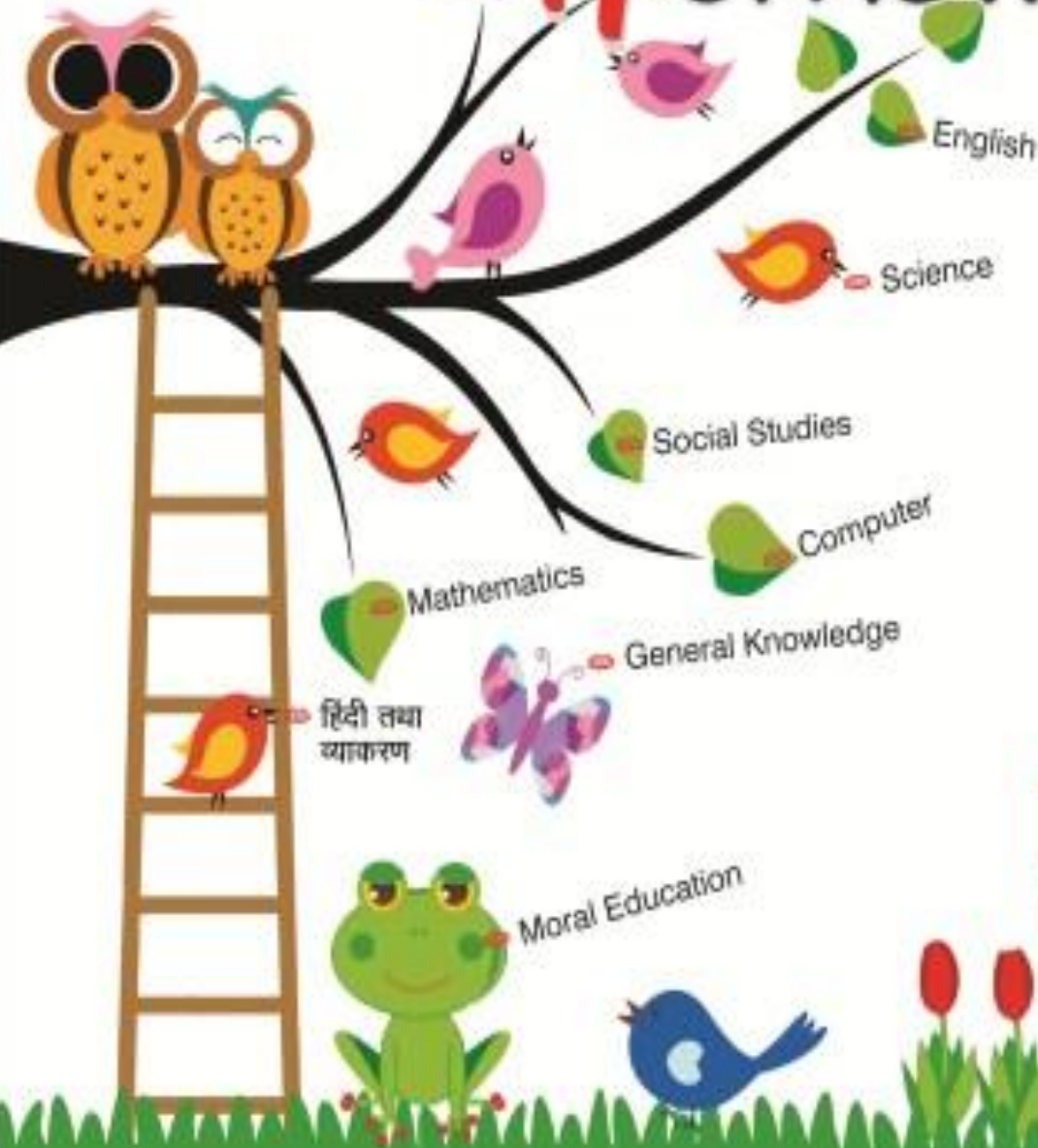


Holidays Homework



B.R.B. MODEL SCHOOL
HOLIDAY HOMEWORK
CLASS – XI

SUB: ENGLISH

- ✓ Reading Section :
1 to 5 Worksheet
19 to 23 Worksheet
- ✓ Writing Section –
44 to 46 Worksheet
61 to 63 Worksheet
- ✓ Literature [Hornbill/ Snapshots]
90 to 93 Worksheet
122 to 125 Worksheet
110 to 112 Worksheet

SUB: PHYSICS

1. Convert an acceleration of 20 ms^{-2} in to km h^{-2} .
2. How many metre are there in one
 - i. Gigametre
 - ii. Femtometre
 - iii. Hectometre
 - iv. exametre
 - v. Nanometre
 - vi. Picometre ?
3. How many gram are there in one.
 - i. Teragram
 - ii. Microgram
 - iii. Attogram
 - iv. Petagram
 - v. Decagram
 - vi. Centgram?
4. Check the correctness of following relations.
 - a. $T = 2\pi \sqrt{\frac{g}{l}}$
 - b. $v^2 - u^2 = 4 as$
 - c. $s = ut + \frac{1}{2} at^2$
 - d. $n = \frac{1}{2l} \sqrt{\frac{T}{m}}$ (where 'm' is the mass per unit length)
5. A particle of mass 'm' tied to a string of length 'l' is revolved in a horizontal circle with a uniform velocity v. Obtain an expression for centripetal force which depends upon these factors.
6. A steel ball of radius r is allowed to fall under gravity through a column of a viscous liquid of co-efficient of viscosity η . After some time the velocity of the ball attains a constant value v_T . The terminal velocity depends upon (i) the weight of the ball mg. (ii) the co-efficient of viscosity (iii) the radius of the ball r. By the method of dimensions determine the relation expressing terminal velocity.
7. A glass bubble from an explosion under water, oscillates with a period T proportional to $P^a d^b E^c$ where P is the static pressure, d is the density and E is the total energy of the explosion. Find the values of a, b and c.
8. Find the value of 100 joule in a system which has 10 cm, 100g and 30 s as fundamental units.
9. A PROJECT FILE is fired horizontally with a velocity of 98 ms^{-1} from the top of a hill 490 m high. Find
 - i. The velocity with which the body strikes the ground.
 - ii. The time taken t to reach the ground.
 - iii. The distance of the target from the hills.
10. Two tall buildings are 200 m apart. With what speed must a ball be thrown horizontally from a window 540 metre above the ground in one building so as to enter a 50 metre high window in the other building?
11. Two projectiles are projected with same speeds at different angles with the horizontal. Under what conditions can they land at same point on the earth?
12. Define motion of a particle in one dimension, two dimensions and three dimensions.
13. What do you mean by average speed and INSTANTANEOUS speed? What are the units in which these are measured?
14. A particle completes one rotation along the circumference of a circle of radius 10 cm in 5 second. What is (i) speed (ii) velocity of the particle?
15. Draw the velocity time graph for a body moving with a constant acceleration and discuss the relation graphically.

16. What is a project file? Give three examples?

17. A PROJECT FILE is fired horizontally with a velocity 'u' from a point at height 'h' from the surface of earth . Derive an expression for

(i) equation of the trajectory (ii)time of descent (iii) horizontal range.

18. A PROJECT FILE is fired with velocity u , making an angle 'θ' with the horizontal. Derive an expression for (i) equation of path (ii)maximum height attained

19. Two PROJECT FILE are fired with same speeds at complementary angles with the horizontal . Prove that the sum of the maximum heights achieved by them is independent of the angle of projection.

20. How many electrons would have to be ejected from a body to decrease its mass by 0.03 milligram . The mass of one electron is 9.1×10^{-31} kg.

SUB : CHEMISTRY

- ✓ Projects Work Given To Each Student.
- ✓ Assignment (NCERT Text Book Questions)

SUB : BIOLOGY

Make a project file (max – 10 pages) on the given topic .

1. Life cycle of Angiosperms.

2. Characters of Bryophyta , Thallophyta , pteridophyta , Gymnosperms & Angiosperms (Any one topic)

3. Collect the information about any 1 phylum i.e. Arthropoda , Annelida etc.

SUB : PHE

Unit – 1 (Changing trends & Career in Physical Education)

- ✓ Define Physical Education its Aims & Objectives.
- ✓ Development of Physical Education - Post Independence
- ✓ Concept & Principles of Integrated Physical Education
- ✓ Career options in Physical Education

Unit –II (Physical Fitness , Wellness & Lifestyle)

- ✓ Meaning & Importance of Physical Fitness wellness & lifestyle
- ✓ Components of Physical Fitness
- ✓ Components Of wellness
- ✓ Preventing Health Threats through Lifestyle Change

Unit –III (Olympic Movement)

- ✓ Ancient & modern Olympics
- ✓ Olympic Symbols , Ideals Objectives & value
- ✓ International Olympic Committee
- ✓ Indian Olympic Association
- ✓ Dronacharya Award, Arjun Award & Rajiv Gandhi Khel Ratna
- ✓ Organisational Set –up of CBSE Sports & Chacha Nehru Sports Award

Unit –IV (Yoga)

- ✓ Meaning & Importance of Yoga
- ✓ Yoga as on Indian Heritage
- ✓ Elements of Yoga

SUB:MATHS

1. If A , B and C are any three sets , then prove that

$$(i) A-(B \cap C) = (A-B) \cup (A-C)$$

$$(ii) A-(B \cup C) = (A-B) \cap (A-C)$$

2. A college awarded 38 medals in football , 15 m in basketball and 20 to cricket. If these medals went to a total of 58 men and only three men got medals in all the three sports , how many received medals in exactly two of the three sports?

3. Of the members of three teams in a certain school 21 are in the basketball team , 26 in hockey team and 29 in the football team . 14 play hockey and basket ball , 15 play hockey and football , 12 play football and basketball and 8 play all the three games. How many members are there in all.

4. Write the following intervals in the set builder form .

- i. (-7,0) ii. (6,12) iii.(6,12) iv. (-20,3)

5. Write the subset of following set.

a. $[p,q]$

b. $[1,2,3]$

c. \emptyset

d. $[\emptyset]$

6. i. if $(\frac{a}{3} + 1, b - \frac{2}{3}) = (\frac{5}{3}, \frac{1}{3})$ find a and b .

ii. if $(x+1, 1) = (3, y-2)$ find x and y .

7. $A = \{1,2\}$, $B = \{1,2,3,4\}$, $C = \{5,6\}$, $D = \{5,6,7,8\}$

Verify that (i) $A \times C \subset B \times D$ (ii) $A \times (B \cap C) = (A \times B) \cap (A \times C)$

(iii) $A \times (B - C) = (A \times B) - (A \times C)$

8. Let R be the relation in the Set N of natural numbers defined by $R = \{(a, b) : a+3b=12, a \in N, b \in N\}$

Find (i) R (ii) Domain of R (iii) range of R .

9. Write the relation $R = \{(x, x^3) = x \text{ is a prime no less than } 10\}$ in roster form.

10. Find the domain for which the functions $f(x) = 2x^2 - 1$ and $g(x) = 1 - 3x$ are equal.

11. Let $A = \{-2, 1, 0, 1, 2\}$ and $F: A \rightarrow Z$ be a function defined by $f(x) = x^2 - 2x - 3$. Find

(i) range of f (ii) pre images of 6, -3 and 5.

12. Find the domain and range of the function $f(x)$ is given (i) $f(x) = \frac{x-2}{3-x}$

(ii) $f(x) = \sqrt{16 - x^2}$ (iii) $f(x) = \frac{1}{\sqrt{x-5}}$

13. Find the domain and Range each of the following real valued functions.

(i) $f(x) = \frac{ax+b}{bx-a}$ (ii) $f(x) = \frac{ax-b}{cx-d}$ (iii) $f(x) = \sqrt{x-1}$

(iv) $f(x) = \sqrt{x-3}$ (v) $f(x) = \sqrt{x-3}$ (vi) $f(x) = \frac{x-2}{2-x}$

(vii) $f(x) = |x-1|$ (viii) $f(x) = -|x|$

14. Prove by the p.m.I.

$$1+4+7+\dots+(3n-2) = \frac{1}{2} n (3n-1)$$

15. using p.m.I. prove that

$$1 + \frac{1}{1+2} + \frac{1}{1+2+3} + \dots + \frac{1}{1+2+3+\dots+n} = \frac{2n}{n+1}$$

16. Prove that for $n \in N$, $10^n + 3 \cdot 4^{n+2} + 5$ is divisible by 9.

17. Prove that $2 \cdot 7^n + 3 \cdot 5^n - 5$ is divisible by 24 for all $n \in N$.

18. Prove that by P.m.I.

$$\left(1 + \frac{1}{3}\right) \left(1 + \frac{5}{4}\right) \left(1 + \frac{7}{9}\right) \dots \left(1 + \frac{2n+1}{n^2}\right) = (n+1)^2$$

19. $n^3 - 7n + 3$ is divisible by 3 for all $n \in N$.

20. $5^{2n+2} - 24n - 25$ is divisible by 576 for all $n \in N$.

SUB: BUSINESS STUDY

Project work- Related to working Process of a Commercial bank.

1. How to open a saving Bank account.
2. How to fill up cash deposit voucher form.
3. How to cash withdrawal from a bank.
4. How to fill up A.T.M. [debit card] form.
5. Types of cheques. When cheques called Bearer Cheque, cross cheque & Account payee cheque.
6. How to withdraw cash by A.T.M. with debit card.[Process]
7. Saving account Pass book [How to maintained by Bank].
8. List of rate of Interest allowed by Bank to their customer.
9. History of Bank with Monogram , Founder and C.E.O. .
10. Teglne of Bank.

SUB: ECONOMICS

All the students of class XI Commerce were prepared their Project Report Individually according the topic and Submitted on 10 July 2017.

SUB: HINDI

- 1- दारोगा वंशीधर गैरकानूनी कार्यों की बजह से पंडित अलोपीदीन को गिरफ्तार करता है, लेकिन कहानी के अंत में इसी पंडित अलोपीदीन की सहृदयता पर मुग्ध होकर उसके यहाँ मैनेजर की नौकरी की तैयार हो जाता है | आपके विचार के वंशीधर का ऐसा करना उचित था ? आप उसकी जगह होते तो क्या करते ?
- 2- नमक विभाग के दारोगा पद के लिए बड़ो बड़ो का जी ललचाता था-| वर्तमान समाज में ऐसा कौन सा पद होगा जिसे पाने के लिए लोग लालाचित रहते होंगे और क्यों?
- 3- लड़कियां हैं वह घास फूस की तरह बढ़ती चली जाती हैं-| वाक्य समाज में लड़कियों की किस स्थिति की वास्तविकता को प्रकट करता है |
- 4- मियाँ नसीरुद्दीन की कौन सी बातें आपको अच्छी लगी?
- 5- तालीम की तालीम ही बड़ी चीज है यहाँ लेखक ने तालीम शब्द का दो बार प्रयोग क्यों किया है -? क्या आप दूसरी बार आए तालीम शब्द की जगह कोई अन्य रख सकते हैं ? लिखिए |
- 6- मियाँ नसीरुद्दीन तीसरी पीढ़ी के हैं जिसने अपने खानदानी व्यवसाय को अपनाया | वर्तमान समय में प्रायः लोग अपने पारम्परिक व्यवसाय को नहीं अपना रहे हैं | ऐसा क्यों ?
- 7- मियाँ कहीं अखबारनवीस तो नहीं हो? यह तो खोजियों की खुराफात है - अखबार की भूमिका को देखते हुए इस पर टिप्पणी करें |
- 8- मियाँ नसीरुद्दीन की अखबार वालों के बारे में क्या राय है? स्पष्ट कीजिये |
- 9- आशय स्पष्ट कीजिये-
 - i) राजनीति, साहित्य और कला के हजारों हजारों मसीहा-
 - ii) मौसम की मार से पका चेहरा, आंखों में काइयाँ भोलापन और मंझे हुए कारोबार के तेवर |
- 10- लेखिका की कृष्णा सोबती की भाषा शैली पर प्रकाश डालिए |
- 11- ईश्वर के स्वरूप के बारे में कवीर ने क्या कहा है?
- 12- भाव स्पष्ट कीजिए -

- i) मर्म न काहू जाना
- ii) साखी सब्दही गावात भूले, आतम खबरि न जाना ।
- iii) गुरु के सहित सिख्य सब बूड़े ।

13- कबीर के धार्मिक विचारों पर प्रकाश डालिए ।

14- चित्रपट के संगीत की लोकप्रियता का क्या कारण है?

15- लता मंगेशकर ने किस प्रकार के गीत गाये हैं ? और उनमें से कौन से बेहतर है ?

16- लता ने कुमार गंधर्व को किस प्रकार प्रभावित किया ? उन्होंने लता की उन्नति को चमत्कार की संज्ञा क्यों दी ?

17- लता के कारण चित्रपट संगीत को विलक्षण लोकप्रियता प्राप्त हुई, यही नहीं लोगों का शास्त्रीय संगीत की ओर देखने का द्रष्टिकोण भी बदला है कैसे ?

व्याकरण :

I. फीचर लेखन :

- a) बाल श्रमिक अथवा बँधुआ मजदूर
- b) जातियता का विष अथवा महंगी शिक्षा

II. पत्र लेखन :

- a) स्वास्थ्य विभाग द्वारा अपने क्षेत्र की ओर कोई ध्यान न दिये जाने पर किसी दैनिक पत्र के संपादक को एक पत्र लिखिए ।
- b) किसी दैनिक समाचार पत्र के संपादक को एक पत्र लिखिए, जिसमे चुनाव प्रचार को नियंत्रित करने के सुझाव दिये गए हैं ।

III. निबंध लेखन (कोई एक) -

- a) आतंकवाद और विश्वशान्ति
- b) प्रेस की स्वतंत्रता और लोकतन्त्र

SUB: C.S.

Q1- Convert (1101110101110)₂ to Hexadecimal.

Q2. Convert (FACE)₁₆ to Binary.

Q3. Convert (11111011110101)₂ to Octal.

Q4. Convert (1110001111100.1000101110)₂ to Hexadecimal.

Q5. What is a Computer? Distinguish between Data and Information.

Q6. Convert the following Decimal Number to Binary.

i) 106

ii) 19

iii) 225

iv) 34

Q6. What is a Memory of Computer? Distinguish between Internal & External Memory.

Q7. Convert the following Binary Number to Decimal.

i) 10010

ii) 1010100

iii) 11100110

iv) 11101

v) 1100

vi) 00001001

Q8- What are the different types of computers based on their working methods and also define the classification of Computer?

Q9. How are data represented in memory? Discuss the representation schemes for numerical and alphanumerical data.

Practical File

Create a Practical File from the topics covered (Area&Perimeter of mathematical shapes) in C++. It should have minimum 15 programs.

Presentation based on Research

Create a presentation based on a detailed study of at least two technology inventions in the field of information technology, which may include Inventor's name with country, out of box contributions, year of invention, characteristics, social impact and uses.

HOLIDAY HOMEWORK
CLASS – XI (ACCOUNTANCY)

1. Enter the following transactions in the Cash Book with Cash and Bank columns. Also pass Journal entries where necessary :—

2012	₹
April 1 Cash-in-Hand	6,200
Bank Overdraft	18,500
2 Received a cheque from Hari and paid it into bank on the same day	1,300
3 Received a cheque from Vinod	3,300
5 Cheque received from Vinod deposited into bank	
5 Purchased goods and paid by cheque	20,000
Freight paid (in cash)	250
6 Sold goods for cash	12,220
8 Sold goods for cash	16,000
9 Sale proceeds of April 8 deposited into Bank	
11 Withdrew cash for private use	1,000
12 Withdrew by cheque for private use	5,000
14 Goods purchased from Suresh on Credit	2,500
16 Paid to Suresh by Cheque	2,500
17 Received a cheque from Ajay	3,700
20 Cheque received from Ajay endorsed to Vijay	
22 Received Cheque from Mahesh and deposited it into Bank	2,700
24 Received Cash ₹1,000 and Cheque ₹1,200 for cash sales	
25 Paid into Bank	10,000
26 Received a Cheque from Prem and sent it to bank immediately	4,150
28 Bank notifies that Prem's Cheque has been dishonoured, Bank Charged ₹20 on this Cheque	
28 Kishore deposited directly in our Bank account	3,000
30 Bank has charged ₹60 for Bank Charges and interest on overdraft	720

2. Suggest journal entries to record the following :
- (i) Purchased 5 typewriters from Monica and Co. @ ₹ 6,000 each for re-sale.
 - (ii) Bought 2 typewriters from Pradeep and Co. @ ₹ 3,500 each for office use.
 - (iii) Paid quarterly rent to proprietor's private house by cheque ₹ 1,800.
 - (iv) Returned 2 typewriters to Monica and Co. not being in good condition.
 - (v) Returned 1 typewriter to Pradeep and Co. not being according to specification.
 - (vi) Sold typewriter out of those meant for re-sale ₹ 8,000.
 - (vii) Cheque paid for machinery bought ₹ 20,000; paid carriage there on ₹ 500 in cash.
 - (viii) Deposited ₹ 2,500 into bank out of private purse by the proprietor.
 - (ix) Paid ₹ 400 for expenses on goods sold to Gopal. The amount is to be realised from Gopal.
- [Ans. Grand Total ₹ 85,700]

3. Pass journal entries for the following transactions :

- (1) Gave ₹ 200 in cash and goods worth ₹ 500 as charity.
- (2) Purchased goods for ₹ 2,500 and paid @ 10% as central sales tax.
- (3) Sold goods to Ram for ₹ 8,000 and charged central sales tax @ 10%.
- (4) Ram paid ₹ 4,000 in cash and gave cheque for the rest of the amount.
- (5) Cheque of Ram deposited in the bank.
- (6) Cheque of Ram dishonoured as he was declared insolvent.
- (7) Only 40% amount is recovered from the estate of Ram.

4. Prepare a single column cash book from the following transactions of Shriram :

2015		₹
April 01	Shriram started business with cash	8,100
April 02	Bought furniture for cash	1,400
April 03	Purchased goods for cash	2,500
April 03	Paid carriage	40
April 05	Sold goods for cash	3,000
April 08	Paid to Shankar Lal	3,200
April 10	Cash purchases	500
April 14	Received from Paras Ram	700
April 16	Paid to Gagan Talkies for advertisement	400
April 20	Received commission	150
April 24	Sold goods on credit to Madan Lal	1,140
April 26	Bought stationery	50
April 28	Paid interest	125
	Paid charity	450
April 30	Withdrew for personal use	1,200

5. Enter the following transactions in Double column cash book :

2014		₹
Feb. 01	Bank overdraft	10,000
	Cash in hand	2,000
Feb. 07	Cheque received from Ramesh	4,000
	and discount allowed	100
Feb. 09	Cheque received from Ramesh deposited into bank	
Feb. 12	Cheque issued to Mohan	2,500
	and discount received	100
Feb. 15	Ramesh's cheque dishonoured	
Feb. 20	Money withdrawn from bank for office use	3,100
Feb. 23	School fees of children paid by cheque	75
Feb. 25	Cheque received from Rohan and endorsed it to Sohan	4,500
Feb. 26	Bank charges	20
Feb. 28	Deposited into bank the entire balance after retaining ₹ 500 in the office.	

6. Record the following transactions in a cash book with discount, cash and bank columns :

2016		₹
Jan. 01	Bank overdraft	12,000
	Cash in hand	2,300
Jan. 07	Cheque received from Ram ₹ 4,000 and discount allowed ₹ 200	
Jan. 08	Deposited the above cheque into bank	
Jan. 12	Banked	200
Jan. 15	Received a money order from Gopal	500
Jan. 16	Money withdrawn from bank for office use	300
Jan. 18	Bank charges	20
Jan. 20	Interest on Bank overdraft	1,000