

This Question Paper contains 20 printed pages.

(Part - A & Part - B)

Sl.No. 0101687

11 (E)

(MARCH, 2019)
(NCERT OTHERS)

પ્રશ્ન પેપરનો સેટ નંબર જેની સામેનું વર્તુળ OMR શીટમાં ઘટ્ટ કરવાનું રહે છે.
Set No. of Question Paper, circle against which is to be darken in OMR sheet.

01

Question Paper Reading 15 Minutes

Part - A : Time : 1 Hour / Marks : 50

Part - B : Time : 2 Hours / Marks : 50

(Part - A)

Time : 1 Hour]

[Maximum Marks : 50

Instructions :

- 1) There are 50 Multiple Choice type Questions in Part - A and all questions are compulsory.
- 2) The questions are serially numbered from 1 to 50 and each carries 1 mark.
- 3) Read each question carefully, select proper alternative and answer in the O.M.R. sheet.
- 4) Separate OMR sheet is given for answering these questions. The answer of each question is to be given by darkening the circle against options (A), (B), (C), (D). Circle ● representing the most correct answer is to be darken with ball pen.
- 5) Set No. of Question Paper printed on the upper - most right side of the Question Paper, the same is to be written in the space provided in the OMR sheet and circle depicting the correct set No. is to be darken with ball pen.

- 1) Which of the statements about the reaction below are incorrect?



- (a) Lead is getting reduced
 - (b) Carbon dioxide is getting oxidised
 - (c) Carbon is getting oxidised
 - (d) Lead oxide is getting reduced
- (A) (a) and (b) (B) (a) and (c)
(C) (a), (b), (c) and (d) (D) (a), (b) and (c)

Rough Work

2) Which of the following will be required to identify the gas evolved when dilute hydrochloric acid reacts with zinc metal?

- (A) pH paper (B) Red litmus paper
(C) A burning splinter (D) Lime water

3) An element P on exposure to moist air turns green and a new compound Q is formed. The substances P and Q are

- (A) P = Fe, Q = Fe₂O₃ (B) P = Cu, Q = CuO
(C) P = Ag, Q = Ag₂S (D) P = Al, Q = Al₂O₃

4) Dilute hydrochloric acid is added to granulated zinc taken in a test tube. The following observations are recorded. Point out the correct observation.

- (A) The surface of metal becomes shining
(B) The reaction mixture turns milky
(C) Odour of a pungent smelling gas is recorded
(D) A colourless and odourless gas is evolved

5) $\text{CaCO}_3(\text{s}) \xrightarrow{\text{heat}} \text{CaO}(\text{s}) + \text{CO}_2(\text{g})$

The above reaction is an example of

- (A) Combination reaction
(B) Decomposition reaction
(C) Double displacement reaction
(D) Displacement reaction

6) 10 mL of a solution of NaOH is found to be completely neutralised by 8 mL of a given solution of HCl. If we take 5 mL of the same solution of NaOH, the amount HCl solution (the same solution as before) required to neutralise it will be

- (A) 4 mL (B) 8 mL
(C) 12 mL (D) 16 mL

11) An element reacts with Oxygen to give a compound with a high melting point. This compound is also soluble in water. This element is likely to be

- (A) Carbon
- (B) Calcium
- (C) Silicon
- (D) Iron

12) Which two metals are comparatively poor conductors of heat?

- (A) Lead and Iron
- (B) Mercury and Iron
- (C) Lead and Mercury
- (D) Silver and Copper

13) You are given a solution of AgNO_3 . Which of the following do you think cannot displace Ag from AgNO_3 solution?

- (A) Magnesium
- (B) Zinc
- (C) Gold
- (D) Copper

14) Metals are refined by using different methods. Which of the following metals are refined by electrolytic refining?

- (i) Ag
- (ii) Cu
- (iii) Na
- (iv) Al
- (A) (i) and (iii)
- (B) (i) and (ii)
- (C) (ii) and (iii)
- (D) (iii) and (iv)

- 15) Arrange the following metals in the order of their decreasing reactivity. **Rough Work**
- (A) $Mg > Al > Zn > Fe$
(B) $Zn > Al > Fe > Mg$
(C) $Al > Mg > Zn > Fe$
(D) $Zn > Mg > Fe > Al$
- 16) Butanone is a four-carbon compound with the functional group
- (A) Carboxylic acid (B) Aldehyde
(C) Ketone (D) Alcohol
- 17) Acetic acid was added to a liquid X kept in a test tube. A colourless and odourless gas Y was evolved. The gas was passed through lime water which turned milky. It was concluded that
- (A) Liquid X is Sodium hydroxide and the gas Y is CO_2 .
(B) Liquid X is Sodium carbonate and the gas Y is CO_2 .
(C) Liquid X is Sodium acetates and the gas Y is CO_2 .
(D) Liquid X is Sodium chloride and the gas Y is SO_2 .
- 18) In which of the following compounds, OH is the functional group?
- (A) Butanal
(B) Butanoic acid
(C) Butanone
(D) Butanol

- 19)** Which of the following statements is not a correct statement about the trends when going from left to right across the periods of the Periodic Table? **Rough Work**
- (A) The elements become less metallic in nature
 - (B) The number of valence electrons increases
 - (C) The oxides become more acidic
 - (D) The atoms lose their electrons more easily
- 20)** For gas welding used for welding broken pieces of iron, we normally use a mixture of
- (A) Ethane and Oxygen
 - (B) Ethene and Oxygen
 - (C) Ethyne and Oxygen
 - (D) Ethene and Hydrogen
- 21)** During deficiency of oxygen in tissues in human beings, pyruvic acid is converted into pyruvate in the _____.
- (A) Mitochondria
 - (B) Golgi body
 - (C) Chloroplast
 - (D) Cytoplasm
- 22)** After digestion, proteins, carbohydrates and fats are respectively converted into
- (A) Glucose, fatty acids and glycerols
 - (B) Amino acids, glucose and fatty acids
 - (C) Amino acids, glucose, fatty acids and glycerol
 - (D) Glucose, glycerol and fatty acids

23) Which of the following is not a component of nerve cell?

- (A) Cell body (B) Cerebrospinal
(C) Dendrites (D) Axon

24) Which hormones are called hormones of fight or flight?

- (A) ACTH, GH (B) TSH, GTH
(C) Adrenaline (D) Thyroxine, Insulin

25) A connection where nerves which detect heat, light etc. to nerves that move muscles is called

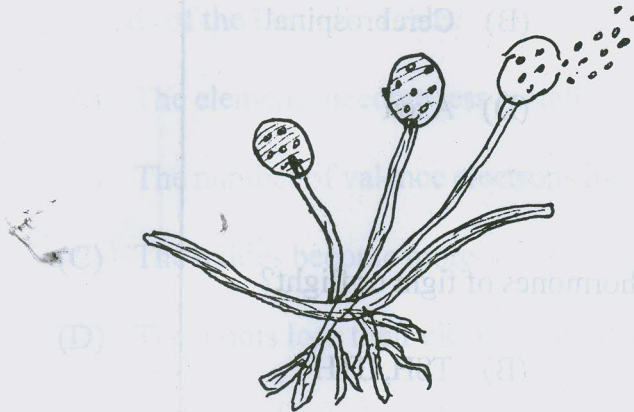
- (A) Neuro-muscular junction
(B) Reflex arc
(C) Reflex action
(D) Medulla

26) Plant hormone which inhibits growth is

- (A) Fluxion
(B) Gibberellins
(C) Cytokinins
(D) Abscisic acid

27) Identify the organism

Rough Work



- (A) Rhizobium (B) Rhizopus
- (C) Rhizoid (D) Mushroom
- 28) The two oviduct in human female unite into an elastic bag like structure known as
- (A) Vagina (B) Fallopian tube
- (C) Cervix (D) Uterus
- 29) The common passage meant for transporting Urine and Sperms in male is
- (A) Urethra
- (B) Vas deferens
- (C) Ureter
- (D) Anus

30) Growing foetus derive nutrition from mothers blood through

- (A) Uterus (B) Fallopian tube
(C) Placenta (D) Cervix

31) A Mendelian experiment consisted of breeding tall pea plant bearing violet flowers with short pea plants bearing white flowers. The progeny all bore violet flowers, but almost half of them were short. This suggests that the genetic makeup of the tall parent can be depicted as

- (A) TTWW (B) TtWW
(C) TTww (D) TtWw

32) Which of the following is controlled by genes?

- (X) Weight of a person
(Y) Height of a person
(A) Only X
(B) Only Y
(C) Both X and Y
(D) Sometimes X and Sometimes Y

33) Wild Cabbage is being cultivated for thousands of years and humans have generated Broccoli, Cauliflower Kala etc. from it. This is an example of

- (A) Geographic isolation
(B) Natural selection
(C) Genetic drift
(D) Artificial selection

Rough Work

(P.T.O.)

Rough Work

34) The radius of curvature of a spherical mirror is 40 cm. What is its focal length?

- (A) 40 cm (B) 20 cm
(C) 80 cm (D) 60 cm

35) The image formed by a concave mirror is observed to be virtual, erect and larger than the object. Where should be the position of the object?

- (A) Between the pole of the mirror and its principal focus
(B) Beyond the centre of curvature
(C) At the centre of curvature
(D) Between the principal focus and the centre of curvature

36) Which of the following materials has maximum optical density?

- (A) Diamond
(B) Pearl
(C) Glass
(D) Water

37) What is the focal length of a lens of power -2.0 D

- (A) -0.5 m (B) 0.5 m
(C) -1.5 m (D) 1.5 m

38) The part of eye that determines the colour of the eye of a person is _____

- (A) Pupil (B) Cornea
(C) Iris (D) Retina

39) What is the formula for an electric current?

- (A) $I = Qt$ (B) $I = \frac{Q}{t}$
(C) $I = \frac{t}{Q}$ (D) $I = W \cdot t$

40) Two conducting wires of the same material and equal lengths and equal diameters are first connected in series and then parallel in a circuit across the same potential difference. The ratio of heat produced in series and parallel combinations would be

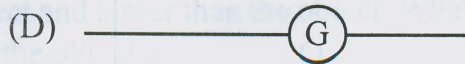
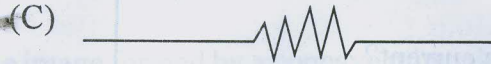
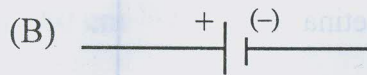
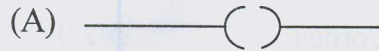
- (A) 1:2 (B) 2:1
(C) 4:1 (D) 1:4

41) On which factors does the resistivity of conducting wire depend?

- (A) Length of wire
(B) Area of cross-section of wire
(C) Volume of wire
(D) Material of wire

42) Which symbol is used to represent the resistance?

Rough Work



43) How much electric current will pass when an electric heater having 50Ω resistor is connected to 200 V ?

(A) 4 A

(B) 4.4 A

(C) 44 A

(D) 0.44 A

44) The commonly used safety fuse wire is made of

(A) Copper

(B) Lead

(C) Nickel

(D) An alloy of tin and lead

45) The phenomenon of electromagnetic induction is

- (A) The process of charging a body
- (B) The process of generating magnetic field due to a current passing through a coil
- (C) Producing induced current in a coil due to relative motion between a magnet and the coil
- (D) The process of rotating a coil of an electric motor

46) The core of an electromagnet must be of

- (A) hard iron
- (B) soft iron
- (C) rusted iron
- (D) steel

47) A fuse wire is a/an _____

- (A) Conductor having low melting point
- (B) Insulator having low melting point
- (C) Semi-conductor having low melting point
- (D) Conductor having high melting point

Rough Work

48) Who had first obtained the electric current with the help of magnetic field?

- (A) Oersted
- (B) Faraday
- (C) Volta
- (D) Joule

49) Most of the sources of energy we use represent stored solar energy. Which of the following is not ultimately derived from the Sun's energy?

- (A) Geothermal energy
- (B) Wind energy
- (C) Nuclear energy
- (D) Bio-mass

50) Which of the following is the full form of CFC?

- (A) Chloro Fluorine Carbon
- (B) Carbon Chloro Fluorine
- (C) Chlorin Fluid Carbon
- (D) Chloro Fluoro Carbon

11 (E)

(MARCH, 2019)
(NCERT OTHERS)

(Part - B)

Time : 2 Hours]

[Maximum Marks : 50

Instructions :

- 1) Write in a clear hand writing.
 - 2) There are four sections in Part - B of the question paper and total 1 to 18 questions are there.
 - 3) All questions are compulsory. Internal options are given.
 - 4) The numbers at right side represents the marks of the questions.
 - 5) New section may be started on a new page of answer book.
 - 6) It is advisable to maintain sequence.
-

SECTION - A

■ Answer the questions 1 to 5 in short. (2 marks each)

- 1) Why are decomposition reactions called the opposite of combination reaction? Write equations for these reactions. [2]
- 2) Give two important uses of washing soda and baking soda. [2]
- 3) State two ways to prevent the rusting of iron. [2]

- 4) List four specific characteristics of the images of the object formed by convex mirrors. [2]

OR

- 4) A doctor has prescribed a corrective lens of power +1.5 D. Find the focal length of the lens. Is the prescribed lens diverging or converging?

- 5) The potential difference between the terminals of an electric heater is 60V. When it draws a current of 4A from the source. What current will the heater draw if the potential difference is increased to 120 V? [2]

OR

- 5) Write two points of differences between a voltmeter and an ammeter.

SECTION - B

■ Answer the questions 6 to 10 in short. (2 marks each)

- 6) State the laws of refraction of light. If the speed of light in vacuum is 3×10^8 m/s find the absolute refractive index of a medium in which light travels with a speed of 1.4×10^8 m/s. [2]

- 7) Draw a ray diagram to show the refraction of light through a glass prism. Mark on it [2]

- the incident ray
- the emergent ray
- the angle of deviation

- 8) What are the qualities of an ideal source of energy? [2]

- 9) What are the problems caused by the non-biodegradable wastes that we generate? [2]

OR

- 9) What is ozone? How and where is it formed in the atmosphere? Explain how does it affect ecosystem.

- 10) What changes can you make in your habits to become more environment-friendly? [2]

SECTION - C

- Answer the following questions 11 to 15 in brief (3 marks each).

11) How many groups and periods are there in the Modern Periodic Table? How do the atomic size and metallic character of element vary as we move [3]

a) down a group and

b) from left to right in a period

12) Draw a neat labelled diagram of human brain and mention the functions of Fore brain. [3]

13) What are the different methods of contraception? [3]

OR

13) List any four modes of asexual reproduction. Give one example of each. Explain any two modes of asexual reproduction.

14) "It is a matter of chance whether a couple will have a male or a female child." Justify this statement by drawing a flow chart. [3]

15) Explain the underlying principle and working of an electric generator by drawing a labelled diagram. [3]

OR

15) Draw magnetic field lines around a bar magnet and list the properties of magnetic lines of force.

SECTION - D

- Answer the following questions 16 to 18 in detail (5 marks each).

- 16) a) What are hydrocarbon? Give examples. [5]
b) Give the structural differences between saturated and unsaturated hydrocarbons with two examples each.
c) What is a functional group? Give examples of four different functional group?

OR

- 16) Explain the given reaction with examples
a) Hydrogenation reaction
b) Oxidation reaction
c) Substitution reaction
d) Saponification reaction
e) Combustion reaction
- 17) What is hypermetropia? State two causes. With the help of ray diagram show [5]
a) eye defect
b) correction of hypermetropia

- 18) Draw a neat and labeled diagram of human respiratory system and explain the process of respiration in human being. [5]

OR

- 18) a) Draw a diagram to show open stomatal pore and label on it
i) guard cells
ii) chloroplast
b) State the function of stomata.
c) How do guard cells regulate the opening and closing of stomatal pore?

