

**SCIENCE**

Time: 60 Minutes

Full Marks: 60

Pass Marks: 21

**ENTRANCE MODEL QUESTION**

(Please Use Block Letters to fill up the following information)

Full Name:.....

School Name:.....

**Group A (English)**

**18 marks**

**Mark (✓) for the best answer**

**A. Read the following passage and choose the best answers to the questions that follow:**

The best way of understanding our own civilization is to take an ordinary sort of a day in the life of an ordinary sort of man, myself for instance, and to see what he does. My home is in London. I get up in the morning when an alarm clock rings on the table of my bed. It is quite a complicated machine and works perfectly. I get into a hot bath, the water which has been heated by the gas. The gas is supplied to me by the gas board of the area in which I live; it is part of national system. The water is supplied by the shave comes from a kettle which has been heated by electricity. As far as I am concerned, what happens is very simple: I put a plug in the wall and put on the switch and the electricity does the rest. I use the safety razor, the blade of which, made of very finely tempered steel, has been cut, together with millions of other blades, by machines. The clothes which I put on have also been spun and woven largely by steam or electrically driven machines.

1. The 'I' in this passage represents...
 

a. a common man.	b. a rich person.
c. an automation.	d. a robot.
2. The ideal way of understanding civilization is...
 

a. to read its literature.	b. to see how the people shave, bathe and dress.
c. to assess its technological progress	d. to study the daily routine of an ordinary person.
3. The 'complicated machine' in the passage refers to...
 

a. an electric kettle.	b. a safety razor.
c. an alarm clock.	d. gas.
4. The gas being 'supplied by a national system' means that...
 

a. it is supplied by the nationalist government.	b. it is supplied only nationally and not internationally.
c. it is supplied all over the country by a central agency.	

- d. it is supplied to only those who believe in a national system.
5. The kind of life experienced by the writer is representative of ...
 

a. an advanced urban society.	b. a rural society.
c. a semi-urbanized society.	d. a socialist society.

**B. Mark (✓) for the best answer**

6. This paper \_\_\_\_\_ thrice weekly.
 

a. appears	b. has appeared	c. will appear	d. appeared
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7. Ankur and her friends \_\_\_\_\_ many places before they returned home.
 

a. had visited	b. visited	c. were visiting	d. would visit.
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8. Watch you gave to me is lost.
 

a	b. no article	c. The	d. Some
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9. I think I am right, \_\_\_\_\_ ?
 

a. don't I	b. am not I	c. aren't I	d. do I
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10. My office \_\_\_\_\_ daily.
 

a. will be cleaned	b. cleans	c. is cleaned	d. has been cleaned
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11. The huts were especially delightful to the boys because.....
 

a) there was music laid on.	b) they were comfortable.
c) they were against the rule.	d) they had made them.
12. The word "lairs" in the passage means.....
 

a) people who tell lies	b) persons who lie on the grounds
c) dens	d) stages
13. Foxy had a better chance of surprising his prey than did Mr Prout because
 

a) he had a gift of invisibility.	b) he wore various disguises.
c) he had studied the boys' habits.	d) he had binoculars.
14. The word "quarry" refers to
 

a) the boys	b) Mr Prout
c) the huts	d) Foxy
15. What did Fate do?
 

a) made the boys smoke.	b) made Foxy follow the boys.
c) caused the dogs to leave the footprints.	d) urged Mr Prout to investigate the boys' activities.



c)  $x + y + 1$

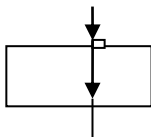
d)  $x(x - y - 1)(x + y - 1)$

18. Points (5,2), (1,0) and (a,5) lie on the same straight line. Then the value of  $a$  is  
 a) 15      b) 13      c) 11      d) 9

**Group C (Science)**

**(1×18=18)**

- MKS unit of pressure is  
 a) pascal      b) dyne/cm<sup>2</sup>      c) meter      d) dyne/m<sup>2</sup>
- A body is acted upon by a constant force, then it will have a uniform  
 a) acceleration      b) speed      c) velocity      d) None of the above
- The value of  $G$  depends on  
 a) masses of bodies      b) medium between the bodies  
 c) both of above      d) none of above
- When the thermometer reads -40°C in Celsius scale, the Fahrenheit scale will read  
 a) 0°F      b) 40°F      c) 32°F      d) -40°F
- Which one is the bad conductor of heat?  
 a) water      b) iron      c) ice      d) moist air
- On which factor does the resistance of a conductor depend?  
 a) length of conductor      b) thickness of conductor  
 c) temperature of conductor      d) all of them
- An uncharged body has .....  
 a) no electron      b) no neutron  
 c) equal nos. of protons and electrons      d) no proton
- Concave lens can't form ..... image.  
 a) diminished      b) virtual      c) erect      d) magnified
- In fig, angle of incidence is  
 a) 90°      b) 0°      c) 180°      d) none
- A person, who uses a glass of power 0.5D, has been suffering from  
 a) hypermetropia      b) myopia  
 c) colour blindness      d) night blindness
- The no. of atoms present in  $\text{HNO}_3$  is  
 a) 5      b) 6      c) 7      d) 4
- Aqua-regia is  
 a) conc.  $\text{HCl}$  + conc.  $3\text{HNO}_3$       b) conc.  $\text{HCl}$  + conc.  $\text{HNO}_3$   
 c) conc.  $3\text{HCl}$  + conc.  $\text{HNO}_3$       d) all of the above



- Which of the following is alkali metal?  
 a) Zn      b) Cu      c) Rb      d) Mg
- 3 mole of nitrogen contains \_\_\_\_\_ atoms.  
 a)  $14 \times 6.023 \times 10^{23}$       b)  $7 \times 6.023 \times 10^{23}$   
 c)  $3 \times 6.023 \times 10^{23}$       d) None
- Marsh gas is  
 a) Ethane      b) Ethene  
 c) Ethyne      d) Methane
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- Aqua-regia is  
 a) conc.  $\text{HCl}$  + conc.  $3\text{HNO}_3$       b) conc.  $\text{HCl}$  + conc.  $\text{HNO}_3$   
 c) conc.  $3\text{HCl}$  + conc.  $\text{HNO}_3$       d) all of the above

**Group D (General Knowledge)**

**6 marks**

- If Book= 43 and pen=35 than Copy is equal to  
 a) 60      b) 48  
 c) 59      d) 79
- What is the antonym of wild?  
 a) Jungly      b) Homely  
 c) Tame      d) Civilised
- Kriti ranked 38<sup>th</sup> from the top and 9<sup>th</sup> from the bottom in a class. If so, how many students were there?  
 a) 47      b) 46  
 c) 45      d) 44
- The Arabian country with no desert is  
 a) Saudi Arabia      b) UAE  
 c) Quatar      d) Lebanon
- The first UN General secretary is  
 a) Trygve      b) U Thant  
 c) Van Ki Mun      d) Kofie Aanan

**ALL THE BEST**