

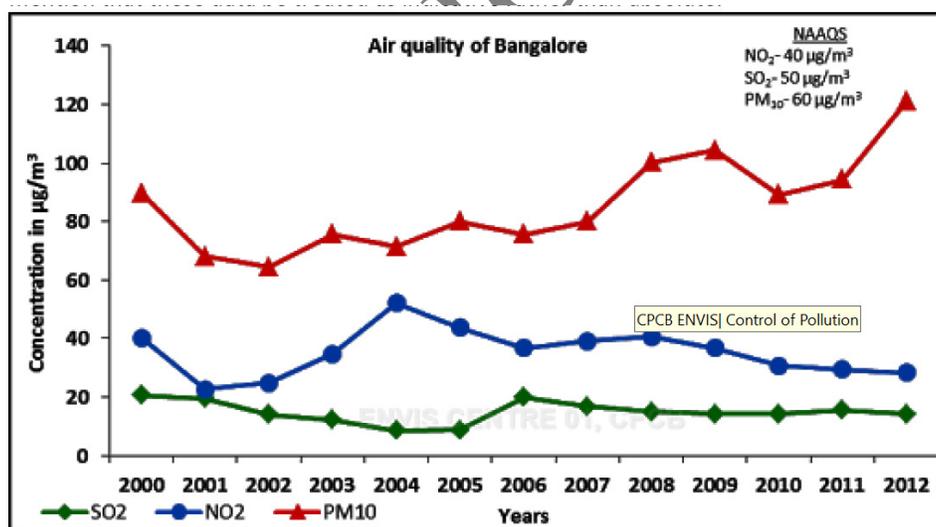
**CLASS - 10**  
**MONTHLY ASSIGNMENT**  
**SUBJECT-ENGLISH**

**Q.1. Read the passage given below and answer the questions that follow:**

To assess air pollution in India, Central Pollution Control Board (CPCB) is executing a nationwide programme of ambient air quality monitoring known as National Air Quality Monitoring Programme (NAMP). The network consists of 793 operating stations covering 344 cities/towns in 29 states and 6 Union Territories of the country.

Under N.A.M.P., three air pollutants viz., Sulphur Dioxide (SO<sub>2</sub>), Nitrogen dioxide (NO<sub>2</sub>) and Respirable Suspended Particulate Matter (RSPM/PM<sub>10</sub>) have been identified for regular monitoring at all the locations. The monitoring of meteorological parameters such as wind speed and direction, relative humidity and temperature was also integrated with the monitoring of air quality. The monitoring of pollutants is carried out for 24 hours with a frequency of twice a week, to have 104 observations in a year.

The monitoring is being carried out by CPCB; State Pollution Control Boards; Pollution Control Committees; National Environmental Engineering Research Institute (NEERI), Nagpur. CPCB coordinates with the other agencies to ensure the uniformity, consistency of air quality data and provides technical and financial support to them for operating the monitoring station. N.A.M.P. is being operated through various monitoring agencies, large number of personnel and equipment are involved in the sampling, chemical analyses, data reporting etc. It increases the probability of variation and personnel biases reflecting in the data; hence it is pertinent to mention that these data be treated as indicative rather than absolute.



**i. The monitoring of air quality twice a week is being accomplished by the following agencies:**

- State Pollution Control Boards, National Environmental Engineering Research Institute, National Air Quality Monitoring Programme and Central Pollution Control Board.
- Central Pollution Control Board, WHO, National Environmental Engineering Research Institute and State Pollution Control Boards.
- National Environmental Engineering Research Institute, State Pollution Control Boards, Pollution Control Committees and National Air Quality Monitoring Programme.

d. Pollution Control Committees, Central Pollution Control Board, National Environmental Engineering Research Institute and State Pollution Control Boards.

**ii. The maximum difference in the concentration of Sulphur dioxide and Nitrogen dioxide was in the year \_\_\_\_\_.**

- a. 2001                      b. 2004                      c. 2006                      d. 2012

**iii. Which of the following statements would be true for the year 2012?**

- a. The concentration of PM10 saw a spike whereas the concentration of Sulphur dioxide and Nitrogen dioxide saw a steady decline.  
b. The concentration of Sulphur dioxide and Nitrogen dioxide saw a spike whereas the concentration of PM10 saw a steady decline.  
c. The concentration of Sulphur dioxide was observed to be the lowest in the last ten years.  
d. The concentration of Sulphur dioxide and Nitrogen dioxide was similar to the one observed in the year 2000.

**iv. Which of the following words is similar in meaning to the word, 'observe'?**

- a. monitor                      b. analyses                      c. executes                      d. reflect

**v. Which of the following has not been identified as an air pollutant by NAMP?**

- a. SO<sub>2</sub>                      b. NO<sub>2</sub>                      c. RSPM                      d. CO

**vi. '...it is pertinent to mention that these data be treated as indicative rather than absolute.' Replace the word 'pertinent' with any one of the words given below.**

- a. wrong                      b. relevant                      c. indispensable                      d. mandatory

**vii. How many observations are made by the National Air Quality Monitoring Programme annually?**

- a. 793                      b. 104                      c. 344                      d. 29

**viii. The National Air Quality Monitoring Programme monitors the**

- a. wind speed and direction                      b. monitoring of air pollutants  
c. relative humidity and temperature                      d. all the above

**ix. Why does CPCB co-ordinate with other agencies?**

- a. To ensure reliability of air quality data                      b. To treat the data as absolute.  
c. To monitor meteorological parameters                      d. To assess air pollution in India.

**x. The PM in PM10 stands for \_\_\_\_\_.**

- a. Pertinent Mention                      b. Particulate Matter  
c. Programme Monitoring                      d. none of these

**xi. Which of the following sentences do not use the word 'execute' in the same manner as in the first sentence of the passage?**



A. You are Tushar/Twinkle of C -2/8, Tarun Enclave, New Delhi. As the head of Studywell Coaching Institute, write a letter to Eduweb Digital Services to place an order for the required equipments for their computer lab. The maximum capacity of the lab is upto 50 students.

B. Our metropolitan cities witness a large number of accidents every day. What do you think is the reason? What can be done to bring down the rate of accidents? Write a letter to the Editor of a national daily expressing your concerns and offering solutions to this problem. You are Arun/Aruna, 112 Model Town, Delhi.

### **First Flight (Main course book)**

#### **4. From the Diary of Anne Frank**

Read the passage given below and answer the questions that follow: All I think about when I'm with friends is having a good time. I can't bring myself to talk about anything but ordinary everyday things. We don't seem to be able to get any closer, and that's the problem. Maybe it's my fault that we don't confide in each other. In any case, that's just how things are, and unfortunately, they are not liable to change. This is why I've started the diary.

1. What are Anne's views on friends?

- a) Anne could only think of having a good time with her friends, nothing more.
- b) Anne hated her friends and wanted to get rid of them.
- c) Anne thought that her friends were very chatty and she wanted to isolate herself.
- d) Anne wanted new friends as she was bored with her old friends.

2. What is Anne's fault?

- a) Anne's fault was that she did not dress properly to meet her friends.
- b) Anne's fault was that she and her friends did not confide in each other, and hence, weren't very close.
- c) Anne's fault was that she did not bring enough food for all of her friends.
- d) Anne's fault was that she never tried to make friends.

3. Explain - unfortunately, they are not liable to change.

- a) Unfortunately, they are not liable to changemeans that regrettably the situation was not likely to change, as she couldn't confide in friends.
- b) Unfortunately, they are not liable to change means that Anne's friends are not going to change their clothes.
- c) Unfortunately, they are not liable to change means that Anne's parents are not changing her bedroom.
- d) Unfortunately, they are not liable to changemeans that regrettably Anne is leaving town and changing schools.

4. Why did Anne decide to write a diary?

- a) Anne decided to write a diary because she loved writing.
- b) Anne decided to write a diary because she was getting bored.
- c) Anne decided to write a diary because she missed her mother.
- d) Anne decided to write a diary because she could not confide in anyone and felt lonely.

5. What is the meaning of the word Confide?

- a) Confide means to hide something.
- b) Confide means to hit someone with a ball.

- c) Confide means to tell someone your secrets.
- d) Confide means to let go of someone or something.

## Passage - 2

Read the passage given below and answer the questions that follow:

Paper has more patience than people.' I thought of this saying on one of those days when I was feeling a little depressed and was sitting at home with my chin in my hands, bored and listless, wondering whether to stay in or go out. I finally stayed where I was brooding: Kes, paper does have more patience and since I'm not planning to let anyone else read this stiff-backed notebook grandly referred to as a diary, unless I should ever find a real friend, it probably won't make a bit of difference.

1. Why did Anne think that paper has more patience than people?
  - a) Anne thought that paper has more patience than people because paper is much better than people for sharing thoughts, keeping secrets and it never shows disinterest.
  - b) Anne thought that paper has more patience than people because paper is easy to tear than tearing a person.
  - c) Anne thought that paper has more patience than people because paper does not dissolve in water as people do.
  - d) Anne thought that paper has more patience than people because people are more impatient than people.
2. Why did Anne think she could confide more in her diary than in people?
  - a) Anne was never so close to people as to pour her heart out to them. She could do so only in her diary because she considered the diary to be her true friend.
  - b) Anne was always so close with people and she did not feel good writing in her diary but still she considered the diary to be her true friend.
  - c) Anne was afraid of making friends and she always isolated herself in a room where the diary was her only true friend.
  - d) Anne was so attached to books and she was a good writer so she considered the diary to be her true friend.
3. Why did Anne think paper has more patience than people?
  - a) Anne thought that paper had more patience than people.
  - b) Anne thought paper had more patience than people.
  - c) Anne thought clowns had more patience than people.
  - d) Anne thought trees had more patience than people.
4. What is the meaning of the word brooding?
  - a) Brooding means to crawl inside a hole.
  - b) Brooding means to hit a person with a bat.
  - c) Brooding means to talk about the feelings with someone.
  - d) Brooding means to worry or think about something.
5. Paper has more patience than people, Who thought of this saying?
  - a) Mr Keesing thought of the saying Paper has more patience than people.
  - b) Anne thought of the saying Paper has more patience than people.

- c) Billy thought of the saying Paper has more patience than people.
- d) Sanne thought of the saying Paper has more patience than people.

**Footprints without feet (Supplementary Reader)**

**5. Footprints without feet**

Q1- Who is the author of the story "Footprints without feet"?

- A) HG Wells            B) James Herriot            C) John Keats            D) WB Butler

Q2- "THE two boys started in surprise at the fresh muddy imprints of a pair of \_\_\_\_\_"

- A) bare feet    B) shoes            C) tyres            D) none of the above

Q3- He was leaving his imprints in \_\_\_\_\_

- A) Paris            B) London            C) Iping            D) Canada

Q4- What is the meaning of "bewildered"?

- A) perplexed    B) confused            C) puzzled            D) all of the above

Q5- Who were the boys following?

- A) a scientist    B) a dog            C) a rat            D) none of the above

Q6- What was he working on?

- A) making fake footprints    B) making human bodies invisible  
C) making a fool of children    D) all of the above

Q7- "Brilliant scientist though he was, Griffin was rather a \_\_\_\_\_ person."

- A) lawless            B) lawful            C) good            D) rude

Q8- What did he do for revenge?

- A) burned himself    B) burned the landlord  
C) burned the house    D) he didn't do anything for revenge

Q9- Griffin's body became as transparent as \_\_\_\_\_

- A) glass            B) ice            C) air            D) none of the above

Q10- What suggests that he was a homeless wanderer?

- A) no clothes    B) no money            C) invisible            D) all of the above

Q11- Why was it a bad time to wander in London?

- A) it was midwinter    B) he was without clothes  
C) both 1 and 2            D) none of the above

Q12- Where did he find comfort in London?

- A) at the inn            B) a big store  
C) theatre store            D) none of the above

Q13- Where did he go next?

- A) at the inn            B) a big store    C) theatre store            D) none of the above

Q14- What did he take from there?

A) food      B) wine      C) bandages      D) all of the above

Q15- How did Griffin finally escape?

A) by hitting them      B) by taking off all his clothes  
C) by running away as fast as he could      D) by hiding

Q16- Where did he go next?

A) Piping      B) Iping  
C) Snowland      D) none of the above

Q17- what was an unusual event?

A) a guest at the inn during winters  
B) a guest at the inn during summers  
C) a guest at the inn during spring  
D) nothing was unusual there

Q18- How did he justify his disinterest in having a conversation with Mrs Hall?

A) desired solitude  
B) didn't want to be disturbed during work  
C) both 1 and 2  
D) none of the above

Q19- What do you mean by the word "eccentric"?

A) uncommon  
B) extra  
C) catchy  
D) none of the above

Q20- Why does Mrs Hall find the scientist eccentric?

A) he visited during off season  
B) his intention was only to work  
C) he looked weird  
D) all of the above

## विषयहिन्दी-

Q1- बड़े भाई साहिब कहानी किस शैली में लिखी गयी है ?

A) व्यंग्यात्मक      B) करुणामयी      C) आत्म कथात्मक      D) सभी

Q2- लेखक के भाई साहिब उस से कितने साल बड़े थे ?

A) ३ साल      B) ५ साल      C) ६ साल      D) आठ साल

Q3- भाई साहिब लेखक से कितनी कक्षा आगे थे ?

A) दो कक्षा      B) तीन कक्षा      C) चार कक्षा      D) सात

Q4- भाई साहिब किस मामले में जल्दबाजी नहीं करते थे ?

A) खेल कूद में      B) लड़ने में      C) शिक्षा के मामले में      D) निर्णय लेने के बारे में

Q5- वे हर काम को साल में दो या तीन बार क्यों करते थे ?

- A) क्योंकि वे धीरे चलना पसंद करते थे B) क्योंकि बुनियाद को मजबूत बनाना पसंद करते थे  
C) क्योंकि आलसी थे D) अच्छा लगता था

Q6- अवसर मिलते ही लेखक कौन से काम करता था ?

- A) चार दीवारी पर चढ़ता उतरता था B) कागज की तितलिया उड़ाता था  
C) कड़कर उछालता था D) सभी

Q7- लेखक का मन किस काम में नहीं लगता था ?

- A) पढ़ने में B) खेलने में C) दोस्तों के साथ D) काम में

Q8- भाई साहिब किस कला में निपुण थे ?

- A) खेलों में B) पढ़ने में C) कंचे खेलने में D) पतंग उड़ाने की कला में

Q9- लेखक को मूर्ख रहना क्यों पसंद है ?

- A) क्योंकि वह मेहनत नहीं करना चाहता B) पढ़ना उसके वश में नहीं था  
C) भाई साहिब के उपदेश सुनना पसंद नहीं था D) सभी

Q10- लेखक के दिल के टुकड़े किस बात पर हो जाते थे ?

- A) पतंग कटने से B) खेल में हार जाने से C) फेल होने से D) भाई साहिब के उपदेश सुनने से

Q11- भू मंडल का स्वामी कौन था ?

- A) बड़े भाई साहिब B) पिता जी C) रावण D) कोई नहीं

Q12- लेखक को भाई साहिब की बातें अच्छी क्यों नहीं लगती थी ?

- A) क्योंकि लेखक अक्ल दर्जे में पास हुआ था B) भाई साहिब फेल हो गए थे  
C) भाई साहिब उपदेश देते थे D) सभी

Q13- लेखक को कौन सा नया शौक पैदा हो गया था ?

- A) कंचे खेलने का B) किताबें पढ़ने का  
C) पतंग उड़ाने का D) सभी

Q14- बड़े भाई साहिब के अनुसार कैसी बुद्धि व्यर्थ है ?

- A) जो आत्म गौरव को मार डाले B) पढ़ाई न करने दे  
C) जो खेल कूद में लगी रहे D) सभी

Q15- लेखक की अपने बारे में क्या धारणा बन गई थी ?

- A) वह बिना पढ़े भी प्रथम आएगा B) कि वह फेल हो जायेगा  
C) कि वह नहीं पढ़ सकता D) कोई नहीं

Q16- बड़े भाई छोटे भाई से हर समय सब से पहले क्या सवाल पूछते थे ?

- A) अब तुम कहाँ थे B) क्या कर रहे थे  
C) कहाँ जा रहे हो D) पढ़ाई कर ली

Q17- बड़े भाई साहिब दिमाग को आराम देने के लिए क्या करते थे ?

- A) कॉपी और किताब के हाशियों पर कुत्तों और बिल्लियों की तस्वीर बनाते थे  
B) एक ही शब्द को बार बार लिखते थे C) बिना अर्थ के शब्द लिखते थे D) सभी

Q18- बड़े भाई में क्या गुण थे ?

- A) गंभीर प्रवृत्ति के थे B) छोटे भाई के हितैषी थे C) वाक् कला में निपुण थे D) सभी

Q19- बड़े भाई साहिब के अनुसार जीवन की समझ कैसे आती है ?

- A) अनुभव से B) धक्के खाकर C) पढ़ने से D) सभी

Q20- बड़े भाई वर्तमान शिक्षा प्रणाली के विरुद्ध क्यों हैं ?

- A) खेल कूद पर पर जोर देती है B) किताबी कीड़ा बनाती है और वास्तविकता से दूर है  
C) बहुत लाभदायक नहीं है D) सभी

ततार्रा वामीरो

Q21- ततार्रा वामीरो कथा के लेखक कौन हैं ?

- A) श्री लीलाधर मंडलोई B) श्री प्रेम चंद C) प्रहलाद अग्रवाल D) कोई नहीं

Q22- श्री लीलाधर का जन्म कब हुआ ?

- A) १९५४ में B) १९४५ में C) १९६४ में D) कोई नहीं

Q23 इनका जन्म कहाँ हुआ ?

- A) छिंदवाड़ा के गांव गुडी में B) भोपाल में C) रायपुर में D) कोई नहीं

Q24- किस के प्रयोग से मंडलोई जी की भाषा प्रभावशाली हो गई है ?

- A) लोक कथा से B) गीतों से C) मुहावरों के प्रयोग से D) कोई नहीं

Q25- ततार्रा वामीरो कथा किस पर आधारित है ?

- A) अंडमान निकोबार द्वीप समूह की लोक कथा पर B) मुहावरों पर C) लोक गीतों पर D) किसी पर नहीं

Q26- यह किसकी कथा है ?

- A) ततार्रा नामक युवक और वामीरो नामक युवती की प्रेम कथा B) प्रेरक कथा  
C) लोक कथा D) कोई नहीं

Q27- ततार्रा किस तरह का युवक था ?

- A) सुंदर, नेक B) मददगार C) शक्तिशाली D) सभी

Q28- आस पास के लोग ततार्रा को क्यों आमंत्रित करते थे ?

- A) उसके आत्मीय स्वभाव के कारण B) उसके सुंदर होने के कारण  
C) उसके लोकल होने के कारण D) शक्तिशाली होने के कारण

Q29- ततार्रा कमर पे क्या बांधता था ?

- A) तलवार B) लकड़ी की तलवार C) लोहे की तलवार D) ताम्बे की तलवार

Q30- वामीरो की त्यागसयी मृत्यु से क्या परिवर्तन हुआ ?

- A) निकोबार के लोग प्रेम से रहने लगे B) निकोबार के लोग दूसरो को अपनाने लगे  
C) निकोबार के लोग दूसरे गांव में भी वैवाहिक सम्बन्ध बनाने लगे D) कोई नहीं

Q31- ततार्रा और वामीरो की कथा कहाँ सुनाई जाती है ?

- A) अंडमान निकोबार में B) अंडमान में C) अंडमान निकोबार के हर घर में D) कोई नहीं

Q32- ततार्रा के पास गांव में किसका आयोजन हुआ ?

- A) पशु पर्व का B) पर्व का C) मेले का D) कोई नहीं

Q33- अंडमान निकोबार द्वीप समूह का अंतिम दक्षिणी द्वीप कौन सा है ?

- A) निकोबार B) अंडमान C) लिटिल अंडमान D) कोई नहीं

Q34- लिटिल अंडमान पोर्ट ब्लेयर से कितनी दूरी पर है ?

- A) १५० किलोमीटर B) १२५ किलोमीटर C) १०० किलोमीटर D) ५०० किलोमीटर

Q35- कार निकोबार लिटिल अंडमान से कितनी दूरी पर है?

A) ६९ किलोमीटर B) ८६ किलोमीटर C) ९६ किलोमीटर की दूरी पर D) ९ किलोमीटर की दूरी पर

Q36- लोगों का ततार्रा की तलवार को लेकर क्या विचार था?

A) तलवार बेकार है B) तलवार बहुत तेज़ है C) तलवार में अद्भुत दैवीय शक्ति है D) कोई नहीं

Q37- ततार्रा की विशेषताएं बताएं।

A) शक्तिशाली एवं आकर्षक B) मिलनसार C) मददगार D) सभी

Q38- ततार्रा अपनी सुध बुध क्यों खो बैठा था ?

A) मधुर गीत की धुन सुन कर B) धूप बहुत तेज़ थी C) मौसम खराब था D) कोई नहीं

Q39- ततार्रा किसको निहार रहा था ?

A) सूरज को B) सागर को C) युवती को D) कोई नहीं

Q40- युवती को गीत गाने के लिए कौन कह रहा था ?

A) उसकी माता जी B) आस पास के लोग C) ततार्रा D) कोई नहीं

Q41- युवती का स्वर कैसा था ?

A) मधुर और सुरीला B) सामान्य C) कर्कश D) कोई नहीं

Q42- किनके हृदय व्यथित हो रहे थे ?

A) ततार्रा- संतारा B) ततार्रा – वामीरो C) कोई नहीं D) लोगों के

Q43- ततार्रा का जीवन कैसा था ?

A) रोचक B) शांत और गंभीर C) ऊबाऊ D) अति रोचक

Q44- वामीरो अपना गाना क्यों भूल गयी ?

A) समुद्र की लहर के कारण  
B) समुद्र को देख कर  
C) ततार्रा को देख कर

Q45- ततार्रा और वामीरो के गांव की क्या प्रथा थी ?

A) वर और वधू एक ही गांव के हों B) वर और वधू अलग अलग गांव से हों  
C) कोई नहीं D) वर और वधू एक दूसरे को जानते हों  
D) कोई नहीं

पदबंध

प्रश्न 46 - श्रीधर के चार पुत्र थे।

A) क्रिया पदबंध B) सर्वनाम पदबंध C) विशेषण पदबंध D) संज्ञा पदबंध

प्रश्न 47 - श्रीधर के चार पुत्र थे।

A) क्रिया पदबंध B) सर्वनाम पदबंध C) विशेषण पदबंध D) संज्ञा पदबंध

प्रश्न 48 - दो हष्ट-पुष्ट लोग बड़े पत्थर को रास्ते से हटा पाए

A) विशेषण पदबंध B) क्रिया पदबंध C) संज्ञा पदबंध D) सर्वनाम पदबंध

प्रश्न 49 इतनी लगन से काम करने वाला मैं असफल नहीं हो सकता।

A) क्रिया पदबंध B) संज्ञा पदबंध C) क्रियाविशेषण पदबंध D) सर्वनाम पदबंध

प्रश्न 50 मेरी बेटी परीक्षा देने दिल्ली जा रही है।

A) क्रियाविशेषण पदबंध B) संज्ञा पदबंध C) सर्वनाम पदबंध D) विशेषण पदबंध

## MATHS SECTION – A

1. For positive integers  $a$  and  $3$ , there exist unique integers  $q$  and  $r$  such that  $a = 3q + r$ , where  $r$  must satisfy:

(a)  $0 \leq r < 3$  (b)  $1 < r < 3$  (c)  $0 < r < 3$  (d)  $0 < r \leq 3$

2. Find the greatest number of 5 digits, that will give us the remainder 5, when divided by 8 and 9 respectively.

(a) 99921 (b) 99931 (c) 99941 (d) 99951

3. For some integers  $p$  and  $5$ , there exist unique integers  $q$  and  $r$  such that  $p = 5q + r$ . Possible values of  $r$  are

(a) 0 or 1 (b) 0, 1 or 2 (c) 0, 1, 2 or 3 (d) 0, 1, 2, 3 or 4

4. The ratio between the LCM and HCF of 5, 15, 20 is:

(a) 9 : 1 (b) 4 : 3 (c) 11 : 1 (d) 12 : 1

5. If  $A = 2n + 13$ ,  $B = n + 7$ , where  $n$  is a natural number, then HCF of  $A$  and  $B$  is:

(a) 2 (b) 1 (c) 3 (d) 4

6. There are 576 boys and 448 girls in a school that are to be divided into equal sections of either boys or girls alone. The total number of sections thus formed are:

(a) 22 (b) 1 (c) 36 (d) 21

7. The HCF of 2472, 1284 and a third number  $N$  is 12. If their LCM is  $23 \times 32 \times 5 \times 103 \times 107$ , then the number  $N$  is :

(a)  $22 \times 32 \times 7$  (b)  $22 \times 33 \times 103$  (c)  $22 \times 32 \times 5$  (d)  $24 \times 32 \times 11$

8. Two natural numbers whose difference is 66 and the least common multiple is 360, are:

(a) 120 and 54 (b) 90 and 24 (c) 180 and 114 (d) 130 and 64

9. 4 Bells toll together at 9.00 am. They toll after 7, 8, 11 and 12 seconds respectively. How many times will they toll together again in the next 3 hours?

(a) 3 (b) 4 (c) 5 (d) 6

10. Which of the following rational numbers have a terminating decimal expansion? 11. For some integer  $m$ , every odd integer is of the form

(a)  $m$  (b)  $m + 1$  (c)  $2m$  (d)  $2m + 1$

12. A rational number in its decimal expansion is 327.7081. What would be the prime factors of  $q$  when the number is expressed in the  $p/q$  form?

(a) 2 and 3 (b) 3 and 5 (c) 2, 3 and 5 (d) 2 and 5

13. HCF of 8, 9, 25 is (a) 8 (b) 9 (c) 25 (d) 1

14. Which of the following is not irrational?  
(a)  $(2 - \sqrt{3})^2$  (b)  $(\sqrt{2} + \sqrt{3})^2$  (c)  $(\sqrt{2} - \sqrt{3})(\sqrt{2} + \sqrt{3})$

15. The product of a rational and irrational number is

(a) rational (b) irrational (c) both of above (d) none of above

16. The sum of a rational and irrational number is

(a) rational (b) irrational (c) both of above (d) none of above

17. The product of two different irrational numbers is always

(a) rational (b) irrational (c) both of above (d) none of above

18. The sum of two irrational numbers is always

(a) irrational (b) rational (c) rational or irrational (d) one

19. If  $b = 3$ , then any integer can be expressed as  $a =$

(a)  $3q$ ,  $3q + 1$ ,  $3q + 2$  (b)  $3q$  (c) none of the above (d)  $3q + 1$

20. Which number is divisible by 11?

(a) 1516 (b) 1452 (c) 1011 (d) 1121

21. LCM of the given number ' $x$ ' and ' $y$ ' where  $y$  is a multiple of ' $x$ ' is given by

(a)  $x$  (b)  $y$  (c)  $xy$  (d)  $x/y$

22. The largest number that will divide 398,436 and 542 leaving remainders 7,11 and 15 respectively is

(a) 17 (b) 11 (c) 34 (d) 45

23. There are 312, 260 and 156 students in class X, XI and XII respectively. Buses are to be hired to take these students to a picnic. Find the maximum number of students who can sit in a bus if each bus takes equal number of students

(a) 52 (b) 56 (c) 48 (d) 63

24. There is a circular path around a sports field. Priya takes 18 minutes to drive one round of the field. Harish takes 12 minutes. Suppose they both start at the same point and at the same time and go in the same direction. After how many minutes will they meet ?

(a) 36 minutes (b) 18 minutes (c) 6 minutes (d) They will not meet

25. Express 98 as a product of its primes

(a)  $2^2 \times 7$  (b)  $2^2 \times 7^2$  (c)  $2 \times 7^2$  (d)  $23 \times 7$

26. Three farmers have 490 kg, 588 kg and 882 kg of wheat respectively. Find the maximum capacity of a bag so that the wheat can be packed in exact number of bags.

(a) 98 kg (b) 290 kg (c) 200 kg (d) 350 kg

27. For some integer  $p$ , every even integer is of the form

(a)  $2p + 1$  (b)  $2p$  (c)  $p + 1$  (d)  $p$

28. 19. For some integer  $p$ , every odd integer is of the form

(a)  $2p + 1$  (b)  $2p$  (c)  $p + 1$  (d)  $p$

29.  $m^2 - 1$  is divisible by 8, if  $m$  is (a) an even integer (b) an odd integer (c) a natural number (d) a whole number 30. If two positive integers  $A$  and  $B$  can be expressed as  $A = xy^3$  and  $B = x^2yz$ ,  $x, y$  being prime numbers, the LCM ( $A, B$ ) is

(a)  $xy^2$  (b)  $x^4y^2z$  (c)  $x^4y^3$  (d)  $x^4y^3z$

31. The product of a non-zero rational and an irrational number is (a) always rational (b) rational or irrational (c) always irrational (d) zero 32. If two positive integers  $A$  and  $B$  can be expressed as  $A = xy^3$  and  $B = x^4y^2z$ ;  $x, y$  being prime numbers then HCF ( $A, B$ ) is

(a)  $xy^2$  (b)  $x^4y^2z$  (c)  $x^4y^3$  (d)  $x^4y^3z$

33. The largest number which divides 60 and 75, leaving remainders 8 and 10 respectively, is

(a) 260 (b) 75 (c) 65 (d) 13

34. The least number that is divisible by all the numbers from 1 to 5 (both inclusive) is

(a) 5 (b) 60 (c) 20 (d) 100

35. The least number that is divisible by all the numbers from 1 to 8 (both inclusive) is

(a) 840 (b) 2520 (c) 8 (d) 42027.

36. The decimal expansion of the rational number  $14587/250$  will terminate after:

(a) one decimal place (b) two decimal places (c) three decimal places (d) four decimal places

37. When a number is divided by 7, its remainder is always:

(a) greater than 7 (b) at least 7 (c) less than 7 (d) at most 7

38.  $(6 + 5\sqrt{3}) - (4 - 3\sqrt{3})$  is

(a) a rational number (b) an irrational number (c) a natural number (d) an integer

39. If  $HCF(16, y) = 8$  and  $LCM(16, y) = 48$ , then the value of  $y$  is

(a) 24 (b) 16 (c) 8 (d) 48

40. According to the fundamental theorem of arithmetic, if  $T$  (a prime number) divides  $b^2$ ,  $b > 0$ , then

(a)  $T$  divides  $b$  (b)  $b$  divides  $T$  (c)  $T^2$  divides  $b^2$  (d)  $b^2$  divides  $T^2$

41. The number ' $\pi$ ' is (a) natural number (b) rational number (c) irrational number (d) rational or irrational

42. If  $LCM(77, 99) = 693$ , then  $HCF(77, 99)$  is (a) 11 (b) 7 (c) 9 (d) 22

43. Euclid's division lemma states that for two positive integers  $a$  and  $b$ , there exist unique integer  $q$  and  $r$  such that  $a = bq + r$ , where  $r$  must satisfy

(a)  $a < r < b$  (b)  $0 < r \leq b$  (c)  $1 < r < b$  (d)  $0 \leq r < b$

### INFORMATION TECHNOLOGY

1. \_\_\_\_\_ is the process of starting a computer.

a. Log in      b. Booting      c. Shut down      d. None of these

2. Which is not Input device?

a. Keyboard      b. Mouse      c. Speaker      d. Joystick

3. \_\_\_\_\_ is primary user interface of a computer in which user work.

a. RAM      b. Hard disk      c. Desktop      d. Icon

4. Suggest function key for Reload/Refresh page.

a. F4      b. F6      c. F3      d. F5

5. Suggest shortcut key for undo.

a. Ctrl + A      b. Ctrl + Y      c. Ctrl + Z      d. Ctrl + C

6. According to the concept of sustainable development, the environment and development are \_\_\_\_\_ issues.

a. Inseparable      b. Separate      c. Independent      d. None of these

7. Having conscious knowledge of your own self, capabilities, feelings and one's own character is called as \_\_\_\_\_

a. Self-Awareness      b. Self-Motivated      c. Self-Confidence      d. None of these

8. \_\_\_\_\_ serves as an interface between the user and computer.

a. CPU      b. Operating System      c. network      d. None of these

9. Use of abbreviation in a communication leads to misinterpretation of messages is an example of \_\_\_\_\_ barriers.

a. Language Barrier   b. Personal Barrier   c. Emotional Barriers. d. Cultural Barriers

10. Trisha is always tense during exam time. She is a sincere and studious student, but the thought of exams creates anxiety in her. Which stress management technique that you would suggest to help her?

a. Yoga   b. Exercise   c. Vacation with Family d. All of these

11. An economy is called Green economy when it is based on the principles of \_\_\_\_\_ Development.

a. Sustainable   b. Economics   c. Both   d. None of these

12. The Cleaning of software installed in the computer cannot be achieved by \_\_\_\_\_  
a. Disk Cleaning   b. backup   c. Cleaning CPU cabinet   d. Installing antivirus software

13. \_\_\_\_\_ Ability of a person to do the things that need to be done without someone or something influencing us.

a. self-motivation   b. self-Discipline   c. self-Awareness   d. self-Regulation

14. \_\_\_\_\_ is not an instant messaging service.

a. Skype   b. Yahoo! Messenger c. Firefox   d. Whatsapp

15. Full form of ICT

a. Information and communication technology   b. Information and channel technology

c. Information and complete technology   d. none of these

16. Name the method we use in setting goal.

a. Smart   b. Time table   c. Self-aware   d. None of these

17. A \_\_\_\_\_ is a device that converts digital computer signals into a form (analog signals ) that can travel over phone lines and vice versa.

a. Repeater   b. Switch   c. Router   d. Modem

18. Computer Accessibility refers to \_\_\_\_\_?

a. Accessibility to calculation b. User friendliness   c. Both A & B   d. None of these

19. What are the types of words we should use for verbal communication?

a. Acronyms   b. Simple   c. Technical   d. Jargons

20. what does an upright (straight) body posture convey or show?

a. Pride   b. Professionalism   c. Confidence   d. Humility

## HISTORY

## HISTORY

## NATIONALISM IN EUROPE

**CHOOSE THE CORRECT ANSWER**

**1. Who followed the policy of Golden Mean?**

- a. Metternich b. Mazzini c. Louis Philippe d. Duke of Orleans

Ans: \_\_\_\_\_

**2. Napoleonic Code was introduced in the year of**

- a. 1809 b. 1807 c. 1805 d. 1804

Ans: \_\_\_\_\_

**3. What was HelairiaPhilike?**

- a. A Secret Society b. A Political Party c. A custom Union. d. An Allegory

Ans: \_\_\_\_\_

**4. Who founded the revolutionary militia 'Red Shirt'?**

- a. Wilson b. Tsar Alexander II c. Garibaldi. d. Metternich

Ans: \_\_\_\_\_

**5. Who was Frederick Sorrieu?**

- a. A Revolutionary b. Chancellor of Austria c. King of France d. French Artist

Ans: \_\_\_\_\_

**6. Vienna Congress was convened in 1815 for what purpose?**

- a. To declare completion of German Unification. b. To restore conservative regime in Europe.  
c. To declare war against France. d. To start the process of Italian unification.

Ans: \_\_\_\_\_

**7. Which year was known as the year of dear bread?**

- a. 1830 b. 1848 c. 1789 d. 1815

Ans: \_\_\_\_\_

**8. Name the state which led the process of Italian unification?**

- a. Rome b. Prussia c. Sardinia Piedmont d. Vienna

Ans: \_\_\_\_\_

**9. Who said Cavour, Mazzini, and Garibaldi: three her brain, her soul, her sword?**

- a. Victor Emmanuel b. George Meredith c. Louis XVIII d. Guizot

Ans: \_\_\_\_\_

**10. Zollverein was a**

- a. Diplomatic institution b. Custom union c. Administrative union d. Trade union

Ans: \_\_\_\_\_

**11. Who followed the policy of Blood and Iron for national unification?**

- a. Garibaldi b. Otto Von Bismark c. Mazzini d. Metternich

Ans: \_\_\_\_\_

**2. United Kingdom of Great Britain came into existence in the year -**

- a. 1789    b. 1798    c. 1707    d. 1801

Ans: \_\_\_\_\_

**3. Who said that, Italy was merely a geographical expression?**

- a. Cavour    b. Napoleon    c. Metternich    d. Guizot

Ans: \_\_\_\_\_

**4. Which one was not included in the Balkan Region?**

- a. Croatia    b. Bosnia Herzegovina    c. Serbia    d. Spain

Ans: \_\_\_\_\_

**5. In which century nationalism emerged in Europe**

- a. 16th century    b. 20th century    c. 19th century    d. 17th century

Ans: \_\_\_\_\_

**6. Who was the king of France at the time of French Revolution?**

- a. Marie Antoinette    b. Louis XVI    c. Czar Nicolas    d. Edward II

Ans: \_\_\_\_\_

**7. Which one of the following was not a part of the concept of nation-state?** (a) Clearly defined boundary

- (b) National identity based on culture and history    (c) Sovereignty    (d) Freedom from monarchy

Ans: \_\_\_\_\_

**8. Which of the following were not introduced by French revolution?** (a) Universal right of a man

- (b) Constitution and equality before law    (c) Participative administration and election

(d) Democracy and universal Suffrage

Ans: \_\_\_\_\_

**9. On the pretext of helping people of Europe to become nations, France plundered neighboring territories. Which of the following faced French aggression during 1790?**

- (a) Holland, Switzerland, Brussels, Mainz, Milan and Warsaw  
(b) Holland, Switzerland, Austria, Prussia, Macedonia, Croatia  
(c) Switzerland, Poland, Macedonia, Croatia, Sardinia  
(d) Spain, Holland, Switzerland, Poland, Prussia, Austria

Ans: \_\_\_\_\_

**10. Civil code of 1804, enforced throughout the French territories**

- (a) Abolished privileges based on birth    (b) Established equality before law  
(c) Secured right to property    (d) All the above

Ans: \_\_\_\_\_

**11. Napoleon's invasions were resented in several countries due to**

- (a) Increased taxes, censorship and forced conscription into army  
(b) Poor administration, restricted trade, language issues  
(c) Dominance of aristocracy and army in administration  
(d) Growth of the feeling of nationalism

ns: \_\_\_\_\_

**2. Which of the following were parts of Hapsburg Empire?**

- a) Austria-Hungary, Bohemia, Lombardy, Venetia
- b) Galicia, Carniola, Bohemia, Lombardy, Venetia
- c) Sudetenland, Austria-Hungary, Lombardy, Venetia
- d) Croatia, Sardinia, Greece, Poland, Austria-Hungary

ns: \_\_\_\_\_

**3. During Eighteenth century which language was spoken by the aristocrats in Europe?**

- a) English
- b) French
- c) Greek
- d) Dutch

ns: \_\_\_\_\_

**4. Liberal nationalism, which dominated Europe in early nineteenth century supported**

- a) Personal freedom
- b) Abolishing privileges of aristocracy and clergy
- c) Demand for constitution
- d) All of these

ns: \_\_\_\_\_

**5. Which of the following was not a demand of the liberals?**

- a) Representative Government
- b) Universal suffrage
- c) Inviolability of private property
- d) Freedom of Markets

ns: \_\_\_\_\_

**6. Johan Gottfried, a German philosopher, believed that the true German culture was to be discovered**

- a) In classical German literature
- b) Among the common people
- c) In fairy tales
- d) In Indian literature

ns: \_\_\_\_\_

**7. After Napoleon's defeat, the territories of Poland were distributed among**

- a) Russia, Prussia and Austria
- b) Austria, England and Prussia
- c) France, England and Prussia
- d) England, Prussia and Russia

ns: \_\_\_\_\_

**8. After the Vienna Congress, a number of Polish priests were sent to Siberia by the Russian authorities**

or

- a) Bringing religious reform in Siberia
- b) Not preaching in Russian language
- c) Opposing constitutional reforms
- d) Holding secret meetings

ns: \_\_\_\_\_

**9. Paris witnessed an upheaval in 1848 which forced monarch Louis Philippe to leave the city.**

**The unrest was caused by**

- a) Tax rise
- b) Food shortage and unemployment
- c) Industrial crisis
- d) Drain of wealth

ns: \_\_\_\_\_

**10. Frederic Wilhelm IV, King of Prussia rejected the terms of the Frankfurt Parliament because**

- a) The constitution made by the parliament wanted the monarch to become a subject to a parliament
- b) The parliament did not have the support of the aristocracy and military heads
- c) The members of the parliament were not elected representatives of German people
- d) The parliament did not have women representatives

Ans: \_\_\_\_\_

**1. During the Frankfurt Parliament held in St. Paul church on 18 May 1848, women were allowed to**

- a) Vote
- (b) Participate in drafting constitution
- (c) Stand in the visitor's gallery
- d) They were not allowed to enter the premises

Ans: \_\_\_\_\_

**2. The unification of Germany took place in 1871 under the leadership of**

- a) Kaiser William I and his chief minister Otto von Bismarck
- b) Monarch Wilhelm IV and his chief minister Garibaldi
- c) Bismarck and Garibaldi
- d) Mazzini and Garibaldi

Ans: \_\_\_\_\_

**3. The convention parliament of England decided the following after the Glorious Revolution**

- a) James's daughter Marry II and her husband William III would jointly rule the country
- b) That the parliament would set out the Bill of Rights
- c) The Monarch would be a subject to a parliament
- d) All of these

Ans: \_\_\_\_\_

**4. United Kingdom of Great Britain came into existence in 1770 after**

- a) Scotland was merged into England
- b) Ireland was merged into England
- c) The Welch population was given voting rights
- d) The Union Jack was introduced

Ans: \_\_\_\_\_

**5. Ireland was forcibly incorporated into the United Kingdom in**

- a) 1717
- (b) 1801
- (c) 1866
- (d) 1896

Ans: \_\_\_\_\_

**ECONOMICS**

**CHAPTER 1 DEVELOPMENT**

**CHOOSE THE CORRECT ANSWERS**

**1. We can obtain per capita income of a country by calculating:**

- a) the total income of a person
- b) by dividing the national income by the total population of a country
- c) the total value of all goods and services
- d) the total exports of the country

ns: \_\_\_\_\_

9. Kerala has low infant Mortality Rate because:

- (a) it has good climate condition
- (b) it has adequate infrastructure
- (c) it has adequate provision of basic health and educational facilities
- (d) it has poor net attendance ratio

ns: \_\_\_\_\_

10. Human Development Index compares countries based on which of the following levels of the people?

- (a) education level
- (b) health status
- (c) per capita income
- (d) All of the above

ns: \_\_\_\_\_

11. What does infant mortality indicate?

- (a) Literate populatio in the 7 and above age
- (b) The number of children that die before the age of one year as a proportion of 1000 live children.
- (c) The total number of children attending the school.
- (d) The number of children born in a year.

ns: \_\_\_\_\_

12. According to the World Bank, the criterion used to classify countries with the income of Rs. 4,53,000 per annum and above in 2004 is considered as:

- (a) Low income countries
- (b) Rich countries
- (c) Average countries
- (d) Underdeveloped countries

ns: \_\_\_\_\_

13. Which of the following things money cannot buy?

- (a) Building
- (b) Flowers
- (c) Pollution free environment
- (d) Books

ns: \_\_\_\_\_

14. Which one of the following is not a measure of development in the Human Development Report of the UNDP?

- (a) Per capita income in US\$
- (b) Education Levels of the people
- (c) Body Mass Index
- (d) Life expectancy at birth

ns: \_\_\_\_\_

15. In which state in India is the infant mortality rate lowest?

- (a) Kerala
- (b) Bihar
- (c) Uttar Pradesh
- (d) Punjab

ns: \_\_\_\_\_

16. BMI(Body Mass Index) is a method of finding out which of the following?

- (a) Infant Mortality
- (b) Health status
- (c) Longevity
- (d) Economic Status

ns: \_\_\_\_\_

17. Which of the following neighbours of India ranks higher on the Human Development Index?

- (a) Nepal
- (b) Sri Lanka
- (c) Bhutan
- (d) Pakistan

ns: \_\_\_\_\_

18. According to World Development Report a country is considered rich when the per capita income is more than which of the following figures:

- (a) Rs.24,000 per annum
- (b) Rs.37,000 per annum
- (c) Rs.4,53,000 per annum
- (d) Rs.5,43,000 per annum

ns: \_\_\_\_\_

**2. Income alone is not a completely adequate indicator of development of a country. Which one of the following is not correct with regard to this statement?**

- a) Money cannot ensure a pollution free environment for individual
- b) Some people earn more than others do
- c) Money helps us buy only material goods and services
- d) Money does not ensure respect and dignity for individuals

ns: \_\_\_\_\_

**3. Infant Mortality Rate refers to the number of children that die:**

- a) before the age of one year as a proportion to 1000 live births in that particular year.
- b) before the age of five years as a proportion to 1000 live births in that particular year.
- c) before the age of one year as a proportion to 100 live births in that particular year.
- d) out of 1000 live births in that particular year.

ns: \_\_\_\_\_

**4. Development goals of different sections of our society can be achieved by:**

- a) Force
- (b) Democratic Political process
- (c) Violent Agitation
- (d) Terrorism

ns: \_\_\_\_\_

**5. Which of the following states of India has low IMR?**

- a) Punjab
- (b) Kerala
- (c) Bihar
- (d) None of these

ns: \_\_\_\_\_

**6. In order to get more income people need:-**

- a. Regular work
- b. Better wages
- c. Decent price for their crops
- d. All of these

ns: \_\_\_\_\_

**7. Things like equal treatment, freedom, security and respect of others are:-**

- a. Material things
- b. Non material things
- c. Income
- d. Growth

ns: \_\_\_\_\_

**8. National Development refers to:-**

- a. Equality
- b. Democratic
- c. Employment
- d. Development of all sections

ns: \_\_\_\_\_

**9. Per capita income refers to :-**

- a. Whole income
- b. Average income
- c. National Income
- d. None of these

ns: \_\_\_\_\_

**10. Literacy measures the proportion of literate population in the -----age group.**

- a. 5 and above
- b. 6 and above
- c. 7 and above
- d. 8 and above

ns: \_\_\_\_\_

## SCIENCE

### BIOLOGY

### MULTIPLE CHOICE QUESTION

1. A key molecule NOT found in a chloroplast is...  
i.Chlorophyll ii.Carbon dioxide iii.Water iv.Steroids
2. Photosynthesis is a good example of...  
i.Catabolism ii.Anabolism
3. Chloroplasts are found in heterotrophic cells.  
i.True ii.False
4. Which of these choices is NOT in the structure of a chloroplast?  
i.Granum ii.Stroma iii.Cristae iv.Thylakoid
5. Only plants can conduct photosynthesis with chloroplasts.  
i.True ii.False
6. Chloroplasts convert solar energy into physical energy.  
i.True ii.False
7. Tick the correct statement.  
i.Arteries carry blood away from the heart while veins carry blood towards heart.  
ii.Veins carry blood away from the heart while arteries carry blood towards heart.  
iii.Both of them carry blood in the same direction.  
iv.Either of them can carry blood away from the blood.
8. Artificial removal of nitrogenous wastes from the human body in the event of kidney failure is  
i.Plasmolysis ii.Dialysis iii.Diffusion iv.Osmosis
9. The function of salivary amylase is to convert  
i.Fats into fatty acids. ii.Proteins into amino acids.  
iii.Starch into sugar. iv.Sugar into starch
10. The parts shown as A and B in the given diagram are  
The parts shown as A and B in the given diagram are  
A) A is epidermal cell, B is stomatal pore  
B) A is guard cell, B is stomatal pore  
C) A is epidermal cell, B is guard cell  
D) A is guard cells, B is epidermal cell
11. The kidneys in human beings are a part of the system for

- (a) nutrition. (b) respiration. (c) excretion. (d) transportation
12. The xylem in plants are responsible for  
(a) transport of water. (b) transport of food.  
(c) transport of amino acids. (d) transport of oxygen.
13. The autotrophic mode of nutrition requires  
(a) carbon dioxide and water (b) chlorophyll (c) sunlight (d) all of the above.
14. The breakdown of pyruvate to give carbon dioxide, water and energy takes place in  
(a) cytoplasm (b) mitochondria (c) chloroplast (d) nucleus.
15. Movement of food through oesophagus is due to  
(a) Lubrication by saliva (b) Peristalsis (c) Gravitational Pull (d) All of the above
16. Where is bile produced?  
(a) Gall bladder (b) Blood (c) Liver (d) Spleen
17. In normal expiration, the diaphragm is  
(a) Arched (b) Flattened (c) Perforated (d) None of these
18. The correct pathway of blood in circulatory system is  
(a) atria → ventricles → arteries → veins  
(b) ventricles → atria → veins → arteries  
(c) ventricles → veins → arteries → atria  
(d) veins → ventricles → atria → arteries
19. Respiration is a process in which  
(a) Energy is stored in the form of ADP  
(b) Energy is released and stored in the form of ATP  
(c) Energy is used up (d) Energy is not released at all.
20. In Photosynthetic process, atmospheric carbon di oxide is \_\_\_\_\_ to carbohydrates  
a) oxidised b) Reduced c) Neutralised d) Burnt
21. When water enters the guard cells the stomata  
a) Opens b) Closes c) Open or closes d) No effect
22. Wastes concentrated in the tubules of Bowman's capsule are called \_\_\_\_\_.  
(a) salts (b) juices (c) urine (d) amino acids
23. On seeing good food our mouth waters. This fluid is actually

- a) Water b) Hormone c) Enzyme d) None of the above
24. The enzyme Pepsin is inactive in stomach without the presence of  
a) Nitric Acid b) Hydrochloric acid c) Acetic acid d) Butyric acid
25. Villi present on the inner lining of the intestinal wall  
a) Secrete enzymes for digestion b) Secrete hormones  
c) Decrease the surface area for absorption d) Increase the surface area for absorption
26. During cellular respiration one molecule of glucose is first broken down into two molecules of \_\_\_\_\_.  
a) Acetic acid b) Pyruvic acid c) Lactic acid d) None of the above
27. Rajib was absent in the class because of muscle pain which he claims to be due to excess physical exercise he had done yesterday. This pain is due to  
a) Formation of lactic acid b) Formation of acetic acid  
c) Formation of Pyruvic acid d) Formation of Hydrochloric acid
28. Right part of the human heart contains  
a) Oxygenated blood b) Mixed blood c) Deoxygenated blood d) No blood
29. The transport of soluble products of photosynthesis is called translocation and it occurs in the part of the vascular tissue called  
a) Xylem b) Sclerenchyma c) Phloem d) Collenchyma
30. In human each kidney has large numbers of filtration units called \_\_\_\_  
a) Neutrons b) Neurons c) Neptune d) Nephrons
31. Haemoglobin is a type of  
(a) Carbohydrate (b) Skin Pigment (c) Vitamin (d) Respiratory Pigment
32. If kidney fails to reabsorb water, the tissues would  
(a) remain unaffected (b) shrink to shrive  
(c) absorb water from blood (d) take more oxygen from blood
33. Which of the following statements about the autotrophs is incorrect?  
(a) They synthesise 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

34. 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
35. Select the correct statement
- (a) Heterotrophs do not synthesise their own food  
(b) Heterotrophs utilise solar energy for photosynthesis  
(c) Heterotrophs synthesise their own food  
(d) Heterotrophs are capable of converting carbon dioxide and water into carbohydrates
35. 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
36. 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
37. 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
38. Which part of alimentary canal receives bile from the liver?
- (a) Stomach (b) Small intestine (c) Large intestine (d) Oesophagus
39. 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
40. In which part of the alimentary canal food is finally digested?
- (a) Stomach (b) Mouth cavity (c) Large intestine (d) Small intestine
41. 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
42. 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
43. 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)
44. 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
45. During respiration exchange of gases take place in
- (a) trachea and larynx (b) alveoli of lungs (c) alveoli and throat (d) throat and larynx
46. 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
- (a) (i) (b) (ii) (c) (ii) and (iv) (d) (i) and (iii)
47. 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

48. 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
50. 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

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