

Class XI
Subject: English (SET B)

Time: 45 minutes

M.M 50

SECTION A – READING-12 MARKS

Read the passage carefully:

Karl Benz invented the modern car in 1888 in Germany. Emile Roger worked for Benz in France. He made cars in France. By 1900, many people were building cars in France and in the U.S. The first company to build only cars was Panhard et Levassor in France. Panahard started in 1889. The Peugeot car company started in 1891 in France. In the US, France and Charles Duryea started the Duryea Motor Wagon Company in 1893. It was the first US car company. By 1902, Ransom E. Olds started the Olds Motor Vehicle Company. A year later, Heny Ford started the Ford Motor company. It produced the Cadillac. All these early modern cars burned gasoline or diesel fuels. Ford opened factories in France and Britain in 1911. Then they opened a factory in Denmark in 1923. Later, they opened a factory in Germany in 1925. Ford was one of the first manufacturers to use an assembly line. With an assembly line, factory workers could produce cars faster and safer than other production systems. Most modern cars till burned gasoline or diesel fuels: These cars cause air pollution. They get the air dirty. Now many people are looking for cleaner cars. And, many car companies are looking for cleaner fuels.

Q.1 Answer the following questions.

- | | |
|--|-----|
| (a) Which company first built only cars? | 1 |
| (b) When did the Peugeot cars company start? | 1 |
| (c) In which year Karl Benz invented the modern car and where? | 1+1 |
| (d) What was the first US car company? | 1 |
| (e) Where did the Ford Motor company open the factory first? | 1 |
| (f) Whose idea was the assembly line? | 1 |
| (g) Find a word from the message which means 'made'. | 1 |
| (h) What is fuel? | 2 |
| (i) What does the pollution in the air mean? | 2 |

Section B – Writing and Grammar– 38 marks

Q.2 You recently visited an important historical monument. You were shocked to find it in a state of utter neglect Taking help from unit, 'Travel and Tourism', the clues given below and with your own ideas write a letter to the editor of a leading newspaper highlighting the poor condition of important archaeological and heritage ' sites. Point out the lack of essential services, the poor state of maintenance and its misuse by people. Give suggestions for improving the situation.

8 marks

Q.3 Mobile phones are detrimental to the academic progress of students. Write a debate on it.

10 marks

Q.4 Write a story in 150 – 200 words with the help of hints given below: 10 marks

'Enjoying a cup of tea while sitting on my balcony on a Sunday morning, suddenly I felt a deep pain in my chest. I thought that this was the last moment of my life. I wanted to call my daughter, my husband and everybody to say the final Good Bye, but couldn't do so'

Imagine what happened after this. Did the family know what happened or did the woman die unnoticed? Explain what were the plans and aspirations of the woman at the last moment of her life. Write an imaginary story with a suitable tide in 150-200 words.

Q.5 The following passage has not been edited. There is one error in each line. Identify the wrong one and write it with the correction in the space given. The first one has been done for you.

(1 x 4 = 4 marks)

	Incorrect	Correct
One morning I finished one business at the bank	one	some
and was returning in pick up my motorobike which I had left	(a).....
in the parking lot outside. Suddenly he realized that I had	(b).....
lost the bike key. Upset, I searched about it in the bank. A bank	(c).....
employee tried to help me find it and in vain.	(d).....

Q.6 Rearrange the following jumbled words to make meaningful sentences. One has been done for you as an example. (1x2= 2 marks)

very important / facial expressions / to us / are

Example : Facial expressions are very important to us.

- (a) someone easier can see you it is to understand
- (b) there / we can mould / of other ways / dozens / our faces / are

Q.7 In each of the following questions ONLY ONE WORD is correctly spelled. Write the correct words. (1 x 4 =4 marks)

- | | | | | |
|-----|---------------|---------------|-----------------|----------------|
| (A) | (a) twelvth | (b) twelfth | (c) vaccum | (d) bouquette |
| (B) | (a) cigarette | (b) etiquette | (c) eeri | (d) comittee |
| (C) | (a) tution | (b) grammer | (c) tuition | (d) seperation |
| (D) | (a) truely | (b) millenium | (c) harrassment | (d) chauffeur |

MANAGEMENT APTITUDE TEST

Time : 45 Minutes

MM: 50

1 MARK QUESTIONS

1. What is the limit of minimum and maximum number of partners in a partnership firm as per new amended Act 2013?
 - A. 2 and 20
 - B. 2 and 50
 - C. 10 and 100
 - D. 5 and 100

2. Pixel mobile phone is introduced by which brand?
 - A. Apple
 - B. Mi
 - C. Google
 - D. Microsoft

3. In which type of firm there is single seller?
 - A. Monopolistic competition
 - B. Perfect competition
 - C. Monopoly
 - D. Oligopoly

4. What is FII?
 - A. Foreign initial investment
 - B. Foreign industrial investment
 - C. Foreign indirect investment
 - D. Foreign introductory investment

5. Who is finance minister of India?

6. Which was the 1st public sector bank of India?

7. Who can issue the currency coins of India?

8. Which sector provides Insurance services?
 - A. Primary
 - B. Secondary
 - C. Tertiary
 - D. All of them

9. RBI was established in which year.
 - A. 1934
 - B. 1935.
 - C. 1936.
 - D. 1937

10. IDBI is which kind of bank.
 - A. Public sector bank
 - B. Private sector bank
 - C. Joint sector bank
 - D. None of them

11. India is considered to be
 - A. Capitalist economy
 - B. Socialist economy
 - C. Mixed economy
 - D. None of them

12. Which bank is known as International bank of India
 - A. Bank of baroda
 - B. ICICI
 - C. Punjab national bank
 - D. none of them

13. Who is the CEO of Amazon.
 - A. Jack ma
 - B. Kim long
 - C. Jeff Bezos
 - D. Bill Gates

14. Who is the present governer of RBI.
 - A. Urjit Patel
 - B. Raghuram Rajan
 - C. H.V. Kamath
 - D. Arvind Sbhramaniam

15. Which is the new indirect taxation bill passed in 2016
 - A. GST
 - B. FDI
 - C. FII
 - D. None of these

16. The planning commission has been replaced by
 - A. Niti Aayog.
 - B. Infrastructure commission.
 - C. Law Commission.
 - D. Finance Commission

17. Who is the richest person in the world as per Forbes list 2018?
 - A. Warren Buffett.
 - B. Bill Gates.
 - C. Mukesh Ambani
 - D. Jeff Bezos

18. Motorola is purchased by which of these companies :
 - A. Google
 - B. Microsoft
 - C. Lenovo
 - D. HTC.

19. In a self help group, most of the decisions regarding saving & loan activities are taken by:-
 - A. Banks
 - B. Group members
 - C. Ngo's
 - D. Government

30. By selling 150 mangoes a fruit seller gains the selling price of 30 mangoes. Find his gain percentage.
 (a) 35% (b) 30% (c) 25% (d) 15%
31. A retailer makes a profit of 10%, if his selling price is 440, Find the cost price.
 (a) Rs. 600 (b) Rs. 500 (c) Rs. 300 (d) Rs. 400
32. For $\frac{3}{4}$ share of profit a businessman is required to invest Rs. 60,000. For $\frac{1}{4}$ share of profit how much a businessman will invest?
 (a) Rs. 20000 (b) Rs. 30000 (c) Rs. 22000 (d) Rs. 21000
33. A, B and C are partners, sharing profit in the ratio of $\frac{1}{2}$: $\frac{1}{3}$: $\frac{1}{6}$. The profit of the firm was Rs18000. Find out the exact ratio between them for sharing profit.
 (a) 3:2:2 (b) 3:2:1 (c) 2:3:1 (d) 1:3:2

3 MARKS QUESTIONS

34. What is the cost of 1 Kilogram of each of the following vegetables?
 (i) 500 Grams of Tomato Rs. 8 -----
 (ii) 350 Grams of peas Rs. 14 -----
 (iii) 250 Grams of Onion Rs. 4 -----
35. The cost of 1 kg of each of the fruits is given.
 (a) Orange Rs. 35 (b) Apples Rs. 80 (c) Mango Rs. 50
- (i) If you will purchase 200 gm of Orange, what amount you will pay for it? -----
 (ii) What will 250 gm cost of Apples? -----
 (iii) What will 300 gm cost of Mangoes? -----
36. Find out
 20% of 1700 = -----
 35% of 3000 = -----
 05% of 75000 = -----

SUBJECT-MATHEMATICS

Time- 45 Minutes

CLASS-XI

MM-50

General Instruction: Attempt all the questions.

1. Question 1-5 in section A carrying 1 mark each.
2. Question 6-10 in section B carrying 2 marks each.
3. Question 11-17 in Section C carrying 5 marks each.

SECTION-A

1. For some integer q , every odd integer is of the form
(a) q (b) $q+1$ (c) $2q$ (d) $2q+1$
2. $n^2 - 1$ is divisible by 8, if n is
(a) an integer (b) a natural number (c) an odd integer (d) an even integer
3. The product of a non-zero rational and irrational number is
(a) always irrational (b) always rational (c) rational or irrational (d) one
4. If one of the zeroes of the quadratic polynomial $(k-1)x^2 + kx + 1$ is -3 , then the value of k is
(a) $\frac{4}{3}$ (b) $-\frac{4}{3}$ (c) $\frac{2}{3}$ (d) $-\frac{2}{3}$
5. If the zeroes of the quadratic polynomial $ax^2 + bx + c$, $c \neq 0$ are equal then
(a) c and a have opposite signs (b) c and b have the opposite signs
(c) c and a have the same sign (d) c and b have the same sign

SECTION- B

6. Find the distance of the point $(2,3)$ from the x - axis
7. A pole 6 m high casts a shadow $2\sqrt{3}$ m long on the ground, then find the Sun's elevation
8. Find 10th term of the AP; 5, 8, 11, 14, -----
9. In an AP, if $d = -4$, $n = 7$, $a_n = 4$. Find a .
10. If ΔABC is right angle at C , then find the value of $\cos(A+B)$.

SECTION- C

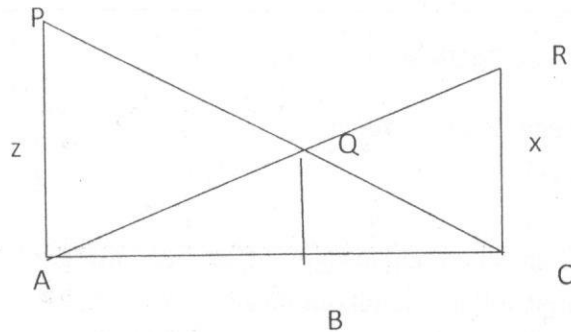
11. If p, q are zeroes of polynomial $(x) = 2x^2 - 7x + 3$, find value of $p^2 + q^2$

12 Solve using cross-multiplication method :

$$2x = 5y + 4; 3x - 2y + 16 = 0$$

13 For what value of k the equation $4x^2 - 2(k+1)x + (k+1) = 0$ has real and equal roots.

14 In the given figure, PA, QB and RC are perpendicular to AC . Prove that $\frac{1}{x} + \frac{1}{z} = \frac{1}{y}$



15 Find a relation between x and y such that the point (x, y) is equidistant from the point $(3, 6)$ and $(-3, 4)$.

16 The angle of elevation of the top of a tower 30 m high from foot of another tower in the same plane is 60° . And the angle of elevation of the top of the second tower from the foot of the first tower is 30° . Find the distance between the two towers and also the height of the other tower.

17 A shopkeeper buys some books for Rs 80. If he had bought 4 more books for the same amount, each book would have cost Rs 1 less. Find the number of books he bought.

CHEMISTRY (Set I)
CLASS- XI

Time: - 45 minutes

MM: 50

General Instructions: -

- (i) Attempt all questions.
 - (ii) Question number of 1 to 5 is of one mark each.
 - (iii) Question number of 6 to 10 is of two marks each.
 - (iv) Question number of 11 to 15 is of three marks each.
 - (v) Question number of 16 to 19 is of five marks each.
-

1. Name the brown coloured gas evolved when lead nitrate crystals are heated in a dry test tube. (1)
2. Why is tartaric acid added into baking soda to get baking powder? (1)
3. An alloy has low melting point and is, therefore, used for welding electric wires together. Name the alloy and write its constituents. (1)
4. Which element exhibits the property of catenation to maximum extent and why? (1)
5. Why do isotopes of an element show similar chemical properties? (1)
6. Give reasons for the following: -
 - (i) All decomposition reactions are endothermic reactions.
 - (ii) Respiration is an exothermic reaction. (2)
7. State what happens when: -
 - (i) Gypsum is heated at 373 K.
 - (ii) Excess of carbon-dioxide gas is passed through lime water. (2)
8. Give an example of a metal and non-metal which is liquid at room temperature. (2)
9. What is the difference between two consecutive members in a homologous series in alkanes in the terms of (i) molecular mass (ii) number atoms of elements. (2)
10. Three elements 'A', 'B' and 'C' having atomic numbers 11, 7 and 6 respectively react with oxygen to form their oxides. (i) Arrange these oxides in increasing order of their basic nature. (ii) Give reason for your answer. (2)
11. Classify the following reactions into different types: -
 - (i) $\text{AgNO}_3(\text{aq}) + \text{NaCl}(\text{aq}) \rightarrow \text{AgCl}(\text{s}) + \text{NaNO}_3(\text{aq})$
 - (ii) $\text{CaO}(\text{s}) + \text{H}_2\text{O} \rightarrow \text{Ca}(\text{OH})_2(\text{aq})$
 - (iii) $2\text{KClO}_3(\text{s}) \rightarrow 2\text{KCl}(\text{s}) + 3\text{O}_2(\text{g})$ (3)
12. What is rust? How is rust formed. Describe the role of zinc to prevent the rusting of iron. (3)
13. What happens when (write balanced chemical equation only): -
 - (i) Ferric oxide is heated with aluminium powder.
 - (ii) Zinc carbonate is heated.
 - (iii) Mercuric sulphide is strongly heated with oxygen. (3)

14. Name the functional groups present in the following organic compounds: -
(i) $\text{CH}_3\text{COCH}_2\text{CH}_2\text{CH}_2\text{CH}_3$
(ii) $\text{CH}_3\text{CH}_2\text{CH}_2\text{COOH}$
(iii) $\text{CH}_3\text{CH}_2\text{CH}_2\text{CHO}$ (3)
15. What are soaps? Why is a soap solution in water appears cloudy? Why soaps are not effective in hard water? (3)
16. Identify the acids and bases from which the following salts are obtained: -
(i) Potassium sulphate (ii) Sodium nitrate (iii) Ammonium chloride
(iv) copper sulphate (v) sodium carbonate. (5)
17. What do you mean by ionic compounds? Explain any four properties of ionic compounds. (5)
18. State Modern periodic law. Give any four limitations of Mendeleev's periodic table. (5)
19. Complete the following chemical reactions:-
(i) $\text{R}_2\text{C} = \text{CR}_2 + \text{H}_2 \xrightarrow{\text{Ni/Heat}}$
(ii) $\text{CH}_3\text{COOH} + \text{NaOH} \longrightarrow$
(iii) $\text{CH}_3\text{CH}_2\text{OH} \xrightarrow{\text{Hot \& Conc. H}_2\text{SO}_4}$
(iv) $\text{HCOOH} + \text{Na} \longrightarrow$
(v) $\text{CH}_3\text{CH}_2\text{OH} \xrightarrow{\text{Hot \& Alkaline KMnO}_4}$ (5)

-----X-----X-----X-----

Subject: Physics

Class: XI

Max. Marks: 50

Duration: 45min.

INSTRUCTIONS:

- (1) Q.1 to Q.25 are Multiple choice questions and each question carry one marks.
- (2) Q.26 to Q.30 are short answer type questions and each question carry two marks.
- (3) Q.31 to Q.35 are short answer type questions and each question carry three marks.

Section -A

1. Which instrument is used for measuring electric potential?
(a) Ammeter (b) galvanometer (c) voltmeter (d) potentiometer
2. When one-unit electric charge moves from one point to another point in an electric circuit, then the amount of work done in joules is known as?
(a) Electric current (b) electric resistance
(c) electric conductance (d) potential difference .
3. The resistance of a conductor is directly proportional to its :
(a) area of cross-section (b) density (c) melting point (d) length
4. 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
5. 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
6. 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
7. A fuse wire is inserted in a?
(a) Live wire (b).In the neutral wire
(c) In the earth wire (d)May be connected in any line.
8. Focal length of plane mirror is
(a) At infinity (b) Zero (c) Negative (d) None of these
9. Power of the lens is -40, its focal length is
(a) 4m (b) -40m (c) -0.25m (d) -25m
10. A concave mirror gives virtual, erect and enlarged image of the object, where is the object placed
(a)At infinity (b) Between F and C (c) Between P and F (d) At F

11. In optics an object which has higher refractive index is called
(a) Optically rarer (b) Optically denser (c) Optical density (d) Refractive index
12. The optical phenomena, twinkling of stars, is due to
(a) Atmospheric reflection (b) Total internal reflection
(c) Atmospheric refraction (d) Scattering of light
13. The unit of power of lens is
(a) Metre (b) Centimeter (c) inch (d) m^{-1}
14. What should be the core of an electromagnet?
(a) soft iron (b) hard iron (c) rusted iron (d) none of above
15. In all the electrical appliances, the switches are put in the
(a) live wire (b) earth wire (c) neutral wire (d) all of above
16. What is the condition of an electromagnetic induction?
(a) there must be a relative motion between the coil of wire and galvanometer
(b) there must be a relative motion between the galvanometer and a magnet
(c) there must be a relative motion between galvanometer and generator
(d) there must be a relative motion between the coil of wire and a magnet
17. No force acts on a current carrying conductor when it is placed-
(a) perpendicular to the magnetic field
(b) parallel to the magnetic field
(c) far away from the magnetic field
(d) inside a magnetic field
18. What happens to the current in short circuit?
(a) reduces substantially (b) does not change
(c) increases heavily (d) vary continuously
19. An alpha particle is diverted towards west is deflected towards north by a field. The field is magnetic. What will be the direction of field?
(a) Towards south (b) towards east (c) downward (d) upward
20. Which method is used to produce electricity in hydroelectric power plant.
(a) By boiling the water to produce steam (b) By ionizing water
(c) By running dynamo by kinetic energy (d) Any of the above
21. Which of the following is the odd one out?
(a) Petroleum (b) Hydro electricity (c) Coal (d) CNG
22. Which of the following is a component of bio-gas?
(a) Methane (b) LPG (c) CNG (d) Hydrogen sulphide
23. Which energy source is the largest source used in India?
(a) CNG (b) LPG (c) Coal (d) Bio Gas

SUBJECT – BIOLOGY

Set-1

Time – 45 Min.

MM – 50

- Note. - **Question no. 1 to 20 carry one mark each.**
Question no. 21 to 27 carry two marks each.
Question no. 28 to 29 carry three marks each.
Question no.30 carry ten marks.

- Q1. In which part of the alimentary canal receives pancreatic juice from the pancreas?
a-stomach b-small intestine c-large intestine d-none of these
- Q2. Liver contains an enzyme called-
a .amylase b. lipase c. a and b d. None of these
- Q3. Which among the following has specialized tissue for conduction of water ?
[i] Thallophyta [ii]Bryophyta [iii] Pteridophyta [iv] Gymnosperm
a. [i]and[ii] b. [ii] and [iii] c. [iii] and [iv] d. [i]and[iv]
- Q4- The filtration unit of kidney is called?
a-ureter b-urethra c-nephron d-neurons
- Q5. Which part of central nervous system control reflexes?
a. spinal cord b. brain c. hormone d. none of these
- Q6. Elephantiasis is caused by
a. Wuchereria b. Pinworm c. Planarians d. Liver Flukes
- Q.7.-Which of the following is a plant hormone-
a- Cytokinin b- Insulin c-Thyroxine d- Lipase
- Q-8.Which of the following is analogous organ of a sweet potato
a-potato b. onion c turnip d all of these
- Q- 9-Covering of heart is-
a-Pleura b- Pericardium c- Epiglottis d- Capsule
- Q-10The opening and closing of stomatal pore depends upon
a-oxygen b-temperature c-water in guard cells d-mesophyll
- Q-11- Iodine is necessary for the synthesis of which hormone?
a-Adrenaline b-Thyroxine c-Auxin d-Insulin
- Q- 12-Exocrine gland is-
a-adrenal b-thyroid c-pancrease d-salivary gland
- Q-13-On germination each pollen grain produces-
a-one male gamete b-two male gamete c- three male gamete d- four male gamete

- Q-14-Fertilization in flowering plants produces
 a-Embryo b-Endosperm c-Nucellus d-both A and B
- Q-15-Zygote is-
 a-always haploid b-Always diploid c-always triploid d-none of the above
- Q-16-Flow of energy in an ecosystem is always-
 a-no specific direction b-multidirectional c-bidirectional d- unidirectional
- Q-17-An IUCD device is
 a-Copper T b-Condom c-Cervical cap d-Vasectomy
- Q-18-Measurment of water pollution is made by –
 a-Coliformcount b-BOD c-pH d-All the above
- Q-19-Which part of alimentary canal receives bile juice from the liver-
 a-Stomach b-Small intestine c-Large intestine d-Oesophagus
- Q-20-Which of the following is a non-biodegradable waste –
 a-Cow dung b-Kitchen waste c-Plastic d-Mannure
- Q-21-Name the main modes of asexual reproduction
- Q-22-What is the main product of aerobic respiration?
- Q-23-What is the role of sensory neuron?
- Q-24-Name any two plant hormones?
- Q-25-Name the two methods of surgical conterceptive method?
- Q-26-How many types of chromosomes in man?
- Q-27-Write two method for prevention of STD?
- Q-28-What are Homologous organs? How do they provide evidence in support of evolution?
- Q-29-Give any four reasons for STDs.
- Q-30-What changes can you make in your habits to become more eco friendly?

24. The amount of light entering the human eye is controlled by
(a) Ciliary muscles (b) Pupil (c) Cornea (d) Iris
25. The part of the eyes refracts light entering the eye from external objects?
(a) Lens (b) Cornea (c) Iris (d) Pupil

Section –B

26. The MCB of a Rupa's room is tripped and keeps on tripping again and again. If it is a domestic circuit, what could be the reason of this phenomenon?
27. Difference between short circuiting and overloading.
28. Why is tungsten used in bulbs but not in fuse wires?
29. Name two safety measures commonly used in electric circuits and appliances.
30. List three energy sources that are considered to be inexhaustible. State one reasons in support of your answer.
31. Why is there so much emphasis on changing over from petrol/diesel driven automobiles to CNG driven vehicles.
32. Why do you take time to find object when you enter in dim lighted room from outside in the sun?
33. When we see any object through the hot air over the fire, it appears to be wavy, moving slightly. Explain.
34. Show an activity to demonstrate the direction of the magnetic field generated around a current carrying conductor.
35. Calculate the area of cross section of a wire of length 2m, its resistance is 25Ω and the resistivity of material of wire is $1.84 \times 10^{-6} \Omega\text{m}$.