

**JKG International School, Indirapuram**  
**Holiday Assignment (2018-19)**  
**Class- IX**

**SUBJECT- ENGLISH**

**Q1. Write the answers of the following questions in not more than 30 to 40 Words.**

- a) What were the things that rained out of Bill Bryson's bag at the airport?
- b) Why did the narrator frequently fail to use the flyer miles?
- c) Why did Sergei call Lushkoff his God son?
- d) How did Olga bring a change in Lushkoff?
- e) After becoming the leader of his village, Prashant performed two important tasks. What were they?
- f) To whom did the happy Prince send his Great Ruby and why?
- g) What revived Johnsy's will to live?
- h) What did the doctor think when the snake was looking into the mirror?
- I) Why was the narrator haunted by the idea of toothbrush while travelling?
- j) How did Santosh develop liking for climbing?
- k) Maria possesses some contradictory characteristics. What are they?
- l) Why did the narrator and his family finally decide to get Bruno home?
- j) How is the narrator affected by the flute?
- k) How did Gerrard outwit the cunning intruder?
- l) Describe the functioning of Tommy and Margie's School, the mechanical teacher, and telebooks. How do they compare with the schools of olden days?
- m) Who helped Evelyn to continue music? What did he do and say?
- n) What did Kezia's grandmother suggest her on her father's birthday?  
How did she react to her suggestion?
- o) What characteristic did Kalam inherit from his parents?
- p) What was the poet's opinion about both the roads?
- q) Nature does not differentiate between men of different lands and races.  
Do you agree with the given statement?
- r) Describe the growth and expansion story of a tree?

- s) How does the snake protect itself? What kind of body does it have?  
 t) How will time not affect the poet's beloved?

### SUBJECT-MATHEMATICS

- Q1. What is the decimal representation of rational number  $\frac{1}{3}$  ?
- Q2. Find the value of  $5\sqrt{3} - 3\sqrt{12} + 2\sqrt{75}$
- Q3. ABCD is a square of side x units. Find the area of ABCD.
- Q4. Find the factors of  $x^5y - xy^5$ .
- Q5. Expand using suitable identity:  
 $(x + 2y + 4z)^3$
- Q6. Draw  $\angle DEF = 72^\circ$ . Construct  $\frac{3}{4}$  of  $\angle DEF$  using a compass.
- Q7. In an isosceles triangle ABC, with  $AB = AC$ , the bisector of angle B and angle C intersect each other at O. Join A to O. show that  $OB = OC$ .
- Q8. Find the curved surface area of right circular cylinder with radius 3 cm and height 11 cm.
- Q9. A bag contains 6 blue and 4 green marbles. If a marble is drawn at random from the bag, what is the probability that the marble drawn is green.
- Q10. If E, F, G and H are respectively the points of the sides of a parallelogram ABCD, Show that  $ar(EFGH) = \frac{1}{2} ar(ABCD)$ .
- Q11. Rationalise the denominator of  $\frac{\sqrt{6} + \sqrt{3}}{\sqrt{6} - \sqrt{3}}$
- Q12. Show  $\sqrt{9.5}$  on the number line.
- Q13. If  $x - 1$  and  $x + 2$  are factors of  $x^3 + 10x^2 + ax + b$ , then find the values of a and b.
- Q14. Factorise :  $27x^3 + y^3 + z^3 - 9xyz$  .

**OR**

Find the remainder obtained on dividing  $p(x) = x^4 + x^3 - 2x^2 + x + 1$  by  $x + 1$ . Use long division method.

- Q15. Plot the points  $(-2, 3)$ ,  $(1, 3)$ ,  $(-3, -2)$ ,  $(0, 2)$  on Cartesian plane. In which quadrant or on which axis do each of the points lie ?

**OR**

If diagonals of a cyclic quadrilateral are diameters of the circle through the vertices of the quadrilateral, prove that it is a rectangle.

- Q16. A triangle and a parallelogram have the same base and the same area. If the sides of the triangle are 26 cm, 28 cm and 30 cm and the parallelogram stands on the base 28 cm. Find the height of the parallelogram.

**OR**

Find the perimeter of a parallelogram of area  $288 \text{ m}^2$ . Altitude on smaller side is twice the side and larger side has an altitude of 8 m.

- Q17. For the data: 11, 15, 17,  $x+1$ , 19,  $x-2$ , 3, if the mean is 14. Find the value of  $x$ , Using the value of  $x$  also find mode of the data.
- Q18. A hemispherical bowl of internal radius 9 cm is full of water. This water is to be filled In cylindrical bottles of diameter 3cm and height 4 cm. Find the number of bottles needed to fill the whole water of the bowl.
- Q19. Prove that angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle.
- OR**
- Show that the diagonals of a square are equal and bisect each other at right angles.
- Q20. Construct a triangle ABC in which angle B =  $60^\circ$ , angle C =  $45^\circ$  and  $AB + BC + CA = 11 \text{ cm}$ .(write steps of constructions also)

## SUBJECT- SCIENCE

### SECTION-A (CHEMISTRY)

- Q1. What is evaporation ? How is it different from boiling.
- Q2. What is sublimation. With the help of an activity, describe the phenomenon of sublimation.
- Q3. If 25 ml of acetone is mixed with 150 ml of water to form an aqueous solution, then find the volume percentage of solution.
- Q4. Calculate the mass of sodium sulphate required to prepare its 20% solution in 100 g of water.
- Q5. Give the names of the elements present in the following compounds.
- |                   |                        |
|-------------------|------------------------|
| (a) Quicklime     | (b) Hydrogen bromide   |
| (c) Baking powder | (d) Potassium sulphate |
- Q6. Explain Rutherford's nuclear model of atom.
- Q7. Explain Bohr-Bury scheme.
- Q8. State all the assumption of Dalton's atomic theory.
- Q9. Explain with examples
- |              |             |
|--------------|-------------|
| (a) Isotopes | (b) Isobars |
|--------------|-------------|
- Q10. Calculate the number of atoms present in 100 g of iron.

### SECTION- B (BIOLOGY)

- Q1. What do you understand by composite fish culture?
- Q2. What are exosmosis and endosmosis ?
- Q3. Differentiate between rough and smooth endoplasmic reticulum.

- Q4. List two main functions of  
(a) Endoplasmic reticulum (b) Lysosomes
- Q5. What is blood ? Give important functions of blood. Which blood cells are involved in oxygen transport?
- Q6. How are cardiac muscles different from skeletal muscles ?
- Q7. Give two characteristics of amphibians. Two examples.
- Q7. What are degenerative diseases? Why are they called so?
- Q8 Explain how does a vaccine work.
- Q9. What are different source and harmful effects of water pollution ? Explain.
- Q10. Why is organic matter important for crop production?

### **SUBJECT- PHYSICS**

- Q1. What is the difference between uniform motion in a straight line and uniform circular motion?
- Q2. If the acceleration of the particle is constant in magnitude but not in direction what type of path does the particle follow?
- Q3. A train 100m long is moving with a velocity of 60 km/h find the time it take to cross the bridge 1 km long.
- Q4. Draw a velocity time graph for an object in uniform motion. Show that the area under the velocity- time graph gives the displacement of object in the given time interval.
- Q5. How a man can swim in water?
- Q6. Why does a gun recoil backward when a bullet is fired from it?
- Q7. Why are the wheels of vehicle provided with mudguards?
- Q8. A body of mass 60 kg has a momentum of 300 kg metre per second calculate its velocity
- Q9. How does the gravitational force between two bodies change if the distance between them is tripled? Explain.
- Q10. Suppose a planet exist whose mass and radius both are half of those of earth calculate acceleration due to the gravity onthe surface of this planet. 'g' on the surface of earth is  $9.8 \text{ m/s}^2$ .
- Q11. An object is immersed in different liquids. Is same buoyant force act on the object due to all liquids?
- Q12. Why do we feel lighter when we swim?
- Q13. Two bodies of same mass start from rest and moves with velocity of  $v$  and  $2v$  respectively, find the ratio of their kinetic energies.

- Q14. Express kilowatt in terms of joules per second.
- Q15. Establish relationship between speed of sound, its wavelength and frequency.
- Q16. How is the pressure variation in a sound wave amplified in human ear?
- Q17. A detector is installed on a ship receive an ultrasonic signal sent to underwater object after 30 seconds of its transmission. if the speed of sound in water is  $v$  what is the depth of object
- Q18. Two astronauts on the surface of the moon cannot talk to each other. explain why?

### **SUBJECT – SOCIAL SCIENCE**

- Q1. Why was treasury of France empty when Louis XVI ascended The Throne ?
- Q2. In which hemisphere India is located?
- Q3. How people elect their representatives in China?
- Q4. What kind of manufacturing units are set up in Palampur?
- Q5. How are water choice fulfilled by elections?
- Q6. What is the theory of plate tectonic?
- Q7. Which Tribunal was set up after World War II to punish the Nazis for their crime against humanity?
- Q8. What were the advantages and disadvantages of the use of mechanical harvesting machines in the USA?
- Q9. Give a brief information on the three types of plate movements on the earth
- Q10. Discuss the significant difference between the Himalayan and the peninsula rivers
- Q11. What was Western cyclonic disturbances?
- Q12. Give arguments in favour of democracy
- Q13. what documents were taken into consideration by the constituent assembly of India to form the Indian Constitution?
- Q14. How can we check the quality of the election process?
- Q15. modern farming methods require more inputs which are manufactured in industry do you agree?
- Q16. The employment structure is characterised by self employment in primary sector explain
- Q17. Do you think that present methodology of poverty estimation is appropriate?

- Q18. Describe the events leading to the economic crisis in Germany
- Q19. Why were Indian farmers reluctant to grow opium?
- Q20. What steps have been taken by the government to protect the flora and fauna of the country?
- Q21. What are the significant features of the National Population Policy 2000?
- Q22. Who resolved the dispute of Mandal Commission? How did it materialise later on?
- Q23. What is secularism? How did the Indian Constitution make India a secular state?
- Q24. Describe current government strategy of poverty alleviation
- Q25. How does social inability to buy food also play a role in food insecurity?
- Q26. On the given outline political map of Europe locate and mark the following  
Any two countries of Central powers who participated in World War I.

**शीतकालीन गृहावकाश  
विषय- हिंदी**

**व्याकरण**

**1. निर्देशानुसार उत्तर दीजिए –**

- क) 'कु' उपसर्ग लगाकर दो शब्द बनाइए।
- ख) 'परिपूर्ण' शब्द में प्रयुक्त उपसर्ग और मूल शब्द अलग कीजिए।
- ग) 'लाचारी' शब्द में प्रयुक्त प्रत्यय और मूल शब्द अलग कीजिए।
- घ) 'इक' प्रत्यय लगाकर दो शब्द बनाइए।
- ङ) 'पुस्तकालय' का समास विग्रह कर समास का नाम लिखिए।
- च) 'चार राहों का समूह' समस्त पद बनाइए और समास का नाम लिखिए।
- छ) किस समास में दूसरा पद प्रधान होता है ?

**2. अर्थ के आधार पर वाक्य भेद बताइए :**

- क) आकाश में तारे टिमटिमा रहे हैं।
- ख) ईश्वर तुम्हें दीर्घायु प्रदान करें।

**3. वाक्य परिवर्तन कीजिए :**

- क) कल हम मेट्रो की सवारी करेंगे। (संदेह वाचक वाक्य)
- ख) उसने खाना खा लिया है। (निषेध वाचक वाक्य)

#### 4. निम्नलिखित पंक्तियों में अलंकार बताइए:

- क) तीन बेर खाती थी वे तीन बेर खाती है।  
ख) को घटि ये वृषभानुजा वे हलधर के वीर।  
ग) नदियाँ जिनकी यशधारा— सी बहती है।  
घ) यमक अलंकार का एक उदाहरण दीजिए।

#### क्षितिज

#### निम्नलिखित प्रश्नों के उत्तर दीजिए :

1. बालिका मैना ने कौन-कौन से तर्क देकर सेनापति 'हे' को महल की रक्षा करने के लिए प्रेरित किया ?
2. भारतीय स्वतंत्रता आंदोलन के संदर्भ में मैना देवी के बलिदान के बारे में लिखने की क्या आवश्यकता रही होगी ?
3. लेखक ने प्रेमचंद को जनता का लेखक क्यों कहा ?
4. लेखिका महादेवी वर्मा ने अपनी माँ के व्यक्तित्व की किन विशेषताओं का उल्लेख किया है ?
5. ताई साहिबा और लेखिका के परिवार में बड़ी घनिष्टता थी। सोदाहरण स्पष्ट कीजिए।
6. सुमति के यजमान और अन्य परिचित लोग लगभग हर गाँव में मिले। इस आधार पर आप सुमति के व्यक्तित्व की किन विशेषताओं का वर्णन कर सकते हैं ?
7. डांडे के देवता का स्थान कहाँ था ? उसे कैसे सजाया गया था ?
8. 'सालिम अली की आँखों पर चढ़ी दूरबीन उनकी मृत्यु के बाद ही तो उतरी थी।' कथन के माध्यम से लेखक ने क्या कहना चाहा है ?
9. चंद्र गहना से लौटती बेर कविता का प्रतिपाद्य अपने शब्दों में लिखिए।
10. 'प्यास जाने कब बुझेगी ?' —पंक्ति किसके लिए कही गई है और क्यों ?
11. 'मेघ आए' कविता में जिन रीति-रिवाजों का मार्मिक चित्रण हुआ है, उनका वर्णन कीजिए।
12. कवि ने कविता में किस यमराज की ओर संकेत किया है और वह कहाँ रहता है ?
13. आप की दृष्टि में बाल-मजदूरी का क्या समाधान हो सकता है ?
14. बंद द्वार की साँकल खोलने के लिए ललद्यद ने क्या उपाय सुझाया है ?
15. कवि कृष्ण का सान्निध्य किस रूप में पाना चाहता है और क्यों ?
16. कोयल की कूक सुनकर कवि की क्या प्रतिक्रिया थी ?

## **SUBJECT : INFORMATION TECHNOLOGY**

### **Answer the following questions.**

- Q1 Which is the world's leading chip manufacturing company?
- Q2 What is the red-eye effect?
- Q3 What is the purpose of the volume control in the status bar of Rapid Typing Software?
- Q4 How does word help you to keep your document error free?
- Q5 Which component of word window is used to change the vertical alignment of text? What do the numbers on the vertical Ruler bar signify?
- Q6 What is the difference between Basic Formulas and Compound Formulas?
- Q7 Write the steps to insert image in a presentation from the Internet.
- Q8 What is a Shape? Describe the steps to insert a Shape in a slide.
- Q9 A person is going to the rural interiors of the country where the Internet connection is very erratic. What kind of e-mail software should he use?
- Q10 How is formatting applied to messages?
- Q12 How are application based e-mail software different from the web based e-mail software?
- Q13 How do you apply border to the cells?
- Q14 What are Functions? What are its two parts ?
- Q15 What do you mean by Indent? Explain the two options available in the Page Layout tab.
- Q16 What is the use of the virtual keyboard in the Rapid Typing Software?
- Q17 How are computers used in Criminal identification and Law Enforcement?
- Q18 What is the function of Sound Card?
- Q19 Write the characters of Non-Impact printers.
- Q20 What is the use of Network Interface Card (NIC)?