

#### DELHI PUBLIC SCHOOL PARADIP REFINERY

#### **WINTER HOLIDAY ASSIGNMENT-2018-19**

# **CLASS-IX**

## **ENGLISH**

- A. Read any book or story/article/novel/magazine according to your choice and answer the following questions.(apart from the syllabus)
  - 1. What did you read? (Name it)
  - 2. What did you learn after reading this story/book?
  - 3. What changes did you feel after reading the book/story?
  - 4. What did you like about it?
  - 5. Would you recommend it to others for changing themselves for better?

#### **SANS**

) पिरत पुस्तकस्य प्रश्नीत्तरं अक्यासं २) ठयजनान्त शहदाता अक्यास 3) मि प्रितीय स्वत्राय समस्त अक्यासं (धातुरुपाणां) 4) अपिरत अवनीधातं (द्वामेकप्रत्यकस्य)

#### **MATH**

- 1. The average marks of a student in 10 papers is 80. If the highest and the lowest scores are not considered, the average is 81. If his highest score is 92, then find his lowest score.
- 2. A, B and C start at the same time in the same direction to run around a circular stadium. A completes a round in 252 seconds. B in 308 seconds and C in 198 seconds, all starting at the same point. After what time will they meet again at the starting point?
- 3. The mean of the following frequency distribution is 180cm. Find the missing frequency *f*.

Height of	120-140	140-160	160-180	180-200	200-220	220-240
Plants (in						
cm)						
Number of	4	f	20	12	6	8
Plants						

- 4. The circumference of the base of a cylindrical vessel is 132 cm and its height is 25 cm. How many litres of water can it hold?
- 5. The probability of getting a bad egg from a lot of 400 eggs is 0.035. Find the number of bad eggs in the lot. Also find the probability of getting a good egg.
- 6. Which of the following rational numbers have non-terminating decimal expansion?

a) 
$$\frac{144}{225}$$
b)  $\frac{25}{36}$  c)  $\frac{49}{256}$ d)  $\frac{7}{250}$ 

- 7. Six years hence, a man's age will be three times the age of his son and three years ago he was nine times as old as his son. Find the present age of the man.
- 8. Amar has some notes of Rs.10 and Rs.20. The total numbers of notes are 70 and the total amount of money with him is Rs. 1,050. Find the number of notes of Rs.10 and Rs.20 with him.
- 9. Two pens and three pencils cost Rs. 86. Four pens and a pencil cost Rs.112. Find the cost of a pen and that of a pencil respectively.
- 10. In a camp, there is a meal for 120 men or 200 children. If 150 children have taken the meal. How many men will be catered to with the remaining meal?
- 11. Which of the following statements is INCORRECT?
  - A) The rational form of 17.66666.... is  $\frac{53}{3}$
  - B) 0.423442344423..... is a rational number
  - C) The equivalent form of 16+2.999..... is a)  $\frac{19}{1}$
  - D)  $\sqrt{25} + \sqrt{64}$  is a rational number.

### **SCIENCE-**

#### **PHYSICS**

- 1. What is meant by potential energy(P.E)? Derive the expression for potential energy. State the factors on which it depends.
- 2. What is meant by power? girl of 45 Kg runs up a staircase of 20 steps in 10 seconds .If each step is 10 cm height. Calculate her power?
- 3. Explain Bell-jar experiment showing sound cannot travel in vacuum with neat diagram.
- 4. Write any three applications of reflection of sound waves.
- 5. Define the following a) Echo
- b) Amplitude c) frequency
- 6. State the frequency range of the following sounds
  - I) Infrasonic
  - II) Ultrasounds
  - III) Audible sounds
  - IV)

#### **BIO**

Write two differences between onion cell and Human cheek cell.

- 1. What is hypotonic solution and what will happen if a plant cell is placed in it and why?
- 2. Write the function of RER and SER in cell.
- 3. Write the different types of plastids and their role.
- 4. What is meristematic tissue? Show its location in plant with the help of diagram.
- 5. Write the role of epidermal cell and cork in plant.
- 6. Write two differences between three types of muscles in Human. Draw labelled diagram.
- 7. How we classify organisms? Write its basis.
- 8. Write two features of (a) Bryophytes (b) Pteridophytes
- 9. Write four characteristics of following
  - (a) Arthropoda (b) Mammals (c) Platyhelminthes (d) Pisces
- 10. Write four means of spread of disease with examples.
- 11. Write the mode of spread of AIDS.
- 12. Why antibiotics don't work in viral diseases? Why doctor give antibiotics in viral disease?
- 13. What are weeds? Give examples and how it can be removed?
- 14. Describe Composite fish culture.
- 15. Differentiate between the following
  - (a) Chronic and Acute disease
  - (b) Antibodies and antibiotics

#### Social Science

- 1. How do you think the rise of hitler to power in germany lead to the fall of democracy.explain in detail.
- 1. Name the different forms of the government. Give 2 examples of each form and write a short note on each.
- 2. Name any 4 schemes of government to provide food security.write a note on each.
- 3. Make a project on the extinct and vulnerable species of plants and animals in india.

### **CHEMISTRY**

- 1. Which isotope is used as a nuclear fuel?
- 2. Write down the chemical formula of
  - a) aluminium sulphate

- b) Aluminium Phosphate
- 3. How does Dalton's Atomic theory explain the law of conservation of mass?
- 4. Write any three important postulates of Bohr's Atomic model.
- 5. Calculate the percentage of nitrogen in Ammonium Sulphate.
- 6. Define the following with examples
  - a) Isotope
  - b) Isobar
  - c) Isomer
  - d) Iso electron
- 7. Write an activity to verify the law of conservation of mass.
- 8. Explain the difference between the following:
  - a) Atoms and molecules
  - b) Molecular mass and molar mass
  - c) Electron and Proton
- 9. Write mass number, valency and electronic configuration of elements from atomic number
  - 1 -20.
- 10. Calculate the molar mass of the following compounds :
  - a) Washing Soda
  - b) Plaster of paris
  - c) Lime water
  - d) Glucose
  - e) Acetylene gas

# **COMPUTER**

Make GIF on Christmas & New Year.