}^{2}$. Find how far the train will go before it is brought to rest?
18. A trolley while going down an inclined plane has a acceleration of $2 \mathrm{~cm} / \mathrm{s}^{2}$. What will be its velocity 3 s after the
start? start?
19. A racing car has a uniform acceleration of $4 \mathrm{~m} / \mathrm{s}^{2}$ what distanco will it cover in 10 s after the start?
20. A stone is thrown in a vertically upward direction with : velocity of $5 \mathrm{~m} / \mathrm{s}$. if the acceleration of the stone during it motion is $10 \mathrm{~m} / \mathrm{s}^{2}$ in the downward direction, then what wit be the height attained by the stone and what time will it tak to reach there?
21. An athlete completes one round of a circular track of diamete 200 m in 40 s . What will be the distance covered and thi displacement at the end of $2 \min 20 \mathrm{~s}$ ?
22. Joseph jogs from one end $A$ to the other end $B$ of a straigh 300 m road in 2 min 30 s and then turns around and jog 100 m back to point C in another 1 min . what are Joseph average speeds and velocities in jogging
(i) from A to B and
(ii) from A to C ?

23. Abdul, while driving to school, computes the average sped for his trip to be $20 \mathrm{~km} / \mathrm{h}$. On his return trip along the sant route. There is less traffic and the average speed is 30 kmh What is the average speed for Abdul's trip?
24. A motorboat starting from rest on a lake accelerates in ${ }^{\circ}$ straight line at a constant rate of $3 \mathrm{~m} / \mathrm{s}^{2}$ for 8 s . How far dob the boat travel during this time?
25. A driver of a car travelling at $52 \mathrm{~km} / \mathrm{h}$ applies the brakes acd accelerates uniformly in the opposite direction. The car stof in 5 s . Another driver going at $3 \mathrm{~km} / \mathrm{h}$ in another car app his brakes slowly and stops in 10 s . On the same graph ppo d plot the speed versus time graphs for the two cars. Whid the two cars travelled father after the brakes were applid
26. Figure shows the distance-time graph of three objects $A, B$ and $C$. Study the graph and answer the following questions:

(i) Which of the three is travelling the fastest?
(ii) Are all three ever at same point on the road?
(iii) How far has $C$ travelled when $B$ passes $A$ ?
(iv) How far has $B$ travelled by the time it passes $C$ ?
27. A ball is gently dropped from a height of 20 m . if its velocity increases uniformly at the rate of $10 \mathrm{~m} / \mathrm{s}^{2}$, then with what velocity will it strike the ground? After what time it strike the ground?


## NTSE \& OLYMPIAD QUESTIONS

## SECTION A. MULTIPLE CHOICE QUESTIONS

1. If a body is moving at constant speed in a circular path, its
(a) velocity is constant and its acceleration is zero
(b) velocity and acceleration are both changing direction only
(c) velocity and acceleration are both increasing
(d) velocity is constant and acceleration is changing direction
?. A graph is plotted showing the velocity of a car as a function of time. If the graph is a straight line, it means that
(a) the car started at rest
(b) acceleration was constant
(c) acceleration was increasing
(d) velocity was constant
2. If a car is traveling north on a straight road and its brakes are applied, it will
(a) have no acceleration
(b) accelerate to the south
(c) accelerate to the north
(d) accelerate either east or west

- An object moves with a uniform velocity when
(a) the forces acting on the object are balanced
(b) there is no external force on it
(c) Both of (a) and (b)
(d) Either (a) or (b)

28. The speed-time graph for a car is shown in the below figure:

(i) Find how far does the car travel in the first 4 s . Shade the area on the graph that represents the distance travelled by the car during the period.
(ii) Which part of the graph represents uniform motion of the car?
29. State which of the following situations are possible and give an example for each.
(i) An object with a constant acceleration but with zero velocity.
(ii) An object moving in a certain direction with an acceleration in the perpendicular direction.
30. An artificial satellite is moving in a circular orbit of radius 42250 km . Calculate its speed, if it takes 24 h to revolve around the earth.
31. The acceleration of a car that speeds up from 12 meters per second to 30 meters per second in 15 seconds is
(a) $2.4 \mathrm{~m} / \mathrm{s}^{2}$
(b) $1.2 \mathrm{~m} / \mathrm{s}^{2}$
(c) $2 \mathrm{~m} / \mathrm{s}^{2}$
(d) $5.2 \mathrm{~m} / \mathrm{s}^{2}$
32. A body moving along a straight line at $20 \mathrm{~m} / \mathrm{s}$ undergoes an acceleration of $-4 \mathrm{~m} / \mathrm{s}^{2}$. After two seconds its speed will be
(a) $8 \mathrm{~m} / \mathrm{s}$
(b) $12 \mathrm{~m} / \mathrm{s}$
(c) $16 \mathrm{~m} / \mathrm{s}$
(d) $28 \mathrm{~m} / \mathrm{s}$
33. A particle experiences constant acceleration for 20 seconds after starting from rest. If it travels a distance $S_{1}$ in the first 10 seconds and distance $S_{2}$ in the next 10 seconds, then
(a) $S_{2}=S_{1}$
(b) $S_{2}=2 S_{1}$
(c) $S_{2}=3 S_{1}$
(d) $S_{2}=4 S_{1}$
34. In which of the following cases, the object does not possess an acceleration or retardation when it moves in
(a) upward direction with decreasing speed
(b) downward direction with increasing speed
(c) with constant speed along circular path
(d) with constant speed along horizontal direction
35. The speed of a falling body increases continuously, this is because
(a) no force acts on it
(b) it is very light
(c) the air exert the frictional force
(d) the earth attract it
36. If an object is in a state of equilibrium
(a) it is at rest
(b) it is in motion at constant velocity
(c) it is in free fall
(d) may be more than one of the above
37. A hockey player pushes the ball on the ground. It comes to rest after travelling certain distance because
(a) the player stops pushing the ball
(b) no unbalanced force action on the wall
(c) the ball moves only when pushes
(d) the opposing force acts on the body.
38. The physical quantity which is the product of mass and velocity of a body is known as
(a) inertia
(b) momentum
(c) force
(d) change in momentum
39. The direction of motion of a body is decided by $\qquad$
(i) velocity
(ii) acceleration
(iii) displacement
(iv) speed
(a) (i) and (ii) only
(b) (ii) and (iii) only
(c) (i) and (iii) only
(d) (i), (ii) and (iii)
40. A body having zero speed
(i) is always under rest
(ii) has zero acceleration
(iii) has uniform acceleration
(iv) always under motion
(a) (i) and (ii) only
(b) (ii) and (iii) only
(c) (i) and (iii) only
(d) (i), (ii) and (iii) only
41. The ratio of distances travelled by a uniformly accelerated body in first, second and third second is
(i) $1: 3: 5$
(ii) an integral multiple of odd number ratio less than 7
(iii) an integral multiple of odd natural numbers.
(iv) $1: 4: 9$
(a) (i) and (ii) only
(b) (ii) and (iii) only
(c) (i) and (iii) only
(d) (i), (ii) and (iii) only
42. A velocity-time graph gives
(i) the distance
(iii) the acceleration
(ii) the displacement
(a) (i) and (ii) only
(iv) the speed
(c) (ii) and (iii) only
(b) (i) and (iii) only
(d) (i), (ii) and (iii)
43. The velocity of an object can be changed by
(i) changing the speed
(ii) changing the direction of motion
(iii) changing both the speed and direction of motion
(iv) None of the above
(a) (i) and (ii) only
(c) (i) and (iii) only
(b) (ii) and (iii) only
(d) (i), (ii) and (iii)
of
44. Motion of an object is the change in position with respec
reference point known as
(a) origin
(c) final position
(b) initial position
45. Displacement is the
(a) shortest distance between initial and final positions
(c) the distance traveled by the object
(d) distance traveled by the object in a unit time
46. An object has traveled 10 km in 15 minutes, its displacen
will be
(a) 10 km
(b) Can be zero
(c) More than 10 km
(d) All of the above
47. If an object covers equal distances in equal intervals of tir
is said to be in
(a) Circular Motion
(b) Uniform Motion
(c) Oscillatory Motion
(d) Non-uniform Motion
48. Average velocity of an object is obtained by
(a) Dividing the total distance traveled by the total taken
(b) Half of the sum of the initial velocity and the final vels
(c) Both (i) and (ii)
(d) None of the above
49. Magnitude of average speed of an object is equal to its aver
velocity if
(a) It is moving in a definite direction
(b) Its initial and final positions are same
(c) It is a uniform motion
(d) None of these
50. Negative value of acceleration signifies
(a) The velocity is increasing
(b) The velocity is decreasing
(c) The velocity remains the same
(d) The object comes to rest
51. In distance-time graphs
(a) Distance is taken along the X -axis
(b) Time is taken along the $Y$-axis
(c) Straight line indicates uniform motion
(d) Straight line indicates non-uniform motion
52. In velocity-time graphs
(a) Velocity is taken along the Y -axis and Time is taken al the X -axis
(b) Straight line indicates uniform acceleration
(c) Straight line parallel to $x$-axis indicates uniform ${ }^{\text {dol }}$
(d) All of the above
53. The equation(s) of motion can be represented as
(a) $\boldsymbol{v}=u+$ at
(b) $s=u t+\frac{1}{2} d t^{2}$
(c) $2 a s=v^{2}-u^{2}$
(d) All of these
54. A jeep starts from rest and attains a speed of $40 \mathrm{kmh}^{-1}$ in 10 minutes. The uniform acceleration will be
(a) $4 \mathrm{kmh}^{-2}$
(b) $4 \mathrm{kms}^{-2}$
(c) $66.7 \mathrm{~ms}^{-2}$
(c) $1.85 \mathrm{cms}^{-2}$
55. In the adjoining velocity-time graph
(a) A uniform acceleration
(b) A uniform retardation
(c) Uniform speed
(d) Initial velocity OA and is moving with
 uniform retardation
56. In the given velocity-time graph AB shows that the body has
(a) Uniform acceleration
(b) Uniform deceleration
(c) Uniform velocity throughout the motion and has zero initial velocity.
(d) None of these

57. 



In the above velocity-time graph of a moving object
(a) Acceleration in the first 2 seconds is $2.3 \mathrm{~ms}^{-1}$
(b) Acceleration in the last 2 seconds is $-2.3 \mathrm{~ms}^{-1}$
(c) Motion is uniform between second and tenth second
(d) All are correct
32. A train travels 40 km at a uniform speed of $30 \mathrm{kmh}^{-1}$. Its average speed after traveling another 40 km is $45 \mathrm{kmh}^{-1}$ for the whole journey. Its speed in the second half of the journey is
(a) $45 \mathrm{kmh}^{-1}$
(b) $90 \mathrm{kmh}^{-1}$
(c) $60 \mathrm{kmh}^{-1}$
(d) None of these
33.


This time-displacement graph shows
(a) An object moving with a uniform velocity
(b) An object moving with a non-uniform speed
(c) A uniformly accelerated motion
(d) No information
34. A man walks on a straight road from his home to market 2.5 km away with a speed of $5 \mathrm{kmh}^{-1}$. Finding the market closed, he instantly turns and walks back home with a speed of $7.5 \mathrm{kmh}^{-1}$. Theaveragespeed of themanovertheinterval of time 0 to 40 min . is equal to -
(a) $5 \mathrm{kmh}^{-1}$
(b) $\frac{25}{4} \mathrm{kmh}^{-1}$
(c) $\frac{30}{4} \mathrm{kmh}^{-1}$
(d) $\frac{45}{8} \mathrm{kmh}^{-1}$
35. The position of a particle moving along the X -axis at certain times is given below :

| $t(\mathrm{~s})$ | 0 | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: | :---: |
| $x(\mathrm{~m})$ | -2 | 0 | 6 | 16 |

Which of the following describes the motion correctly?
(a) Uniform, accelerated
(b) Uniform, decelerated
(c) Non-uniform, accelerated
(d) There is not enough data for generalization
36. You are on an ocean liner that is going eastward at $12.0 \mathrm{~ms}^{-1}$, and you run southward at $3.6 \mathrm{~ms}^{-1}$. The magnitude and direction of your resulting velocity.
(a) $15.6 \mathrm{~ms}^{-1}$, E/W
(b) $18.4 \mathrm{~ms}^{-1}, \mathrm{~W} / \mathrm{E}$
(c) $12.5 \mathrm{~ms}^{-1}, \mathrm{~S} / \mathrm{E}$
(d) $13.5 \mathrm{~ms}^{-1}, \mathrm{~S} / \mathrm{E}$
37. If a car can accelerate at $3.2 \mathrm{~ms}^{-2}$, how long will it take to speed up from $15 \mathrm{~ms}^{-1}$ to $22 \mathrm{~ms}^{-1}$ -
(a) 2.2 s
(b) 1.2 s
(c) 5 s
(c) 4 s
38. A ball is dropped from a window 24 meters high. How long will it take to reach the ground?
(a) 2.2 s
(b) 1.2 s
(b) 4.5 s
(c) 0.2 s
39. A pitcher throws his fastball horizontally at $42.1 \mathrm{~ms}^{-1}$. How far does it drop before crossing the plate, 18.3 meters away?
(a) 0.8 m
(b) 1.2 m
(c) 2.2 m
(d) 0.93 m
40. Mohan takes 20 minutes to cover a distance of 3.2 kilometers due north on a bicycle, his velocity in kilometer/hour-
(a) 8.1
(b) 9.6
(c) 1.2
(d) 7.2
41. Which of the following statements contains a reference to displacement?
I. "The town is a five mile drive along the winding country road."
II. "The town sits at an altitude of 940 m ."
III. "The town is ten miles north, as the crow flies."
(a) I only
(b) III only
(b) I and III only
(d) II and III only

## I.T.

Read Sessions Unit 3(Part A) Basic ICT Skills.
Session 1: ICT \& its Impact
Session 2: Basics of a Computer Systems and a Mobile device
Session 3: Input, Output, Memory and Storage Devices of a Computer system
Session 4: Basic Computer Operations
Define the following terms:
(Write on a A4 Size sheet)
i)Indentation ii) Margin iii) Mail Merge iv) Character Formatting v) Paragraph Formatting
vi) Auto Correct vii) Auto Text viii)Page Orientation ix) Word Wrap x) Line Spacing

Learn Unit 3 (Part B)Digital Documentation

## Assignment

For Roll No 1 to 15:
Make a chart on "Computer Lab Rules".
For Roll No 16 to 40:
Make a Chart on "Operating System".

