SAMPLE PAPER

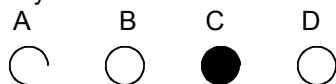**Class : VII**   ***Time allowed :*** 2 hours   ***Maximum Marks :*** 340

Please read the instructions in Question Booklet before answering the question paper.

INSTRUCTIONS

01.   The question paper has **'8'** printed pages. Please ensure that the copy of the question paper you have received contains all pages.

02.   Before starting the paper, fill up the required details in the blank space provided in the answer sheet.

03.   Write your name and Seven digit **Reg. No.** in the space provided at the top of this booklet.

04.   The question paper consists of **'85'** objective type questions. Each question carry **4** *marks* and all of them are compulsory.

05.   Each question contains four alternatives out of which only **ONE** is correct.

06.   There is **NO NEGATIVE** marking.

07.   Indicate the correct answer for each question by filling appropriate bubble in your answer sheet.

08.   The answers of the questions must be marked by shading the circle against the question by dark **Black Ball point Pen** only.

09.   For rough work, use the space provided at the bottom of each page. No extra sheet will be provided for rough work and you are not supposed to bring the same.

10.   Use of **blank papers**, **clip boards**, **log tables**, **calculator**, **slide rule**, **mobile** or any other **electronic gadgets** in any form is "**NOT PERMISSIBLE**".

11.   You must not carry mobile phone even if you have the same, give it to your Invigilator before commencement of the test and take it back from him/her after the exam.

12.   The Answer Sheet will be checked through computer hence the answer of the questions must be marked by shading the circles against the question by dark **Black Ball point Pen** only.

For example if only 'C' choice is correct then, the correct method for filling the bubble is

the wrong method for filling the bubble are

(a)   A   B   C   D   Tick Mark

(b)   A   B   C   D   Cross Mark

(c)   A   B   C   D   Half filled or Semi Dark

The answer of the questions in wrong or any other manner will be treated as wrong.

USEFUL DATA

Take g = 10 m/s² wherever required.

Q.1 On what factors does the radiation of heat depend?
(i) The temperature of the substance
(ii) The colour of the substance
(iii) Medium to transfer the energy
(A) (i) and (ii) only (B) (ii) and (iii) only (C) (iii) and (i) only (D) (i), (ii) and (iii)

Q.2 In many household articles we can find a magnet instead of a lock or a bolt in the doors. Magnets are used in such places mainly to
(A) facilitate frequent usage (B) ensure safety
(C) make the article airtight (D) make the article look beautiful

Q.3 Kinetic energy depends on :
(A) position (B) velocity (C) shape (D) colour

Q.4 When do chemical reactions produce heat energy?
(A) Energy required by reactants is more than the energy used in the formation of products.
(B) Energy required by reactants is less than the energy used in the formation of products.
(C) Energy required by reactant is equal the energy used in the formation of products.
(D) All of the above

Q.5 Which of the following has the highest Potential energy?
(A) 10 kg stone at a height of 20 m (B) 100 kg stone at a height of 2 m
(C) 40 kg stone at a height of 5 m (D) 30 kg stone at a height of 7 m

Q.6 The filament of a bulb is usually a :
(A) thin wire with many coils
(B) thick wire with many coils
(C) thin straight wire
(D) thick straight wire.

Q.7 Which of the following is a natural source of light?
(A) Electric lamp (B) Electric filament (C) Torch light (D) Sun

Q.8 The metal disc provided at one end of the common cell is the
(A) switch
(B) positive terminal
(C) negative terminal
(D) spring

Cell

Metal disc
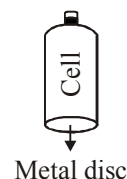
Q.9 A compass works :
(A) only in oceans or seas
(B) only on land, where the earth's magnetic field is strong
(C) only on high mountains
(D) at all places withing the earth's magnetic field

Q.10 It is easy to draw water from a well when the rope passes over a pulley than drawing it directly. Because
(A) pulley adds more force
(B) pulley decreases the weight of the bucket
(C) pulley has a mechanical advantage of more than one
(D) pulley changes the direction of force

Q.11 A boy held a book of 1 kg at a height of 1 metre for 60 seconds. Calculate the work done.
(A) 60 J   (B) 30 J   (C) 15 J   (D) 0

Q.12 The reading in the thermometer scale is made in
(A) Degree Celsius   (B) Degree Fahrenheit (C) Kelwin   (D) None of these

Q.13 What is the kinetic energy of a ball of mass 500 g and moving with a speed of 2 m/s?
(A) 4 J   (B) 1 J   (C) 1 N   (D) 4 ergs

Q.14 A man runs at a constant speed of 3.2 m s^{-1}, then what distance does he cover?
(i) 6.4 m in 2 seconds; (ii) 192 m in 1 minute; (iii) 32 cm in 1 second
(A) (i) and (ii) only   (B) (ii) and (iii) only   (C) (iii) and (i) only   (D) (i), (ii) and (iii)

Q.15 When the same amount of force is applied :
(A) a nail travels more distance than a screw into the wood board
(B) screw travels more distance than the nail
(C) both pierce the wood board to equal distance
(D) none of the above

Q.16 Pashmina shawls are made from fur of
(A) Kashmiri goat   (B) Llama
(C) Yak   (D) Angora

Q.17 Which of the following materials is hard, opaque and shines when freshly cut ?
(A) Rubber   (B) Wood   (C) Tin   (D) Plastic

Q.18 Overhead cables ned not be insulated because :
(A) air is a bad conductor of electricity
(B) air is a good conductor of electricity
(C) bare wires conduct electricity better than insulated wires
(D) none of these

Q.19 Filtration as a method of separation can be used for mixtures that are :
(A) homogeneous and liquid-in-gas mixtures   (B) heterogeneous and liquid-in-liquid mixtures
(C) homogeneous and solid-in-liquid mixtures.   (D) heterogeneous and solid-in-liquid mixtures

Q.20 Which of the following Venn diagrams shows the relationship between changes correctly ?
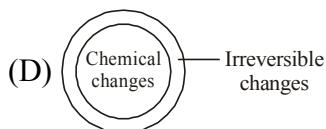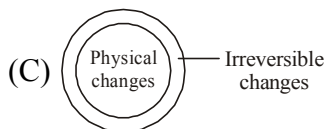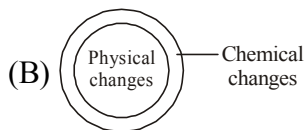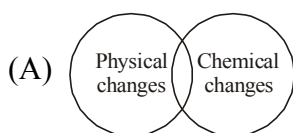
Q.21 The acid used in the making of vinegar is :
(A) formic acid   (B) acetic acid   (C) sulphuric acid   (D) nitric acid

Q.22 Vegetable fibres are made up of
(A) Cellulose   (B) Protein   (C) Nylon   (D) Reyon

Q.23 Which of the following will be true for 'ash' that is obtained by burning wood in air ?
(A) The properties of ash will be similar to wood
(B) The properties of ash will be similar to air
(C) The properties of ash will be different from both wood and air.
(D) The properties of ash will be similar to both wood and air.

Q.24 Opaque objects :
(A) reflect most of the light falling on them (B) transmit most of the light falling on them
(C) absorb most of the light falling on them (D) are strong and hard

Q.25 Reddish brown coating over the surface of iron is called Rust. It is formed due to
(A) Oxygen (B) Oxygen and water vapour
(C) Water vapour (D) None of these

Q.26 Which is the weakest acid ?
(A) Citric (B) Sulphuric (C) Hydrochloric (D) Nitric

Q.27 Sand and water can be separated by :
(A) decantation (B) sieving
(C) sublimation (D) magnetic separation

Q.28 Identify the mixture from the following.
(A) Oxygen (B) Carbon dioxide (C) Hydrogen (D) Air

Q.29 Clay is used for making pots and bricks because it is
(A) opaque (B) non- magnetic
(C) a good conductor of heat (D) easily moulded into different shapes

Q.30 A mixture contains two solids A and B. Solid A is light in weight while solid B is very heavy. Their sizes are almost same. Here, A is the unwanted component. To get pure solid b, which separaion method would ou suggest ?
(A) Sieving (B) Winnowing
(C) Magnetic separation (D) Filtration

Q.31 Potato is a/an
(A) annual (B) binneal (C) perennial (D) fern

Q.32 Soya beans are the richest source of
(A) carbohydrates (B) proteins (C) fats (D) roughage

Q.33 Which of the following are energy giving foods ?
(A) Groundnut and eggs (B) Eggs and milk
(C) Soya bean and ground nut (D) Potatoes and rice

Q.34 Mohan has a cup or rice, two chappatis, two vegetable curries and ghee in his plate of means. What is missing in his meals ?
(A) Fats (B) Proteins (C) Salt (D) Water

Q.35 The plants which grow on land but need very less amount of water are called
(A) xerophytes (B) pteridophytes (C) hydrophytes (D) mesophytes

Q.36 Rabbit is a _____ animal
(A) parasite   (B) autotroph   (C) herbivorous   (D) carnivorous

Q.37 Part of our balanced diet which is neither body building nor energy providing but still important for proper functioning of our body is
(A) protein   (B) carbohydrate   (C) vitamin   (D) fat

Q.38 Bleeding of gums is a symptom of the disease
(A) rickets   (B) beri beri   (C) goitre   (D) scurvy

Q.39 Which part of the banana plant is not used as food ?
(A) Stem   (B) Leaf   (C) Flower   (D) Fruit

Q.40 For healthy teeth and bones the following mineral is required
(A) iron   (B) calcium   (C) sodium   (D) magnesium

Q.41 Find the odd one out
(A) Milk   (B) Curd   (C) Carrot   (D) Honey

Q.42 Glands in the walls of the stomach secrete an enzyme called
(A) amylase   (B) trypsin   (C) pepsin   (D) serotonin

Q.43 Which of the following are not energy giving foods ?
(A) Raw potato   (B) Cooked rice   (C) A slice of a fruit   (D) Groundnut

Q.44 Which of the following are called food factories of the plant ?
(A) Leaves   (B) Stem   (C) Roots   (D) Flowers

Q.45 The structural unit of a living being is
(A) atom   (B) molecule
(C) compound substance   (D) cell

Q.46 Raju scored 16 marks of 25. Its fractional form is
(A) $\dfrac{1}{25}$ (B) $\dfrac{16}{25}$ (C) $\dfrac{9}{25}$ (D) $\dfrac{25}{25}$

Q.47 The number which is neither positive nor negative is
(A) 1   (B) 5   (C) 0   (D) 10

Q.48 In the adjoining figure. it is given that D and E are the mid points of AB and AC respectively. If $\angle A = 80°$, $\angle C = 35°$, then $\angle EDB =$ _____
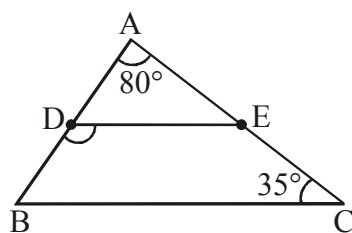
(A) 120°   (B) 160°   (C) 70°   (D) 115°

Q.49 $\left(\dfrac{x^a}{x^b}\right)^c \times \left(\dfrac{x^b}{x^c}\right)^a \times \left(\dfrac{x^c}{x^a}\right)^b = $ _____

(A) 0   (B) 1   (C) –1   (D) 2

Q.50 Simplify $(a^3 - 2a^2 + 4a - 5) - (- a^3 - 8a + 2a^2 + 5)$
(A) $2a^3 + 7a^2 + 6a - 10$ (B) $2a^3 + 7a^2 + 12a - 10$
(C) $2a^3 - 4a^2 + 12a - 10$ (D) $2a^3 - 4a^2 + 6a - 10$

Q.51 In a $\triangle ABC$, E is the midpoint of AC and G is the centroid of the triangle. Then BE : GE
(A) 1 : 2   (B) 2 : 1   (C) 3 : 1   (D) 1 : 3

Q.52 12 : 3 :: x : 1 value of x is
(A) $\dfrac{1}{4}$ (B) 1   (C) 4   (D) 5

Q.53 Angles are measured in
(A) compasses   (B) protractor   (C) degrees   (D) centimetres

Q.54 Sum of two integers is +62. If one of the integer is –48 then the other is
(A) +14   (B) –14   (C) –110   (D) +110

Q.55 When two line segments meet at a point forming right angle they are said to be _____ to each other.
(A) parallel   (B) perpendicular   (C) equal   (D) none

Q.56 The value of $(512)^{\frac{-2}{9}}$ is
(A) $\dfrac{1}{2}$ (B) 2   (C) 4   (D) $\dfrac{1}{4}$

Q.57 If   p : All integers are rational numbers
and   q : Every rational number is an integer, then which of the following statement is correct?
(A) p is False and q is True   (B) p is True and q is False
(C) Both p and q are True   (D) Both p and q are False

Q.58 The average weight of sample of 10 apples is 52 g. Later it was found that the weighing machine had shown the weight of each apple 10 g less. The correct average weight of an apple is
(A) 62 g   (B) 54 g   (C) 56 g   (D) 52 g

Q.59 Difference of $\dfrac{19}{25}$ and $\dfrac{27}{25}$ is
(A) $\dfrac{9}{25}$ (B) $\dfrac{3}{25}$ (C) $\dfrac{8}{25}$ (D) $\dfrac{6}{25}$

Q.60 The mean of 10 observation is 25. If one observation, namely 25, is deleted, the new mean is
(A) 25   (B) 20   (C) 28   (D) 22

Q.61 In a ΔABC, if $AB^2 = BC^2 + AC^2$, then the right angle is at
(A) A (B) B (C) C (D) None

Q.62 In a ΔABC, if $\angle A = \angle B + \angle C$ then $\angle A = $ ——
(A) 60° (B) 45° (C) 90° (D) none

Q.63 A man walked 3 km towards North then 8 km towards South. His position at the end of the walk is
(A) 5 km towards East (B) 3 km towards South
(C) 8 km towards North (D) 5 km towards South

Q.64 Express 0.0084 in scientific notation.
(A) 84×10^{-4} (B) 8.4×10^{-3} (C) 0.84×10^{-2} (D) None

Q.65 How many cubes are needed to make the solid below?
(A) 9
(B) 14
(C) 18
(D) 21
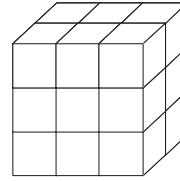
Direction (Q.66 to 67) : In each of the following questions, five groups of letters are given. One of these groups is different from the other four. Find the odd one.

Q.66 (A) WHEAT (B) TRAIN (C) PROUD (D) DRIVE

Q.67 (A) ADBEC (B) FIGJH (C) KNLOM (D) PRTSQ

Direction (Q.68 to 69) : Choose the odd numeral pair/group in each of the following questions.

Q.68 (A) 1975 – 1579 (B) 3152 – 5321 (C) 4283 – 8432 (D) 7319 – 9731

Q.69 (A) 21 : 24 (B) 28 : 32 (C) 54 : 62 (D) 70 : 80

Q.70 THEREFORE is to TEEOERFRH as HELICOPTER is to .... ?..........
(A) HELICORETP (B) HLCPERTOIE (C) RETPOCILEH (D) RETPOCILHE

Direction (Q.71 and Q.72): In the figure, rectangle, square, circle and triangle represents the regions of wheat, gram, maize and rice cultivation respectively. On the basis of the figure answer the following quesitons.

Q.71 Which area is cultivated by rice only ?
(A) 5 (B) 1 (C) 2 (D) 11

Q.72 Which area is cultivated by maize only ?
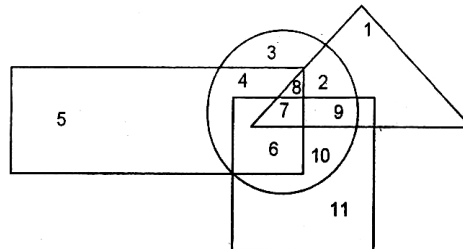(A) 10 (B) 2 (C) 3 (D) 4

Direction (Q.73 to 76) : In each of the following questions, five groups of letters are given. One of these groups is different from the other four. Find the odd one.

Q.73 (A) CALORIC   (B) DRUID   (C) LEVEL   (D) FRETFUL

Q.74 (A) LAHMQW   (B) HUTMCX   (C) CLOVIK   (D) IXMLBC

Q.75 (A) MOTXYZ   (B) GKRVWX   (C) PSBEFG   (D) ORNODF

Q.76 (A) STUTTER   (B) RESURRECT   (C) SURRENDER   (D) SUCCEED

Direction (Q.77): In the following questions, there is a relationship between the numbers / letters / figures on the left of the sign (: :). The same relationship exists to the right of the sign (: :), of which one is missing. Find the missing term from the alternatives.

Q.77 BEJQ : DGLS : : FINU : ?
(A) H L R Z   (B) H K P W   (C) H K R Z   (D) E H Q W

Directions (Q.78 to 80):- Find the missing term in the following series

Q.78 Z, S, W, O, T, K, Q, G, ?, ?
(A) N, C   (B) N, D   (C) O, C   (D) O, D

Q.79 AI, BJ, CK, ?
(A) DL   (B) DM   (C) GH   (D) LM

Q.80 0.5, 1.5, 4.5, 13.5, (......)
(A) 9   (B) 11   (C) 13   (D) 40.5

Q.81 Choose the venn diagram which best relates apples, oranges, mangoes.
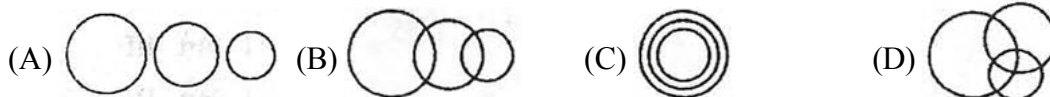
Direction (Q.82 to 84) : Find the missing term in the following series.

Q.82 1, 6, 15, ..., 45, 66, 91
(A) 27   (B) 28   (C) 25   (D) 26

Q.83 80, 40, 20, ..., 5
(A) 90   (B) 30   (C) 10   (D) 60

Q.84 11, 10, ..., 100, 1001, 1000, 10001
(A) 101   (B) 110   (C) 111   (D) None of these

Direction (Q.85) : In each of the following questions, five groups of letters are given. One of these groups is different from the other four. Find the odd one.

Q.85 (A) EDCBA   (B) PONML   (C) UTSRQ   (D) YXWVZ

ANSWER KEY

Q.1	D	Q.31	B	Q.61	C
Q.2	A	Q.32	B	Q.62	C
Q.3	B	Q.33	D	Q.63	D
Q.4	B	Q.34	B	Q.64	B
Q.5	D	Q.35	A	Q.65	C
Q.6	A	Q.36	C	Q.66	D
Q.7	D	Q.37	C	Q.67	D
Q.8	C	Q.38	D	Q.68	A
Q.9	D	Q.39	B	Q.69	C
Q.10	D	Q.40	B	Q.70	B
Q.11	D	Q.41	C	Q.71	B
Q.12	B	Q.42	C	Q.72	C
Q.13	B	Q.43	C	Q.73	D
Q.14	A	Q.44	A	Q.74	C
Q.15	B	Q.45	D	Q.75	D
Q.16	A	Q.46	B	Q.76	D
Q.17	C	Q.47	C	Q.77	B
Q.18	A	Q.48	D	Q.78	A
Q.19	D	Q.49	B	Q.79	A
Q.20	D	Q.50	C	Q.80	D
Q.21	B	Q.51	C	Q.81	A
Q.22	A	Q.52	C	Q.82	B
Q.23	C	Q.53	C	Q.83	C
Q.24	A	Q.54	D	Q.84	A
Q.25	B	Q.55	B	Q.85	D
Q.26	A	Q.56	D		
Q.27	A	Q.57	B		
Q.28	D	Q.58	A		
Q.29	D	Q.59	C		
Q.30	B	Q.60	A		

From Class 7th to 8th Moving						
CURRENT CLASS		**Physics**	**Chemistry**	**Mathematics**	**Biology**	**Mental Ability**
				100 % Previous Class (VI) Syllabus		
VII		Motion & Time, Lights, Electric Current and Its effects, Heat, Wind, Storm & Cyclone.	Physical and Chemical Changes, Fiber To Fabric, Acids Bases and Salts, Water resources, Waste water story.	Integer, Fraction and Decimals, Data Handling, Simple equations, Lines and Angles, The triangles and its properties, Congruence of Triangles, Comparing quantities, Rational Numbers, Practical Geometry, Primeter and area, Algebraic Expression, Exponents and Powers, Symmetry, Visualising solid shapes.	Nutrition In Plants, Nutrition In Animals, Weather, Climate & Adaptation, Soil, Respiration in organism, Transportation in animals and plants, Forest : Our lifeline	Verbal and Non-Verbal Reasoning