

R.S.M.PUBLIC SCHOOL, SUPAUL

HOLIDAY HOME WORK-2021

CLASS-09

(INFORMATION TECHNOLOGY)

Answer the following questions:

- Q 1. What is a ITeS?
- Q 2. What do you understand about Phonetics? Explain it.
- Q 3. Explain the various elements of communication process.
- Q 4. Define the BPO Service & BPM Industry.
- Q 5. Why is it important to communicate? Explain.
- Q 6. Discuss IT applications in certain major areas.

(SCIENCE)

(CHEMISTRY)

Fill in the blanks:

- (a) Gases can be liquefied by applying-----and lowering.....
- (b) When steam condenses to form water, the process is known as-----.
- (c) Temperature on Kelvin scale = temperature on Celsius scale + -----.
- (d) The state of matter called-----makes a fluorescent tube
..... (Or neon sign bulb) to glow.
- (e) Solid carbon dioxide is also known as.....
- (f) Evaporation is surface phenomenon but boiling is ----phenomenon.
- (g) Gases have neither fixed shape nor _____ .
- (h) The SI unit of pressure is
- (i) Cooling is caused during and not
- (j) _____ is the change of gaseous state directly into solid state.

2. Short Answer Type Questions:-

- a). How do substances undergo change in physical state?
- b). Why gases are highly compressible?
- c). Why do solids generally lack the property of diffusion?
- d). Define the terms used for the following:
 - i. Conversion of vapour to solid
 - ii. Conversion of solid to liquid
 - iii. Conversion of vapour to liquid
- e). What temperature in Kelvin scale is equal to 50^oC.
- f). Write the full form of (i) CNG (ii) LPG
- g). How do surface area and wind speed affect the rate of evaporation?
- h). Liquids have generally lower density as compared to solid, but you must observed that ice floats on the water. Give reason.

i). Define-:

- (i) Latent heat of fusion (ii) melting point (iii) latent heat of vaporization.
- j). Give reason for the following:
- i). A Liquid generally flow easily
 - ii). Ice at 0 degree Celsius appears colder in the mouth than water at 0 degree Celsius.
 - iii). Doctors advise to put strips of wet clothes on the forehead of a person having high fever.
- k). How does perspiration or sweating help keep our body cool on hot day?
- l). Why does a desert cooler cool better on hot, dry day?
- m). What types of clothes should we wear in summer? Why?
- n). Why are we able to sip hot tea or milk faster from a saucer rather than from a cup?
- o). How does the water kept in earthen pot (matka) become cold during summer?

3. Long Answer Type Questions:-

- i.) Draw a labelled diagram of the experimental set up to study the latent heat of fusion of ice.
- ii). Draw a labelled diagram of the experimental set up to demonstrate the sublimation of ammonium chloride (NH_4Cl).
- iii). What is evaporation? State the various factors affect evaporation.
- iv). Draw the "state of matter triangle" to show the inter conversion of state of matter.
- v). With the help of labelled diagram of an activity to show the particles of matter are very small. Use the following material that has been provided to you. Four beakers, three test tubes, droppers, distilled water, few crystals of KMnO_4 .

(PHYSICS)

- 1. Distinguish between distance and displacement.
- 2. Define average speed, average velocity & acceleration.
- 3. Derive 1st and 2nd equation of motion with the help of graphs:
 - I. $v = u + at$
 - II. $s = ut + \frac{1}{2}at^2$
- 4. Solve the numerical questions given in page no. - 109 & 110 (NCERT Book).
- 5. What is circular motion? How will you calculate speed of an object in circular motion?
- 6. How can you say that motion of an artificial satellite is accelerated?
- 7. What is Newton's 1st law of motion? Give two examples from everyday life.
- 8. Explain Newton's 2nd law of motion. Derive a formula to measure force ($F = m \times a$)

9. What is Newton's 3rd law of motion? Explain it with two examples.
10. Solve 5 numerical questions based on $F = ma$ with your choice.

Page - 128

Page - 129 (NCERT Book)

Page - 130

(BIOLOGY)

Answer the following questions:

- Q.1. To draw neat and labelled diagram of following:-
I. An animal cell II. Mitochondria III. Chloroplast
- Q.2. To do Questions Of pages of chapter-cell.
- Q.3. To write and learn about following terms:-
I. Plasmolysis II. Endocytosis
III. Membrane biogenesis IV. Detoxification
- Q.4. to differentiate between:-
I. Meristematic and Permanent tissue
II. Parenchyma and sclerenchyma
III. Xylem and Phloem
- Q.5. Name one place/organ in living organisms where the following tissues are located.
a) Squamous epithelium
b) Columnar epithelium
c) Adipose tissue
d) Cardiac muscle
e) Apical meristem
f) Cork
g) Smooth muscle
- Q.6. Express the following in one word.
a) A tissue capable of cell division.
b) Plant tissue secreting Latex.
c) Tissue which connects two bones.
d) An organelle known as kitchen of cell.
e) Type of solution in which cell shrinks.
f) A group of cells performing a specific function.
g) A liquid connective tissue with R.B.C.
h) A non - living component of plant cell.
- Q.7. Project work -: Make electric hand sanitizer machine.

(MATHEMATICS)

Solve these Problems:

1. Is every rational number a whole Number? Justify your answer.
2. Find two rational numbers between -2 and 5.
3. Express 0.6 in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$.
4. Simplify: $\frac{2 + \sqrt{3}}{2 - \sqrt{3}} - \frac{2 - \sqrt{3}}{2 + \sqrt{3}}$
5. Locate $\sqrt{2}$, $\sqrt{3}$ and $\sqrt{5}$ on the number line.
6. If $a = 2 + \sqrt{3}$, find the value of $a - \frac{1}{a}$

7. Represent $\sqrt{4.5}$ on the number line.

8. Find the value of x, if $(6/5)^x (5/6)^{2x} = \frac{125}{216}$.

9. Simplify $(64/125)^{-2/3}$.

10. Find the factors of $(1 - x^3)$.

11. Find the remainder when $f(x) = 4x^3 - 12x^2 + 14x - 3$ is divided by $g(x) = (2x - 1)$.

12. Find $x + 1/x$, if $x^2 + 1/x^2 = 62$.

13. If $x + 2k$ is a factor of $f(x) = x^4 - 4k^2x^2 + 2x + 3k + 3$, find k.

14. Evaluate: $185 \times 185 - 15 \times 15$.

15. If $\sqrt{m} + \sqrt{n} - \sqrt{p} = 0$, then find the value of $(m + n - p)^2$.

16. If a, b, c are all non-zero and $a + b + c = 0$, prove that

$$\frac{a^2}{bc} + \frac{b^2}{ca} + \frac{c^2}{ab} = 3$$

17. Factorise:

i). $X^8 - y^8$

ii). $X^3 + 13x^2 + 32x + 20$

iii). $2x^3 - 3x^2 - 17x + 30$

18. If $x^2 + 1/x^2 = 34$, find $x^3 + 1/x^3 - 9$

19. Project Work: Write the contributions of at least two Mathematicians in the field of mathematics.

20. Activity: Prove any formula with the help of activity and explain.

21. Find whether $(\sqrt{2}, 3\sqrt{2})$ is a solution of $x - 3y = 9$ or not.

22. $2x + y = 3$ passes from origin. Is this statement true or false?

23. The cost of a toy horse is same as that of cost of 3 balls. Express this statement as a linear equation in two variables. Also draw its graph.

24. Draw the graph of linear equation $x = 4$ and $y = 5$. Find the area formed by the two graphs and the axes.

25. Solve for x: $\frac{3}{x-1} + \frac{1}{x+1} = \frac{4}{x}$, where $x \neq 0, x \neq 1, x \neq -1$.

Note:

I. Students are instructed to solve all the questions & go through stepwise process.

II. Solve all the questions in a separate notebook.

III. This holiday home - assignment must be submitted to your concerned subject teacher, when the School reopens.

(संस्कृत)

1. अस्मद्, युष्मद्, भवत्, राजन् इत्यादयानां शब्दानि लिखत -

2. "परिश्रमस्य महत्त्वम्" इति विषये हिन्दी भाषया आङ्ग्लभाषया वा पंचवाक्यानि लिखत।

3. नद्याः एकं सुन्दरं चित्रं निर्माय संकलय्य वा वर्णयत यत् तस्याः तीरे मनुष्याः पशवः खगाश्च निर्विघ्नं जलं पिबन्ति।

4. भारतीयसन्तगीतिः पाठे वीणायाः चर्चा अस्ति। अन्येषां पंचवाद्ययन्त्राणां चित्रं रचयित्वा संकलय्य वा तेषां नामानि लिखत।

5. स्वपरिचयम् लिखत।

(हिन्दी)

क. निम्नलिखित प्रश्नों के उत्तर 30 से 40 शब्दों में लिखें—

1. झूरी के साले गया को दाँतों पसीना क्यों आ गया?
2. दोनों बैल झूरी से क्या पूछना चाहते थे और क्यों?
3. 'दोनों बैलों में कोई गुप्त शक्ति थी' गुप्त शक्ति से प्रेमचंद का क्या तात्पर्य है?
4. छोटी बच्ची को बैलों के प्रति प्रेम क्यों उमड़ आया?
5. तिब्बत में डाँड़े किसे कहते हैं?
6. ल्हासा की ओर पाठ के आधार पर बताइए कि तिब्बती समाज की क्या-क्या विशेषताएँ हैं?
7. लेखक सुमति के पास विलंब से क्यों पहुँचा?
8. कबीर 'संत सुजान' किसे मानते हैं?
9. ज्ञान की तुलना किससे की गई है और क्यों?
10. 'हिंदू मुआ राम कहि मुसलमान खुदाई' से क्या आशय है?
11. ललद्यद के अनुसार मनुष्य समभावी कब बनेगा?
12. बंद द्वार की साँकल खुलने का आशय स्पष्ट कीजिए।
13. ईश्वर को जानने के लए ललद्यद ने क्या उपाय सुझाया है?
14. रसखान अगले जन्म में ब्रज में ही क्यों रहना चाहते हैं?
15. कृष्ण की लाठी और कंबल के बदले रसखान क्या-क्या न्योछावर करने को तैयार हैं?
16. गोपी कृष्ण की मुरली को होठों पर नहीं रखना चाहती है क्यों?
17. गोधन से क्या तात्पर्य है?
18. परियोजना कार्य :-
मृदा प्रदूषण / वायु प्रदूषण (फाइल में) किसी एक विषय पर प्रोजेक्ट बनाएँ ।
19. दो बैलों की कथा के आधार पर 'पशु और किसान' विषय पर एक प्रोजेक्ट बनाएं।

II. निर्देशानुसार उत्तर लखें—

1. सम, प्र, परि, सर, खुश, एवं सु उपसर्ग से निर्मित पाँच-पाँच शब्द लिखें।
2. औना, अक्कड़, आवट, आकू एवं इया प्रत्यय से बने पाँच-पाँच शब्द लिखें।
3. निम्नलिखित मुहावरों का प्रयोग अपने वाक्यों में करें -
गाँठ खुलना, बाँध टूटना, खाक में मिल जाना, होश उड़ना, हाथ तंग होना

۱۔ سبق نمبر ۱ سے سبق نمبر ۵ تک تمام مصنفین اور شعراء کی پیدائش اور انتقال کی تاریخ کے ساتھ ان کی زبان پیدائش کی زبان میں یاد کرنا ہے۔

۲۔ "نظم ہندو مسلمان" اور "ایک دیپتی لڑکی کا کہنت" کو زبان یاد کرنا ہے اور اس کا خلاصہ بھی بتانا ہے۔

۳۔ "بہادر شاہ کا ہاتھی" اور "نادان دوست" کی زبان کو زبان یاد کرنا ہے اپنی زبان میں بولنا ہے۔

۴۔ پرنسپل کے نام درخواست لکھ کر وجہ بتائے ہوئے چھٹی کی گزارش کرنا ہے۔

۵۔ سبق نمبر ۱ سے سبق نمبر ۵ تک کے دیئے گئے جملوں کو الفاظ کو جملوں میں استعمال کرنا ہے۔

۶۔ سبق نمبر ۱ سے سبق نمبر ۵ تک تمام الفاظ کے معنی یاد کرنا ہے۔

(ENGLISH)

Answer all the given questions in beautiful handwriting in a separate summer vacation homework notebook:-

Q.1. Read through the news clipping given below air pollution. Taking hints from the clipping write an article in 100-150 words on 'vehicular pollution'.

Nearly 40,000 people die of air pollution every year in Ahmadabad, Mumbai, Kolkata, Delhi, Kanpur and Nagpur; 7500 in Delhi alone.

A study found a rise in coronary ailments within 24 to 48 hours after pollution levels increased in Delhi.

Q.2. This year during the coming summer vacations your parents have decided to skip the annual family holidays. To spend your time usefully, you decide to take up gardening as a hobby. Write an article in 100-150 words on what you perceive are the benefits of taking up such a hobby.

Q.3. Arrange the following jumbled up words & phrases into meaningful sentences:-

- (i) exercises/for/health/good/doing/is
- (ii) days/aware/their/health/these/people/are/more/of
- (iii) its/urbanisation/in India/everywhere/has/tentacles/spread
- (iv) foreign/a/home/old-age/is/concept
- (v) generation/time/days/younger/to/these
- (vi) people/glued/children/and/older/remain/it/to
- (vii) entertainment/all/become/a great/for/it/has/source of

Q.4. (a) Editing:-

An one-eyed man was travelling through a bus one day. He was carrying a huge bag on him shoulder. Anyone sitting next to him said, "why didn't you keep your bag beneath the seat?" The man smiled and said, "It is too big to be kept their."

Error	Correction
(a) _____	_____
(b) _____	_____
(c) _____	_____
(d) _____	_____
(e) _____	_____
(f) _____	_____
(g) _____	_____

Q.4. (b) Omission: -

"The Room on the Roof" is excellent novel written Ruskin Bond It is a beautiful of writing that reflects explorations and new discoveries the adolescents world. The main character, boy named 'Rusty' is in search of identity

Before	Missing word	After
(a) _____	_____	_____
(b) _____	_____	_____
(c) _____	_____	_____
(d) _____	_____	_____
(e) _____	_____	_____
(f) _____	_____	_____
(g) _____	_____	_____

Q.5. Answer the following questions:-

- (i) How does the author describe:- (a) his father (b) his mother (c) himself?
- (ii) What two "important" and "earth-shaking" decisions did the doctor take while he was looking into the mirror?
- (iii) What did Einstein call his desk drawer at the patent office? Why?

- (iv) Why does the world remember Einstein as a “world citizen”?
- (v) How does Kezia begin to see her father as a human being who needs her sympathy?
- (vi) Where did Bismillah Khan play the Shehnai on 15 August 1947? Why was the event historic?
- (vii) How does Evelyn hear music? (100-150 words)
- (viii) Why did Margie hate school? Why did she think the old kind of school must have been fun?
- (ix) Mahendra calls ghosts or spirits a figment of the imagination what happens to him on a full-moon night?
- (x) Name all the people who are tried in the king’s court, and give the reasons for their trial.
- Q.6. Make a bookmark decorate it and write an inspirational quotation of a well known poet, author. Laminate it and present beautifully.
- Q.7. Noted below is the telephonic conversation between Leena and Reena. Since Reena has to leave for a commitment, she writes Leena’s message for Seema and puts it on Seema’s table. Write the message, in a box, in not more than 50 words.

Leena:- Good morning! This is Leena here. May I please speak to Seema?

Reena:- Good morning! Sorry Leena, Seema is not here at the moment.

Leena:- Okay. May I request you to convey my message to her when she is back?

Reena:- Sure, please tell me.

Leena:- My brother has bought the chemistry book that she had requested for her examination. She may collect it as per her convenience.

Reena:- I’ll convey it to her.

(SOCIAL SCIENCE)

* Answer all the given questions in beautiful handwriting in a separate Summer Vacation homework notebook:-

• **OBJECTIVE QUESTIONS:-**

- (1) When did Louis XVI become the king of France?
 (a) In 1770 (b) In 1772 (c) In 1774 (d) In 1780
- (2) Who is the composer of the national anthem Marseillaise?
 (a) Roget de L’Isle (b) Mirebeau (c) Abbe Sieyes (d) Rousseau
- (3) When did women in France get the right to vote?
 (a) In 1940 (b) In 1942 (c) In 1944 (d) In 1946
- (4) Suffragette Movement means a movement to give women the right to?
 (a) Equality (b) property (c) vote (d) freedom
- (5) India is located in which hemisphere?
 (a) Northern (b) Southern (c) both a & b (d) None
- (6) The latitude that divides India is almost two equal halves?
 (a) Tropic of cancer (b) equator (c) Arctic Circle

- (7) The latitudinal as well as longitudinal extent of the Indian mainland is about
 (a) 20° (b) 30° (c) 40° (d) 50°
- (8) The Himalayan Mountains form an arc and cover distance of
 (a) 2400 km (b) 2300 km (c) 2200 km (d) 2100 km
- (9) The Northern plains are formed of ____ soil
 (a) Alluvial (b) black (c) laterite (d) red
- (10) Which river is found in desert region of India?
 (a) Narmada (b) Tapti (c) Kaveri (d) Luni
- (11) The most common form of democracy is
 (a) Proportional Democracy (b) Direct Democracy
 (c) Representative Democracy (d) Liberal Democracy
- (12) The principal of democracy is applicable to
 (a) Right to speech only (b) political rights only
 (c) Right to life only (d) any sphere of life
- (13) Which form of government requires all citizens to take part in politics?
 (a) Monarchy (b) Dictatorship (c) Democracy (d) None
- (14) Which of these is a factor of production?
 (a) Land (b) Labour (c) Physical capital (d) All of the above
- (15) Green Revolution took place in India in
 (a) 1950s (b) 1960s (c) 1970s (d) 1980s
- (16) People of Palampur sell their milk to a nearby large village
 (a) Noida (b) Mirzapur (c) Meerut (d) Raiganj
- (17) The work force population includes people from
 (a) 15 to 59 years (b) 14 to 50 years
 (c) 21 to 60 years (d) 22 to 60 years
- (18) Disguised unemployment can be traced to
 (a) Banking (b) transport (c) mining (d) agriculture
- (19) One who is willing to work but is unable to find work is called
 (a) Unemployed (b) employed (c) disguised (d) None
- (20) When did Louis XVI call an assembly of the Estates General to pass proposals for new taxes?
 (a) On 5th May, 1789 (b) On 4th April, 1789 (c) On 5th May, 1788 (d) None

• **SUBJECTIVE QUESTIONS:-**

- Q.1. Which values of the French revolution do you think inspired democracy all over the world?
- Q.2. What was the focus of Montesquieu in his book "The spirit of Laws"?
- Q.3. Describe the divisions in French society before the French revolution.

Q.4. What is the distance of North-South extent and East-West extent of India?

Q.5. Name the countries sharing a land boundary with India.

Q.6. Name the major physiographic divisions of India.

Q.7. Name the three major divisions of the Himalayas from North to South.

Q.8. Distinguish between Bhangar and Khadar.

Q.9. What is democracy?

Q.10. Mention three essential features of democracy.

Q.11. Mention any three negative effects of the Green Revolution.

Q.12. What are the four requirements for the production of goods and services?

Q.113. What do you understand by “people as a resource”?

Q.14 What are the various activities undertaken in the primary sector, secondary sector and tertiary sector?

Q.15. On an outline map of India show the following:-

(a) K2

(b) Kanchenjunga

(c) Anai Mudi

