

BHATNAGAR INTERNATIONAL SCHOOL

HOLIDAY HOMEWORK

VIII FORM

English

Q1-Reading is definitely a good habit and a passion for most of us. It enriches our mind and interest. Read the book 'Swami and his Friends' by R.K Narayan and prepare an interesting booklet comprising of:-

- (1) The summary of the story
- (2) Character sketch of your favourite character
- (3) Design an eye catching book cover

Q2- Script and memorize a speech to be delivered in the morning assembly on the topic 'Consumer Awareness Rights in India'.

Science and Technology

Q1- How is the vision of eye is related to nutrition?

Q2- Why is tall mirrors placed in a small office?

Q3- Why is plain mirrors placed in a jewelers show case? Explain with the help of a flow chart, the working of a human eye.

Q4- Why the musical instruments show variations or display with different pitch of sound?

Q5- What steps should be taken to reduce the effect of noise pollution?

Q6-What are the common defects on eye? How are they caused? How can they be corrected? Use dialogues to support your answer.

Q7-Make a power point presentation on space shuttles and NASA. Make at least 10 slides combining both the topics in one presentation.

General Awareness

Q1- Make a power point presentation on Know your Delhi 100 YEARS OF GLORY, total 10 slides. Write some information regarding this topic in your note book.

Q2- Paste 5 -7 current topics in the notebook.

Computer

Q1- Design a web page on Delhi 100 years of glory.

Q2- Design another web page using all the tags to make your time table in HTML

German

Design a plan regarding how you would like to furnish your room. Describe your room in German.

Mathematics

Q1. Fill ups:-

1. The number of times an observation occurs in the given data is called the _____ of the observation.
2. The mid volume of a c.I is: _____.
3. The difference between the highest and the lowest values of the observation in a given data is _____.
4. The probability that it will rain tomorrow is 0.85. What is the probability that it will not rain tomorrow?
5. Aman's monthly salary is Rs. 2400 and his monthly expenses on the travel are Rs. 250. The central angle of the sector representing travel expenses in the pie chart would be _____.
6. Area of one hectare is equivalent to _____.
7. Volume of a cylinder with $r = 2r$ cm and $h = h/4$ cm = _____.
8. Ratio of surface area of the cube is 36:49. Ratio of their edges is _____.
9. What is the value of $a+b / 2b$, if $a +10$ and $b+ 15$?
10. Find the product of $(a^{1000}) (b^{999}) (abc) (0) =$ _____.

Q2. The mean (average) of 4, 3, $x+2$, 7, 11 is 6. Find the value of x .

Q3. Mona brought a birthday cake measuring 45 cm x 20 cm x 15 cm. How many children attended the birthday party if each one got 270^3 cm cake?

Q4. Water flows from a tank with a rectangular base measuring 80 cm by 70 cm into a tank with a square base of side 60 cm. If the water in the first tank is deep will it be in the second tank.

Q5. Find the number, of the outcomes when 4 coins are tossed simultaneously.

Q6. In a class of 40 students, 24 are boys and the rest are girls. Find the probability that a selected student will be a girl.

Q7. A test was given to a group of 40 students for a job. The test was completed by the candidates in the following times (in min).

Q8. 26,31,42,26,27,44,30,42,40,26,28,49,36,37,42,40,41,32,30,49,48,33,34,35,45,44,40,42,48,27,35,41,28,30,32,48,42,39.

➤ Prepare a grouped frequency table by taking a class interval 25-30, 30-35 etc.

Q9. If $5x$ books cost Rs. $(10x^2 + 20x)$ what is the cost of one book?

Q10. Factorize-

- a) $182 \times 182 - 2 \times 182 \times 62 + 62 \times 62$
- b) $25 - (4a^2 + 12a + 9)$
- c) $a^2 b^4 c^6 - 1$
- d) $(5-x)^2 - 49y^2$
- e) $x^2/36 - y^2/25$
- f) $4x^2 + 12x + 9$

Q11. The diameter of a road roller, 1m 40cm long is 80 cm. If it takes 650 revolutions to level a playground, find the cost of leveling the ground at Rs. 3 per sq. metre.

Q12. A metal of edge 12m is melted to form 3 smaller cubes. If the edge of two smaller cubes are 6m and 8m, find the surface area of third smaller cubes.

Q13. Find the value of $(81x^2 + 16y^2 - 72xy)$ when $x = \frac{2}{3}$ and $y = \frac{3}{4}$.

Q14. Subtract $4x^3 + 3x^2y - \frac{1}{2}xy^2 + 5y^3$ from $\frac{4}{3}x^2y + 5x^3 - \frac{2}{3}y^3 + 5xy^2$.

Q15. If $41 - 3m = 15$ and $1m = 10$, then what is the value of $16l^2 + 9m^2$.

Q16. Find the value of $A - B - C$ if $A = 1m + mn$, $B = mn - 1m$, $C = 1m - mn$.

Q17. The adjacent sides of a rectangle are-

$3x^2 - 5y^2$ and $7x^2 - xy$. Find its perimeter.

Q18. Evaluate (99.5) using identities.

Q19. Simplify $a^2b(a-b^2) + ab^2(4ab-2a^2) - a^3b(1-2b)$.

Q20. Find the value of 101×99 using identities.

Q21. 5 hockey pucks and 3 hockey sticks cost Rs.23 and 5 hockey pucks and 1 hockey stick cost Rs.20. How many does 1 hockey puck cost?

Q22. X is the mother of Y but Y is not the daughter of X, then what is relation of Y with X?

Q23. If e means *, z means -, q means +, y means / then $24y \ 6z \ 2q \ 5e \ 2 = ?$

Q24. Seen through a mirror, the arms of a clock show 8:50. What is the actual time?

Q25. LIVE is to EVIL as 5232 is to?

Q26. If 10th day after 15th of the month be Thursday, what day was the 1st of the same month?

Q27. Find the value of:-

$$\frac{(865 + 167)^2 + (865 - 167)^2}{865 \times 865 + 167 \times 167}$$

Q28. If the factors of $a^2 + b^2 + c^2 + 2(ab + bc + ca)$ are $(a + b + mc)$ and $(a + b + nc)$, then the value of $m + n$ is _____.

Q29. If Quotient $+2x + 5$ and divisor $+x + 2$, then the dividend _____.

Q30. If $3x - 7y + 10$ and $xy + -1$, then, find the value of $9x^2 + 49y^2$.

Q30. If $x - \frac{1}{x} = 6$, find the value of $x^2 + \frac{1}{x^2}$?

Social science

1. Write any five famous "slogans" given by any five freedom fighters for independence
2. Map work :- on a political map of India mark the various industries of India.
3. Topic of debate :- Reservation for the marginalized group educational institute Jbs
4. Write the functions of the following :-
 - The police
 - Public prosecutor
 - Defense lawyer
5. Define nationalism. Explain the reasons for the growth of nationalism.