Model Paper

ENTRANCE EXAMINATION 2016-17

Class 9th

Subjects	Marks	Time
Mathematics and Reasoning	50	40 min.
Science	50	40 min.
Language Convention (English and Hindi)	40+10	40 min.

Total Time- 40M.   **Mathematics and Reasoning**   **Total M-50**

SECTION –A(5X1=10)

Q-1 Find $\dfrac{-4}{5} \times \dfrac{3}{7} \times \dfrac{15}{16} \times \left(\dfrac{-14}{9}\right)$

Q-2 What is a regular polygon?

Q-3 Express 121 as the sum of 11 odd numbers.

Q-4 72% of 25 students are good in mathematics. How many are not good in mathematics?

Q-5 An item marked at ₹ 840 is sold for ₹ 714. What is the discount and discount %?

SECTION –B(5X2=10)

Q-6 Subtract $4a - 7ab + 3b + 12$ from $12a - 9ab + 5b - 3$

Q-7 Obtain the product of   (i) xy, yz, zx (ii) $a, -a^2, a^3$

Q-8 Add: $p(p-q), q(q-r)$ and $r(r-p)$

Q-9 . If the word GERMINATION is coded as IMGRENNOAIT, how the word ESTABLISHED will be coded?

Q-10 Using $a^2 - b^2 = (a+b)(a-b)$, find $12.1^2 - 7.9^2$

SECTION –C(5X3=15)

Q-11 Find three rational numbers between $\dfrac{1}{4}$ and $\dfrac{1}{2}$

Q-12 What should be added to twice the rational number $\dfrac{-7}{3}$ to get $\dfrac{3}{7}$?

Q-13 Find the number of sides of a regular polygon whose each exterior angle has a measure of 45°

Q-14 Construct the quadrilateral LIFT LI=4 cm IF=3 cm TL=2.5 cm LF=4.5 cm IT=4 cm

Q-15 When a die is thrown, list the outcomes of an event of getting
(i)   (a) a prime number   (b) not a prime number.
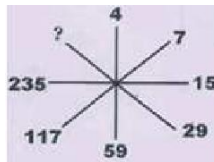(ii)   (a) a number greater than 5 (b) a number not greater than 5.

SECTION –D(5X4=20)

Q-16   Write a Pythagorean triplet whose smallest member is 8.

Q-17 Find the smallest number by which 9408 must be divided so that the quotient is a perfect square. Find the square root of the quotient.
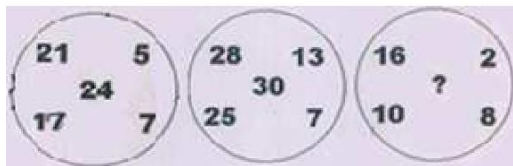
Q-18 Find the greatest 4-digit number which is a perfect square.

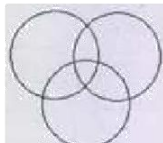**Q-19** Find the missing number in each of the following questions:

(i)

(ii)

Q-20 In each of the following questions, patterns of circles are used to represent the relationship among different items. Each circle represents an item. Which one of these relationships among the items is not represented by the patterns of circles given in each question?
(i)

a) Oxygen, Air, Water.   c) Students, Boys, Players
b) Maids, Women, Doctors   d) Musicians, Singers, Women

(ii)

a) Fruits, Apples, Tomatoes
b) Sea, Islands, Mountains
c) Tigers, Carnivores, Elephants
d) Fathers, Males, Doctors

SUBJECT SCIENCE

1. What do you understand by ploughing?
2. What are the traditional tools used for sowing?
3. What are the advantages of irrigation?
4. What is the contribution of Alexander Fleming in the study of microorganisms?
5. What re communicable diseases?
6. What is the amount of nitrogen in the atmosphere?
7. Name two Rabi crops?
8. What are communicable diseases?
9. What are antigens?
10. Polio is caused by virus or bacteria?
11. What is sterilization?
12. Give two uses of waste plastics?
13. What do you understand by non biodegradable substances?
14. $NO_2 + H_2O$ ⟶ ……………………………
15. What do you understand by change in state?
16. What is the full for of CNG?
17. What is the economic use of wax?
18. What is the full form of IUCN?
19. What do you understand by critically endangered animals?
20. What is the basic difference between unicellular and multi cellular?
21. Explain the meaning of word eukaryotes?
22. Write down one function of chloroplasts?
23. What is the young one of hen called?
24. Draw the labeled figure of human egg?
25. Write the full form of ZIFT?
26. Name two viviparous animals?
27. What do you understand by incomplete metamorphosis?
28. What was the name of the first cloned vegetable?
29. Define adolescence?
30. What is larynx?
31. Name two male sex hormones?
32. How many chromosomes are present in human sperm?
33. What do you understand by term diet?
34. Name two communicable diseases?
35. Write the function of glucagon?
36. Define velocity?
37. What is gravity?
38. What is fission?
39. Write the formula to calculate speed?
40. What is atmosphere?
41. Write the function of nucleus inside the living cell?
42. The intensity of light is measured in……………………….
43. What is VIBGYOR?
44. What is cyclone?

45. Seismograph is used to measure the ……………………………of earthquake.
46. What is the unit of force?
47. What do you understand by angle of incident?
48. Is sunlight white or coloured?
49. Write the importance of ozone layer?
50. What do you understand by leap year?

Language convention

Time:40 min.   **M.M- 50**

SUBJECT – ENGLISH

Q.1:- Read the passages carefully and answer the question that follow –

  A- Then my son and I advised my wife, and friends advised her too, to give Baba to the Zoo at mysore , He was getting too big to keep at home . After some weeks of such advice she at last consented. Hastily, and before she could change her mind, a letter was written to the curator of the zoo. Did he want fame bear for his collection ? He replied. 'Yes' the zoo sent a cage from mysore in a lorry, a distance of eighty-seven miles, and Baba was packed off

We all missed him greatly; but in a sense we were relieved. My wife was consolable she wept and fretted for the first few days she would not eat a thing. Then she wrote a number of letters to the curator How was Baba? Back came the replies well but fretting; he refuses food too.

Q.a:- what advise did the son and friends gave to the author's wife?
Q.b:- What did the mysore zoo send to the author's house ?
Q.c:- What did the author's wife do after Baba' departure ?
Q.d:- In which sense did they feel relieved ?
Q.e:- Who was inconsolable?
Q.f:- find out the word from passage which means- got angry
      (i) fretted   (ii) inconsolable (iii) consented   (iv) advised

Q.2:- You are Arvind living at WZ 1442 sitapuri, Delhi write a letter to your younger brother, in a boarding school,
     dvising him not to fall in a bad company.

Q.3:- Do as directed -
    The old lady said, "Aha! I have regained my eyesight " (Indirect speech)
    You said to me, " I shall not appear in examination this year " (Indirect speech)

Q.4:- change as directed :-
    Shut the windows (passive voice)
    Whom will you give the massage (Passive voice)

Q.5:- Transform of following sentences as directed in Bracket -
        (i) He had been watering the plants for three hours [Future Perfect continuous]
        (ii) Ravi has gone to school [Past Indefinite]
        (iii) They had arrived their school before the bell rang [Interrogative]

Q.6:- Re- arrange these Jumble words in a meaningful sentence.
        (i) had/ Sita / taken away / Ravan / came / Ram / Before
        (ii) Letter/ being / him / a / was / written / by /
        (iii) Dhoni / with / came / player/ his/ along/ in / field / the .
        (iv) of / he / singing/ dancing / and / fond / is acting.
        (v) exercises / are / morning / good / health / for

Q.7:- Give the synonym –
     (a) Compulsory   (b) marvelous (c) recompense   (d) Oblivious   (e) feeble .

Q.8:- Give the antonym :-
     (a) Agony   (b) leap   (c)magnify (d) callous   (e) attract

प्र01:– दिए –गए शब्द का वर्ण विच्छेद कीजिए –

त्रिभुवन –

प्र02:– निम्नलिखित शब्दों में से शुद्ध रूप छाँटिए –

परलौकिक , पारलौकिक , पारलोकिक , परलोकिक

प्र03:– उपसर्ग छाँटकर लिखिए–

अध्यात्म – अ, अध् , अधि , अध्य

प्र04:– नीचे दिए गए शब्द में कौन सा प्रत्यय हैं–

पढाई – ई , आई , अइ , ढाई

प्र05:– भाववाचक संज्ञा शब्द छाँटिए–

लडका – बच्चा , लडकपन , लडकापन , लडके

प्र06:– रेखांकित पद में प्रयुक्त कारक के नाम लिखिए–

बच्चे ने पेंसिल से चित्र बनाया

प्र07:– उचित विशेषण छाँटिए–

नीति – नितिक , नैतिक , नीतियाँ

प्र08:– उचित क्रियाविशेषण द्वारा रिक्त स्थान की पूर्ति कीजिए –

छात्र ....अध्यापक की बात सुन रहे हैं।

प्र09:– अर्थ के आधार पर दिए –गए वाक्य के प्रकार लिखिए –

आज रविवार है ।

प्र010:– प्रयुक्त अलंकार का नाम लिखिए–

रघुपति राघव राजा राम