KTST (Knewton's Trend Setter Test)

Class: IX   **Duration: 60 Min**   **M.M: 150**

Subjects			
Mental Ability	Mathematics	Science	Social Science

General Instructions:

1. The Test is of 1 hour duration.
2. This Test Consist of three sections, section-A (Mental Ability), section-B (Mathematics), Section-C (Science) & Section-D (Social Science).
3. All three sections Consist of 5 Marks for each question.
4. There will be only one correct choice in the given Sections for each questions.
5. Use Blue/Black Ball Point Pen only for writing particulars/making responses on side-1 and side-2 of the answer sheet. Use of Pencil is strictly prohibited.
6. No candidate is allowed to carry any textual material, printed or written, bits of papers, pagers, any electronic device, etc. Except the admit card inside the examination hall/room.
7. Rough work is to be done on the space provided for this purpose on this test booklet only.
8. On completion of the test, the candidate must handover the answer sheet to the invigilator on duty in the room/hall. Candidates are allowed to take away the test booklet with them.
9. Do not fold or make any stray marks on the Answer Sheet
10. Make sure to fill all you details properly in OMR SHEET/Answer Sheet as per the given columns.

Section- A (Mental Ability)

1. If in a certain language, MADRAS is coded as NBESBT, how is BOMBAY coded in that language?
a) CPNCBX   b. CPNCBZ   c. CPOCBZ   d. CQOCBZ   e. NONE OF THESE

2. If code for 'OPPOSITE' = 'ETISOPPO', then code for 'TOGETHER' = '?'
a. REHTGEOT   b. RETHEGOT   c. REHGOET   d. REHTEGOT   e. NONE OF THESE

3. There are six persons A, B, C, D, E and F. C is the sister of F. B is the brother of E's husband. D is the father of A and grandfather of F. There are two fathers. Three brother and a mother in the group.   Who is the Mother?
a) A   b. B   c. D   d. E

4. Zara Phillips-Tindall is the second-eldest grandchild of Queen Elizabeth II. As a member of the Great Britain Team, she won a silver medal at the London 2012 Olympics which was presented to her by her mother, who herself was an Olympian. In which sport did she win the medal?

a) GOLF   b. EQUISTRAIN   c. GYMNASTIC   d. POLO

5. Directions: Each question given below consists of a statement followed by two arguments numbered I and II. You have to decide which of the arguments a ?strong? argument is and which a ?weak? argument is.

Statement: Should there be an upper age limit of 65 years for contesting Parliamentary, Legislative Assembly elections?

Arguments: I. Yes. Generally, people above the age of 65 lose their dynamism and will power.

II. No. The life span is so increased that people remain physically and mentally active even up to the age of 80.

a) Only argument I is strong   b. Only argument II is strong

c. Either I or II is strong   d. Neither I nor II is strong   e. Both I and II are strong

Section- B (Mathematics)

1.

Question: Multiplicative inverse of 'O' is

a) does not exist
b) 1/0
c) 0
d) none of these

2.

Question: Which of the following illustrates the inverse property of addition?

a) $3 - 3 = 0$
b) $3 + 0 = 0$
c) $3 + 3 = 6$
d) $3 - 0 = 3$

3.

3. The value of 104 x 96 is: (a) 9984 (b) 9624 (c) 9980 (d) 9986

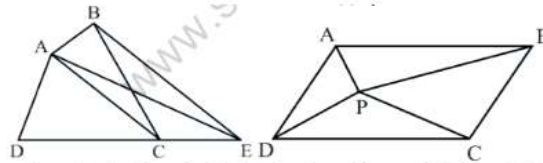**4. The three steps from solids to points are:**

(a) solids – surfaces – lines – points   (c) lines – points – surfaces - solids

(b) solids – lines – surfaces – points   (d) lines – surface – points – solids

5. ABC and ABD are two triangles on the same base AB. If line- segment CD is bisected by AB at O then ar(ABC) =

(a) ar(ABD) (b) 1/2ar(ABD) (c) 1/3ar(ABD) (d) 1/4ar(ABD)

6. In Fig. ABCD is a quadrilateral and BE || AC and also BE meets DC produced at E then the area of ΔADE is _____ to the area of the quadrilateral ABCD.

(a) half (b) one third (c) one fourth (d) equal

7. Find the area of a quadrilateral ABCD in which AB = 3 cm, BC = 4 cm, CD = 4 cm, DA = 5 cm and AC = 5 cm.

(a) 15 cm^2 (b) 15.4 cm^2 (c) 15.2 cm^2 (d) none of these

8. A linear equation in two variables has

(a) no solution (b) only one solution (c) only two solutions (d) infinitely many solutions

9. An equation of the form ax + by + c = 0 represents a linear equation in two variables, if

(a) a = 0, b ≠ 0 (b) a ≠ 0, b = 0 (c) a = 0, b = 0 (d) a = 0, b ≠ 0

10. The graph of the linear equation in two variables y = mx is

(a) a line parallel to x – axis (b) a line parallel to y – axis (c) a line passing through the origin (d) not a straight line

1. When a bottle of soda water is opened, carbon dioxide escapes, producing a fizz. This is due to:

a. Decrease in solubility on decreasing temperature

b. Decrease in solubility on increasing temperature

c. Decrease in solubility on decreasing pressure

d. Decrease in solubility on increasing pressure

2.

Question: When water at 0°C freezes to form ice at the same temperature of 0°C, then it:

(a) Absorbs some heat

(b) Releases some heat

(c) Neither absorbs nor releases heat

(d) Absorbs exactly 3.34 x 105J/kg of heat

3.

Question: The evaporation of a liquid can best be carried out in a:

(a) Flask

(b) China dish

(c) T est tube

(d) Beaker

4.

Answer: Atoms of different elements can have the same mass

Question:

a. 24g of Mg: 1 mole

b. 35.5g of Cl_2: _____

a) 0.5mol

b) 1 mol

c) 2moles

d) 2.5 moles

5.

Question: An element X has valency equal to 3. What will be its formula with carbonate ions?

a) $X_2(CO_3)_3$

b) X_2CO_3

c) XCO_3

d) $X(CO_3)_3$

6.

Question: What is the mode of nutrition in bacteria?

a) Autotrophic and heterotrophic
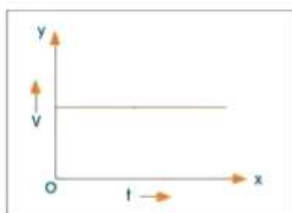
b) Autotrophic

c) Heterotrophic

d) None of the options

7.

Question: Which of the these are found filamentous

a) Spirogyra

b) Euglena

c) Chlamydomonas

d) Amoeba

8.

Question: From the given v-t graph (figure) it can be inferred that the object is moving with

a) uniform velocity

b) non uniform velocity

c) At rest

d) moving with uniform acceleration

9.

Question: The acceleration of a body from a velocity - time graph is

a) Equal to the slope of the graph

b) Area under the graph

c) Is denoted by a line parallel to the time axis at any point on the distance axis

d) Is denoted by a line parallel to the distance axis at any point on the time axis

10.

Question: The action and reaction forces referred to in the third law

a) Must act on different objects

b) Must act on the same objec

c) May act on different objects

d) Need not be equal in magnitude but act in the same direction

Section- D (Social Science)

1.

Question. The Tropic of Cancer does not pass through

(a) Rajasthan

(b) Orissa (Now Odisha)

(c) Chhattisgarh

(d) Tripura

2.

Question. The soil containing calcareous deposits is locally known as

(a) Bhangar

(b) Khadar

(c) Bhabar

(d) Kankar

3.

Question. The famous shrine of Lord Hatakeswara temple is situated near which spring?

(a) Atri

(b) Taptapani

(c) Tarabalo

(d) Deulajhari

4.

Question: Which of these is a provision that a democratic constitution does not have ?

a) Name of the head of the state.

b) Powers of the head of the state.

c) Powers of the legislature.

d) Name of the country.

5.

Question. The two determinants of earning by an individual in the market are:

(a) Health and education

(b) Education and skill

(c) Age and education

(d) Skill and age

**** The End****