

# **HOLIDAY HOMEWORK (2021-22)**

## **Class-X**

### **Dear Parents**

For this summer vacation, we have planned assignments and activities to keep the children engaged and also help them in channelizing their energies. Kindly help and guide your ward in completing his/her work and also exploring his/her creative self.

### **General Instructions-**

- The Holiday Homework is to be done neat and tidy handwriting. Subject wise, in separate folders or files as per the given instructions.
  - Holiday Homework of all the subjects must be submitted within three days after the school reopens to the respective teachers.
  - Make a set routine for him/her to do holiday homework as regular practice improves his/her learning and writing skills instead of forcing them to do their holiday homework at the eleventh hour.
  - Encourage your child to cultivate the reading habit because it not only enhances the knowledge acquired but also develops the vocabulary, language skills and improves spellings. Encourage your child to read newspaper, G.K book and current affairs to update him/her.
  - Spend quality time with your child engaging him / her in activities based on enhancing his / her powers of observation and imagination.
  - Make sure that the Holiday Homework is to be done according to the given instructions and with neat and tidy handwriting.
  - Above mentioned guidelines will help your child to become a smart and an active learner. Holiday homework will be assessed on certain parameters and marks/grade will be awarded accordingly.
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## English

### 1. Questionnaire Making

How to do: Prepare 15 multiple choice questions from the story a) Long walk to Freedom  
b) Footprints without feet

### 2. Being innovative with values

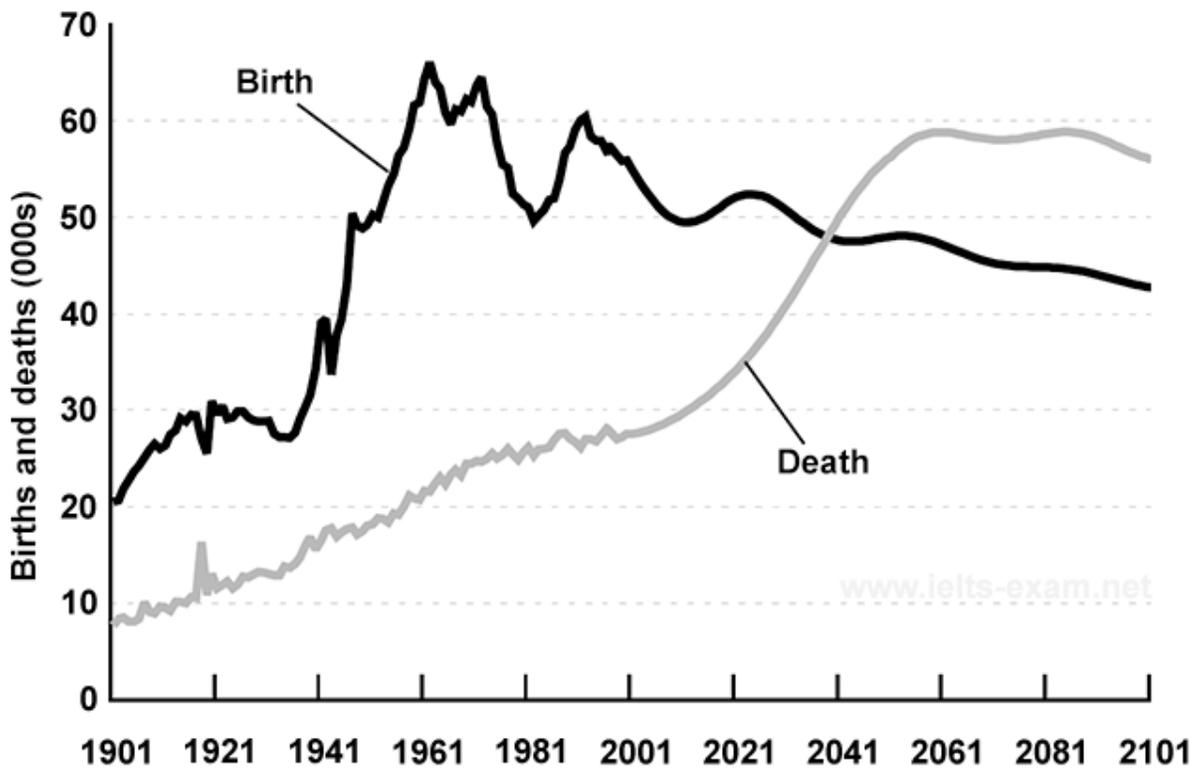
How to do: Create your own diary in which you will write daily about any one positive change which you will bring in yourself like being organized or being punctual etc (80-100 words)

Where to do: small handmade diary which should be properly decorated.

Parameters: Creativity, Content, Authentication

### 3. Read Novel Oliver Twist by Charles Dickens and reduce it into a booklet.

4. Question 1: Below is a graph given showing birth and death rates in a country from 1901 to 2101. Write an analytical paragraph (100-150 words).



5. Write a letter to Delhi Sports, Daryaganj, New Delhi, placing an order for sports articles like footballs, cricket balls, Tennis balls and cricket bats to be supplied to your school. Sign as Ravi/Raveena, Sports Secretary.

6. You are Rajesh/Rajni Roy of 105 C, Chatterjee Lane, Kolkata. You have received a letter from your brother who is staying in the hostel of Shakti Mandir Public School, Darjeeling,

stating that he is being bullied by some senior students who threatened him with dire consequences, if he complained. Write a letter to the Hostel Warden requesting him to take urgent action.

7. Answer in 100-120 words (beyond text and across texts)

The people at the post-office contribute to put together whatever they can manage, for Lencho.

(a) What do you think was the main reason behind their help? Would you have done the same if you were one of the employees?

(b) As an employee, write about your perspective and reason(s) for contributing to the fund. The fact that you don't want to say 'no' to a cause initiated by your boss, can also be an equally compelling reason!

ii. Read the given anecdote and analyse the similarities and differences with reference to 'A Letter to God'.

A very poor woman called-in a radio station asking for help from God. A non-believer, also listening to this radio program, decided to make fun of the woman. He got her address, called his secretary and ordered her to buy food and take it to the woman.

However, the instruction was: "When the woman asks who sent the food, tell her that it's from the devil."

When the secretary arrived at the woman's house, the woman was very happy and grateful for the help. The Secretary then asked her, "Don't you want to know who sent the food?"

The woman replied, "No, I don't even care because when God orders, even the devil obeys!"

iii. The postmaster was a representative of God. Evaluate this statement in the context of your understanding of 'A Letter to God'.

8. Roll No. 1-7 will prepare Ch The Making of a scientist for Flip Classroom.

8-14 will prepare Ch The Hundred Dresses for Flip Classroom.

15-21 will prepare Ch The Necklace for Flip Classroom.

22-28 will prepare Ch The Hack Driver for Flip Classroom.

29-33 will prepare Ch The Proposal for Flip Classroom.

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## Hindi

### Assignment-1

1. निम्नलिखित गद्यांश को पढ़कर दिए गए प्रश्नों के उत्तर दीजिए-

जिसे स्वयं पर भरोसा है, उसी पर लोग भरोसा करते हैं। जो लोग अपनी सहायता स्वयं नहीं करते हैं, भगवान भी उसकी सहायता से पीछे नहीं हटते। हो सकता है कोई निष्ठावान व्यक्ति अपने कर्मक्षेत्र में असफल रहा हो, परंतु जितने भी सफल व्यक्ति हुए हैं, उनमें प्रत्येक में आत्मविश्वास अवश्य रहा है। आत्मविश्वास ही शक्ति का स्रोत है। मनुष्य को ईश्वर से जो दिव्य वरदान मिला है, वह है -आत्मविश्वास। इसी आत्मविश्वास के बल पर वह एवरेस्ट जैसे ऊंचे पहाड़ों पर जा सका है। सागर की अतल गहराइयों से मोती ढूँढ लाया सुदूर ग्रहों पर पहुंचने की चेष्टा करता रहा और ज्ञान के समुद्र में से ऐसे विलक्षण रत्न ढूँढ लाया, जिसने दुनिया को हतप्रभ कर दिया। ऐसी-ऐसी खोजे की कि घर बैठे दुनिया घूम लीजिए। इसी प्रबल आत्मविश्वास के बल पर उसने असंभव को संभव कर दिखाया।

1. कैसे लोगों पर दूसरे लोग भरोसा करते हैं ?

अपने पर भरोसा करने वाले।

दूसरों पर भरोसा करने वाले।

बोलने वाले।

भाग्य पर भरोसा करने वाले।

2. सफल व्यक्तियों में कौन-सा गुण पाया जाता है?

अविश्वास

आत्मविश्वास

कायरता

भ्रष्टाचार का

3. आत्मविश्वास के बल पर मनुष्य क्या कर सकता है?

भाग सकता है।

कायरता दिखा सकता है।

एवरेस्ट पर जा सकता है।

भाग्य के भरोसे रह सकता है।

4. मनुष्य की शक्ति का स्रोत क्या है ?

विश्वास

वीरता

साहस

आत्मविश्वास

5. अतल का विलोम शब्द क्या है ?

समुद्र की गहराई

आसमान

जमीन

अंतरिक्ष

2. रेखांकित पदों का पद परिचय दीजिए:

गोदान प्रेमचन्द द्वारा लिखा गया ।

करण कारक

पुरुषवाचक संज्ञा, एकवचन, पुलिङ्ग

कर्मकारक

जातिवाचक

2. दादा जी धीरे-धीरे टहलते हैं।

क्रियावाचक विशेषण

कालवाचक

जातिवाचक

रीतिवाचक

3. रसराज किसे कहा जाता है?

शृंगाररस

करुणारस

वीररस

शांतरस

4. वीररस का स्थाई भाव क्या है ?

उत्साह

शोक

रति

निर्वेद

5. नेताजी की मूर्ति पर चश्मा कौन लगाता था ?

कैप्टन चश्मेवाला

हालदार साहब

पानवाला

मास्टर

6. भगत अपनी फसल कहां ले जाता था ?

मठ में

मंडी में

घर पर

अनाथालय में

7. लेखक ने किस क्लास का टिकट लिया था?

फर्स्ट क्लास

सेकंड क्लास

ए सी रूम्स

जर्नल

8. मानवीय करुणा की दिव्य चमक किस से कहा जाता है ?

लेखक को

फादरबुल्के को

सर्वेश्वरदयाल सक्सेना को

फादर पास्कल

9. नेताजी की मूर्ति किसने बनाई थी ?

कैप्टन चश्मे वाले ने

ड्राइंग मास्टर ने

लेखक ने

पानवाले ने

10. भगत किसके उपासक थे?

कबीरदास के

तुलसीदास के

श्रीकृष्ण के

रहीम के

11. पुस्तकों को बेचने के लिए एक विज्ञापन का निर्माण करें ].

## **Assignment-2**

1. निम्नलिखित गद्यांश को पढ़कर नीचे दिए गए प्रश्नों के उत्तर दीजिए :

वन प्रकृति की अमूल्य संपदा है। मानव जीवन इससे अभिन्न रूप से जुड़ा हुआ है। इसका सभ्यता और संस्कृति से भी अटूट संबंध है। आदि मानव का जन्म एवं उसकी सभ्यता, संस्कृति का विकास इन्हीं वनों में हुआ है। उसकी खाद्य सामग्री और आवास की समस्या भी इन्होंने ही सुलझाई थी। मानव की ओर अन्य जीव जंतुओं की जीवन रक्षा में भी इन्हीं का हाथ रहा है। हमारे ग्रंथ उपनिषद् और आरण्यक आदि वनों में ही रचे गए। महाकवि वाल्मीकि द्वारा रचित ग्रंथ रामायण भी तपोवन में ही रूपाकार हुआ था। औषधियां भी हमें वनों से ही मिलती हैं। विश्व की कोई सभ्यता एवं संस्कृति नहीं है जिसने वनों के मूल्य को न आका हो, उनकी मेहता को न समझा हो , इसलिए वन समरक्षण की आवश्यकता है। कागज बनाने तथा मकान के लिए लकड़ी वनों से ही प्राप्त होती है। पेड़ पौधे पर्यावरण की रक्षा तो करते

ही हैं इन में कार्बन डाई ऑक्साइड को शोषित करने की शक्ति भी होती है। सिंचाई और पेयजल की समस्या का समाधान भी वनों के संरक्षण से ही संभव है। वन है तो नदियां भी अपने भीतर जल की अमृत धारा संजोकर प्रवाहित हो रही है। वन समाप्त होने से धरती बंजर तथा रेगिस्तान बन जाएगी ।

1. वन प्रकृति की कैसी संपदा है ?

अमूल्य

बेकार

कीमती

अच्छी

2. आदि मानव का विकास कहां हुआ है?

नगरों में

महलों में

वनों में

घरों में

3. वृक्ष कौन सी गैस शोषित करते हैं?

कार्बन डाइ ऑक्साइड

हाइड्रोजन

ऑक्सीजन

केमिकल्स

4. वनों में कौन से ग्रंथ रचे गए हैं?

उपनिषद

आरण्यक

दोनों

कोई भी नहीं

5. महर्षि वाल्मीकि ने कौन से ग्रंथ की रचना की है ?

महाभारत

रामायण

अभिज्ञान शाकुंतल

वेद

2. रचना के आधार पर वाक्य के कितने भेद होते हैं?

एक

दो

3

4

3. सरल वाक्य में कितनी क्रियाएं होती हैं ?

एक

अनेक

दो

एक भी नहीं

4. सरस्वती ने नहाकर पूजा की। कौन-सा वाक्य है ?

सरल वाक्य

संयुक्त वाक्य

मिश्र वाक्य

कर्म वाक्य

5. संयुक्त वाक्य में कितनी क्रियाएं होती हैं ?

दो

3

अनेक

एक

6. मिश्र वाक्य का उदाहरण है।

बच्चे घर में आराम कर रहे हैं।

जैसे ही सुबह हुई, चिड़िया चहचहाने लगी ।

मोहन गांव गया और वहां बीमार पड़ गया।

हर्ष गीत गा रहा है।

7. पद के रचयिता कौन है ?

तुलसीदास

सूरदास

मीराबाई

जयशंकर प्रसाद

8. श्री कृष्ण ने गोपियों के पास किसे भेजा ?

उद्धव

बलराम

अक्रूर

भीम

9. गोपियों ने बड़भागी किसे कहा है ?

बलराम

सूरदास

राधा

उद्धव

10. उद्धव की तुलना किसके साथ की गई है?

कमल के पत्ते से

तेल की गागरी से

प्रेम की नदी से

सभी से

11. गोपियां किसका इंतजार कर रही थीं?

श्रीकृष्ण

बलराम

उद्धव

सूरदास

12. उद्धव ने गोपियों को किस का संदेश सुनाया ?

श्रीकृष्ण का

बलराम का

योग का

प्रेम का

### Assignment-3

### Subject Hindi

1. श्री कृष्ण कौन-सा धर्म भूल गए थे?

राजा का

मंत्री का

प्रेम का

प्रजा का

2. गोपियां श्री कृष्ण को कैसे याद करती थीं?

सोते-जागते

दिन-रात

हर पल

सभी

3. राम, लक्ष्मण परशुराम संवाद किसकी रचना है?

तुलसीदास

रामदास

सूरदास

महिदास

4. परशुराम को क्रोध क्यों आया ?

राम के कारण

जनक के कारण

धनुष के टूटने के कारण

विवाह के कारण

5. भृगुकुल केतु कौन हैं?

राम

लक्ष्मण

परशुराम

विश्वामित्र

6. गर्व के शिशु पर कौन दया नहीं करता?

परशुराम का फरसा

परशुराम का धनुष

राम का धनुष

लक्ष्मण का धनुष

7. राम किसके समान कहा है?

गन्ने की खांड के सामान

लोहे की खांड के समान

फूल के समान

चंद्रमा के समान

8. गाधिसूनु किसे कहा जाता है?

विश्वामित्र को

दशरथ को

जनक को

वशिष्ठ को

9. बादल का गर्जना किसका प्रतीक है?

क्रांति का

विचार का

आनंद का

शोर का

10. बादल का किन-किन अर्थ के लिए प्रयोग किया है?

क्रांति के लिए

नव जीवन के लिए

नूतन कविता के लिए

सभी

11. कवि ने कौन-से महीने का वर्णन किया है?

फागुन का महीना

वर्षा का महीना

पतझड़ का महीना

शरद का महीना

12. फागुन का महीना किस ऋतु में आता है?

ग्रीष्म ऋतु

बसंत ऋतु

वर्षा ऋतु

शरद ऋतु

## Assignment-4

### Subject Hindi

1. माता का अंचल के लेखक कौन है?

शिवपूजन सहाय

भगवती प्रसाद

महादेवी वर्मा

हरिओम जी

2. लेखक का बचपन का नाम क्या था?

शिवपूजन सहाय

भोलानाथ

तारकेश्वर नाथ

शिवशंकर

3. भोलानाथ किसके पास अधिक रहता था?

माता के पास

पिता के पास

मित्र मंडली में

अकेला

4. भोलानाथ को कौन सजाती थी?

भोलानाथ की मां

पिता

स्वयं

कोई नहीं

5. सांप के बिल में पानी किसने डाला?

भोलानाथ ने

भोलानाथ के मित्र ने

भोलानाथ के पिता ने

बहन ने

5. जॉर्ज पंचम की मूर्ति किस-से बनी थी?

संगमरमर से

एलुमिनियम से

लाट से

लाल पत्थर से

6. इंग्लैंड से भारत में कौन आने वाली थी?

महारानी विक्टोरिया

महारानी एलिजाबेथ

जॉर्ज पंचम की पत्नी

जॉर्ज पंचम की बहन

9. महारानी के आगमन पर दिल्ली का स्वरूप क्या हो गया?

सुंदर

दिखावटी

आडंबर

बेकार

10. नाक किस-का प्रतीक मानी जाती है?

अपमान का

सम्मान का

आदर का

बुराई का

11. जॉर्ज पंचम की मूर्ति पर किस की नाक लगाई गई?

जिंदा आदमी की

पत्थर की

लाट की

नेता की

12. दर्जी को कपड़े बनाने में मुश्किल क्यों हुई?

नाप नहीं था

पहनने के बारे में नहीं पता था

यात्रा का ज्ञान नहीं था

पूछने से डरता था

## Assignment-5

### Subject Hindi

1. क्रियात्मक विधियां जिन्हें चार्ट, साइनिंग पेज आदि पर बनाया जाए।
2. 10 सुलेख लिखें।
3. रस व उसके भेदों को चार्ट पर चित्र के अनुसार दर्शाए।

4. अपने विद्यालय के प्रचार प्रसार के लिए विज्ञापन तैयार करें।
5. विद्यालय के विकास, प्रगति, उन्नति के लिए 10 वाक्यों की अनुसूची तैयार करें।

## **Mathematics**

1. Revise the entire covered chapter.
  2. Holiday homework should be completed in separate notebook.
  3. Do neat and clean work
  4. Do activities related to covered topics in Mathematics Practical Book. (Buy Practical File from school.)
  5. Do the given assignments.
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1. Prepare the following topic for “ Flip class”
  - i. Roll No. 1 to 5– How to find HCF by Long Division Method
  - ii. Roll No. 6 to 10 – How to obtain Quadratic Formula
  - iii. Roll No. 11 to 15 – Probability
  - iv. Roll No. 16 to 20 – How to represent pair of Linear Equation graphically.
  - v. Roll No. 21 to 25 – How to form quadratic polynomial if sum and product of the zeroes are given.
  - vi. Roll No. 26 to 30 – Define conditions of pair of linear equation.
  - vii. Roll No. 31 to 33 – Define elimination method.

### **Chapter -1(Real Numbers)**

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Choose the correct answer from the given four options in the following questions:

1. For some integer  $m$ , every even integer is of the form  
(A)  $m$  (B)  $m + 1$  (C)  $2m$  (D)  $2m + 1$
2. For some integer  $q$ , every odd integer is of the form  
(A)  $q$  (B)  $q + 1$  (C)  $2q$  (D)  $2q + 1$
3.  $n^2 - 1$  is divisible by 8, if  $n$  is  
(A) an integer (B) a natural number  
(C) An odd integer (D) an even integer

4. If the HCF of 65 and 117 is expressible in the form  $65m - 117$ , then the value of  $m$  is  
(A) 4 (B) 2 (C) 1 (D) 3
5. The largest number which divides 70 and 125, leaving remainders 5 and 8, respectively, is  
(A) 13 (B) 65 (C) 875 (D) 1750
6. If two positive integers  $a$  and  $b$  are written as  $a = x^3y^2$  and  $b = xy^3$ ;  $x, y$  are prime numbers, then HCF ( $a, b$ ) is  
(A)  $xy$  (B)  $xy^2$  (C)  $x^3y^3$  (D)  $x^2y^2$
7. If two positive integers  $p$  and  $q$  can be expressed as  $p = ab^2$  and  $q = a^3b$ ;  $a, b$  being prime numbers, then LCM ( $p, q$ ) is  
(A)  $ab$  (B)  $a^2b^2$  (C)  $a^3b^2$  (D)  $a^3b^3$
8. The product of a non-zero rational and an irrational number is  
(A) always irrational (B) always rational  
(C) rational or irrational (D) none
9. The least number that is divisible by all the numbers from 1 to 10 (both inclusive) is  
(A) 10 (B) 100 (C) 504 (D) 2520
10. The decimal expansion of the rational number  $\frac{14587}{1250}$  will terminate after:  
(A) One decimal place (B) Two decimal places  
(C) Three decimal places (D) Four decimal place

### CASE STUDY QUESTIONS

1. Mahesh works as a manager in a hotel. He has to arrange seats in hall for a function. A hall has a certain number of chairs. Guests want to sit in different groups like in pairs, triplets, quadruplets, fives and sixes etc. When Mahesh arranges chairs in such pattern like in 2's, 3's, 4's 5's and 6's then 1, 2, 3, 4 and 5 chairs are left respectively. But when he arranges in 11's, no chair will be left.
  - (i) In the hall, how many chairs are available?  
(a) 407 (b) 143 (c) 539 (d) 209
  - (ii) If one chair is removed, which arrangements are possible now?  
(a) 2 (b) 3 (c) 4 (d) 5
  - (iii) If one chair is added to the total number of chairs, how many chairs will be left when arranged in 11's.  
(a) 1 (b) 2 (c) 3 (d) 4
  - (iv) How many chairs will be left in original arrangement if same number of chairs will be arranged in 7's?  
(a) 0 (b) 1 (c) 2 (d) 3

(v) How many chairs will be left in original arrangement if same number of chairs will be arranged in 9's?

- (a) 8 (b) 1 (c) 6 (d) 3



2. Indian Army is the third biggest military contingent in the World next to USA and China. However, there are many firsts that make Indian army stand out in the world, making us all Indians very proud. Knowing them, will help you celebrate Republic day with greater vigor and gratitude. On 71th republic day Parade in Delhi Captain RS Meal is planning for parade of following two groups:

(a) First group of Army contingent of 624 members behind an army band of 32 members.

(b) Second group of CRPF troops with 468 soldiers behind the 228 members of bikers.

These two groups are to march in the same number of columns. This sequence of soldiers is followed by different states Jhanki which are showing the culture of the respective states.

(i) What is the maximum number of columns in which the army troop can march?

- (a) 8 (b) 16 (c) 4 (d) 32

(ii) What is the maximum number of columns in which the CRPF troop can march?

- (a) 4 (b) 8 (c) 12 (d) 16

(iii) What is the maximum number of columns in which total army troop and CRPF troop together can march past?

- (a) 2 (b) 4 (c) 6 (d) 8

(iv) What should be subtracted with the numbers of CRPF soldiers and the number of bikers so that their maximum number of column is equal to the maximum number of column of army troop?

- (a) 4 Soldiers and 4 Bikers  
(b) 4 Soldiers and 2 Bikers  
(c) 2 Soldiers and 4 Bikers  
(d) 2 Soldiers and 2 Bikers

(v) What should be added with the numbers of CRPF soldiers and the number of bikers so that their maximum number of column is equal to the maximum number of column of army troop?

- (a) 4 Soldiers and 4 Bikers
- (b) 12 Soldiers and 12 Bikers
- (c) 6 Soldiers and 6 Bikers
- (d) 12 Soldiers and 6 Bikers



3. A road roller (sometimes called a roller-compactor or just roller) is a compactor-type engineering vehicle used to compact soil, gravel, concrete, or asphalt in the construction of roads and foundations. Similar rollers are used also at landfills or in agriculture. Road rollers are frequently referred to as steamrollers, regardless of their method of propulsion.

RCB Machine Pvt. Ltd started making road roller 10 year ago. Company increased its production uniformly by fixed number every year. The company produces 800 roller in the 6th year and 1130 roller in the 9th year.

On the basis of the above information, answer any four of the following questions :

- (i) What was the company's production in first year?  
 (a) 150      (b) 200    (c) 250    (d) 290
- (ii) What was the company's production in the 8th year?  
 (a) 760    (b) 820    (c) 880    (d) 1020
- (iii) What roller the company's total production of the first 6 years?  
 (a) 3150 (b) 1775    (c) 2250      (d) 1725
- (iv) What was the increase in the company's production every year?  
 (a) 160    (b) 130    (c) 90      (d) 110
- (v) In which year the company's production was 1350 rollers?  
 (a) 5<sup>th</sup>      (b) 6<sup>th</sup>      (c) 11<sup>th</sup>    (d) 9<sup>th</sup>

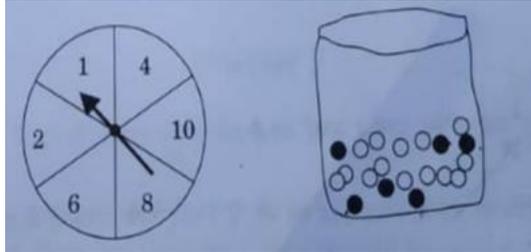


4. Read the following passage and answer the questions given at the end:

### Diwali Fair

A game in a booth at a Diwali Fair involves using a spinner first. Then, if the spinner stops on an even number, the player is allowed to pick a marble from a bag. The spinner and the marbles in the bag are represented in Figure-9.

Prizes are given, when a black marble is picked. Shweta plays the game once.



- (i) What is the probability that she will be allowed to pick a marble from the bag?
  - (ii) Suppose she is allowed to pick a marble from the bag, what is the probability of getting a prize, when it is given that the bag contains 20 balls out of which 6 are black?
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### Assignment -2

1. The value of  $k$  for which the system of equations  $x + y - 4 = 0$  and  $2x + ky = 3$ , has no solution, is  
(a)  $-2$  (b)  $\neq 2$  (c)  $3$  (d)  $2$
2. The value of  $x$  for which  $2x$ ,  $(x + 10)$  and  $(3x + 2)$  are the three consecutive terms of an AP, is  
(a)  $6$  (b)  $-6$  (c)  $18$  (d)  $-18$
3. The first term of an AP is  $p$  and the common difference is  $q$ , then its 10th term is  
(a)  $q + 9p$  (b)  $p - 9q$  (c)  $p + 9q$  (d)  $2p + 9q$
4. If one of the zeroes of the quadratic polynomial  $x^2 + 3x + k$  is  $2$ , then the value of  $k$  is  
(a)  $10$  (b)  $-10$  (c)  $-7$  (d)  $-2$
5. The total number of factors of a prime number is  
(a)  $1$  (b)  $0$  (c)  $2$  (d)  $3$
6. The quadratic polynomial, the sum of whose zeroes is  $-5$  and their product is  $6$ , is  
(a)  $x^2 + 5x + 6$  (b)  $x^2 - 5x + 6$  (c)  $x^2 - 5x - 6$  (d)  $-x^2 + 5x + 6$
7. A die is thrown once. What is the probability of getting a number less than 3?
8. If the probability of winning a game is  $0.07$ , what is the probability of losing?
9. A pair of dice is thrown once. What is the probability of getting a doublet?
10. If a number  $x$  is chosen at random from the numbers  $-3, -2, -1, 0, 1, 2, 3$ . What is probability that  $x^2 \leq 4$ ?
11. The sum of the first 7 terms of an AP is  $63$  and that of its next 7 terms is  $161$ . Find the AP.

12. Determine graphically the coordinates of the vertices of a triangle, the equations of whose sides are given by  $2y - x = 8$ ,  $5y - x = 14$  and  $y - 2x = 1$ .
13. If 4 is a zero of the cubic polynomial  $x^3 - 3x^2 - 10x + 24$ , find its other two zeroes.
14. Find a quadratic polynomial whose zeroes are reciprocals of the zeroes of the polynomial  $f(x) = ax^2 + bx + c$ ,  $a \neq 0$ ,  $c \neq 0$ .
15. Divide the polynomial  $f(x) = 3x^2 - x^3 - 3x + 5$  by the polynomial  $g(x) = x - 1 - x^2$  and verify the division algorithm.
16. A man can row a boat downstream 20 km in 2 hours and upstream 4 km in 2 hours. Find his speed of rowing in still water. Also find the speed of the stream.
17. The sum of four consecutive numbers in AP is 32 and the ratio of the product of the first and last terms to the product of two middle terms is 7 : 15. Find the numbers.

## Social Science

Instructions:-

- Holiday home work should be completed in separate notebook
- Do neat & clean work
- Student can use A4 size sheet also

### ASSIGNMENT 1 (HISTORY)

On an outline political map of India locate and label identify the following:-

1. Champaran (Movement of indigo planters).
2. Kheda ( Peasant satyagraha ).
3. Ahmedabad (cotton meal workers Satyagraha).
4. Amritsar (Jallianwala bagh incident)
5. Chauri Chaura (Calling of the NCM).
6. Bardoli (No tax campaign).
7. Dandi (Civil disobedience movement )

USE DIFFERENT COLOUR TO LOCATE

1. On the basis of chapter nationalism in Europe make at least 20 additional questions covering the whole chapter (Short answer type)
2. Prepare a newspaper report on "JALLIANWALA BAGH" massacre in 200 to 250 words

## CIVICS

1. Make a list of 22 schedule language of India & state

## GEOGRAPHY

1. Prepare a flow chart of soil and its types.
2. To complete 10 very short type questions and answers from each chapter that has been covered in class.

## ECONOMICS

1. To complete 10 very short type question and answers from each chapter that has been covered in class.
2. Prepare a table (on the basis of per capital income IMR, literacy rate) of year 2010, 2011 & 2020 of states given below :-

HARYANA/PUNJAB/GUJRAT/KERELA/RAJASTHAN/MAHARASHTRA

## REVISION

History – Nationalism in India

CIVICS – Power sharing

GEO – Resources

ECO – Sectors in Indian economics

# Science

## Physics

### Instruction-

- Holiday homework should be completed in separate notebook.
  - Do neat and clean work
  - Diagram should be drawn by pencil.
  - Investigatory project should be based on available facts, figures and data.
  - Make the proper notes for flip class.
1. Make 30 question from chapter – “Light, Electricity” along with answer. ( Pattern – It includes objective type, short, long and diagram based answer type)
  2. Draw the Ray diagrams of Lenses and Mirrors on chart paper.
  3. Prepare chapter – “Light, Electricity” for periodic test.
  4. Make a model or project on the following topic: (in group of three)
    - i. Roll No. 1 to 3 – First law of Reflection (model along with chart).
    - ii. Roll no. 4 to 6 – Make a working model of an electric circuit consist of different coloured LED, key, battery (model along with chart).
    - iii. Roll No 7 to 9 – Model on domestic circuit (model along with chart)
    - iv. Roll no. 10 to 12 – Project on Ohm’s law (Project along with chart)
    - v. Roll No. 13 to 15 – Project on combination of Resistances in series and Parallel (Project along with posters and the information about the domestic circuits)
    - vi. Roll no. 16 to 18 – Project on Resistivity of Metals, Non-metals, Semiconductors (Project should include the information about the uses of Metals, Non-metals and semiconductor on the basis of their Resistivity)
    - vii. Roll No 19 to 21 – Project on Heating Effect of Current and its applications with posters
    - viii. Roll no. 22 to 24 – Model on domestic circuit (model along with chart)
    - ix. Roll no. 25 to 27 – Project on Resistivity of Metals, Non-metals, Semiconductors (Project should include the information about the uses of Metals, Non-metals and semiconductor on the basis of their Resistivity)
    - x. Roll No 28 to 30 – Model on domestic circuit (model along with chart)
    - xi. Roll no. 31 to 33 – Project on Refraction of Light along with posters
  5. Write the given practical in practical file –
    - i. Studying the dependence of potential difference (V) across a resistor on the current (I) passing through it and determine its resistance. Also plotting a graph between V and I.
    - ii. Determination of the resistance of two resistors when connected in series and parallel.

6. Prepare the following topic for “ Flip class”

- i. Roll No. 1 to 5– Reflection of Light, Ray Diagrams of Mirror
- ii. Roll No. 6 to 10 – Refraction of Light, Ray Diagrams of Lenses
- iii. Roll No. 11 to 15 – Electricity- Current, Potential, Ohm’s Law
- iv. Roll No. 16 to 20 – Resistance, Combination of Resistances
- v. Roll No. 21 to 25 – Heating Effect of Current, Electric Power and Energy
- vi. Roll No. 26 to 30 – Refraction of Light, Ray Diagrams of Lenses
- vii. Roll No. 31 to 33 –Electricity- Current, Potential, Ohm’s Law

7. Do the given assignment. (Write the complete answer of objective question)

**Assignment**

1. The letters appears to be raised when seen through a glass slab placed over it, this is due to:

- (a) reflection of light
- (b) refraction of light
- (c) diffraction of light
- (d) polarization of light

2. The laws of reflection are applicable to :

- (a) plane mirror
- (b) concave mirror
- (c) convex mirror
- (d) all of the above

3. In order to get a real and inverted image of same size, formed by a convex lens, the object should be placed:

- (a) at F
- (b) at 2F
- (c) at infinity
- (d) between optical centre, and F of the lens

4. A convex lens forms the image Sun at:

(a) focus

(b) C

(c) C and F

(d) no image is formed

5. A light ray is travelling through air. When it enters water, it slows and bends. What is this change in direction called?

(a) Reflection

(b) Refraction

(c) Absorption

(d) Transmission

6. Under which of the following conditions a concave mirror can form an image larger than the actual object?

(a) When the object is kept at a distance equal to its radius of curvature

(b) When object is kept at a distance less than its focal length

(c) When object is placed between the focus and centre of curvature

(d) When object is kept at a distance greater than its radius of curvature

7. What is the unit of Power of lens?

(a) meter

(b) dioptre

(c) volt

(d) ampere

8. Which kind of mirror is used in solar furnace?

(a) convex mirror

(b) concave mirror

(c) plane mirror

(d) all of the above

9. The focal length of a plane mirror is :

(a) positive

(b) negative

(c) zero

(d) infinity

10. A full length image of a distant tall building can definitely be seen by using

(a) a concave mirror

- (b) a convex mirror
- (c) a plane mirror
- (d) both concave as well as plane mirror

11. You are given water, mustard oil, glycerine and kerosene. In which of these media a ray of light incident obliquely at same angle would bend the most?

- (a) Kerosene
- (b) Water
- (c) Mustard oil
- (d) Glycerine

13. A child is standing in front of a magic mirror. She finds the image of her head bigger, the middle portion of her body of the same size and that of the legs smaller. The following is the order of combinations for the magic mirror from the top.

- (a) Plane, convex and concave
- (b) Convex, concave and plane
- (c) Concave, plane and convex
- (d) Convex, plane and concave

14. A lens of focal length 12 cm forms an erect image, three times the size of the object. The distance between the object and image is:

- (a) 8 cm
- (b) 16 cm
- (c) 24 cm
- (d) 36 cm

15. A concave mirror of focal length 20 cm forms an image having twice the size of object. For the virtual position of object, the position of object will be at

- (a) 25 cm
- (b) 40 cm
- (c) 10 cm
- (d) At infinity

16. The purpose of a rheostat is:

- (a) Increase the magnitude of current only
- (b) Decrease the magnitude of current only
- (c) Increase or decrease the magnitude of current
- (d) None of these

17. Point to be kept in mind for verification of Ohm's Law is:

- (a) Ammeter and voltmeter should be connected in series
- (b) Ammeter should be connected in series and voltmeter in parallel
- (c) Ammeter should be connected in parallel and voltmeter in series
- (d) Ammeter and voltmeter should be connected in parallel

18. A battery of 6V is connected in series with resistors of 0.1 ohm, 0.15 ohm, 0.2 ohm, 0.25 ohm and 6 ohm. How much current would flow through the 0.3 ohm resistor?

- (a) 0.895A
- (b) 2.22A
- (c) 1A
- (d) none of these

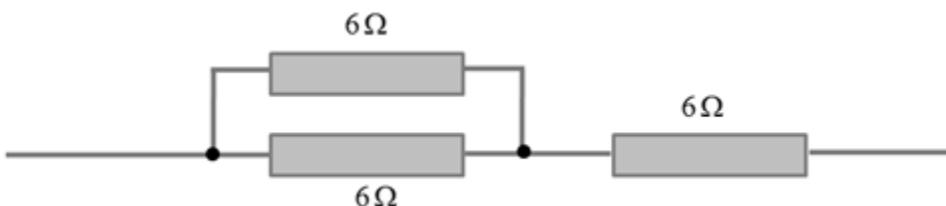
19. When a  $4\ \Omega$  resistor is connected across the terminals of a 2 V battery, the number of coulombs passing through the resistor per second is:

- (a) 0.5
- (b) 1
- (c) 2
- (d) 4

20. Keeping the potential difference constant, the resistance of the circuit is halved. The current will become:

- (a) One-fourth
- (b) Four times
- (c) Half
- (d) Double

21. If in the given arrangement, the three resistors are to be replaced by a single resistor. What will be the value of this resistor?

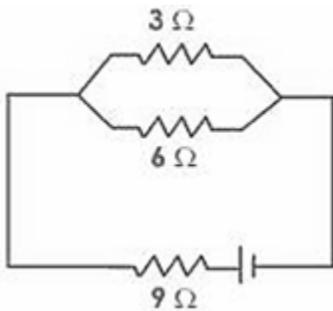


- (a)  $4\Omega$
- (b)  $6\Omega$
- (c)  $9\Omega$
- (d)  $18\Omega$

22. If the current flowing through a fixed resistor is halved, the heat produced in it will become:

- (a) One-fourth
- (b) One-half
- (c) Double
- (d) Four times

23. In the given figure, the resistors



- (a)  $6\Omega$ ,  $3\Omega$  and  $9\Omega$  are in series
- (b)  $9\Omega$  and  $6\Omega$  are in parallel and the combination is in series with  $3\Omega$
- (c)  $3\Omega$ ,  $6\Omega$  and  $9\Omega$  are in parallel
- (d)  $3\Omega$  and  $6\Omega$  are in parallel and the combination is in series with  $9\Omega$

24. A battery of 10 volt carries 20,000 C of charge through a resistance of  $20\Omega$ . The work done in 10 seconds is

- (a)  $2 \times 10^3$  joule
- (b)  $2 \times 10^5$  joule
- (c)  $2 \times 10^4$  joule
- (d)  $2 \times 10^2$  joule

25. Two devices are connected between two points say A and B in parallel. The physical quantity that will remain the same between the two points is

- (a) current
- (b) voltage
- (c) resistance
- (d) None of these

26. A cooler of 1500 W, 200 volt and a fan of 500 W, 200 volt are to be used from a household supply. The rating of fuse to be used is

- (a) 2.5 A
- (b) 5.0 A
- (c) 7.5 A
- (d) 10 A

27. The resistivity does not change if]

- (a) the material is changed
- (b) the temperature is changed
- (c) the shape of the resistor is changed
- (d) both material and temperature are changed

28. Electric potential is a:

- (a) scalar quantity
- (b) vector quantity
- (c) neither scalar nor vector
- (d) sometimes scalar and sometimes vector

29. When electric current is passed, electrons move from:

- (a) high potential to low potential.
- (b) low potential to high potential.
- (c) in the direction of the current.
- (d) against the direction of the current

30. The heating element of an electric heater is made up of:

- (a) copper
- (b) nichrome
- (c) aluminium
- (d) iron

(Q. No. 31-35) *In each of the following questions, a statement of Assertion is given by the corresponding statement of Reason. Of the statements, mark the correct answer as*

- (a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
- (b) If both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.

(c) If Assertion is true, but Reason is false.

(d) If Assertion is false, but Reason is true.

(e) If Assertion and Reason both are false.

31. **Assertion:** The connecting wires are made of copper.

**Reason:** The electrical conductivity of copper is high.

32. **Assertion:** Domestic circuits are connected in Parallel.

**Reason:** Parallel circuits have same current in every part of the circuit.

33. **Assertion:** Two wires of same length and material have different areas of the cross-section.

**Reason:** The wire with the lower area of cross-section has the lower resistivity.

34. **Assertion:** Convex mirror is preferred for rearview mirror in vehicles.

**Reason:** The field view of a convex mirror is lesser than that of concave mirror.

# Biology

## Instruction-

- Holiday homework should be completed in separate notebook.
- Do neat and clean work
- Diagram should be drawn by pencil.
- Investigatory project should be based on available facts, figures and data. Select any one region like Sonipat, Rohtak etc.
- Make the proper notes for flip class.

1. Make 20 questions from chapter – “Life Processes, How do Organisms Reproduce?” along with answer. ( Pattern – It includes objective type, short, long and diagram based answer type)

2. Draw the labeled diagram of “Human digestive system, Respiratory system, Human heart, Human excretory system, Nephron, Flower”
3. Prepare chapter – “Life Processes, How do Organisms Reproduce?” for periodic test.
4. Make a model or project on the following topic: (in group of three)
  - i. Roll No. 1 to 3 – Human alimentary canal (model along with chart)
  - ii. Roll no. 4 to 6 – Human respiratory system (model along with chart)
  - iii. Roll No 7 to 9 – Human heart (model along with chart)
  - iv. Roll no. 10 to 12 – Human excretory system (model along with chart)
  - v. Roll No. 13 to 15 – Nephron (model along with chart)
  - vi. Roll no. 16 to 18 – Flower (model along with chart)
  - vii. Roll No 19 to 21 – Black fungus (project)
  - viii. Roll no. 22 to 24 – Corona Virus (Visit to a doctor or collect information from any hospital/clinic) (project)
  - ix. Roll no. 25 to 27 – Corona virus ( Collect information from covid patient in your locality ) (project)
  - x. Roll No 28 to 30 – Corona virus ( Collect information from covid patient in your locality ) (project)
  - xi. Roll no. 31 to 33 – Corona Virus (model along with chart)
5. Write the given practical in practical file –
  - i. Experimentally show that carbon dioxide is given out during respiration.
  - ii. Studying (a) binary fission in Amoeba, and (b) budding in yeast and Hydra with the help of prepared slides.
6. Prepare the following topic for “ Flip class”
  - i. Roll No. 1 to 5– Nutrition
  - ii. Roll no. 6 to 10 – Respiration
  - iii. Roll No. 11 to 15 – Transportation
  - iv. Roll no. 16 to 20 – Excretion

- v. Roll No. 21 to 25 –Asexual reproduction
- vi. Roll No. 26 to 30 – Sexual reproduction in flowering plants
- vii. Roll No. 31 to 33 –Photosynthesis

7. Do the given assignment. (Write the complete answer of objective question)

### **Assignment**

1. Which of the following statements about the autotrophs is incorrect?

- (a) They synthesis carbohydrates from carbon dioxide and water in the presence of sunlight and chlorophyll
- (b) They store carbohydrates in the form of starch
- (c) They convert carbon dioxide and water into carbohydrates in the absence of sunlight
- (d) They constitute the first trophic level in food chains

2. In which of the following groups of organisms, food material is broken down outside the body and absorbed?

- (a) Mushroom, green plants, Amoeba
- (b) Yeast, mushroom, bread mould
- (c) Paramecium, Amoeba, Cuscuta
- (d) Cuscuta, lice, tapeworm

3. Select the correct statement

- (a) Heterotrophs do not synthesis their own food
- (b) Heterotrophs utilize solar energy for photosynthesis
- (c) Heterotrophs synthesis their own food
- (d) Heterotrophs are capable of converting carbon dioxide and water into carbohydrates

4. Which is the correct sequence of parts in human alimentary canal?

- (a) Mouth → stomach → small intestine → oesophagus → large intestine
- (b) Mouth → oesophagus → stomach → large intestine → small intestine
- (c) Mouth → stomach → oesophagus → small intestine → large intestine
- (d) Mouth → oesophagus → stomach → small intestine → large intestine

5. If salivary amylase is lacking in the saliva, which of the following events in the mouth cavity will be affected?

- (a) Proteins breaking down into amino acids
- (b) Starch breaking down into sugars
- (c) Fats breaking down into fatty acids and glycerol
- (d) Absorption of vitamins

6. The inner lining of stomach is protected by one of the following from hydrochloric acid. Choose the correct one

- (a) Pepsin

- (b) Mucus
- (c) Salivary amylase
- (d) Bile

7. Which part of alimentary canal receives bile from the liver?

- (a) Stomach
- (b) Small intestine
- (c) Large intestine
- (d) Oesophagus

8. A few drops of iodine solution were added to rice water. The solution turned blue-black in colour. This indicates that rice water contains

- (a) complex proteins
- (b) simple proteins
- (c) fats
- (d) starch

9. In which part of the alimentary canal food is finally digested?

- (a) Stomach
- (b) Mouth cavity
- (c) Large intestine
- (d) Small intestine

10. Choose the function of the pancreatic juice from the following

- (a) trypsin digests proteins and lipase carbohydrates
- (b) trypsin digests emulsified fats and lipase proteins
- (c) trypsin and lipase digest fats
- (d) trypsin digests proteins and lipase emulsified fats

11. When air is blown from mouth into a test-tube containing lime water, the lime water turned milky due to the presence of

- (a) oxygen
- (b) carbon dioxide
- (c) nitrogen
- (d) water vapour

13. Which of the following statement(s) is (are) true about respiration?

- (i) During inhalation, ribs move inward and diaphragm is raised
  - (ii) In the alveoli, exchange of gases takes place i.e., oxygen from alveolar air diffuses into blood and carbon dioxide from blood into alveolar air
  - (iii) Haemoglobin has greater affinity for carbon dioxide than oxygen
  - (iv) Alveoli increase surface area for exchange of gases
- (a) (i) and (iv) (b) (ii) and (iii)  
(c) (i) and (iii) (d) (ii) and (iv)

14. Which is the correct sequence of air passage during inhalation?

- (a) Nostrils → larynx → pharynx → trachea → lungs
- (b) Nasal passage → trachea → pharynx → larynx → alveoli
- (c) Larynx → nostrils → pharynx → lungs
- (d) Nostrils → pharynx → larynx → trachea → alveoli

15. Which of the following statement (s) is (are) true about heart?

- (i) Left atrium receives oxygenated blood from different parts of body while right atrium receives deoxygenated blood from lungs
- (ii) Left ventricle pumps oxygenated blood to different body parts while right ventricle pumps deoxygenated blood to lungs
- (iii) Left atrium transfers oxygenated blood to right ventricle which sends it to different body parts
- (iv) Right atrium receives deoxygenated blood from different parts of the body while left ventricle pumps oxygenated blood to different parts of the body

16. What prevents backflow of blood inside the heart during contraction?

- (a) Valves in heart
- (b) Thick muscular walls of ventricles
- (c) Thin walls of atria
- (d) All of the above

17. Single circulation i.e., blood flows through the heart only once during one cycle of passage through the body, is exhibited by

- (a) Labeo, Chameleon, Salamander
- (b) Hippocampus, Exocoetus, Anabas
- (c) Hyla, Rana, Draco
- (d) Whale, Dolphin, Turtle

18. In which of the following vertebrate group/groups, heart does not pump oxygenated blood to different parts of the body?

- (a) Pisces and amphibians
- (b) Amphibians and reptiles
- (c) Amphibians only
- (d) Pisces only

19. Choose the correct statement that describes arteries.

- (a) They have thick elastic walls, blood flows under high pressure; collect blood from different organs and bring it back to the heart
- (b) They have thin walls with valves inside, blood flows under low pressure and carry blood away from the heart to various organs of the body
- (c) They have thick elastic walls, blood flows under low pressure; carry blood from the heart to various organs of the body

(d) They have thick elastic walls without valves inside, blood flow under high pressure and carry blood away from the heart to different parts of the body.

20. The filtration units of kidneys are called

- (a) ureter
- (b) urethra
- (c) neurons
- (d) nephrons

21. Oxygen liberated during photosynthesis comes from

- (a) water
- (b) chlorophyll
- (c) carbon dioxide
- (d) glucose

22. The blood leaving the tissues becomes richer in

- (a) carbon dioxide
- (b) water
- (c) haemoglobin
- (d) oxygen

23. Which of the following is an incorrect statement?

- (a) Organisms grow with time
- (b) Organisms must repair and maintain their structure
- (c) Movement of molecules does not take place among cells
- (d) Energy is essential for life processes

24. The internal (cellular) energy reserve in autotrophs is

- (a) glycogen
- (b) protein
- (c) starch
- (d) fatty acid

25. In a flower, the parts that produce male and female gametes (germ cells) are

- (a) stamen and anther
- (b) filament and stigma
- (c) anther and ovary
- (d) stamen and style

26. Characters transmitted from parents to offspring are present in

- (a) cytoplasm
- (b) ribosome
- (c) golgi bodies

(d) genes

27. Characters that are transmitted from parents to offspring during reproduction show

- (a) only similarities with parents
- (b) only variations with parents
- (c) both similarities and variations with parents
- (d) neither similarities nor variations

28. A feature of reproduction that is common to Amoeba, Spirogyra and Yeast is that

- (a) they reproduce asexually
- (b) they are all unicellular
- (c) they reproduce only sexually
- (d) they are all multicellular

29. In Spirogyra, asexual reproduction takes place by

- (a) breaking up of filaments into smaller bits
- (b) division of a cell into two cells
- (c) division of a cell into many cells
- (d) formation of young cells from older cells.

30. The ability of a cell to divide into several cells during reproduction in Plasmodium is called

- (a) budding
- (b) reduction division
- (c) binary fission
- (d) multiple fission

31. Name the following

- (a) The process in plants that links light energy with chemical energy
- (b) Organisms that can prepare their own food
- (c) The cell organelle where photosynthesis occurs
- (d) Cells that surround a stomatal pore
- (e) Organisms that cannot prepare their own food
- (f) An enzyme secreted from gastric glands in stomach that acts on proteins.

32. In each of the following situations what happens to the rate of photosynthesis?

- (a) Cloudy days
- (b) No rainfall in the area
- (c) Good manuring in the area
- (d) Stomata get blocked due to dust

33. Name the correct substrates for the following enzymes

- (a) Trypsin (b) Amylase  
(c) Pepsin (d) Lipase

34. "All plants give out oxygen during day and carbon dioxide during night". Do you agree with this statement? Give reason.

35. How do the guard cells regulate opening and closing of stomatal pores?

36. Two green plants are kept separately in oxygen free containers, one in the dark and the other in continuous light. Which one will live longer? Give reasons.

37. If a plant is releasing carbon dioxide and taking in oxygen during the day, does it mean that there is no photosynthesis occurring? Justify your answer.

38. Draw the diagram of alimentary canal of man and label the following parts.  
Mouth, Oesophagus, Stomach, Intestine

39. How do carbohydrates, proteins and fats get digested in human beings?

40. Why are budding, fragmentation and regeneration all considered as asexual types of reproduction? With neat diagrams explain the process of regeneration in Planaria.

## **SUBJECT: COMPUTERS**

- Open the Internet and go to the following web pages:

- i) [www.yahoo.com](http://www.yahoo.com)
- ii) [www.ndtv.com](http://www.ndtv.com)
- iii) [www.facebook.com](http://www.facebook.com)
- iv) [www.rediff.com](http://www.rediff.com)
- v) [www.sdineshonline.in](http://www.sdineshonline.in)

and find out 10 unique points in each page which are not common in any other webpage.

- Describe all the top-level (12) domain names.
- Write down the steps in creating an e-mail account.
- How can you compose a new mail? Explain.
- Open an e-mail account in your names as Sugam in gmail/yahoo mail.
- Write e-mail to ojas by making a blind copy to Namya. Print all the executions.