

## SAMPLE PAPER

**Class : VIII**

**Time allowed : 2 hours**

**Maximum Marks : 340**

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

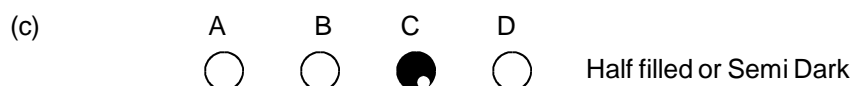
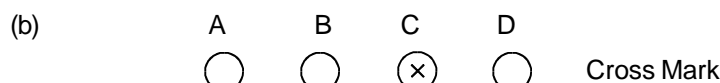
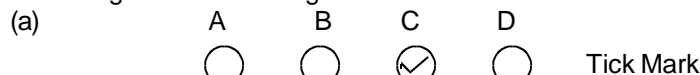
### INSTRUCTIONS

01. The question paper has '10' 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 **NEGATIVE** marking. **1 mark** will be deducted for each wrong answer.
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

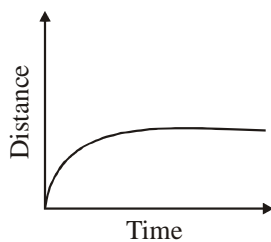


The answer of the questions in wrong or any other manner will be treated as wrong.

#### USEFUL DATA

**Take  $g = 10 \text{ m/s}^2$  wherever required.**

- Q.1 The speed of light is  
 (A) 330 m/s (B) 300,000,000 m/s (C) 30,000 m/s (D) 300,000,000 km/s
- Q.2 Shweta observes lightning in her area. She hears the sound 5 s after she observed lighting. How far is she from the place where lighting. How far is she from the place where lightning occurs if speed of sound in air is  $330 \text{ ms}^{-1}$   
 (A) 1.65 km (B) 2.55 km (C) 3.65 km (D) 4.55 km
- Q.3 When you heat the water in a pot, it boils. What do you infer from above observation?  
 (A) Heat is a form of energy (B) Water can boil itself  
 (C) Water develops heat on it own (D) None of the above
- Q.4 Cement floors are laid with the glasses between the rectangular floor tiles. The reason is  
 (A) to give them a beautiful geometrical design  
 (B) glasses hold the floor tiles strongly  
 (C) not to let the floor tiles crack on heating in the summer  
 (D) there is no specific reason
- Q.5 By using a cncave mirror, image of a tree is focused on a screen. The distance between the screen and the mirror is  
 (A) Equal to twice the focal length of the concave mirror.  
 (B) Equal to one fourth of the focal length of the concave mirror.  
 (C) Equal to half the radius of curvature of the concave mirror.  
 (D) Equal to the radius of curvature of the concave mirro.
- Q.6 Convex mirrors are used as rearview mirrors in the motor vehicles because  
 (A) the reflect light better than the other mirrors  
 (B) they produce images which are more clearer than those produced by others.  
 (C) the produce magnified images  
 (D) they form images which are much smaller than the objects
- Q.7 Study the graph given below. How is the speed of the moving body?

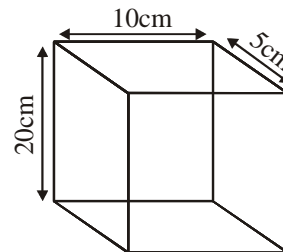


- (A) It goes on increasing  
 (B) It first decreases then becomes zero  
 (C) It increases then becomes constant but not zero  
 (D) It decreases then becomes constant but not zero
- Q.8 Oxygen can be supplied to a fish tank by bubbling air in to water. The pressure and the volume of the air bubbles while they are rising respectively  
 (A) Decreases, increases (B) Decreases, decreases  
 (C) Increases, decreases (D) Increases, increases

- Q.9 Gaps are left between railway tracks because :
- (A) gaps give the space to the tracks to expand in summer heat  
 (B) gaps hold the tracks firmly  
 (C) to produce gentle rhythmic sound when the train moves on the track  
 (D) it is customary to leave the gaps
- Q.10 When we touch a steel rod and a paper simultaneously, we feel that the rod is colder because
- (A) iron being a good conductor conducts more heat from our body  
 (B) paper being a good conductor conducts more heat from our body  
 (C) more heat flows from the iron to our body  
 (D) more heat flows from the paper to our body

- Q.11 A brick of weight 80 N stands upright on the ground as shown in figure. the pressure exerts on the ground by brick is

- (A)  $\frac{5 \times 10}{80} \times 10^{-4} \text{ Nm}^{-2}$   
 (B)  $80 \times 5 \times 10^{-4} \text{ Nm}^{-2}$   
 (C)  $\frac{10}{80 \times 5 \times 10^{-4}} \text{ Nm}^{-2}$   
 (D)  $\frac{80}{10 \times 5 \times 10^{-4}} \text{ Nm}^{-2}$



- Q.12 The distance between the focus and the pole of the mirror is called
- (A) focal length (B) radius of curvature  
 (C) principal axis (D) diameter of curvature
- Q.13 At a particular time, the constant of ratio of length of a tree and the length of its shadow is found to be 1.5. Now, the length of the shadow of a flag pole is 15 m, calculate the length of the pole
- (A) 15 m (B) 22.5 m (C) 2.25 m (D) 13.5 m
- Q.14 John carried out an experiment to find out how different surface (P,Q,R and S) effect the distance a car travelling at 50 km/h needed to stop once the brakes are applied.

The results are shown below :

Type of road surface	P	Q	R	S
Stopping distance (m)	18	15	19	27

Which type of road will provide the most friction for the car to stop ?

- (A) P (B) Q (C) R (D) S
- Q.15 Which of the following relations is correct ?
- (A)  $\text{Distance} = \frac{\text{Speed}}{\text{Time}}$  (B)  $\text{Distance} = \frac{\text{Time}}{\text{Speed}}$   
 (C)  $\text{Distance} = \text{Speed} \times \text{Time}$  (D)  $\text{Distance} = \frac{1}{\text{Speed} \times \text{Time}}$

- Q.16 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.17 Phenolphthalein turns \_\_\_\_\_ in acidic and neutral solutions.  
 (A) colourless (B) pink (C) red (D) green
- Q.18 Caustic soda is the common name for :  
 (A)  $Mg(OH)_2$  (B) KOH (C)  $Ca(OH)_2$  (D) NaOH
- Q.19 Which among the following is the strongest acid ?  
 (A) Acetic acid (B) Sulphuric acid (C) Formic acid (D) Tannic acid
- Q.20 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.21 A base reacts with an acid to form salt and water. This reaction is called :  
 (A) oxidation reaction (B) neutralisation reaction  
 (C) reduction reaction (D) ionisation reaction
- Q.22 Adding salt to water makes it salty. Which of the following is true regarding this change ?  
 (A) It is a chemical change because a new substance is formed  
 (B) It is a physical change because the original substances can be recovered  
 (C) It is a chemical change because there is exchange of heat  
 (D) It is a physical change because there is a slight change in colour.
- Q.23 Adding salt to water makes it salty. Which of the following is true regarding this change ?  
 (A) It is a chemical change because a new substance is formed  
 (B) It is a physical change because the original substances can be recovered  
 (C) It is a chemical change because there is exchange of heat  
 (D) It is a physical change because there is a slight change in colour.
- Q.24 Polystyrene has following uses :-  
 (A) for insulating refrigerators & cold stores  
 (B) for containers which are used as ice box  
 (C) for packing expensive items as cellphones, TV  
 (D) All of these
- Q.25 Which is the weakest acid ?  
 (A) Citric (B) Sulphuric (C) Hydrochloric (D) Nitric
- Q.26 In acids, methyl orange turns :  
 (A) yellow (B) green (C) red (D) white
- Q.27 The acid used in the making of vinegar is :  
 (A) formic acid (B) acetic acid (C) sulphuric acid (D) nitric acid

- Q.28  $? + O_2 \rightarrow 2K_2O$   
 (A) K (B)  $K_2$  (C) 2K (D) 4 K
- Q.29 Two changes are stated below :  
 i. A piece of magnesium gives of bright flames when burnt.  
 ii. A piece of iron glows red when heated strongly.  
 Which of these is a physical change ?  
 (A) i only (B) ii only (C) both i and ii (D) neither i nor ii
- Q.30 Which of the following is thermosetting plastics  
 (A) PVC (B) Nylon (C) Melamine (D) Terylene
- Q.31 Cryopreservation is:  
 (A) Preservation of living beings in chemicals (B) Preservation at very low temperature  
 (C) Preservation through radiation. (D) Preservation through use of gases.
- Q.32 Above plant mushroom gets its food



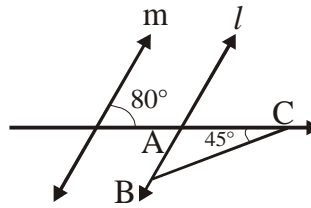
Mushroom

- (A) from dead and decaying plants (B) from photosynthesis  
 (C) by eating small insects which come near it (D) from the water we pour near it
- Q.33 Irrigation facilitates :  
 (A) Absorption of mineral & fertilisers. (B) Pond formation.  
 (C) Easy harvesting (D) Crop rotation.
- Q.34 Strong heating of a substance at high temperature followed by immediate chilling is  
 (A) Pasteurization (B) Cryopreservation (C) Sterilization (D) Neutralization
- Q.35 Plants grown & cultivated at one place on a large scale:-  
 (A) Weeds (B) Mushroom (C) Crops (D) None
- Q.36 Which of the following statements is not correct?  
 (A) In plant cells, vacuoles are absent.  
 (B) Vacuole is bounded by a single membrane.  
 (C) In *Amoeba*, contractile vacuole is important for excretion.  
 (D) Flagellum is important for transport of bacteria.
- Q.37 Which part of the cell contains organelles?  
 (A) Protoplasm (B) Nucleoplasm (C) Chromosomes (D) Cytoplasm
- Q.38 The tube starting at mouth and ending at anus is called  
 (A) oesophagus (B) food cavity (C) alimentary canal (D) elementary canal
- Q.39 The polio drops given to children in pulse polio programme is  
 (A) An antibiotic (B) A vaccine (C) A drug (D) An energy suppliment

- Q.40 Which of the following is a parasitic plant?  
 (A) Cactus (B) Saliva (C) Cuscuta (D) Cucumber
- Q.41 Mushroom is the type of :  
 (A) Algae (B) Protista (C) Fungi (D) Bacteria
- Q.42 Digested food is absorbed by  
 (A) heart (B) lungs (C) blood (D) water
- Q.43 The part of alimentary canal that runs from the mouth to stomach is called  
 (A) trachea (B) bronchi (C) oesophagus (D) intestine
- Q.44 Controlling centre of a cell is  
 (A) Nucleus (B) Nucleolus (C) Chloroplast (D) Ribosome
- Q.45 Raju got stomachache. Which of the following could be a reason?  
 (A) He ate food at seven in the evening  
 (B) He drank water after eating food  
 (C) He did not chew the food properly  
 (D) He did not wash his hands properly after eating food
- Q.46 0 reduced by  $\frac{1}{2}$  is  
 (A)  $\frac{1}{2}$  (B)  $-\frac{1}{2}$  (C) 2 (D) -2
- Q.47 The absolute value of  $|x - 6| + |6 - x|$ , when  $0 < x < 6$  is  
 (A)  $6x$  (B) 12 (C)  $2(6 - x)$  (D) None of these
- Q.48 Solve for x :  $\frac{6x - 7}{2x + 1} = \frac{3x + 1}{x + 5}$ .  
 (A) 5 (B) 3 (C) 2 (D) 1
- Q.49 The additive inverse of  $\frac{-a}{b}$  is  
 (A)  $\frac{b}{a}$  (B)  $\frac{a}{-b}$  (C)  $\frac{a}{b}$  (D)  $\frac{-b}{a}$
- Q.50 The rational number  $0.\overline{3}$  can also be written as .....  
 (A)  $\frac{3}{10}$  (B)  $\frac{33}{100}$  (C)  $\frac{1}{3}$  (D) 333
- Q.51 Write the additive inverse of  $\frac{-5}{6} + \frac{2}{3}$   
 (A)  $\frac{1}{6}$  (B)  $\frac{-1}{6}$  (C) 6 (D) -6

Q.52 Five times the number increased by 4 is equal 39. The number is  
 (A) 4 (B) 5 (C) 7 (D) 6

Q.53 In figure  $l \parallel m$ , then  $\angle ABC$  will be



(A)  $45^\circ$  (B)  $30^\circ$  (C)  $35^\circ$  (D)  $125^\circ$

Q.54 A piece of wire  $\frac{15}{4}$  m long is broken into pieces. One piece is  $2\frac{1}{2}$  m long . Find the length of the other piece

(A)  $\frac{6}{7}$  m (B)  $\frac{5}{9}$  m (C)  $\frac{5}{4}$  m (D)  $\frac{5}{2}$  m

Q.55 The numerator of a fraction is six more than the denominator. If the numerator is increased by 5 and the denominator is decreased by 1, the fraction becomes  $\frac{3}{2}$  . Find the fraction.

(A) 25 (B)  $\frac{27}{29}$  (C)  $\frac{1}{25}$  (D)  $\frac{29}{30}$

Q.56 Find the smallest square number divisible by each one of the numbers 8, 9 and 10.

(A) 360 (B) 720 (C) 3600 (D) 2500

Q.57 The greatest four digit number which is also a perfect square is

(A) 9701 (B) 9801 (C) 9901 (D) None of these

Q.58 Solve  $\frac{2x-3}{2} - \frac{x+1}{3} = \frac{3x-8}{4}$  .

(A) 1 (B) 2 (C)  $\frac{4}{5}$  (D)  $\frac{5}{8}$

Q.59 The hypotenuse of an isosceles right angled triangular field has a length of  $30\sqrt{2}$  m, then length of other side is

(A)  $30\sqrt{2}$  m (B) 30 m (C) 25 m (D) None of these

Q.60 The measure of each angle of a convex quadrilateral is

(A) less than  $180^\circ$  (B) equal to  $180^\circ$  (C) greater than  $180^\circ$  (D) none of these

Q.61 If the angle of a quadrilateral are  $x^\circ$ ,  $(x-10)^\circ$ ,  $(x+30)^\circ$  and  $2x^\circ$ , then the greatest angle is

(A)  $136^\circ$  (B)  $180^\circ$  (C)  $68^\circ$  (D)  $148^\circ$

**Direction (Q.62 to Q.65) : Read the following table and choose the correct answer from the given four alternative answers**

Class Intervals	5 – 10	10 – 15	15 – 20	20 – 25	25 – 30	30 – 35
Frequency	18	27	19	14	3	8

- Q.62 The size of the class 25 – 30 is  
 (A) 5 (B) 25 (C) 30 (D) 27.5
- Q.63 The lower limit of the class 15 – 20 is  
 (A) 20 (B) 15 (C) 5 (D) 35
- Q.64 The upper limit of the class 30 – 35 is  
 (A) 30 (B) 32 (C) 35 (D) 65
- Q.65 The class mark of the class 5 – 10 is  
 (A) 5 (B) 10 (C) 15 (D) 7.5
- Q.66 3, 10, 29, 66, 127, ?  
 (A) 164 (B) 187 (C) 216 (D) 218

**Directions (Q.67): Refer to the data below and mark the alternative that follows from the data given in the question.**

‘=’ means ‘<’ ; ‘Δ’ means ‘>’ ; ‘□’ means ‘≤’ , ‘◻’ means ‘≥’ ; ‘∑’ means ‘=’

- Q.67  $ab = \frac{z}{y} \sum c$ , implies that  
 (A)  $a > z$  (B)  $ab < c$  (C)  $(b)^2 > z$  (D)  $c < ab$
- Q.68 Six persons are sitting in a circle. Ved faces towards Balbir who is to the left of Nandu and right of Prakash. Nandu is to the left of Moti. If Moti exchange his seat with Narendra and Parkash exchange with Balbir, who will be sitting to the left of Moti ?  
 (A) Narendra (B) Balbir (C) Nandu (D) Ved

**Direction (Q.69 to 74) : Find the missing term.**

- Q.69 1, 9, 17, 33, 49, 73, (.....)  
 (A) 97 (B) 98 (C) 99 (D) 100
- Q.70 5, 16, 49, 104, (.....), 280  
 (A) 115 (B) 148 (C) 170 (D) 181
- Q.71 9, 11, 20, 31, (.....), 82  
 (A) 41 (B) 51 (C) 60 (D) 71
- Q.72 5, 17, 37, 65, (.....), 145  
 (A) 95 (B) 97 (C) 99 (D) 101
- Q.73 4, 10, (.....), 82, 244, 730  
 (A) 24 (B) 28 (C) 77 (D) 218
- Q.74 UPI, ?, ODP, MBQ, IAW  
 (A) RHJ (B) SHJ (C) SIJ (D) THK

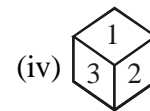
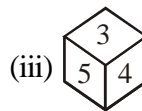
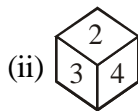
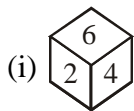


- Q.75 If 'South-east' is called 'East', 'North-west' is called 'West', 'South-west' is called 'South' and so on, what will 'North' be called?  
 (A) 'East' (B) North-east (C) North-west (D) South

**Direction (Q.76 to 78) :** Find the missing term in the following series.

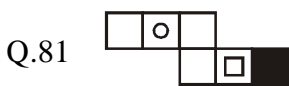
- Q.76 1, 4, 2, 8, 6, 24, 22, 88, ...  
 (A) 86 (B) 90 (C) 154 (D) 352
- Q.77 2, 1, 2, 4, 4, 5, 6, 7, 8, 8, 10, 11, ....  
 (A) 9 (B) 10 (C) 11 (D) 12
- Q.78 C4X, F9U, I16R, ?  
 (A) K25P (B) L25P (C) L25O (D) L27P
- Q.79  $S \times T$  means 'S is the brother of T'.  
 $S - T$  means 'S is the mother of T'.  
 $S + T$  means 'S is the father of T'.  
 Which of the following represents 'M is the son of Q' ?  
 (A)  $M \times R + Q$  (B)  $M + R \times Q$  (C)  $M - R + Q$  (D)  $Q + M \times R$

- Q.80 A dice is thrown four times and its four different positions are shown below. Find the number on the face opposite the face showing 2.



- (A) 3 (B) 4 (C) 5 (D) 6

**Direction (Q.81):** The sheet of paper shown in the figure (X) given on the left hand side, in each problem, is folded to form a box. Choose from amongst the alternatives (A), (B), (C) and (D), the boxes that are similar to the box that will be formed.

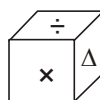


(X)

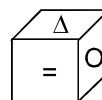


- (A) A and B only (B) B, C and D only (C) D only (D) C and D only

- Q.82 Which symbol will appear on the opposite surface to the symbol 'X' ?



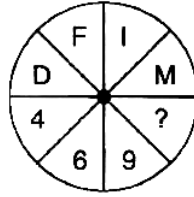
(i)



(ii)

- (A) ÷ (B) = (C) Δ (D) O

Q.83 Find the missing term in the given figure.



- (A) 10                      (B) 13                      (C) 12                      (D) 14

Q.84 Pointing to the lady on the platform, manju said " she is the sister of the father of my mother's son" who is the lady to manju ?

- (A) mother                      (B) sister                      (C) aunt                      (D) niece

Q.85 In the word PORTER can be coded as MBNZQN, how can REPORT be written ?

- (A) NQMNBZ                      (B) NQMBNZ                      (C) NBQMNZ                      (D) NQBMNZ

## ANSWER KEY

Class : VIII

SAMPLE PAPER

Q.1 B  
Q.2 A  
Q.3 A  
Q.4 C  
Q.5 C  
Q.6 D  
Q.7 B  
Q.8 A  
Q.9 A  
Q.10 A  
Q.11 D  
Q.12 A  
Q.13 B  
Q.14 B  
Q.15 C  
Q.16 C  
Q.17 A  
Q.18 D  
Q.19 B  
Q.20 C  
Q.21 B  
Q.22 B  
Q.23 B  
Q.24 D  
Q.25 A  
Q.26 C  
Q.27 B  
Q.28 D  
Q.29 B  
Q.30 C

Q.31 B  
Q.32 A  
Q.33 A  
Q.34 A  
Q.35 C  
Q.36 A  
Q.37 D  
Q.38 C  
Q.39 B  
Q.40 C  
Q.41 C  
Q.42 C  
Q.43 C  
Q.44 A  
Q.45 C  
Q.46 B  
Q.47 C  
Q.48 C  
Q.49 C  
Q.50 C  
Q.51 A  
Q.52 C  
Q.53 C  
Q.54 C  
Q.55 A  
Q.56 C  
Q.57 B  
Q.58 B  
Q.59 B  
Q.60 A

Q.61 A  
Q.62 A  
Q.63 B  
Q.64 C  
Q.65 D  
Q.66 D  
Q.67 B  
Q.68 D  
Q.69 A  
Q.70 D  
Q.71 B  
Q.72 D  
Q.73 B  
Q.74 B  
Q.75 C  
Q.76 A  
Q.77 B  
Q.78 C  
Q.79 D  
Q.80 C  
Q.81 D  
Q.82 D  
Q.83 B  
Q.84 C  
Q.85 B