



SUBJECT : ENGLISH

CLASS – XII

HOLIDAY HOMEWORK (2016-17)

PRACTICE PAPER

General Instructions –

1. To solve the paper in A4 white sheets.
2. All questions to be answered according to the sections.
3. To submit the homework on 4 July 2016 positively

Section A – Reading Skills

Q.1 Read the following passage and answer the questions given below:

BURNING PLASTICS IS NO SOLUTION

When plastic waste is burnt, a complex eave of toxic chemicals is released. Breaking down polyvinyl chloride (PVC) – used for packaging, toys and coating electrical wires – produces dioxin, an organochloride which belongs to the family of Persistent Organic Pollutants (POPs). A recent Dioxin Assessment Report brought out byu the United States Environment Protection Agency (USEPA) says the risk of getting cancer from dioxin is ten times higher than reported by the agency in 1994.

Yet the Delhi Government is giving the green signal to a gasification project which will convert garbage into energy without removing plastic waste. Former transport minister Rajender Gupta, the promoter of this project, says this is not necessary.

He claims no air pollution will be caused and that the ash produced can bre used as manure. An earlier waste-to-energy project set up in Timarpur failed. The new one, built with Australian assistance, wil cost Rs. 200 crore. It will generate 25 megawatts of power and gobble 1,000 tonnes of garbage everyday.

“Technologies like gasification are a form of incineration,” says Madhumita Dutta, central coordinator with Toxics Link, New Delhi. Incineration merely transfers hazardous waste from a solid form to air, water and ash, she points out.

Toxins produced during incineration include acidic gases, heavy metals as well as dioxins and furans. “The 'manure' will be hazardous and a problem to dispose,” says Dutta.

Municipal solid waste contains a mix of plastics. Breaking down this waste emits hydrochloric acid which attacks the respiratory system, skin and eyes, resulting in coughing, vomiting and nausea.

Polyethylene generates volatile compounds like formaldehyde and acetaldehyde, both suspected carcinogenic.

Breaking styrene from polystyrene can cause leukemia. Polyurethane is associated with asthma. Dioxin released

by PVC is a powerful hormone disrupter and causes birth defects and reproductive problems. There is no threshold dose to prevent it and our bodies have no defence against it.

“Even the best run incinerators in the world have to deal with stringent norms, apart from contaminated filters and ash, making them hugely expensive to operate,” says Dutta. In Germany, air pollution devices accounted for two-thirds the cost of incineration. Despite such efforts, the European Dioxin Inventory noted that the input of dioxin into the atmosphere was the highest from incineration.

“India does not have the facility to test dioxin and the cost of setting one up is prohibitively expensive,” says Dutta.

Besides, Indian garbage has a low calorific content of about 800cal/kg, since it has high moisture and requires additional fuel to burn. Toxics Link calculates that the electricity generated from such technology will cost between Rs. 5-7 per unit, which is six times higher than conventional energy. India has chosen a dioxin preventive route and burning of chlorinated plastics is prohibited under Municipal Solid Waste and Biomedical Rules.

Nearly 80 percent of Indian garbage is recyclable or compostable. Resident associations, the informal sector and the municipal corporation can make Delhi's garbage disappear in a sustainable manner. “Instead, the government promotes end of pipeline solutions,” says Dutta.

– *Rita Anand*

Questions:

A. Choose the most appropriate option:

(1 x 3 = 3 marks)

(a) Dioxin causes

- (i) cancer (ii) heart attack (iii) sickness (iv) hypertension

(b) The gasification process transforms

- (i) energy into garbage (ii) garbage into energy
(iii) water into energy (iv) none of the above

(c) Garbage can be converted into energy by

- (i) gasification (ii) gratification (iii) a chemical process (iv) incinators

B. Answer the following questions briefly:

(1 x 6 = 6 marks)

- (a) Which toxic chemical is released on burning plastic waste? How is it harmful?
(b) What is the aim of waste-to-energy project? What is likely to happen during incineration?
(c) How will burning plastic adversely impact the health of citizens?
(d) What two arguments are advanced against the use of incinerators?

(e) Why would gasification of waste prove a wasteful luxury in India?

(f) What facts are revealed in the passage pertaining to Indian garbage?

C. Find words in the passage similar in meaning as:

(1 x 2 = 2 marks)

(a) Waste material

(b) Swallow

Q.2 Read the following poem and answer the questions that follow:

Whose woods these are I think I know.

His house is in the village, though;

He will not see me stopping here

To watch his woods fill up with snow.

My little horse might think it queer

To stop without a farmhouse near

Between the woods and frozen lake

The darkest evening of the year.

He gives his harness bells a shake

To ask if there is some mistake.

The only other sound's the sweep

Of easy wind and downy flake.

The woods are lovely, dark and deep,

But I have promises to keep,

And miles to go before I sleep,

And miles to go before I sleep

Questions:

A. Choose the most appropriate option:

(1 x 3 = 3 marks)

(a) Why does the poet stop in between the journey?

(i) to enjoy the sight

(ii) to take a break

(iii) to recall the owner of the wood

(iv) to hear the harness bell

(b) Why the horse may be surprised at the unscheduled stoppage?

(i) it was a very lonely place

(ii) it was the coldest month of the year

(iii) it was approaching darkness during one of the coldest days

(iv) there was risk of bandits

(c) The last two reader encourage the readers to

(i) go ahead

(ii) do positive things

(iii) comprehend then illusion

(iv) all of the above

B. Answer the following questions briefly:

(1 x 6 = 6 marks)

(a) What did the poet do at last?

(b) What can be said about the weather as described in the poem?

(c) Why is this act called strange here?

(d) What message does the poet want to convey?

(e) Why does the horse feel perturbed?

(f) Which sounds are mentioned in the last stanza?

C. Find words in the message similar in meaning as:

(1 x 2 = 2 marks)

(a) strange

(b) falling snow

Q.3 1. On the basis of your reading make notes on the below passage.

5 marks

2. Write the summary of the passage in your own words.

3 marks

It was bound in a rough, red cloth, now smoothened in pces with the many caresses it had received over the years. Its name boldly etched in gold over its hard cover. Its spine still holding on firmly to the age old pages, much thumbbed, dog-eared, yellowing pages.nIts illustrations, lithigraphs by the author himself, and a frayed red ribbon placed between the pages I had read the last time. This is my favourite book.

That book startled me off on a journey that inevitably took me to the book alleys that still make the three hundred year old city proud. The fact that my lane meandered through several by-lanes and reached the book

alleys in less than fifteen minutes made my trips frequent and my pocket-money meagre. The narrow lanes were lined with small shops with dusty shelves. Their bespectacled shop-owners – bibliophiles in their own right – were always eager to help me find treasures in all shapes and sizes, bound in cloth or leather, some new and some which had changed several hands; others which had corners folded, many in tatters, a few boasting of an autograph or a note written in attention of a loving reader. My prized possession in those days was a book called Sita that was illustrated with paintings by the illustrious Raja Ravi Verma.

Nothing gave me more pleasure than the feel of a cold spine against my palm, the weight of the pages, their slight reluctance to open spontaneously, the faint crick at the turn of each page, and the musty smell of the yellowing pages mixed with a slight whiff of the jet-black ink that filled my nostrils as I brought the book close to my face.

Thus enamoured by books of all shapes and sizes, colours and textures and thus pampered by the abundance of such gems in dusty attics and tiny shop windows, I stepped out of my city's boundaries and stepped into different cities. As a resident in some, whilst a tourist in others. My experiences in each of those cities have been varied as have been my encounters with books.

In the beginning, I would wait to return from those cities and visit the old, familiar book alleys for my ration of books for the rest of the year. But soon I realized that the character of the alleys, the shops lining them and the books they sold had started to change. The old, dusty spines of ageless classics were fast being replaced by Last Minute Suggestions for Board Examinations, Queries & Answers Made Easy, cheap reprints of old classics, poor translations of world famous children's classics and photocopies of what were otherwise intellectual masterpieces. Makeshift shops had encroached upon the pavements of the narrow alleys and had started to threaten the original inhabitants themselves. Disappointment was inevitable, and it didn't take too long to set in. Like many others, I soon decided it was time to park my hopes elsewhere.

Section-B-Writing Skills

Q4. The Residents welfare Society is organizing a “Bal Mela” on Children’s day. There will be stalls, games and rides along with many attractive prizes. Extend an invitation to the residents to participate in the same. (W.L-50 words) **(4 marks)**

OR

As the Secretary of Vasant Vihar Residents Association, draft a notice informing the residents about a free medical camp for free health and heart check up organized by Fortis Group Of Hospitals. Sign as Dr. Mohan. (W.L-50 words)

Q5. You are Vishal, the hostel warden of Zenith Public School, Mumbai. Write a letter placing order to the sales manager, Bharat Electronics and Appliances, New Delhi for a few fans, geysers and 4 other goods that want to purchase for the hostel. **(6 marks)**

OR

Write a job application for the post of a P.G.T Home Sc. for St. Mary's school, 16, Meera bagh delhi. You are Shubhash Madan, resident of 83, Purva Enclave, G.K-II, Delhi. Do add a bio data also.

Q6. You are Bala, a social worker, much concerned about the practice of keeping building materials on roadside and pavements. Write an article in 150-200 words on how this encroachments not only leads to health and hygiene problems but also endangers life and property. Give suitable suggestions for putting an end to this practice.

(10 Marks)

Q.7. Mahatma Gandhi once said "I regard English language as an open window for peeping into western thought and science". Write a speech, to be delivered in the morning assembly expressing your view points of English in India". **(10 marks)**

Section-C-Literature

Q.8 Read the extract given below and answer the questions that follow: (4 marks)

Driving from my parent's home to Cochin last Friday morning, I saw my mother, beside me, doze, open mouthed, her face ashen like that of a corpse and realised with pain that she thought away, and looked but soon put that thought away, and looked out at young trees sprinting, the merry children spilling out of their homes,.....

Questions:

- (i) When and where was the poet driving to? (1)
- (ii) Who was sitting beside her? What did the poet notice about her? (1)
- (iii) What does the poet compare her mother's face to and why? (1)
- (iv) What did the poet do then? (1)

OR

A thing of beauty is a joy for ever
Its loveliness increases, it will never
Pass into nothingness; but will keep
A bower quiet for us.

Questions:

- (i) A thing of beauty is joy for ever.” Explain. (1)
- (ii) Why does a beautiful thing ‘pass into nothingness’? (1)
- (iii) What does poet mean by “a bower quiet for us”? (1)
- (iv) Name the poem. (1)

Q.9 Answer any four of the following questions in 40-50 words: (4 x 3 = 12 marks)

- (i) The walls of the classroom are decorated with the pictures of “Shakespeare”, “buildings with domes”, “world maps” and beautiful valleys. How do these contrast with the world of these children?
- (ii) Even after getting a job in a tea-stall, Saheb didn't appear very happy, why?
- (iii) What kind of care and attention did the rattrap peddler receive at the manor house?
- (iv) Why was Douglas afraid of water and swimming?
- (v) What was the proclamation made on the birth of the Tiger King?

Q.10 Flamingo - Value-based question (125-150 words) (6 marks)

- (a) How did the peddler feel after robbing the crofter? What course did he adopt and how did he react to the new situation? What does his reaction reveal?
- (b) Describe the lives of the ragpickers and the workers of the glass – blowing industry.

Q.11 Vistas - Value-based question (125-150 words) (6 marks)

- (a) “The operation is successful. The Maharaja is dead”. Elucidate.
- (b) Explain the significance of the title “The Enemy”?

Q.12 Long Reading Text – Invisible Man.

Answer the following questions in about 125 words. (6 X 2 = 12 marks)

- (a) Describe the interview of Mr. Cuss and the stranger.
- (b) Justify the title “The furniture that went mad”, with reference to Chapter 6 of the novel The Invisible Man.

CLASS-XII
English Holiday Homework

SYLLABUS COVERED -NOTICE, INVITATION AND REPLIES, POSTER, ARTICLE, SPEECH AND DEBATE

General Instructions-

- (a) Qnos. 1-9 - Short Compositions-Word Limit-50. Marks=4**
- (b) Qnos. 10-13 – Formal Letters-Marks=6**
- (c) Qnos. 14-17 - Creative Writing-200-225 words. Marks=10**
- (d) To answer these in the Writing Skills registers.**
- (e) To submit the same on 4th July 2016.**
- (f) All Writing Skills registers to be covered properly with a brown paper and named accordingly.**

Q1. Write a notice on "WORLD READING DAY" to be celebrated in your school on 17 December 2015.

Q2. Write a notice inviting students for participation in inter school quiz competition-'INVENT'.

Q3. Draft a poster on 'Blood Donation Camp'.

Q4. Draft a poster on 'Save Trees'.

Q5. Draft a poster to create Consumer Awareness in the present days .

Q6. Ritu Wears is giving Annual Sale on all woolen garments. Draft a poster highlighting the above.

Q7. You are Mr. Patel , Principal of Don Bosco School , Kolkata .Draft an invitation to the Education Minister(state) to grace the occasion as the Chief Guest for Eighth Annual Day of your school .

Q8. Design an invitation for the occasion of your elder brother's wedding.

Q9. Draft a reply expressing your inability to attend your friend's brother's wedding.

Q10. Write an application(with bio data)for the post of a Manager at Spice World NOIDA.

Q11. Write a letter to the General Manager, Big Bazaar, complaining against the bad quality of clothes that were bought in bulk for the children of the S.O.S village. You are Mr. Mohan, purchase officer S.O.S village-Delhi. Mention the details of bills , clothes, money paid and date of purchase.

Q12. Write a letter to Mr. Agashe, manager, Haldiram's ordering Veg. lunch to be provided to your corporates for a month.

Q13. Write a letter to M/S Sony Electronics offering your premises on franchise . Invent all the terms and conditions needed.

Q14. India believes in the policy of globalization and liberalization. In keeping with this, the FDI was supposed to diversify by allowing foreign companies to invest in world's largest democracy India . As a conscious youth express your opinions through an article "Is India Shining and Developing Economically".

Q15. In the world of computers, reading books seem to take a back seat. The young generation feels more comfortable with their laptops. Sending messages has become a rampant practice. 'The art of writing letter is on the wane'. Comment on the above and write an article on the same.

Q16. Express your views on the topic- Students are favouring to choose Humanities subjects as a career option.

Q17. Do you think being computer proficient is the need of the hour. Discuss over a debate.

NOTE-

SUGGESTED READING

- A) RED SAREE
- B) THE LIVES OF OTHERS - BY NEEL MUKHERJEE
- C) HOME AND THE WORLD - BY TAGORE
- D) CHOKNERBALI - BY TAGORE

SUGGESTED FILMS TO WATCH

- A) SOUND OF MUSIC
- B) MY FAIR LADY
- C) TOWERING INFERNO
- D) THE MAN WHO KNEW INFINITY – A BIOPIC
- E) QUOVADES
- F) GANDHI - DIRECTED BY RICHARD ATTEN BOROUGH (MUST WATCH AS IT IS REFERENCE TO TEXT "THE INDIGO")
- G) PROSIDONE ADVENTURE

WRITE A CRITICAL APPRECIATION OF ANY 2 FILMS -WORD LIMIT 150 WORDS IN AN A4 SIZE PAPER.

"Wish you a very happy holiday



HOLIDAY HOMEWORK

SUBJECT: PHYSICS

CLASS- XII

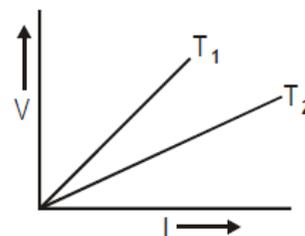
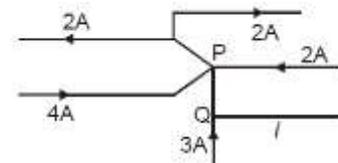
SET - A

1 Mark Questions

1. Draw curve to represent variation of electric field strength E with respect to distance r with centre of spherically symmetric charge dist.
2. 5000 lines of an electric field enter a given volume but only 3000 leave it. Find the magnitude charge inside the given volume.
3. 15. Sketch the lines of force due to two equal positive charges placed near each other.
4. Define term dielectric constant of a medium.
5. What is an ideal electric dipole?
6. Is electric potential a scalar or a vector quantity?
7. Calculate number of electric field lines originating from one coulomb charge.
8. Sketch a graph showing variation of resistivity with temperature of (i) Copper (ii) Carbon.
9. The emf of the driver cell (Auxillary battery) in the potentiometer experiment should be greater than emf of the cell to be determined. Why?
10. You are required to select a carbon resistor of resistance $47k\Omega \pm 10\%$ from a large collection. What should be the sequence of colour bands used to code it?

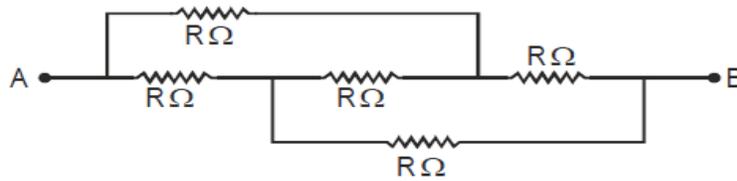
2 Marks Questions

11. The fig. here shows a part of a circuit. What are the magnitude and direction of the current i in the lower right-hand wire?
12. Two wire one of copper and other of manganin have same resistance and equal length. Which wire is thicker?
13. $V - I$ graph for a metallic wire at two different temperatures T_1 and T_2 is as shown in the figure. Which of the two temperatures is higher and why?
- 14.
15. (a) What would be the work done if a point charge $+q$ is taken from a point A to the point B on the circumference of a circle with another point charge $+q$ at the centre.
- (b) Sketch graph to show how charge Q acquired by capacitor of capacitance C varies with increase in potential difference between its plates.
16. A copper wire of resistance R is uniformly stretched till its length is increased to n times its original length. What will be its new resistance? Find % change in its resistance also.



3 Marks Questions

17. (a) Calculate the equivalent resistance between points A and B in the figure given below.



(b) A car battery is of 12V. Eight dry cells of 1.5 V connected in series also give 12V, but such a combination is not used to start a car. Why?

18. State Gauss Theorem in Electrostatics. Prove that no electric field exists inside a hollow charged sphere.

19. Using Gauss Theorem derive an expression for electric field intensity at a point near a thin infinite uniformly charged plane sheet.

20. Derive an expression for Electric field intensity at point P on the axial line of an electric dipole.

21. Deduce electric field Intensity expression at point P on the equatorial line of electric dipole.

5 Marks Questions

22. (a) Distinguish between polar and non-polar dielectrics.

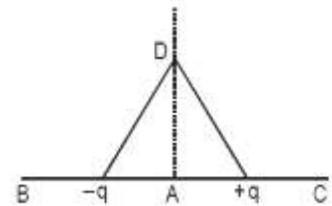
(b) Two electric lamps A and B marked 220V, 100W and 220V, 60W respectively.

Which of the two lamps has higher resistance?

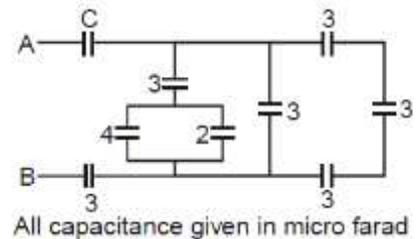
(c) Constantan is used for making the standard resistance. Why?

23. (a) An electric dipole is held in uniform electric field. Show that there will be no translatory motion of dipole. Hence derive an expression for the torque acting on it.

(b) Two point charges $-q$ and $+q$ are placed $2l$ metre apart, as shown in fig. Give the direction of electric field at points A, B, C and D.



24. (a) For what value of C does the equivalent capacitance between A and B is $1\mu\text{F}$ in the given circuit.

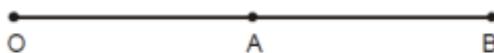


(b) Three concentric spherical metallic shells A $<$ B $<$ C of radii a , b , c ($a < b < c$) having surface densities σ , $-\sigma$ and σ respectively. Find the potential of three shells A, B and (ii). If shells A and C are at the same potential obtain relation between a , b , c .

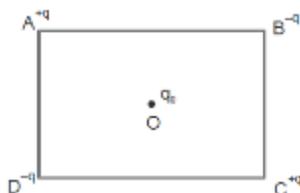
HOLIDAY HOMEWORK
SUBJECT : PHYSICS
CLASS- XII
SET - B

1 Marks Questions

1. Draw schematically an equipotential surface of a uniform electrostatic field along x-axis.
2. Sketch field lines due to (i) two equal positive charges near each other (ii) a dipole.
3. Name the physical quantity whose SI unit is volt/meter. Is it a scalar or a vector quantity?
4. Write the ratio of electric field intensity due to a dipole at a point on the equatorial line to the field at a point at a point on the axial line, when the points are at the same distance from the centre of dipole.
5. Draw equipotential surface for a dipole.
6. An uncharged conductor A placed on an insulating stand is brought near a charged insulated conductor B. What happens to the charge and potential of B?
7. A point charge Q is placed at point O shown in Fig. Is the potential difference $V_A - V_B$ positive, negative or zero, if Q is (i) positive (ii) negative charge.

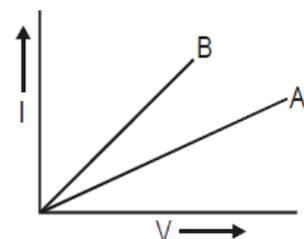


8. An electron and proton are released from rest in a uniform electrostatic field. Which of them will have larger acceleration?
9. In an uniform electric field of strength E, a charged particle Q moves point A to point B in the direction of the field and back from B to A. Calculate the ratio of the work done by the electric field in taking the charge particle from A to B and from B to A.
10. Four charges $+q, -q, +q, -q$ are placed as shown in the figure. What is the work done in bringing a test charge from ∞ to point O.

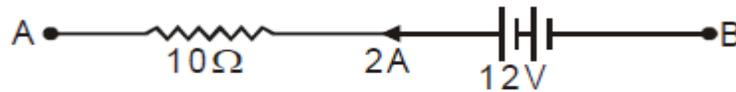


2 Marks Questions

11. (a) Two charge $-q$ and $+q$ are located at points A $(0, 0, -a)$ and B $(0, 0, +a)$. How much work is done in moving a test charge from point $(b, 0, 0)$ to Q $(-b, 0, 0)$?
 (b) Draw schematically the equipotential surface corresponding to a field that uniformly increases in magnitude but remains in a constant (say z) direction.
12. Out of $V - I$ graph for parallel and series combination of two metallic resistors, which one represents parallel combination of resistors? Justify your answer.
13. Explain why is the potentiometer preferred to a voltmeter for measuring emf of a cell?

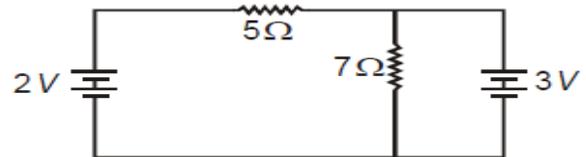


14. (a) How can a given 4 wires potentiometer be made more sensitive?
 (b) Why is copper not used for making potentiometer wires?
15. (a) In the figure, what is the potential difference between A and B?



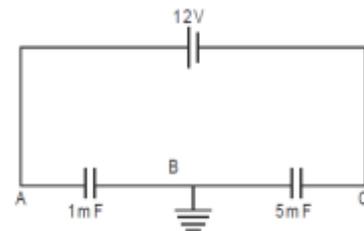
3 Marks Questions

16. Two resistances 5Ω and 7Ω are joined as shown to two batteries of emf 2V and 3V. If the 3V battery is short circuited. What will be the current through 5Ω ?



17. ABC is an equilateral triangle of side 10 cm. D is the mid-point of BC, charge $100\mu\text{C}$, $-100\mu\text{C}$ and $75\mu\text{C}$ are placed at B, C and D respectively. What is the force experienced by a $1\mu\text{C}$ positive charge placed at A?

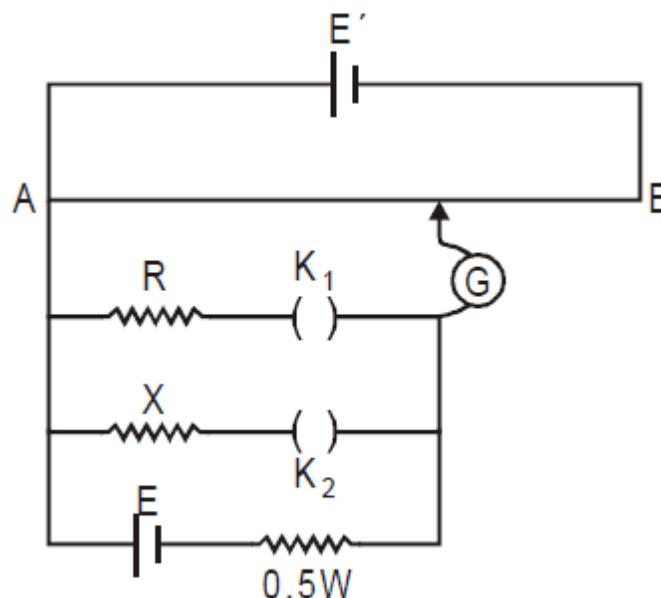
18. (a) Find the potential at A and C in the following circuit :



- (b) Diagrammatically represent the position of a dipole in (i) stable (ii) unstable equilibrium when placed in a uniform electric field.

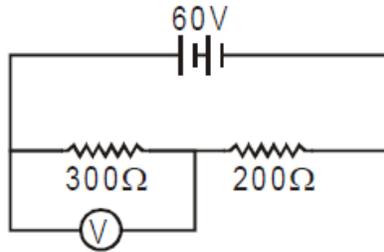
19. Two identical parallel plate capacitors connected to a battery with the switch S closed. The switch is now opened and the free space between the plates of the capacitors is filled with dielectric of dielectric constant 3. Find the ratio of the total electrostatic energy stored in both capacitors before and after the introduction of dielectric.

20. Figure show a potentiometer circuit for comparison of two resistances. The balance point with a standard resistance $R = 10\Omega$ is found to be 160 cm. While that with the unknown resistance X is 134.4 cm. Determine the value of X.

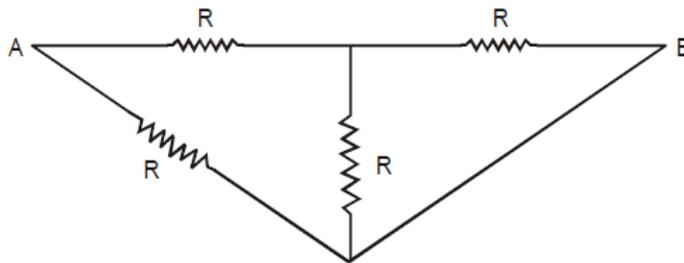


5 Marks Questions

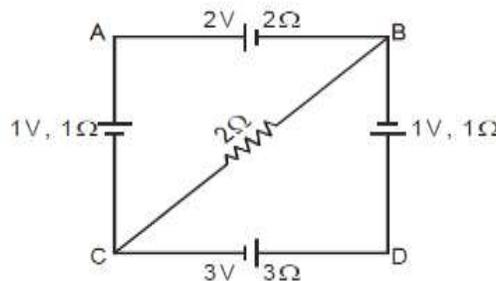
21. (a) In the circuit shown, the reading of voltmeter is 20V. Calculate resistance of voltmeter. What will be the reading of voltmeter if this is put across 200Ω resistance?



(b) The Equivalent Resistance between points A and B of the adjoining circuit.



22. (a) For the circuit given below, find the potential difference b/w points B and D.



(b) Four cells each of internal resistance 0.8Ω and emf 1.4V, are connected (i) in series (ii) in parallel. The terminals of the battery are joined to the lamp of resistance 10Ω . Find the current through the lamp and each cell in both the cases.

23. (a) With a certain unknown resistance X in the left gap and a resistance of 8Ω in the right gap, null point is obtained on the metre bridge wire. On putting another 8Ω in parallel with 8Ω resistance in the right gap, the null point is found to shift by 15cm. Find the value of X from these observations.

(b) Three cell are connected in parallel, with their like terminals are connected together, with wires of negligible resistance. If the emf of the cell are 2V, 1V and 4 V and if their internal resistance are 4Ω , 3Ω and 2 ohm respectively, find the current through each cell.



HOLIDAY HOMEWORK

CLASS XII

CHEMISTRY PAPER-1

- Alcohols are comparatively more soluble in water than ethers of comparable molecular masses. Explain why? (1)
- ortho-Nitro phenol & para-nitro phenol are separated from each other by steam distillation. Name the isomer which is steam volatile. Give reason also. (1)
- What are ambident nucleophiles? Explain with an example. (1)
- Why the chloroform is stored in dark coloured bottles? (1)
- Arrange the following amines in decreasing order of their pK_b values: (1)
 $C_2H_5NH_2$, $C_6H_5NH_2$, $C_6H_5NHCH_3$, $(C_2H_5)_2NH$.
- How will you carry out the following conversions? (2)
 - Benzoic acid to benzaldehyde
 - Benzene diazonium chloride to benzoic acid.
- Give reasons for the following; (2)
 - Dipole moment of ethyl alcohol is higher than that of phenol.
 - Grignard reagent can not be used in alcoholic medium.
- How will you distinguish the following? (2)
 - Phenol & benzoic acid
 - Benzaldehyde & acetophenone.
- The treatment of alkyl chlorides with aqueous KOH lead to the formation of alcohols but in the presence of alcoholic KOH alkenes are major product. Why? (2)
- Write structure of the following organic compound: (2)
 - 1,4-Dibromobut-2-ene.
 - 3-Iodo-4-tertbutyloctane
- Write the short notes on the following; (3)
 - Carbylamine reaction
 - Riemer Tiemann reaction
 - Sandmeyer's reaction.
- Account for the following; (3)
 - Gabriel phthalamide synthesis is preferred for preparation of primary amines.
 - Ethyl amine is soluble in water whereas aniline does not.
 - Aliphatic amines are stronger bases than aromatic amines.
- Explain the following; (3)
 - Benzaldehyde is less reactive towards nucleophilic addition reactions than propanal.

- b) Aldehydes are generally more reactive than ketones.
c) During the preparation of esters from a carboxylic acid & alcohol in the presence of an acid catalyst, the water or the ester should be removed as soon as it is formed.

14. Explain the following in brief; (3)

- a) Racemic mixture b) Chirality c) Organo metallic compound.

15. a) How will you distinguish the primary, secondary & tertiary amines? Also write the chemical equations of the reactions involved. (3)

b) How will you convert the following?

- (i) Methanol to ethanoic acid (ii) Methanamine to ethanamine

16. a) An organic compound A (molecular formula $C_8H_{16}O_2$) was hydrolysed with dilute sulphuric acid to give a carboxylic acid (B) & an alcohol (C). Oxidation of (C) with chromic acid produced (B). (C) on dehydration gives but-1-ene. Write equation for the reactions involved.

b) Describe the following; (i) Acetylation (ii) Protonation of alcohols (5)

17. a) An organic compound 'A' containing one benzene ring reacts with aq NH_3 followed by heating gives compound 'B' which on heating with Br_2 & KOH forms a compound 'C' of molecular formula C_6H_7N . Write the structures & IUPAC names of the compounds A, B & C. (5)

b) How will you distinguish the following pairs of the compounds?

- (i) Pentan-3-one & pentan-2-one (ii) Chloro benzene & cyclohexyl chloride

18. Explain the following observation : (5)

- a) Electrophilic substitution in case of aniline takes place more readily than in benzene.
b) Gabriel phthalamide synthesis is preferred for the synthesizing primary amines.
c) Tertiary amines do not undergo acylation reaction.
d) Phenols are more acidic than alcohols.
e) ortho-Nitro phenol is more acidic than ortho-Methoxy phenol.

19. a) Distinguish between the following organic pairs with the help of suitable chemical test; (5)

- i) Propan-1-ol and 2-Methyl propan-2-ol
ii) Phenol and ethanoic acid.

b) Arrange the following compounds in increasing order of their properties as indicated against them;

(i) Benzoic acid, 4-nitro benzoic acid, 3, 4- dinitro benzoic acid, 4-methoxy benzoic acid (increasing order of their acidic strength)

(ii) α -Bromo butanoic acid, β - bromo butanoic acid, γ - bromo butanoic acid, bromo butanoic acid. (increasing order of their acidic strength)

(iii) $C_2H_5NH_2$, $(C_2H_5)_2NH$, $(C_2H_5)_3N$, NH_3 (increasing order of their basic Strength in gaseous phase)

13. How will you carry out the following conversions? (3)
 a) Ethane to butane b) Aniline to Benzoic acid c) Propan-2-ol & 2-Methyl propan-2-ol
14. How will you carry out the following conversions? (3)
 a) Bromoethane to butane b) Aniline to chlorobenzene c) Benzyl chloride to benzyl alcohol
15. Explain the following; (3)
 a) Protonation of alcohols is easier than phenols.
 b) Although chlorine is an electron withdrawing group, yet it is ortho, para directing in electrophilic aromatic substitution reaction.
 c) Chloroacetic acid is stronger acid than acetic acid.
16. a) Give chemical test to distinguish between the following pairs of the compounds;(5)
 i) Propanal & Propanone ii) Benzaldehyde & Acetophenone
 b) How will you convert phenol into aspirin?
 c) Name the reagents used in the following reactions
 i) Oxidation of a primary alcohol to carboxylic acid
 ii) Butane-2-one to butan-2-ol
 iii) Ethanal to ethane
 iv) Benzamide to aniline
- 17.i)Account for the following; (5)
 a) Haloalkanes undergo nucleophilic substitution reactions easily.
 b) The order of acidity of alcohols falls in the order: primary>secondary>tertiary.
 c) The boiling point of ethanol is higher than that of methoxymethane.
 ii) An optically active compound having molecular formula $C_7H_{15}Br$ reacts with aqueous KOH to give racemic mixture of products. Write the mechanism involved for the reaction.
18. i) Distinguish between the following organic pairs with the help of suitable chemical test; (5)
 a) Propan-1-ol and propan-2-ol b) Phenol and ethanol c) Phenol and Aniline
 ii) Arrange the following in increasing order of their property indicated against it;
 a) CH_3CH_2CHO , $CH_3CH_2CH_2OH$, $C_2H_5OCH_3$, $CH_3CH_2CH_2CH_3$. (boiling point)
 b) Propan-1-ol, 2,4,6-trinitrophenol, 3-nitrophenol, 3,5-dinitrophenol, phenol, 4-methylphenol(acidic strength)
19. Explain the following; (5)
 a) Carboxylic acids do not give the characteristic reactions of carbonyl group.
 b) Methanoic acid reduces Tollen's reagent.
 c) Haloarenes do not undergo nucleophilic substitution reaction easily.
 d) Unlike phenols alcohols are easily protonated.
 e) ortho nitrophenol is steam volatile while para nitrophenol is not.



Bal Bharati PUBLIC SCHOOL

Sector – 21, Noida
Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in
Website : <http://bbpsnoida.balbhharati.org>

HOLIDAYS H W

CLASS - XII

SUBJECT : MATHEMATICS

General Instructions

- Each question of Section A is of 1 Mark.
- Each question of Section B is of 2 Marks.
- Each question of Section C is of 4 Marks.
- Each question of Section D is of 6 Marks.

Section A

1. Let * be a binary operation defined by $a * b = 3a + 4b - 2$. Find $4 * 5$.
2. If $n(A) = 3$ and $n(B) = 2$, find the number of relations from A to B.
3. If $A = (1,2,3)$ and $B = (a,b)$, Write total number of functions from A to B.
4. If $A = (1,2,3)$ and $B = (a,b,c,d,e)$, Write total number of one one functions from A to B.
5. If $A = (1,2,3)$ and $B = (a,b,c)$, Write total number of one one and onto functions from A to B.
6. If $A = (1,2,3,4)$ and $B = (a,b)$, Write total number of onto functions from A to B.
7. If $f: R \rightarrow R$ be defined by $f(x) = (x-2)^3$ then find $f^{-1}(-1)$.
8. Evaluate the following

$$(i) \sec^{-1}\left(-\frac{2}{\sqrt{3}}\right) \quad (ii) \sin^{-1} \sin\left(\frac{3\pi}{4}\right) \quad (iii) \cos^{-1}\left\{\cos \frac{5\pi}{6}\right\} \quad (iv) \cos^{-1}\left(\cos \frac{7\pi}{6}\right)$$

$$(v) \sin^{-1}(\sin(-600^\circ)) \quad (vi) \cos\left\{\cos^{-1}\left(-\frac{\sqrt{3}}{2}\right) + \frac{\pi}{4}\right\} \quad (vii) \tan\left(\cos^{-1} \frac{8}{17}\right)$$

$$(viii) \tan\left[2 \tan^{-1} \frac{1}{5} - \frac{\pi}{4}\right] \quad (ix) \sin\left[\frac{1}{2} \cos^{-1} \frac{4}{5}\right]$$

Section B

9. Let * Be a binary operation on Q defined by $a * b = \frac{3ab}{5}$ Show that * is commutative as well as

associative. Also find its identity element, if it exists.

10. $f: R \rightarrow R, f(x) = ax + b$. Find a and b if $f \circ f = I$.

11. $f(x) = \begin{cases} 1+x & , 0 \leq x \leq 2 \\ 3-x & , 2 \leq x \leq 3 \end{cases}$ find $f \circ f$.

12. If $f(x) = 1 + \alpha x, \alpha \neq 0$ is inverse of itself, find α .

13. Prove that (i) $\sin^{-1} x = \cos^{-1} \sqrt{1-x^2}, \text{ If } 0 \leq x \leq 1$ (ii)

$$\sin^{-1} x = -\cos^{-1} \sqrt{1-x^2}, \text{ If } -1 \leq x < 0$$

$$\text{(iii) } \cos^{-1} x = \sin^{-1} \sqrt{1-x^2}, \text{ If } 0 \leq x \leq 1$$

$$\text{(iv) } \cos^{-1} x = \pi - \sin^{-1} \sqrt{1-x^2}, \text{ If } -1 \leq x \leq 0$$

Section C

14. Show that the relation R defined on the set $N \times N$ by

$$(a,b)R(c,d) \Rightarrow a+d = b+c \text{ is an equivalence relation.}$$

15. If R is a relation on the set R defined as $(a,b) \in R \Leftrightarrow 1 + a b > 0$ for all $a, b \in R$. Show that R is reflexive and symmetric but not transitive.

16. Let N be the set of natural numbers and R be a relation on $N \times N$ defined by $(a,b) R (c,d) \Leftrightarrow ad=bc$ for all $(a,b),(c,d) \in N \times N$, Check R for reflexive, symmetric and transitive.

17. Let N be the set of natural numbers and R be a relation on $N \times N$ defined by

$$(a,b) R (c,d) \Leftrightarrow ad(b+c) = bc(a+d). \text{ Check whether R is an equivalence relation on } N \times N$$

18. Prove the following

$$\text{(i) } \cot^{-1} 1 + \cot^{-1} 2 + \cot^{-1} 3 = \frac{\pi}{2} \quad \text{(ii) } \sin^{-1} \frac{1}{\sqrt{5}} + \sin^{-1} \frac{2}{\sqrt{5}} = \frac{\pi}{2}$$

$$\text{(iii) } 2 \tan^{-1} \frac{1}{5} + \sec^{-1} \frac{5\sqrt{2}}{7} + 2 \tan^{-1} \frac{1}{8} = \frac{\pi}{4}$$

19. Solve: $\sin^{-1} \frac{2a}{1+a^2} + \sin^{-1} \frac{2b}{1+b^2} = 2 \tan^{-1} x$.

20. If $f(x) = \begin{cases} \frac{1 - \sin^3 x}{3 \cos^2 x} & , \text{ if } x < \frac{\pi}{2} \\ a & , \text{ if } x = \frac{\pi}{2} \\ \frac{b(1 - \sin x)}{(\pi - 2x)^2} & , \text{ if } x > \frac{\pi}{2} \end{cases}$ is $f(x)$ is continuous at $x = \frac{\pi}{2}$, find a and b .

21. If $f(x) = \begin{cases} \frac{2^{x+2} - 16}{4^x - 16} & , \text{ if } x \neq 2 \\ k & , \text{ if } x = 2 \end{cases}$ is continuous at $x = 0$, find k .

22. Find value of a for which the function $f(x) = \begin{cases} \frac{(4^x - 1)^3}{\sin(x/a) \log \left\{ \left(1 + x^2/3 \right) \right\}} & , x \neq 0 \\ 12 (\log 4)^3 & , x = 0 \end{cases}$

23. If $f(x) = \begin{cases} \frac{36^x - 9^x - 4^x + 1}{\sqrt{2} - \sqrt{1 + \cos x}} & , x \neq 0 \\ k & , x = 0 \end{cases}$ is continuous at $x = 0$, then find k .

24. If $f(x) = \frac{2x + 3 \sin x}{3x + 2 \sin x}$, $x \neq 0$ is continuous at $x = 0$, then find $f(0)$

25. Let $f(x) = \frac{\log \left(1 + \frac{x}{a} \right) - \log \left(1 - \frac{x}{b} \right)}{x}$, $x \neq 0$. Find the value of f at $x = 0$

so that f is continuous at $x = 0$

26. Find the RHD and LHD of $f(x) = \begin{cases} x - 1, & x < 2 \\ 2x - 3, & x \geq 2 \end{cases}$ at the point $x = 2$.

Hence show that f is not diff at $x = 2$

27. Show that $f(x) = \begin{cases} x^2 \sin(1/x) & , x \neq 0 \\ 0 & , x = 0 \end{cases}$ is derivable at 0 and $f'(0) = 0$

28. Show that $f(x) = |x - 2|$ is continuous but not derivable at 2.

29. Write a function which is everywhere continuous but fails to be differentiable exactly at 3 points. Also prove it.

Section D

30. $f: N \rightarrow N, f(x) = 4x^2 + 12x + 15$ show that $f: N \rightarrow \text{Range } f$ is invertible. find inverse of f .

31. If $\sin^{-1} x + \sin^{-1} y + \sin^{-1} z = \pi$, Then prove that $x \sqrt{1 - x^2} + y \sqrt{1 - y^2} + z \sqrt{1 - z^2} = 2xyz$

32. Prove that : $\frac{\alpha^3}{2} \operatorname{cosec}^2 \left(\frac{1}{2} \tan^{-1} \frac{\alpha}{\beta} \right) + \frac{\beta^3}{2} \sec^2 \left(\frac{1}{2} \tan^{-1} \frac{\beta}{\alpha} \right) = (\alpha + \beta) (\alpha^2 + \beta^2)$



CLASS - XII

SUBJECT : MATHEMATICS

General Instructions

- Each question of Section A is of 1 Mark.
- Each question of Section B is of 2 Marks.
- Each question of Section C is of 4 Marks.
- Each question of Section D is of 6 Marks.

Section A

1. If A and B are square matrices of order 3 such that $|A| = -1$, $|B| = 3$, then find $|3AB|$
2. If A is a square matrix of order 2 and $|A| = 3$, then Evaluate $|4A|$.
3. If A is a square matrix of order 3 and $|A| = 2$, then Evaluate $A(\text{adj } A)$.
4. If A is square matrix of order n such that $|A| = -4$, find the value of $|A^T|$, where A^T is the transpose of A.
5. If A is a square matrix of order 3 and $|A| = -5$, find the value of $|\text{adj. } A|$.
6. If A and B are square matrices of the same order and $B^{-1} = A$, then Evaluate AB and BA.
7. If A is an invertible matrix of order 2 and $|A| = 10$, then Evaluate $|A^{-1}|$.
8. If $A^{-1} = \begin{bmatrix} 1 & 0 \\ 0 & 2 \end{bmatrix}$ and $B^{-1} = \begin{bmatrix} 0 & 1 \\ 2 & 0 \end{bmatrix}$, then find $(AB)^{-1}$.
9. If $\Delta = \begin{vmatrix} 1 & 2 & 3 \\ 2 & -1 & 0 \\ 3 & 4 & 5 \end{vmatrix}$, then write $\begin{vmatrix} 1 & 6 & 3 \\ 4 & -6 & 0 \\ 3 & 12 & 5 \end{vmatrix}$ in term of Δ .
10. Write a square matrix which is both symmetric as well as skew-symmetric.
11. If A is an $m \times n$ matrix such that AB and BA are both defined, then write the order of matrix B.
12. If A and B are symmetric matrices, then check whether ABA is symmetric or skew symmetric matrix.
13. If A is symmetric matrix then check whether A^n for $n \in \mathbb{N}$ is symmetric or skew symmetric matrix.
14. If $A = [a_{ij}]_{m \times n}$ is a skew-symmetric matrix, what is the value of a_{ii} .

Section B

Using the properties, Evaluate the following

$$(1) \begin{vmatrix} 6 & -3 & 2 \\ 2 & -1 & 2 \\ -10 & 5 & 2 \end{vmatrix} \quad (2) \begin{vmatrix} 49 & 1 & 6 \\ 39 & 7 & 4 \\ 26 & 2 & 3 \end{vmatrix} \quad (3) \begin{vmatrix} 67 & 19 & 21 \\ 39 & 13 & 14 \\ 81 & 24 & 26 \end{vmatrix}$$

Construct a 3×3 matrix $C = [c_{ij}]$ whose elements are given by

$$c_{ij} = \left[\frac{i}{j} \right] \text{ where } [x] \text{ stands for greatest integer function.}$$

Section C

Prove the following using properties of determinants

$$(1) \begin{vmatrix} (b+c)^2 & a^2 & bc \\ (c+a)^2 & b^2 & ca \\ (a+b)^2 & c^2 & ab \end{vmatrix} = (a-b)(b-c)(c-a)(a+b+c)(a^2+b^2+c^2)$$

$$(2) \begin{vmatrix} a^2 & 2ab & b^2 \\ b^2 & a^2 & 2ab \\ 2ab & b^2 & a^2 \end{vmatrix} = (a^3 + b^3)^2 \quad (3) \begin{vmatrix} (a+1)(a+2) & a+2 & 1 \\ (a+2)(a+3) & a+3 & 1 \\ (a+3)(a+4) & a+4 & 1 \end{vmatrix} = -2$$

$$(4) \begin{vmatrix} a & b & c \\ x & y & z \\ p & q & r \end{vmatrix} = \begin{vmatrix} x & y & z \\ p & q & r \\ a & b & c \end{vmatrix} = \begin{vmatrix} y & b & q \\ x & a & p \\ z & c & r \end{vmatrix} \quad (5)$$

$$\begin{vmatrix} a+b+nc & na-a & nb-b \\ nc-c & b+c+na & nb-b \\ nc-c & na-a & c+a+nb \end{vmatrix} = n(a+b+c)^3$$

$$(6) \begin{vmatrix} \frac{a^2+b^2}{c} & c & c \\ a & \frac{b^2+c^2}{a} & a \\ b & b & \frac{c^2+a^2}{b} \end{vmatrix} = 4abc \quad (7)$$

$$\begin{vmatrix} a & b & ax+by \\ b & c & bx+cy \\ ax+by & bx+cy & 0 \end{vmatrix} = (b^2-ac)(ax^2+2bxy+cy^2)$$

$$(8) \begin{vmatrix} a^2 & b^2 & c^2 \\ (a+1)^2 & (b+1)^2 & (c+1)^2 \\ (a-1)^2 & (b-1)^2 & (c-1)^2 \end{vmatrix} = 4 \begin{vmatrix} a^2 & b^2 & c^2 \\ a & b & c \\ 1 & 1 & 1 \end{vmatrix}$$

$$(9) \begin{vmatrix} -a(b^2 + c^2 - a^2) & 2b^3 & 2c^3 \\ 2a^3 & -b(c^2 + a^2 - b^2) & 2c^3 \\ 2a^3 & 2b^3 & -c(a^2 + b^2 - c^2) \end{vmatrix} = abc(a^2 + b^2 + c^2)^3$$

$$(10) \begin{vmatrix} a-b & b-c & c-a \\ b+c & c+a & a+b \\ a & b & c \end{vmatrix} = a^3 + b^3 + c^3 - 3abc$$

$$(11) \begin{vmatrix} -bc & b^2 + bc & c^2 + bc \\ a^2 + ac & -ac & c^2 + ac \\ a^2 + ab & b^2 + ab & -ab \end{vmatrix} = (ab + bc + ac)^3$$

$$2. \quad \text{Prove that} \quad \begin{vmatrix} X+1 & X+2 & X+a \\ X+2 & X+3 & X+b \\ X+3 & X+4 & X+c \end{vmatrix} = 0$$

Where a, b, c are given to be in A.P.

3. Prove that the product of matrices

$$\begin{bmatrix} \cos^2 \theta & \cos \theta \sin \theta \\ \cos \theta \sin \theta & \sin^2 \theta \end{bmatrix} \text{ and } \begin{bmatrix} \cos^2 \phi & \cos \phi \sin \phi \\ \cos \phi \sin \phi & \sin^2 \phi \end{bmatrix}$$

is the null matrix, when θ and ϕ differ by an odd multiple of $\frac{\pi}{2}$.

$$4. \quad \text{If } A = \begin{bmatrix} \cos a + \sin a & \sqrt{2} \sin a \\ -\sqrt{2} \sin a & \cos a - \sin a \end{bmatrix} \text{ prove that}$$

$$A^n = \begin{bmatrix} \cos na + \sin na & \sqrt{2} \sin na \\ -\sqrt{2} \sin na & \cos na - \sin na \end{bmatrix} \text{ for all } n \in \mathbb{N}.$$

4. Prove that + ve odd integral powers of a skew symmetric matrix are skew symmetric

+ ve even integral powers are symmetric.

6. If A and B are two square matrices such that $B = -A^{-1}BA$ prove that $(A + B)^2 = A^2 + B^2$.

7. If $X = \begin{bmatrix} \cos A & \sin A \\ -\sin A & \cos A \end{bmatrix}$, then prove that $X^n = \begin{bmatrix} \cos nA & \sin nA \\ -\sin nA & \cos nA \end{bmatrix}$; $n \in \mathbb{N}$.

Section D

1. Solve the following system of equations by matrix method:

$\begin{aligned} 3x + 4y + 7z &= 14 \\ (1) \quad 2x - y + 3z &= 4 \\ x + 2y - 3z &= 0 \end{aligned}$	$\begin{aligned} \frac{2}{x} - \frac{3}{y} + \frac{3}{z} &= 10 \\ (2) \quad \frac{1}{x} + \frac{1}{y} + \frac{1}{z} &= 10 \\ \frac{3}{x} - \frac{1}{y} + \frac{2}{z} &= 13 \end{aligned}$	$\begin{aligned} 5x + 3y + z &= 16 \\ (3) \quad 2x + y + 3z &= 19 \\ x + 2y + 4z &= 25 \end{aligned}$
$\begin{aligned} 2x + 2y - 2z &= 1 \\ (4) \quad 4x + 4y - z &= 2 \\ 6x + 6y + 2z &= 3 \end{aligned}$	$\begin{aligned} 2x + 3y - z &= 0 \\ (5) \quad x - y - 2z &= 0 \\ 3x + y + 3z &= 0 \end{aligned}$	$\begin{aligned} x + y - z &= 0 \\ (6) \quad x - 2y + z &= 0 \\ 3x + 6y - 5z &= 0 \end{aligned}$

If $A = \begin{bmatrix} 1 & -1 & 1 \\ 2 & 1 & -3 \\ 1 & 1 & 1 \end{bmatrix}$, find A^{-1} and hence solve the system of linear equations

$$x + 2y + z = 4, \quad -x + y + z = 0, \quad x - 3y + z = 2$$

Given that $A = \begin{bmatrix} 1 & -1 & 0 \\ 2 & 3 & 4 \\ 0 & 1 & 2 \end{bmatrix}$ and $B = \begin{bmatrix} 2 & 2 & -4 \\ -4 & 2 & -4 \\ 2 & -1 & 5 \end{bmatrix}$ find AB . Hence use this to solve the following

system of equations : $x - y = 3$; $2x + 3y + 4z = 17$; $y + 2z = 7$

Given that $A = \begin{bmatrix} -4 & 4 & 4 \\ -7 & 1 & 3 \\ 5 & -3 & -1 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & -1 & 1 \\ 1 & -2 & -2 \\ 2 & 1 & 3 \end{bmatrix}$ find AB . Use this to solve the

following System of linear equations: $x - y + z = 4$; $x - 2y - 2z = 9$; $2x + y + 3z = 1$

5. Using elementary transformations, find the inverse of the following matrix:

(i) $\begin{bmatrix} 2 & -1 & 4 \\ 4 & 0 & 2 \\ 3 & -2 & 7 \end{bmatrix}$	(ii) $\begin{bmatrix} 2 & 5 & 3 \\ 3 & 4 & 1 \\ 1 & 6 & 2 \end{bmatrix}$	(iii) $\begin{bmatrix} 3 & -3 & 4 \\ 2 & -3 & 4 \\ 0 & -1 & 1 \end{bmatrix}$	(iv) $\begin{bmatrix} 2 & -1 & 3 \\ 1 & 2 & 4 \\ 3 & 1 & 1 \end{bmatrix}$	(v) $\begin{bmatrix} 2 & 5 & 3 \\ 3 & 4 & 1 \\ 1 & 6 & 2 \end{bmatrix}$.
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SUBJECT : BIOLOGY

Set-I

General Instructions

- All questions are compulsory.
- Wherever necessary, the diagrams drawn should be neat and properly labelled.
 - Q1 to 5 carry one mark each, Q6 to 10 two marks each, Q 11 to 17 three marks each , Q18 is of 4 marks and Q19 to 20 five marks each.

- Q1. Who first observed the X chromosome. What was it called then?
- Q2. Name the event during cell division that results in the gain or loss of chromosomes.
- Q3. What are Pleiotropic genes?
- Q4. What is Polygenic Inheritance?
- Q5. How much is one map unit for expressing distance between genes on a chromosome?
- Q6. Why do the sons of a haemophilic father never suffer from this trait?
- Q7. What do you mean by phosphodiester bond? Explain.
- Q8. Comment on the utility of variability in number of tandem repeats during DNA fingerprinting .
- Q9. What is Satellite DNA? Name their types.
- Q10. Marsupials and Australian Placental mammals exhibit convergent evolution. Explain how?
- Q11. With the help of any two suitable examples, explain the effect of anthropogenic action on organic evolution.
- Q12. What would happen if histones were to be mutated and made rich in amino acids aspartic acid and glutamic acid in place of basic amino acids such as lysine and arginine?
- Q13. Sweet potato and potato are the result of convergent evolution. Justify the statement.
- Q14. Identify a, b,c ,d, e and f in the table given below

Syndrome	Cause	Sex of the individual	Characteristics of the affected individual
Turner's	45 with XO	a	b
c	d	e	Overall masculine
Down's	Trisomy of 21 st chromosome	both	f

- Q15. Name the major types of RNAs and explain their role in Protein synthesis in prokaryotes.
- Q16. What does the following equation represent: $p^2 + 2pq + q^2 = 1$ Explain.
- Q17. Describe the discontinuous synthesis of DNA.
- Q18. A patient supposed to be suffering from malaria went to a doctor who on testing blood sample confirmed him negative for malaria. The RBC in blood sample was found to be sickle shaped.
a) With what disorder was patient suffering from?
b) How is it caused?
c) What values are reflected by the doctor?
- Q19. What is Test Cross? How can it decipher the heterozygosity of a plant? Explain with the help of crosses.
- Q20. Describe the steps involved in the sequencing of a genome.



SUBJECT : BIOLOGY

Set-II

General Instructions

- All questions are compulsory.
- Wherever necessary, the diagrams drawn should be neat and properly labelled.
- Q1 to 5 carry one mark each, Q6 to 10 two marks each, Q 11 to 17 three marks each , Q18 is of 4 marks and Q19 to 20 five marks each.

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- Q1. A male honey bee has 16 chromosomes whereas it's female has 32 chromosomes. Give reason
- Q2. Name two plants whose genomes have been sequenced
- Q3. Expand SNPs. What are they?
- Q4. Retroviruses mutate and evolve faster than other viruses. Why?
- Q5. Name the scientific name of the plant on which Taylor et al performed experiments.
- Q6. What is frameshift mutation? What kind of mutation does not affect protein synthesis?
- Q7. What kind of transcription is found in Retroviruses? Identify the enzyme that helps in the process.
- Q8. Why is pedigree analysis done in the study of human genetics? State the conclusion that can be drawn from it.
- Q9. Differentiate between Aneuploidy and Polyploidy.
- Q10. What are mutagens? Give two examples.
- Q11. State the Mendelian Law which is universally accepted. Explain with the help of a cross.
- Q12. A woman of 45 years delivered an abnormal child with flat nasal bridge and mouth usually open with a large protruding tongue. Name the genetic disorder. What causes this condition? Is the disorder hereditary?
- Q13. Explain male and female heterogamety.
- Q14. Describe the various steps of Griffith's experiment that led to the conclusion of the Transforming Principle.
- Q15. Explain adaptive radiation with the help of a suitable example.
- Q16. Differentiate between homology and analogy. Give one example of each.
- Q17. Describe the process of transcription in bacteria.
- Q18. What is Thalessemia ? How would you counsel the family not to blame the mother for delivering child suffering from the disease? List the values your counselling can propagate in the families.
- Q19. How did Messelson and Stahl proved Semiconservative replication of DNA.
- Q20. Bring out the salient features of genetic code.



CLASS –XII
COMPUTER SCIENCE

SET - A

Time :- 2 Hours

M.M.-50

Instructions

- **All questions are compulsory**
- **Programming Language : C++**

(a) What is the difference between an array and a structure in C++? Give a suitable example to illustrate both using C++ code. **(2)**

(b) What is the difference between Actual Parameter and Formal Parameter? Also, give a suitable C++ code to illustrate both. **(2)**

c) Observe the following C++ code: **(1)**

```
#include <iostream.h>
#include <stdio.h>
#include <string.h>
#include <math.h>
void main()
{
char STR[80];
gets(STR);
puts(strrev(STR));
getch();
}
```

Name the header file which is not necessary to run the above program and name the header file which is necessary for the successful compilation of the above program.

(d) Rewrite the following code after removing all the syntax error(s) if any present in the code. Make sure that you underline each correction done by you in the code. **(2)**

Important Note:

- Assume that all required header files are already included, which are essential to run this code
- The correction made by you should not change the logic of the program.

```
int sum(const int arr[], int size)
void caller() {
int A[10],i=0;
for(;i<10;i++)
cin>>A[i];
sum(A,10); }
```

```

void main() {
    caller()
}
int sum(const int arr[], size)
{
    int s=0,i=-1;
    while(++i<size)
    {
        s+=arr[i];
    }
    return s;
}

```

(e) Obtain the output from the following C++ program as expected to appear on the screen after its execution. **(2)**

Important Note :

- All the desired header files are already included in the code , which are required to run the code.

```

void main()
{ char *Text="TALenT@orG";
  for(int i=0;Text[i]!='\0';i++) {
    if(!isalpha(Text[i]))
      Text[i]='*';
    else if(!isupper(Text[i]))
      Text[i]=Text[i]+1;
    else Text[i]=Text[i+1];
  }
  cout<<Text ;
}

```

(f) Obtain the output from the following C++ program as expected to appear on the screen after its execution. **(3)**

Important Note :

- All the desired header files are already included in the code , which are required to run the code.

```

class STAR_CINEMA {
    char Movie_Name[25];
    int No_Of_Tickets;
    char Ticket_Type[10];
public:
    STAR_CINEMA(char *MN="EYE", int NT=3, char *TT="BALCONY") {
        strcpy(Movie_Name,MN);
        No_Of_Tickets=NT;
        strcpy(Ticket_Type,TT);
    }
    void SHOW() {
        if(strcmp(Ticket_Type,"BALCONY")==0)
            cout<<Movie_Name<<"\t"<<No_Of_Tickets<<"\t"<<Ticket_Type<<"\t"<<3.00 *No_Of_Tickets;
        cout<<endl;
    }
}

```

```

if(strcmp(Ticket_Type,"GENERAL")==0)
cout<<Movie_Name<<"\t"<<No_Of_Tickets<<"\t"<<Ticket_Type<<"\t"<<2.00 *No_Of_Tickets;
cout<<endl;
}
~STAR_CINEMA() {
cout<<"Booked\n";
} };
void main() {
STAR_CINEMA T1;
T1.SHOW();
{
STAR_CINEMA T2("TROY", 2, "GENERAL");
T2.SHOW();
} }

```

(g) Observe the following program & Find out the correct possible outputs from the options .
 (Assuming that all required header files are included in the program) **(2)**

```

void main() {
char serial[ ] = {'E', 'X', 'A', 'M', '\0'};
int number [ ]= { 69,66,67,68};
randomize();
cout<<number(random(3));
for( int i=0;i<4;i++)
cout<<serial(sizeof(int) + random(2)-1);
}

```

- (i) 67XXAX
- (ii) 69AXXA
- (iii) 66AAXA
- (iv) 67AAAM

2. a) What do you understand by visibility modes in class derivations? What are these modes? **(2)**
 b) Answer the questions(i) and (ii) after going through the following program: **(2)**

```

class Test
{ char paper[12];
int marks;
Test( ) { } //Function 1
Test(Test &tt) { ... } //Function 2
~Test( ) { } //Function 3
};

```

- (i) What is Function 1, Function 2 and Function 3 referred as?
- (ii) Write the complete definition for Function2.

- c) Define a class **TAXPAYER** in C++ with following description: **(4)**

Private Members:

pan	Integer
Name	String of 25 characters
taxableinc	Float //total annual taxable income
tax	Float

Public Members

- A function **caltax()** to calculate tax using following rules:

<u>Total Annual Taxable</u>	<u>Rate of Taxation</u>
Up to 60000	0%
>15000 & <60000	5%
>5000 & <15000	10%
<5000	15%

- A function **inputdata()** to allow the user to enter the values of pan, Name and taxableinc and invoke function **caltax()** to calculate tax.
 - A function **displaydata()** to allow user to view the content of all the data members
- d) Consider the following C++ declarations and answer the questions given below: **(4)**

```
class A {
    void anyval( );
protected:
    int x, y;
    void procval( );
public:
    void getvalA( );
    void putvalA( );
};
class B : protected A {
    int a,b;
protected:
    int c,d;
    void getvalB( );
public:
    void putvalB( );
};
class C : private B {
    int p;
protected:
    int q;
    void getval( );
public:
    void showval();};
```

- (i) Name all member functions, which are accessible by the objects of class C.
- (ii) Name all the protected members of class B.
- (iii) Name the base class and derived class of class B.
- (iv) Name the data members, which are accessible from member functions of class C.

e) Consider the following C++ declarations and answer the questions given below: **(4)**

```
class Organization {
    char Address[20];
    double Budget, Income;
protected:
    void Compute( );
public:
```

```

        Organization( );
        void Get( );
        void Show( );
};
class WorkArea : public Organization
{
char Address[20];
int Staff;
protected:
double Pay;
void Calculate( );
public:
WorkArea( );
void Enter( );
void Display( );
};
class ShowRoom : private Organization
{
char Address[20];
flat Area;
double Sale;
public:
ShowRoom( );
void Input( );
void Show( );
};

```

(i) Name the type of inheritance illustrated in the above C++ code.

(ii) Write the name of data members, which are accessible from member function of class ShowRoom.

(iii) Write the name of all the member function, which are accessible from objects belonging to class WorkArea.

(iv) How many bytes will be required by an object of class ShowRoom?

4. a) Observe the program segment given below carefully, and fill the blanks marked as statement 1 and statement 2 using seekg() and write() functions for performing the required task. (1)

```

class Product
{
int Item_no;
char I_Name[20];
public:
void enterdetails( );
void showdetails( );
int Ritem_no( ) {return Item_no;}
};
void modify(Product Pnew)
{
fstream file;
file.open("item.dat", ios::binary | ios::in | ios::out);

```

```

product p1;
int rec = 0, found = 0;
while(!found)
{
rec++;
if(Pnew.Ritem_no( ) == p1.Ritem_no( )
{
_____ // statement 1
file.write((char*) &Pnew, sizeof(Pnew));
found = 1;
}
else
_____ // statement 2
}
if(!found)
cout<<"record for modification does not exist";
file.close( ); }

```

- b) Write a function to count the number of words present in a text file named "Memo.txt". Assume that each word is separated by a single blank space character and no blanks/spaces in the beginning and end of the file. **(2)**
- c) Given a binary file **Out.dat** containing records of the class OUTSTAND given below, write functions in C++ to write objects having outamt more than Rs. 10,000 into **critical.dat** binary file. **(3)**

```

class OUTSTAND
{ int memno;
float outamt;
public:
void getit( ) {cin>>memno>>outamt;}
void putit( ) {cout<<memno<<outamt;}
float getamt()
{ return outamt;
} } ;

```

- d) Assuming a binary file FUN.DAT is containing objects belonging to a class LAUGHTER (as defined below). Write the user defined function in C++ to add more objects belonging to class LAUGHTER at the bottom of it. **(4)**

```

class LAUGHTER
{ int Idno;
char Type[5];
char Desc[50];
public:
void newentry()
{ cin>>Idno;
gets(Type);
gets(Desc);
}
void showdata( )
{ cout<<Idno;
cout<<Type;
cout<<Desc;
}};

```

5. a) Differentiate between static and dynamic allocation of memory.

(2)

b) Give the output of the following program (Assuming all required header files are included in the program): (2)

```
void main( )
{
    int array[ ] = {2,3,4,5};

    int *pt = array;

    int value = *pt;

    cout<<value<<"\t";

    value = *pt++;

    cout<<value<<"\t";

    value = *pt;

    cout<<value<<"\t";

    value = *++pt;

    cout<<value<<"\t";}
```

c) What will the output of the following program?

(3)

```
#include<iostream.h>
int main( )
{
    int a[ ] = {11,22,33,44,55};
    int x;
    int *p = a;
    x = *p++;
    cout<<"*p="<<*p<<"\n";
    cout<<"x="<<x<<"\n";
    int b[ ] = {11,22,33,44,55};
    int y;
    int *q = b;
    y = *q++;
    cout<<"*q="<<*q<<"\n";
    cout<<"y="<<y<<"\n";
    int c[ ] = {11,22,33,44,55};
    int z;
    int *r = c;
    z = *++r;
    cout<<"*r="<<*r<<"\n";
    cout<<"z="<<z<<"\n";}
```



**CLASS –XII
COMPUTER SCIENCE**

SET - B

Time :- 2 Hours

M.M.-50

Instructions

- **All questions are compulsory**
- **Programming Language : C++**

Q.1

(a) Give the difference between the type casting and automatic type conversion. Also give a suitable C++ code to illustrate both. **(2)**

(b) What is the difference between 'd' and "d"?

Also, give a suitable C++ code to illustrate both.

(2)

c) Observe the following C++ code:

(1)

```
#include <iostream.h>
#include <stdio.h>
#include <string.h>
#include <math.h>
void main()
{
char STR[80];
gets(STR);
puts(strrev(STR));
getch( );
}
```

Name the header file which is not necessary to run the above program and name the header file which is necessary for the successful compilation of the above program.

(d) Rewrite the following code after removing all the syntax error(s) if any present in the code. Make sure that you underline each correction done by you in the code. **(2)**

Important Note:

- Assume that all required header files are already included, which are essential to run this code
- The correction made by you should not change the logic of the program.

```
int total(const int arr[ ], int size)
void caller()
{
```

```

int X[8],i=0;
for(;i<8;i++)
cin>>X[i];
total(X,10);
}
void main()
{
caller()
}
int total(const int arr[], size)
{
int s=0,i=-1;
while(++i<size)
{
s+=arr[i];
}
return s;
}

```

(e) Obtain the output from the following C++ program as expected to appear on the screen after its execution. **(2)**

Important Note :

- All the desired header files are already included in the code , which are required to run the code.

```

void main()
{ char *Text="PROgrAm@C++";
for(int i=0;Text[i]!='\0';i++)
{
if(!isalpha(Text[i]))
Text[i]='*';
else if(!isupper(Text[i]))
Text[i]=Text[i]+1;
else Text[i]=Text[i+1];
}
cout<<Text ;
}

```

(f) Obtain the output from the following C++ program as expected to appear on the screen after its execution. **(3)**

Important Note :

- All the desired header files are already included in the code , which are required to run the code.

```

#include<iostream.h>

#include<conio.h>

#include<string.h>

class state

```

```

{ char *statename;

  int size;

  public:

  state(){size=0;statename=new char[size+1];}

  state (char *s)

  { size=strlen(s);statename=new char[size+1];

    strcpy(statename,s);

  }

  void display()

  { cout<<statename<<endl;}

  void replace(state&a, state &b)

  {size=a.size+b.size;

    delete statename;

    statename=new char[size+1];

    strcpy(statename, a.statename);

    strcat(statename,b.statename);

  }

};

void main()

{ clrscr();

  char *temp="Delhi";

  state state1(temp), state2("Mumbai"), state3("Nagpur"), s1,s2;

  s1.replace(state1,state2);

  s2.replace(s1,state3);

  s1.display();

  s2.display();

  getch();

```

```
}
```

(g) Observe the following program & Find out the correct possible outputs from the options .
(Assuming that all required header files are included in the program) **(2)**

```
void main()  
{  
char serial[ ] = {'E', 'X', 'A', 'M', '\0'};  
int number [ ]= { 69,66,67,68};  
randomize();  
cout<<number(random(3));  
for( int i=0;i<4;i++)  
cout<<serial(sizeof(int) + random(2)-1);  
}
```

(i) 67XXAX

(ii) 69AXXA

(iii) 66AAXA

(iv) 67AAAM

2.

a) Define Inheritance. What is the difference between private and protected members?

(2)

b) Answer the questions(i) and (ii) after going through the following program: **(2)**

```
class Test  
{ char paper[12];  
int marks;  
Test() { } //Function 1  
Test(Test &tt) { .... } //Function 2  
~Test() { } //Function 3  
};
```

- (ii) What is Function 1, Function 2 and Function 3 referred as?
(v) Write the complete definition for Function2.

c) Define a class **TAXPAYER** in C++ with following description: **(4)**

Private Members:

pan	Integer
Name	String of 25 characters
taxableinc	Float //total annual taxable income
tax	Float

Public Members

- A function **caltax()** to calculate tax using following rules:

<u>Total Annual Taxable</u>	<u>Rate of Taxation</u>
Up to 60000	0%
>15000 & <60000	5%
>5000 & <15000	10%
<5000	15%

- A function **inputdata()** to allow the user to enter the values of pan, Name and taxableinc and invoke function **caltax()** to calculate tax.
- A function **displaydata()** to allow user to view the content of all the data members

d) Consider the following C++ declarations and answer the questions given below: **(4)**

```
class Animal
{
    void anyval( );
protected:
    int x, y;
    void procval( );
public:
    void getvalA( );
```

```

        void putvalA( );

};

class B : public Animal
{
        int a,b;

        protected:

        int c,d;

        void getvalB( );

        public:

        void putvalB( );

};

class C : protected B
{

        int p;

        protected:

        int q;

        void getval( );

        public:

        void showval();};

```

- (v) Name all member functions, which are accessible by the objects of class C.
 - (vi) Name all the protected members of class B.
 - (vii) Name the base class and derived class of class B.
 - (viii) Name the data members, which are accessible from member functions of class C.
- e) Consider the following C++ declarations and answer the questions given below: **(4)**

```

class Bank {
char Address[20];
double Budget, Income;
protected:
void Compute( );
public:
void Get( );

```

```

void Show( );
};
class Bank1
{
char Address[20];
int Staff;
protected:
double Pay;
void Calculate( );
public:
void Enter( );
void Display( );
};
class Bank2 : public Bank, private Bank1
{
char Address[20];
flat Area;
double Sale;
public:
void Input( );
void Show( );
};

```

- (i) Name the type of inheritance illustrated in the above C++ code.
- (ii) Write the name of data members, which are accessible from member function of class Bank2
- (iii) Write the name of all the member function, which are accessible from objects belonging to class Bank.
- (iv) How many bytes will be required by an object of class Bank2?

4. a) Observe the program segment given below carefully, and fill the blanks marked as statement 1 and statement 2 using seekg() and write() functions for performing the required task.

(1)

```

class Product
{
    int Item_no;
    char I_Name[20];
public:
    void enterdetails( );
    void showdetails( );
    int Ritem_no( ) {return Item_no;}
};
void modify(Product Pnew)
{

```

```

fstream file;
file.open("item.dat", ios::binary | ios::in | ios::out);
product p1;
int rec = 0, found = 0;
while(!found)
{
    rec++;
    if(Pnew.Ritem_no( ) == p1.Ritem_no( ))
    {
        _____ // statement 1
        file.write((char*) &Pnew, sizeof(Pnew));
        found = 1;
    }
    else
        _____ // statement 2
}
if(!found)
    cout<<"record for modification does not exist";
file.close( ); }

```

b) Write a function to count the number of characters present in a text file named "Fun.txt".

(2)

c) Given a binary file MY.dat containing records of the class BOOK given below, write functions in C++ to write objects having price more than Rs. 1,000 into **critical.dat** binary file. (3)

```
class BOOK
```

```
{ int bno;
```

```
float price;
```

```
public:
```

```
void getit( ) {cin>>bno>>price;}
```

```
void putit( ) {cout<<bno<<price;}
```

```
float getprice()
```

```
{ return price;
}    }    ;
```

d) Assuming a binary file TRY.DAT is containing objects belonging to a class MUSIC (as defined below). Write the user defined function in C++ to add more objects belonging to class MUSIC at the bottom of it.

(4)

```
class MUSIC
{
    int Idno;
    char Type[5];
    char Desc[50];
public:
    void getdata( )
    { cin>>Idno;
      gets(Type);
      gets(Desc);
    }
    void showdata( )
    { cout<<Idno;
      cout<<Type;
      cout<<Desc;
    }
};
```

a) Illustrate the use of “self referential structures” with the help of an example. **(2)**

b) Give the output of the following program (Assuming all required header files are included in the program):

(2)

```
void main( )
{ int array[ ] = {12,23,24,50};
  int *pt = array;
```

```

int value = *pt;

cout<<value<<"\t";

    value = *pt++;

    cout<<value<<"\t";

    value = *pt;

    cout<<value<<"\t";

    value = *++pt;

    cout<<value<<"\t";}

```

c) What will the output of the following program?

(3)

```

#include<iostream.h>
# include <conio.h>
void main()
{
clrscr();
int sum(int*)(int),int);
int square(int);
int cube(int);
cout<<sum(square,4)<<endl;
cout<<sum(cube,4)<<endl;
getch();
}
int sum(int(*ptr)(int k),int n)
{
int s=0;
for(int i=1;i<=n;i++)
{
s+=(*ptr)(i);
}
return s;
}
int square(int k)
{ int sq;
sq=k*k;
return k*k;
}
int cube(int k)
{
return k*k*k;
}

```

d) Write a function that takes one string argument and reverse the given string.

(3)



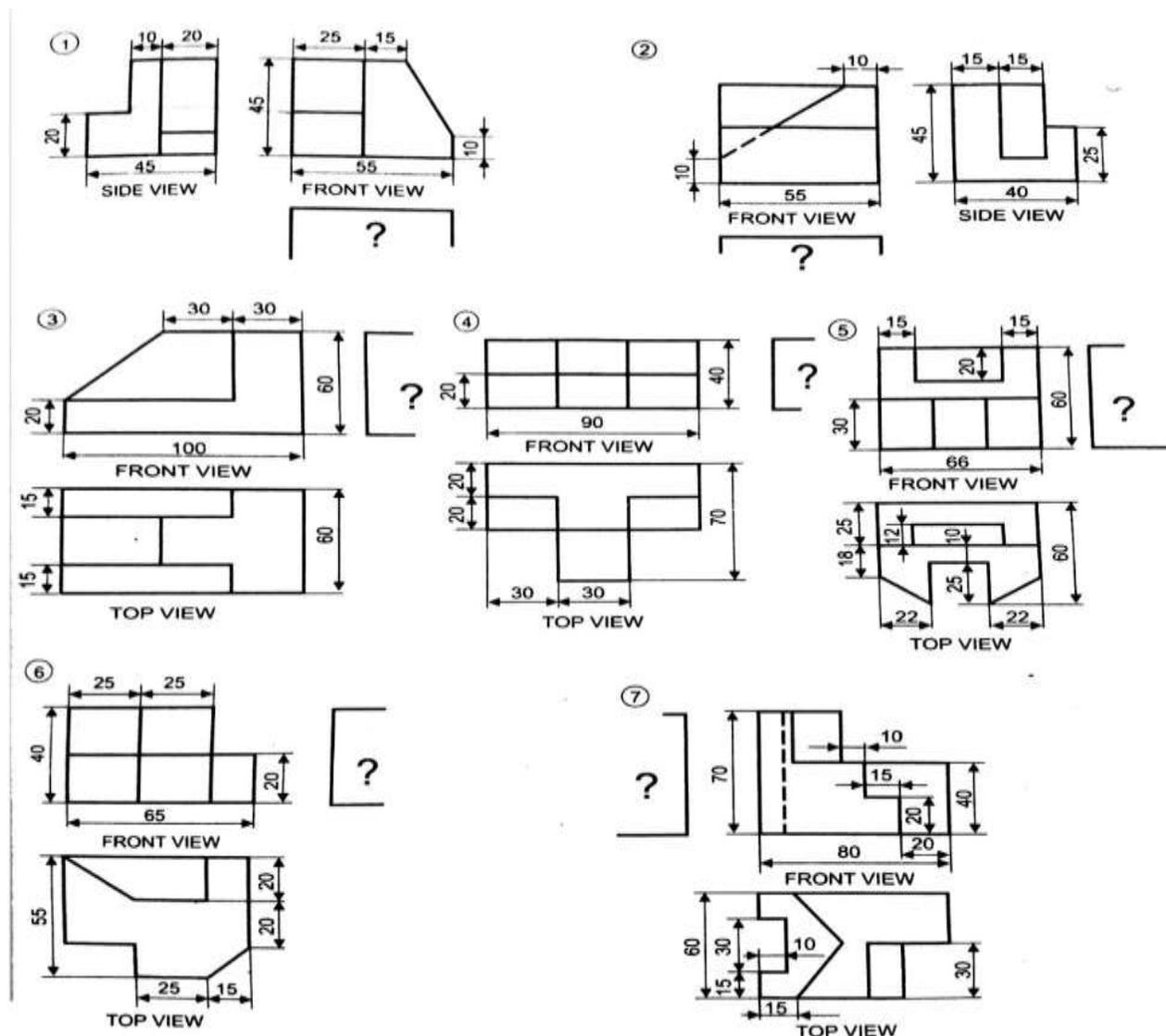
**ENGINEERING GRAPHICS, CLASS-XII
SUMMER HOLIDAY HOMEWORK**

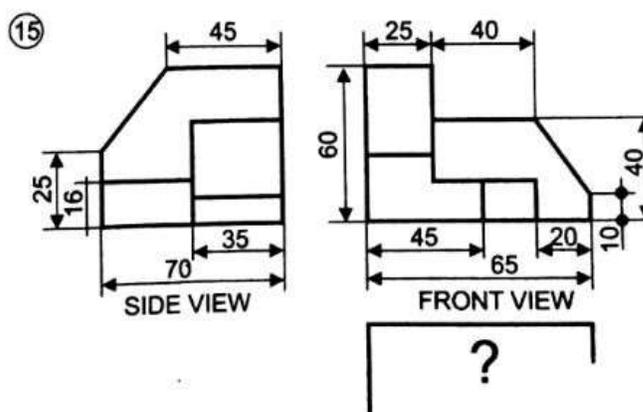
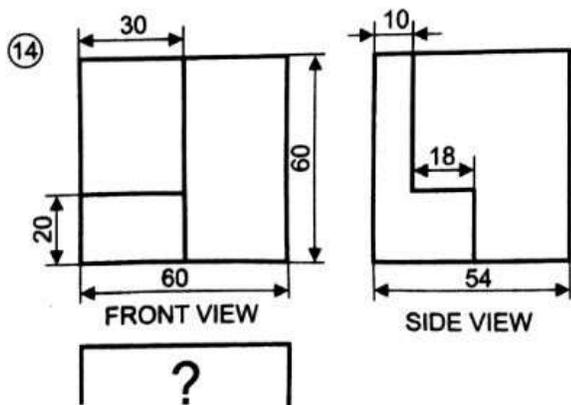
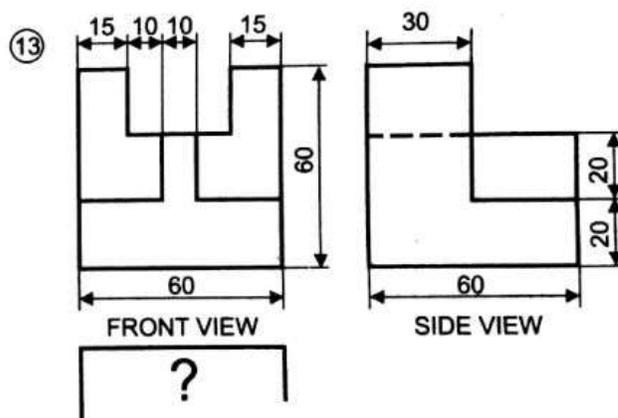
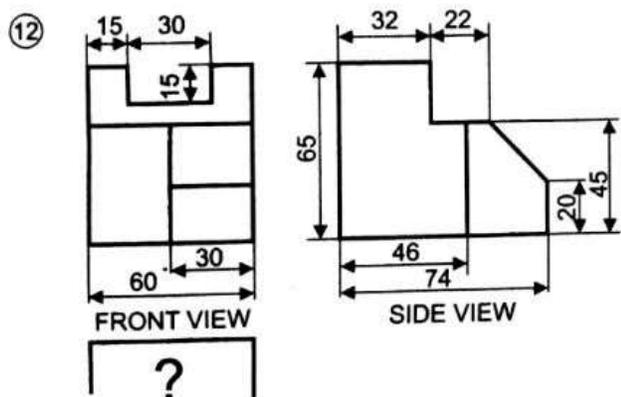
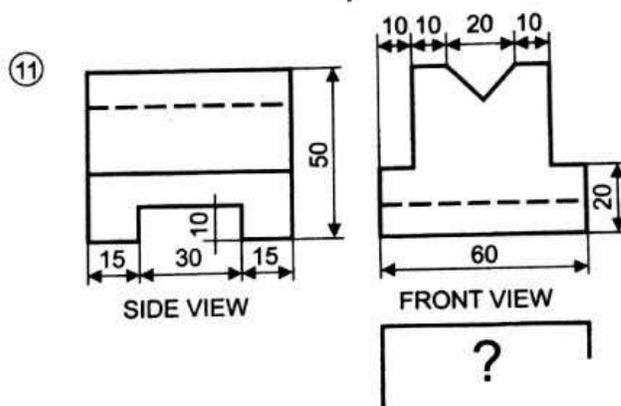
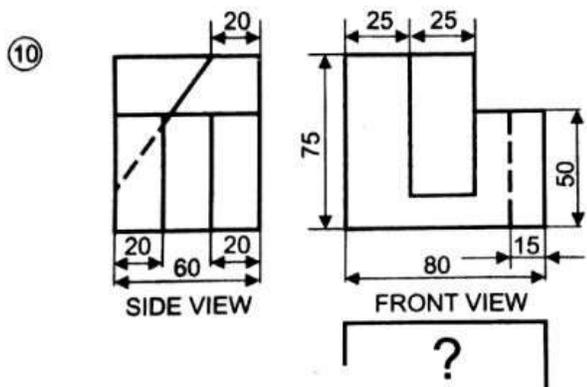
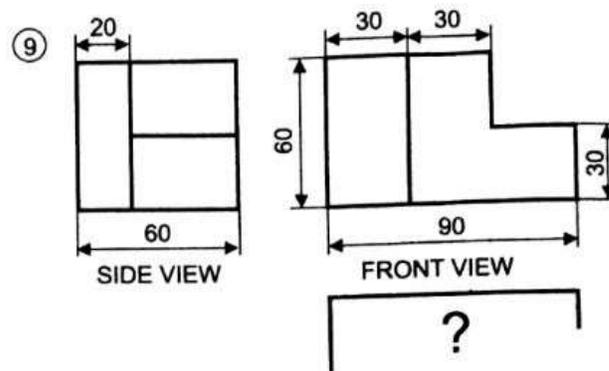
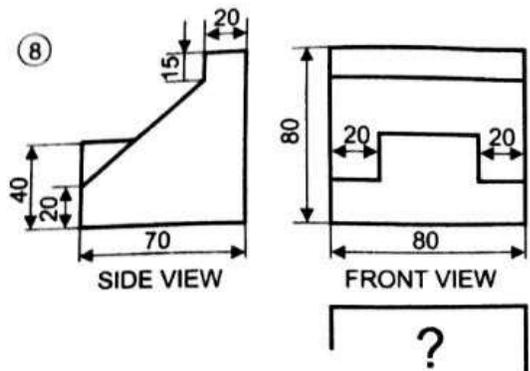
GENERAL INSTRUCTION :

- a. In no Isometric views hidden edges or lines are to be shown.
- b. Must give dimensions in the isometric views.
- c. Give the titles in the Orthographic views/ isometric views.
- d. Must follow SP: 046-2003.

CHAPTER : MACHINE BLOCK

Q - Draw the given view, missing view and Isometric view of the following :







Bal Bharati PUBLIC SCHOOL

Sector – 21, Noida
Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in
Website : <http://bbpsnoida.balbharti.org>

SUBJECT : ECONOMICS

CLASS - XII (SET A)

Time: 1 ½ hrs

M.M- 50

Prepared by : ANITA PANDA

1. How will the following effect the PPC: (1)
Startup India, stand up India
Flood in Chennai
Demonetization
2. From the following identify the study matter of micro/macroeconomics: (1)
 - a) General price level
 - b) Output produced by cloth mill
 - c) Price determination of gold jeweler
 - d) Sugar industry
3. How will the following effect the demand curve of a commodity , use diagrams (1)
4. Increase in the price of complementary good.
5. Increase in the price of the substitute good.
6. Increase in the income of a person using inferior good.
7. In a free market economy, the allocation of resources is determined by: (1)
 - (i) Votes taken by consumers
 - (ii) A central planning authority
 - (iii) By consumer preferences
 - (iv) The level of profits or market
5. If the price of sugar increases, the demand for tea will: (1)
 - (i) increase
 - (ii) remain the same
 - (iii) Decrease
 - (iv) none of the above
6. Distinguish between fixed cost and variable cost and give one example of each.: (3)
7. Draw average total cost, average variable cost and marginal cost curve in a single diagram. (3)
8. Define market demand with the help of a schedule. Explain the two factors affecting market demand (other than the ones which affect individual demand). (3)
9. With a rise in price from Rs.8 to Rs.14, total expenditure on a commodity rises by 40% and becomes Rs.1,120. Calculate price elasticity of demand. Also, indicate whether demand is elastic or inelastic. Draw an appreciate demand curve as well. (3)
44. On the basis of the information given in the table, determine the level of output at which the producer will be in equilibrium. Use MR & MC approach. Give reasons also. (3)

Output	AR(₹)	Total Cost (₹)
1	7	7
2	7	15
3	7	28
4	7	33
5	7	40
7	7	48

10 Explain how supply is affected by change in price of competitive goods and by advancements in technology. (4)

11. The ratio of elasticity of supply of two commodities A and B is 1:15. A 20 percent fall in price of A results a fall in its supply of B if its price rises from ₹ 7.50 to ₹ 8.25 per unit. Also, draw supply curves when:

(a) Elasticity is more than 1

(b) Elasticity is less than 1 (4)

12. When the price of oranges increases, its quantity demanded decreases but when the demand for oranges decreases, its price also decreases. Explain with the help of suitable diagrams.

12: Calculate MOC and also comment on the shape of PPC:(3)

	A	L	U	G	A
					0

13.The MU schedule for goods A and B is given. Price of both the goods is ₹1 each and income of Mr. Narendra is assumed to be ₹6.How many units of both the goods should be purchased by him so that his total utility is maximized? (4)

Units	1	2	3	4	5	6
JA	14	12	10	6	4	2
JB	13	12	10	3	2	1

14. Explain the relationships between marginal revenue and average revenue when a firm is able to sell more quantity of output (4)

(a) at the same price

(b) only by lowering the price.

15. Explain why the minimum of AVC is at the level of output lower than that of AC.

16. .State true or false. Give reasons (6)

- (i) Total utility will increase even when marginal utility decreases.
- (ii) If $MU_x/P_x > MU_y/P_y$, the consumer should buy more of commodity-Y and less of commodity-X.
- (iii) The rate at which the consumer can substitute Good-X for Good-Y tends to decline as we move downward along the price line.
- (iv) Increase in income of the consumer is the only cause that leads to a parallel shift to budget line to the right.
- (v) A situation when $P_x/P_y > MUX/MUY$ is better than when $P_x/P_y = MUX/MUY$.
- (vi) When $MRS_{XY} < P_x/P_y$, the consumer reaches the point of equilibrium only when the consumption of X increases and of Y decreases.

17.. Are the following statement true or false? Give reasons: (6)

- (i) Excess of marginal revenue over marginal cost is always better than equality between the two in order to achieve equilibrium for a producer.
- (ii) In the following case, producer's equilibrium is at output level 2.

Output	1	2	3	4	5	6	7	
MR		24	24	24	24	24	24	
TC		26	50	72	92	115	139	165

- (iii) Law of supply does not indicate the magnitude of change in quantity supplied of a commodity due to change in its price.
- (iv) Fall in productivity of wheat due to a cyclone will lead to a downward movement along the same supply curve of wheat.

18. Identify the market from the given features and also briefly explain the implications of each feature: (6)

1. Homogeneity of goods
2. High degree of interdependence
3. Price-maker with constraints



Bal Bharati PUBLIC SCHOOL

Sector – 21, Noida

Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in

Website : <http://bbpsnoida.balbharati.org>

SUBJECT : ECONOMICS CLASS - XII (SET B)

Time:1 ½ Hrs

M.M-50

Prepared by : ANITA PANDA

1. Budget line indicates: (1)
(a)Price Ratio (b)Income Ratio (c)Cost Ratio (d)None
2. When total utility is maximum, marginal utility becomes: (1)
(a)Zero (b)Diminishing (c)Maximum (d)Minimum
3. Given the fact that MRS between goods X and Y is diminishing, IC is: (1)
(a)Convex to the origin (b)Concave to the origin in c)Straight Line d)None
4. Ordinal concept of utility expresses utility in terms of: (1)
(a)Units (b)Level of Satisfaction (c)Constants (d)None
5. When price of Good-Y (shown on Y-axis) rises: (1)
(a)Price line shifts to the right (b)Price line shifts to the left
(c)Price line rotates to the right
6. When the price of onions is very high, the poor man simply stops buying it. Explain the economics of it, using utility analysis. (3)
7. MRS tends to diminish because of the law of diminishing marginal utility. Comment. (3)
8. X and Y are complementary goods whereas Y and Z are substitute goods. What will be the effect on demand of Z when price of X falls? Use diagram. (3)
9. Price elasticity of demand for good x is -1 and good y is -2.5. which of the two is more elastic and why? (3)
10. How will production of a commodity behave when only one factor is variable? (3)
11. A consumer wants to consume two goods. The prices of the goods are ₹4 and ₹5 respectively. The consumer's income is ₹20. (4)

(i) Write down the equation of the budget line.

(ii) How much of Good-1 can the consumer consume if she spends her entire income on that good?

(iii) How much of Good-2 can she consume if she spends her entire income on that good?

(iv) What is the slope of the budget line?

12. State true or false with reasons: (4)

a. In the second stage of law of variable proportion both TP and MP rise.

b. AC is minimum when $AC < MC$.

c. Increasing returns to scale is seen in the short run.

d. When TP falls MP becomes zero.

13. Explain any two features of monopoly and also describe the causes that lead to the creation of monopoly in the market. (4)

14. Government fixes the market selling price of sugar at Rs 20 per Kg. (6)

a. What do you think the government is trying to achieve through this decision?

b. What is the term used for such kind of interference by the government?

c. Also mention some consequences.

15. Given below is the utility schedule of a consumer for commodity-X. The price of the commodity is ₹6 per unit. How many units should the consumer purchase to maximize satisfaction?

(Assume that utility is expressed in utils and 1 util = ₹1). Give reasons for your answer. (6)

Consumption(Units)	Total Utility(Utils)	Marginal Utility(Utils)
1	10	10
2	18	8
3	25	7
4	31	6
5	34	3
6	34	0

16. Due to the latest fashion changes, the demand of cotton shirts has suddenly increased and at the same time, price of cotton falls due to rise in the number of firms manufacturing cotton.

How will this whole situation affect the equilibrium price and quantity of cotton shirts? (6)



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Sector – 21, Noida

Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in

Website : <http://bbpsnoida.balbharati.org>

SUBJECT : ACCOUNTANCY

CLASS - XII (SET A)

Max Marks : 50

Time allowed : 1 hour 30 minutes

General Instructions:

1. All the questions to be attempted in a separate register or file
2. All questions are to be done in the prescribed format.
3. All questions are compulsory.
4. This assignment is to be completed within one and a half hours

-
1. Distinguish between Authorised Capital and Issued Capital 1
 2. Identify the purpose of utilising the 'Security Premium' that would maximise the return to shareholders. 1
 3. S.S.S. Ltd. has a paid-up share capital of Rs. 60,00,000 and a balance of Rs. 15,00,000 in the Securities Premium Reserve. The Company Management does not want to carry over this balance. State the purpose for which this balance can be utilized. 1
 4. SSS Ltd., forfeited 1,000 equity shares of Rs. 100 each for the non-payment of first call Rs. 20 per share and second and final call of Rs. 25 per share. State:
(i). Can these shares be re-issued?
(ii). If yes, state the minimum amount at which these shares can be re-issued?
(iii). If these shares were re-issued at Rs.50 per share fully paid up, what will be the amount of Capital Reserve? 3
 5. *X Ltd.* was formed with a capital of Rs. 15,00,000 divided into shares of Rs. 10 each. Out of these 6,000 shares were issued to the vendors, as fully paid as purchase consideration for a building acquired, 3,000 shares were issued to signatories to the Memorandum of Association as fully paid. The Directors offered 19,500 shares to the public and called-up Rs. 6 per share and received the entire called-up amount on shares allotted. Prepare a Balance Sheet showing Share Capital as per Companies Act, 2013 from the above transactions in the books of *X Ltd.* 4
 6. MCS Ltd. issued 40,000 shares of Rs.10 each payable as Rs. 2 per share on application, Rs. 4 per share on allotment and the balance in two equal instalments, Applications were received for 80,000 shares and the allotment was made as follows:
(i) Applicants of 50,000 shares were allotted 30,000 shares.
(ii) Applicants of 30,000 shares were allotted 10,000 shares.
Neeraj to whom 600 shares were allotted from category (i), failed to pay the allotment money. Pass the Journal entries up to allotment only. 6
 7. Prakash Engineering Company Ltd. issued for public subscription 40,000 equity shares of Rs. 10 each at a premium of Rs. 2 per share payable as under:

On application Rs. 2 per share
 On allotment Rs. 5 per share (including premium)
 On first call Rs. 2 per share
 On final call Rs. 3 per share

Applications were received for 75,000 equity shares. The shares were allotted on *pro-rata* basis to the applicants of 60,000 shares only, the remaining applications being rejected. Money overpaid on application was utilised towards the sum due on allotment.

Ashok to whom 3,000 shares were allotted failed to pay the allotment money and the two calls. Baneet who applied for 3,000 shares paid the calls money along with allotment money. Pass the Journal entries to record the above transactions. **6**

8. Issue of Shares at a Premium in Consideration Other Than Cash). Rohit Ltd. purchased assets from Rohan & Co., for Rs. 3,50,000. A sum of Rs.75,000 was paid by means of a bank draft and for the balance due, Rohit Ltd. issued equity shares of Rs. 10 each at a premium of 10%. Journalise the above transactions in the books of the company. **4**

9. A company purchased a running business from M/s. Sharma Brothers for a sum of Rs.1,50,000, payable as Rs. 1,20,000 in fully paid shares of Rs. 10 each and balance in cash. The assets and liabilities consisted of the following:

Plant and Machinery	Rs. 40,000	Stock	Rs.50,000
Building	Rs. 40,000	Cash	Rs. 20,000
Sundry Debtors	Rs. 30,000	Sundry Creditors	Rs. 20,000

You are required to pass the necessary Journal entries in the company's books. **4**

10. A limited company was registered with an authorised capital of Rs. 2,00,000 in Rs.10 per equity share, of these 6,000 equity shares issued as fully paid to the vendors for purchase of building, 8,000 equity shares were subscribed for by the public and during first year Rs. 5 per equity share were called-up, payable Rs.2 on application, Rs. 1 on allotment, Rs. 1 on first call and Rs. 1 on second call. The amounts received in respect of these shares were as follows:
 On 6,000 equity shares the full amount called,
 On 1,250 shares Rs. 4 per equity share,
 On 500 shares Rs.3 per equity share,
 On 250 shares Rs. 2 per equity share.

The directors forfeited 750 equity shares on which less than Rs.4 per equity share had been paid. Show the Journal entries in the books of the company and also show the share capital as it would appear in the Balance Sheet, **8**

12. Shiva Ltd. invited applications for issuing 2,00,000 equity shares of Rs. 100 each at a premium of Rs. 60 per share. The amount was payable as follows:
 On application Rs. 30 per share (including premium of Rs. 10)
 On allotment Rs. 70 per share (including premium of Rs. 50)
 On first and final call the balance amount.

Applications for 1,90,000 shares were received. Shares were allotted to all the applicants and the company received all money due on allotment except Jain who had been allotted 1,000 shares, and his shares were immediately forfeited. Afterwards first and final call was made. Gupta did not pay the first and final call on his 2,000 allotted shares. His shares were also forfeited. 50% of the forfeited shares of both Jain and Gupta were reissued for Rs. 90 per share fully paid-up.

Pass the necessary Journal entries in the books of Shiva Ltd. for the above transactions. **8**

11. Give the meaning of 'Issue of Debentures as a Collateral Security' **4**



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Sector – 21, Noida

Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in

Website : <http://bbpsnoida.balbharati.org>

SUBJECT : ACCOUNTANCY

CLASS - XII (SET B)

Max Marks : 50

Time allowed : 1hour 30 minutes

General Instructions:

5. All the questions to be attempted in a separate register or file
6. All questions are to done in the prescribed format.
7. All questions are compulsory.
8. This assignment is to be completed within one and a half hours

-
1. What is meant by Financial Statements? 1
 2. Name the two basic Financial Statements. 1
 3. From the following information, prepare profit and Loss statement of X Ltd. for the year ended 31st March 2013:

	Rs in Lacs	
Revenue from Operations	2605	
Other Income	40	
Cost of materials consumed	1000	
Changes in Inventories	(275)	
Employee Benefits Expense	850	
Finance Costs	20	
Depreciation and Amortization Expense	150	
Other Expenses	100	3
Tax rate @ 30%		

4. Under what heads and sub-heads the following items will appear in the Balance sheet of a company
1. Debit Balance of Profit & Loss A/c, 2. Tonnage Tax Reserve, 3. Interest accrued on Investments. 3
5. Under what heads and sub-heads the following items will appear in the Balance sheet of a company as per Revised Schedule VI: 3
 1. Un-called liability on partly paid up shares purchased
 2. Premium on Redemption of Debentures
 3. Security deposit for telephones.
 4. Stores & Spares
 5. Computer Software
 6. Proposed Dividend

6. With the help of the following information calculate any two of the following ratios: 4

1. Gross Profit Ratio
2. Operating Ratio
3. Debt Equity Ratio
4. Quick Ratio

	Rs		Rs
Sales	600000	9% Preference Share Capital	100000
Opening Stock	30000	Equity Share Capital	300000
Purchases	255000	Securities Premium	50000
Carriage inwards	5000	Other Current Assets	150000
Closing Stock	50000	Current Liabilities	180000
12% Debentures	150000	13% Term loan	75000
		Adm. & Selling Expenses	60000

7. On the basis of the following information calculate any two of the following ratios: 4

- (a) Operating Ratio, (b) Liquid Ratio, (c) Proprietary Ratio

Information:

Cash Sales Rs: 4,00,000, Credit Sales Rs: 2,75,000; Sales Returns Rs: 75,000; Cost of Goods Sold Rs: 3,90,000; Selling and Distribution Expenses Rs: 27,000; Administration Expenses Rs: 3,000; Current Liabilities Rs 1,95,000; Current Assets Rs: 4,13,000; Closing Stock Rs: 23,000; Equity Share Capital Rs: 4,37,000 Preference Share Capital Rs: 1,74,000; Fixed Assets Rs: 3,87,000. Debenture Redemption Reserve Rs: 29000

8. From the following information calculate any two of the following ratios: 4

- (i) Gross Profit Ratio; (ii) Working Capital Turnover Ratio and; (iii) Proprietary Ratio

Information:

	Rs		Rs
Paid up Capital	800000	Current Assets	500000
Credit Sales	300000	Current Liabilities	290000
9% Debentures	340000	Cash Sales 75% of Credit Sales	
Cost of Goods Sold	680000		

9. From the following information calculate any two of the following ratios: 4

1. Net Profit Ratio 2. Debt. Equity Ratio 3.Quick Ratio

Information:

	Rs		Rs
Paid up Capital	2000000	Capital Reserve	200000
9% Debentures	800000	New Sales	1400000
Gross Profit	800000	Indirect Expenses	200000
Current Assets	400000	Current Liabilities	300000
Opening Stock	50000	Closing Stock -20% more than Opening Stock	

10. From the following information calculate any two of the following ratios 4

1. Liquid Ratio, 2. Proprietary Ratio 3. Working Capital Turnover Ratio

Net Sales	500000	Gross Profit	150000
Total Current Assets	300000	Closing Stock	25000
Prepaid Insurance	5000	Total Current Liabilities	150000
Share Capital	400000	Reserves and Surplus	57000
Preliminary Expenses	7000	Fixed Assets	600000

11. From the following information calculate any two of the following ratios

4

1. Liquid Ratio 2. Gross Profit 3. Debt Equity Ratio

Net Sales Rs 400000; Opening Stock Rs 10000 Closing Stock Rs 3000 Less than Opening Stock Net Purchase 80% of net Sales, Direct Expenses Rs 20000, Current assets RS 100000 Prepaid Expenses Rs 3000 Current Liabilities Rs 60000 9% Debentures Rs 400000 Long Term loan from Bank Rs 150000 Equity Share Capital Rs 800000 8% Preference Share Capital Rs 300000.

12. On the basis of the following information calculate: 4

1. Debt Equity Ratio And 2. Working Capital Turnover Ratio

Information:

Net Sales	6000000	Cost of Goods Sold	4500000
Other Current Assets	1100000	Current Liabilities	400000
Paid up Share Capital	600000	6% Debentures	300000
9% Loan	100000	Debentures Redemption Reserve	200000
Closing Stock	100000		

13. Net Profit after Interest and Taxes Rs 300000 10% Debentures of Rs 100 each Rs 500000 Capital Employed Rs 4000000 Tax Rate @ 40% Calculate Return on Investment and Debt Equity Ratio. 4

14. From the following information calculate any two of the following ratios 4

a) Debt-equity Ratio b) Working Capital Turnover Ratio c) Return on Investment

Information : Equity Share Capital Rs 1000000 General Reserve Rs 100000 Profit and Loss Account after Tax and Interest Rs 300000 Rs 12% Debentures Rs 400000 Creditors Rs 300000 Land And Building Rs 1300000 Furniture Rs 300000 Debtors Rs 290000 Preliminary Expenses Rs 100000 Sales Rs 300000 and Tax Paid 50%

15. Rs 240000 is the cost of goods sold Inventory turnover 8 times; Stock at the beginning is 1.5 times more than the stock at end. Calculate the values of Opening and closing stock 3



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Sector – 21, Noida

Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in

Website : <http://bbpsnoida.balbharati.org>

SUBJECT : BUSINESS STUDIES CLASS – XII, (SET A)

Time: 1 ½ hours

M. Marks: 50

General Instructions:-

1. Answers to questions carrying 1 mark may be from one word to one sentence.
 2. Answer to questions carrying 2-3 Marks may be from 50 to 75 words.
 3. Answer to questions carrying 4-5 marks may be about 150 words
 4. Answer to questions carrying 6 marks may be about 200 words.
 5. Attempt all parts of a question together.
-

- Q.1. Your grandfather has retired as the director of a manufacturing company. At what level of management was he working? (1)
- Q.2. Which principle of management does functional foremanship violate? (1)
- Q.3. Which policy of Indian government has moved India towards globalization? (1)
- Q.4. "Workers shall be encouraged to develop and carry out their plan for development." Identify the principle of management formulated by Fayol. (1)
- Q.5. "Management is a process." Explain. (3)
- Q.6. Which technique of Taylor suggests that each worker should be supervised by specialists? Give the designations of any four specialists suggested by him. (3)
- Q.7. Enumerate the various ways in which managers respond to changes in business environment. (3)
- Q.8. What are the responsibilities of the consumer? (3)
- Q.9. Explain how principles of management: (4)
- 1) Help managers in taking scientific decisions.
 - 2) Provide the managers with useful insights into real world situations.
- Q.10. "Coordination is the essence of management." Explain. (4)
- Q.11. Ms. Ritu and Mr. Rohit are Data Entry Operators in a company having same educational qualifications. Ritu is getting Rs. 5000 and Mohit Rs. 6000 per month as salary for the same working hours. Which principle of management is violated in this case. Name and explain the principle. (4)

Q.12. "Social environment of a business is important for a business enterprise." Explain. (5)

Q.13. What are the remedies available to consumers under the Consumer Protection Act, 1986? (5)

Q.14. Explain the features management. (6)

Q.15. NEW DELHI: (6)

A Retail chain has been directed by a consumer forum in the city to pay a fine of Rs 1 lakh for overcharging a customer. The forum directed the supermarket to deposit Rs 70,000 in consumer legal aid account and asked it to give Rs 30,000 damages to east Delhi resident Madhavi for "cheating" and "harassing" her. The east district consumer forum held that charging anything above the maximum retail price (MRP), as had happened in the case, is absolutely illegal. MADHAVI had been charged Rs 90 extra. The incident took place on June 13, 2012 when MADHAVI bought goods worth Rs 3,512.80 from supermarket. After reaching home, she found out she had been charged Rs 160 for turmeric powder with a printed MRP of Rs 90 and Rs 40 each for two soaps with an MRP of Rs 30 each.

The respondent (supermarket) submitted before the forum that they "never had the intention to dupe" Madhavi and claimed that the alleged overbilling was an "inadvertent oversight".

"The overbilling...is an inadvertent oversight committed by a staff of the respondent and not a deliberate act of the respondent to sell the goods on price above MRP to the complainant," it told the court.

The bench, however, seemed unimpressed with the argument and held that the respondent clearly indulged in unfair trade practice.

"By and large, customers do not pay so much attention at the time of making the payment and by scrutinizing the bill at home. It is the duty of the seller or the service provider to be honest and charge the customers the MRP (maximum retail price) including or excluding tax, as the case may be. supermarket is a big retail chain and by indulging in this kind of unfair trade practices and methods, they are cheating the public and making huge profits..." said the bench,

1. Identify the forum Madhavi had appealed into.
2. List some of the responsibilities fulfilled by Madhavi which ensured that she gets compensation.
3. Which consumer right was exercised by Madhavi
4. What value is expressed by the forum to the society



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Sector – 21, Noida

Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in

Website : <http://bbpsnoida.balbharati.org>

SUBJECT : BUSINESS STUDIES

CLASS – XII, (SET B)

- Q.1. A sales person is asked to finalize a deal with customer. The marketing manager allows him a discount of upto 10% but the finance manager allows him to give discount of upto 25%. Which principle is violated here? (1)
- Q.2. What do you mean by first mover advantage? (1)
- Q.3. Consumers might be exploited by unscrupulous, exploitative and unfair trade practices. Give two examples of such practices adopted by sellers. (1)
- Q.4. “Principles of management are different from those used in pure science.” Write any one difference. (1)
- Q.5. “Management is multi-dimensional”. Explain. (3)
- Q.6. “Discipline is a double - edged tool.” Comment. (3)
- Q.7. “Environmental Scanning helps in the identification of threats and early warning signals.” Explain. (3)
- Q.8. Give any three points showing the importance of consumer protection from consumers’ point of view. (3)
- Q.9. A pharmaceutical company is marketing its medicines in India which were banned in other countries due to their side effects. The company did not mention this information anywhere. Which right of the consumer is violated here? Identify the missing values. (4)
- Q.10. Mr. Kunal is working as the Finance Manager of XYZ Ltd. At what level of management is he working? State the functions being performed by him. (4)
- Q.11. Mr. Bharti was a vegetarian who went to a snack bar for having French Fries and later found out that it had non-vegetarian content. Neither the advertisement nor the packing of the product displayed that the product has non vegetarian content. Will Mr. Bharti be able to claim compensation? Which right of the consumer is violated? Explain. (4)
- Q.12. “In the absence of management, the productive resources will remain resources and shall never become production.” In the light of this statement, explain the importance of management. (5)
- Q.13. In your school you observe that books are kept in office, chalks in the library and office records in the staff room. How will that affect the achievement of school objective? Which aspect of a management is lacking here and why? As a manager what steps will you take to rectify the shortcomings? (5)

Q.14. Read the article attached below carefully and explain the importance of the concept reflected in the article: (6)



FRESH MOUNTAIN AIR FROM CANADA FOR SALE IN CHINA

city started adding a 'clean air' charge of one yuan per customer to the food bills, claiming that they offering customers pollution-free because of the air filtration machines they had installed. Although officials ordered the restaurant to remove the additional charges, social users in China supported the decision, saying that they would happily pay the amount to be able to breathe clean

The trend of fresh glacial and mountain water in bottles began a few years ago. But already, this fad seems to be passé, as bottled mountain air

is now in. With China's pollution levels continuing to rise, a Canadian company has decided to make the most of a bad situation by selling bottles of fresh mountain air. Vitality Air is offering fresh air from two of Canada's lakes, with a bottle of 'premium oxygen' costing between US\$15.85 and 18.50 (₹1050 and 1230). The company, which started operations in October, claims to have sold out its first batch of 500 bottles in just two months.

Q.15. Name and explain that principle of management which suggests that communication from top to bottom should follow the official lines of command. (6)



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Sector – 21, Noida

Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in

Website : <http://bbpsnoida.balbhharati.org>

SUBJECT : Entrepreneurship CLASS – XII (SET A)

Time : 90 minutes

M. Marks: 50

General Instructions

- All questions are compulsory.
 - This question paper is to be attempted with utmost sincerity and to be done in the class registers.
 - Q1 – Q 9: 1 mark
 - Q10 – Q 14: 2 marks
 - Q15 – Q 19: 3 marks
 - Q 20 – Q 23 4 marks
-

1. Define 'opportunity'.
2. What is the role of an environment to start any project?
3. What are 'Idea Fields'?
4. Why are natural resources important to generate ideas?
5. What is trend spotting?
6. What is 'incubation'?
7. What are the forms of business enterprise?
8. Give a legal formality involved in a sole proprietorship.
9. What is 'place mix'?
10. What do you understand by 'generic' requirement?
11. Give any two components of product mix.
12. Differentiate between profession and employment.
13. What are the various forms of organizations as public sector enterprises?
14. How can an environment be scanned?
15. Draw a diagram to show 'creativity'.
16. What are the three ways of trend spotting?
17. What are the consequences for non-registration of a partnership firm?
18. Why is a private company more desirable?
19. Differentiate between cost plus pricing and penetration pricing.
20. Since her college days mehak loved the thrill of adventure sports. She was an avid reader which helped her to keep track of various new adventure sports taken up all around the world. She had recently read an article on increasing trend towards 'space tourism and adventurous holidays'. Using her personal experiences and her passion for adventure sports she decided to start a company called

'YOLO' For the same purpose she also decided to collect statistics to see how much of these sports were accepted in our country. Identify the ways in which she was able to spot the trend.

21. "Human life is built around works". Identify the form of Business Organisation being talked about in the following sentences:-

- a. "One-man control is the best in the world if that man is big enough to manage everything."
- b. "Two heads being better than one."
- c. "Self-help as well as mutual help system."
- d. The birth of this legal person is by law and can be put to death by law

22. Diary foods Ltd., has been well known for its products throughout India. They started manufacturing Biscuits and chocolates in the year 1995 and slowly built their brand. The company occupied the top position in terms of sales and it increased its product range also. By 2010 they were the undisputed leader in the field of confectionaries. Their annual general meeting was held wherein the Board of directors felt that the company should also be socially responsible in doing their business. They decided to use new technologically advanced recycled paper for all their products which would retain the freshness of their products as well as contribute towards the saving of our planet. By doing this the company has modified their goods in a particular way to create a new product of greater value to the customers. Identify the concept mentioned above and explain it from financial and marketing point of view.

23. 'Floral Art and Craft' opened its first store in Mumbai in the year 2010 with the objective of providing its customers with fresh flowers creatively packed and value for money.

It procures fresh flower directly from the farmers. The organization makes sure that the farmers adopt organic means to nourish the soil and do not use chemical fertilizers as it degrades the soil fertility.

Packaging material is procured from specially abled crafts man of I CAN. Floral Art and Craft's face book and twitter page encourages two way communication with its customers. These social media channels provide a platform through which it can interact with customers and access their opinion about the brand. The store also uses direct e-mails to their frequent customers to inform them about different schemes and other promotional messages. Its website promotes the store by organizing different flower decorating classes and competitions using the products of I CAN.

- I. Identify the promotion strategy adopted by I CAN. Also state the lines from the text that helped to identify the form.
- II. State any two features of this type promotion strategy.
- III. State two values communicated to the society.



Bal Bharati PUBLIC SCHOOL

Sector – 21, Noida

Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in

Website : <http://bbpsnoida.balbharati.org>

SUBJECT: Entrepreneurship

CLASS – XII (SET B)

Time : 90 minutes

M. Marks: 50

General Instructions

- All questions are compulsory.
 - This question paper is to be attempted with utmost sincerity and to be done in the class registers.
 - Q1 – Q 9: 1 mark
 - Q10 – Q 14: 2 marks
 - Q15 – Q 19: 3 marks
 - Q 20 – Q 23 4 marks
-

1. Who are entrepreneurs?
2. Why should we explore the environment?
3. What is the role of an environment to start any project?
4. Define any one element of innovation process.
5. What are economic activities?
6. What are non-economic activities?
7. Define 'branding'.
8. What is the purpose of 'logo'?
9. Packaging is the key element of what?
10. What are specific goals?
11. What is 'indirect-one level' of distribution?
12. Explain a 'pitch deck with oral narrative'.
13. Why do we need to establish goals?
14. Why is creativity called the first stage of innovation?
15. Elaborate any three ways to generate ideas by an entrepreneur.
16. How can an entrepreneur seek help from another entrepreneur before starting a project?
17. What is 'break – even point'?
18. How can economic feasibility of an enterprise be understood by financial plan?
19. What are the three types of flows in a channel of distribution?
20. Shahida, a student of School of Rug Weaving Institute, Turkey, visited her grandparents in Kashmir for the first time. Breathtaking mountain scenery, clear lakes, lush vegetation and magnificent forests mesmerized her. The valley is home to a rich biodiversity including a large number of bird species, many of which are unique to Kashmir. It is home to Yak and sheep that are taken care of by nomads. Kashmiri lifestyle is essentially slow paced and reflects religious diversity. Kashmiris are known to enjoy their music in its various local forms, and the traditional dress of both genders is often quite colorful. Tulip, Saffron, dry fruits and artistic woodwork are its hallmark. She also observed that the government was stable and all the tourist places were well guarded by the army. She found it to be an ideal place to start a unit for carpet weaving and employ local people to preserve the ethnic touch. After the devastating floods a considerable population was rendered jobless, her

unit would help to revive their economic condition. She started scanning and screening the environment and collected the following information.

- I. Help her categorize the information making use of PESTEL MODEL.(Any three)
- II. Also state a value communicated by Shahida.

21. Chacko Ltd. has been manufacturing umbrellas since 1980. They are the market leaders in manufacturing small hand size umbrellas. They have their production unit in Kochi. The MD's son Abraham Chako took over the family business in 2010. He had finished graduation from USA. Using his educational and networking skills, he was able to take up an export order. He also decided to operate an exclusive export oriented unit in Chellanam. The production work for this unit began in 2014. A dedicated team framed an operational plan for the entire process. Abraham visited the plan to evaluate and take appraisal of the work performed in the unit. State two ways as to how it will help Abraham.

22. Pureminds Ltd was a company into manufacturing of water purifiers, water dispensers, packaged drinking water and hand sanitizers. They do a lot of research and development and would update their products on a regular basis. They also encouraged feedback and suggestions from the customers. Acting on one such suggestion, they decided to manufacture a water bottle with a built in water purifier called 'Wonderpure'. They spent a lot of money on promoting the product with the tagline 'Your child is secure with Wonderpure' The target segment was quality conscious consumers. It was priced in such a way that the cost of investment of the original research gets recovered from the customer. The product was an instant hit.

- I. Identify and explain the pricing strategy to be used by Pureminds Ltd.
- II. State two advantages and two disadvantages of the pricing strategy identified in part.

23. 'Pure Neer India Ltd.' is the manufacturers of water purifiers. The company has developed a new water purifier that not only converts the hard water into soft water but also kills the bacteria and other harmful micro organisms present in it. The company has named this water purifier as 'NirmalNeer' and for its marketing, appointed salesmen throughout the country. The company also trained the salesmen to provide information about the usefulness of the 'NirmalNeer' water purifiers to the customers and motivate them to buy the same.

- I. Name and explain the 'type of promotion strategy' adopted by the company.
Also identify the channel of distribution used by the company.



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Sector – 21, Noida
Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in
Website : <http://bbpsnoida.balbharati.org>

HOLIDAY HOMEWORK SUBJECT: POLITICAL SCIENCE CLASS –XII

- Q1 Read the following statement and say whether it is 'True' of 'False':
The Cuban crisis occurred in 1964. 1
- Q2 Whom would you identify with the slogan- "Sampoorna Kranti." 1
- a] Ram Manohar Lohiya b] Jai Prakash Narayan c] Karupuri Thakur d] None of these
- Q3 Who was the spiritual guru of Tibet? 1
- Q4 Which one of the following is a land locked country with monarchy: 1
- a] Afghanistan b] Nepal c] Bhutan d] Sri Lanka
- Q5 . _____ was the architect of the Green Revolution in India? 1
- a] P. C. Mahalanobis b] K.N.Raj c] J.L.Nehru d] Prof. M S Swaminathan
- Q6. What do you mean by 'largest garage sale'? 2
- Q7. What do you mean by 'Bandwagon Strategy'? 2
- Q 8. What is meant by common but differential responsibility? 2
- Q 9. Which two challenges were faced by Lal Bahadur Shastri? 2
- Q10. What do you mean by Mc Donaldization? 2
- Q11. Criticize India's policy of Non Alignment? 4
- Q12. What are the objectives of establishing regional organizations? 4
- Q13. Mention two areas each of agreement and disagreement between India and Pakistan. 4
- Q 14. Why did the Anandpur Sahib Resolution become controversial? 4
- Q 15. Mention the points of agreement of Tashkent Declaration. 4
- Q 16. What factors led to the popularity of Indira Gandhi's govt in 1970? 4
- Q18. Mark on the map after **naming a** and then answer the **question b** :
- a] The four princely states . 2
- b] Mention the major problems faced in the integration of any one of these states into the Indian union. 3

Q17. Read the cartoon given below and answer the questions :

5



1. Who is the speaker in this cartoon? 1
2. Which plan is cartoon talking about? 1
3. What were the main aims of the said plan? 3

Q19. Read the passage carefully and answer the questions:

The First World War encouraged the world to invest in an international organisation to deal with conflict. Many believed that such an organisation would help the world to avoid war. As a result, the League of Nations was born. However, despite its initial success, it could not prevent the Second World War (1939-45). Many more people died and were wounded in this war than ever before. The UN was founded as a successor to the League of Nations. It was established in 1945 immediately after the Second World War. The organisation was set up through the signing of the United Nations Charter by 51 states. It tried to achieve what the League could not between the two

The UN's objective is to prevent international conflict and to facilitate cooperation among states. It was founded with the hope that it would act to stop the conflicts between states escalating into war and, if war broke out, to limit the extent of hostilities. Furthermore, since conflicts often arose from the lack of social and economic development, the UN was intended to bring countries together to improve the prospects of social and economic development all over the world. By 2006, the UN had 192 member states. These included almost all independent states. In the UN General Assembly, all members have one vote each. In the UN Security Council, there are five permanent members. These are: the United States, Russia, the United Kingdom, France and China. These states were selected as permanent members as they were the most powerful immediately after the Second World War and because they constituted the victors in the War.

- a] In which year the second world war ended? 1
- b] How many countries signed over the charter of UNO? 1
- c] How many member states are there in UNO? 1
- d] Which two members of EU are the permanent members of UN Security Council? 2

Q20. Read the passage carefully and answer the questions: The Third Five Year Plan (1961-66) emphasized the need to increase agricultural production by providing adequate irrigation facilities, use of fertilizers, improved cropping pattern and soil conservation. The planners emphasized the need to develop agricultural economy along cooperative lines, diversify the rural economy including non-agricultural activities like fish, poultry, dairy farming etc. It also emphasized the need for rapid industrial development. Emphasize was laid on heavy industries like coal, oil, steel, power etc. It aimed to build a solid capital base and make the economy of agriculture and industry. It aimed at mobilization of internal and external resources for national and regional development. The balanced growth strategy, however, led to low growth rate, high inflation and balance of payment. This poor performance led to suspension of the fourth plan. It forced the government to have annual plans for the next three years (1966-69). The period was called 'Plan Holiday'.

- | | | |
|----|--|---|
| a] | Mention any two aims of the third five year plan. | 1 |
| b] | What was plan holiday? | 1 |
| c] | List any three non-agricultural areas were identified for development. | 3 |

Q21. Read the passage carefully and answer the questions: One of Hazarika's songs....dwells on the unity theme; the seven states of north-eastern India become seven sisters born of the same mother....'Meghalaya went own way...Arunachal Pradesh too separated and Mizoram appeared in Assam's gateway as a groom to marry another daughter.'.....The song ends with a determination to keep the unity of Assamese with other smaller nationalities that are left in the present day Assam...' the Karbis and the Missing brothers and sisters are our dear ones.' Sanjib Baruah

- | | | |
|----|---|---|
| a] | Which unity is the poet talking about? | 1 |
| b] | Why were the states of north-east created separately out of the erstwhile state of Assam? | 2 |
| c] | Do you think that the same theme of unity could apply to all the regions of India? | 2 |

Q 22. Who was Mikhail Gorbachev? Give his contributions. 6

OR

In what way Soviet Union lagged behind the west?

Q23. Why did Narmada Bachao Andolan oppose the dam projects in the Narmada Valley? 6

OR

Would you consider the anti-arrack movement as a women's movement?

Q24. Enumerate the ways by which the Chinese economy has improved dramatically. 6

OR

What makes EU a highly influential regional organization?

Q25. Discuss the effects of emergency on the functioning of mass media. 6

OR

What does the term Syndicate mean in the context of the congress party of 60's?
Examine the role played by the syndicate within the congress. .

Q26. Describe the adverse effects of one party dominance on Indian democracy. 6 .

OR

Pinpoint any three causes for the dominance of congress party in the first three general elections in India.

Q27. Give three features and three drawbacks of Second Five Year plan. 6

OR

Define Green Revolution. Mention two positive and two negative consequences of it.

PAPER II

Q1. Who was P.C. Mahalanobis?

Q2. What is 'Amnesty International' responsible for?

Q3. How far is it correct to say that globalization results in the erosion of State sovereignty?

Q4. Correct and rewrite the following:

"Eight temporary members of the UN Security Council are elected by the General Assembly for a period of three years."

Q5. Who signed the Tashkent Agreement and when?

Q6. What is meant by 'one party dominance' in the Indian context?

Q7. What was Bandung Conference? Describe its outcome.

Q8. What is meant by decentralized planning ?

Q9. What was the role of Sardar Patel in the integration of princely states into the Indian union ?

Q10. Define Geo politics.

Q11. Explain any three challenges for nation building faced by India at the time of its independence.

Q12. The phrase 'Aaya Ram Gaya Ram' signifies which concept? Explain its impact on the Indian political system.

Q13. Describe the basic principles of the foreign policy of India.

Q14. What is India's attitude on C.T.B.T.? Why has India not signed C.T.B.T.?

Q15. How would you support India's candidature for the permanent membership of the Security Council?

Q16. What is the difference between traditional and non-traditional security?

Q17. **Read this passage and answer the following questions:**

"If globalization is about the flows of ideas, capital, commodities and people, it is perhaps logical to ask if there is anything novel about this phenomenon. Globalization in terms of these four flows has taken place through much of human history. However, those who argue that there is something distinct about contemporary globalization point out that it is in the scale and speed of these flows that account for the uniqueness of globalization.

(a) Give an example of each of these four flows that distinguishes globalization from similar flows in earlier times.

- (b) Can we conclude from this way looking at globalization that is essentially economic and always positive? give examples to support your position. 3

Q18 Read the given paragraph and answer the following questions :

“Way back in the late sixties, the dominance of the congress party was challenged; but the congress under the leadership of Indira Gandhi, managed to re-establish its predominant position in politics, The nineties saw yet another challenge to the predominant position of the congress, it did not, however, mean the emergence of any other single party to fill in its place.”

- Give two reasons for the decline of the congress. 2
- A new party system emerged in 1989. What is it ? Explain. 2
- Suggest any two solutions which give a stable government 1

Q19. Read the paragraph given below carefully and answer the following questions :

We have a Muslim minority who are so large in numbers that they cannot, even if they want ,go anywhere else. That is a basic fact about which there can be no argument. Whatever the provocation from Pakistan and whatever the indignities and horrors inflicted on non-Muslims there, we have got to deal with this minority in a civilized manner. We must give them security and the rights of citizens in a democratic State. If we fail to do so, we shall have a festering sore which will eventually poison the whole body politic and probably destroy it. Jawaharlal Nehru, Letter to Chief Ministers

- (a) Why Jawaharlal Nehru wanted to deal with Muslim minority in a civilized way ? 1
- (b) Why this minority should be given the security and rights on the same footing as to all other in a democratic system. 2
- (c) If this minority was not provided security and rights what kinds of scenario is envisaged ? 1

Q20. Study the cartoon given below and the following questions:-



- (a) Does the cartoon refer to a puppet government ? 1+2+2=5
- (b) Describe the role of such a government in the Indian democratic set up.
- (c) What is meant by 'Support the government from outside'?

- Q20. On the given political map of India, five states of tensions related to integration from 1947 to 2006 have been marked as A, B, C, D, E. Identify these states and write their names in your answer book against A, B, C, D, E respectively. 5



- Q 22. Explain peaceful and conflicting relations with India and China. 6

OR

Define globalization. What are its causes? Assess any three basis on which globalization is being resisted in India.

- Q23. Analyze any three reasons for imposing emergency on 25th June, 1975. Did the government misuse its emergency powers? Give any three arguments in support of your answer

6

OR

Examine the grave economic crisis prior to the 4th general elections of 1967. Assess the verdict of the electorate based on the election.

- Q24. Assess any six steps suggested since 2005 to make the UN more relevant in the changing world. 6

OR

What is meant by security? Evaluate the role of any new sources of threat to security.

- Q25. What was Green Revolution? Mention its three positive and three negative consequences. 6

OR

How did the dominance of Congress Party affect the democratic nature of Indian politics?

- Q26. Assess any two causes of the partition of India in 1947. Explain any four of its consequences.

OR

Assess the outcome of planned development towards the foundation of India's economic growth and land reforms. 6

- Q27. Explain the concept of 'common but differentiated responsibilities'. How and where was it emphasized upon? 6

OR

Analyze India's stand on environmental issues

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Sector – 21, Noida

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Website : <http://bbpsnoida.balbharati.org>

HOLIDAY HOMEWORK SUBJECT: HISTORY CLASS –XII

ANSWER IN SHORT FOR TWO MARKS:

1. How was the Lower Town of Mohenjodaro distinct from the Citadel?
2. What was a Guild? What were its purposes?
3. What is meant by Hagiography?
4. Mention two features of drainage system of the Harappan cities.
5. Why is Akbar considered to be the greatest of all the Mughal Emperors ? Give two reasons. .
6. Explain why 'Deccan Riots Commission' was set up.
7. Explain why 'Deccan Riots Commission' was set up.
8. Mention two features of drainage system of the Harappan cities.
9. Why is Akbar considered to be the greatest of all the Mughal Emperors ? Give two reasons.
10. How did Magadha become the most powerful mahajanpada between sixth to fourth century BCE ? Give two reasons.

ANSWER IN SHORT FOR FOUR / EIGHT MARKS:

11. Who were Alvars and Nayanars ? Mention the support they got from the Chola rulers.
12. Describe the subsistence strategies of the Harappans.
13. "According to shastras only Kashatriyas could be the Kings." Provide evidence to prove that this was not universally followed.
14. Examine the significance of rituals associated with 'Mahanavami Dibba'.
15. "The officer corps of the Mughals was described as a bouquet of flowers held together by loyalty to the emperor." Substantiate.
16. "Mirabai has been recognized as a source of inspiration for centuries." Identify the moral values that you have learnt from her socio-religious ideology

- 17 Describe the main characteristics of Mauryan Administration. Point out the major sources used by Historians to reconstruct the history of Mauryan Empire.
- 18 Explain Bernier's understanding of landownership during Mughal period.
- 19 Why did Cunningham as the Director General of Archaeological Survey of India (ASI) miss the significance of Harappa ? Explain.
- 20 "According to shastras only Kashatriyas could be the Kings." Provide evidence to prove that this was not universally followed.
- 21 Explain the value of interfaith debates which were held in Ibadat Khana at Fatehpur Sikri to shape the religious philosophy of Akbar.
- 22 Discuss reasons for the rapid growth of Buddhism?
- 23 What were the elements of the practice of Sati that drew the attention of Bernier?
- 24 Discuss any five religious beliefs or principles of Lingayats.
- 25 Examine the role played by Zamindars in Mughal India.
- 26 Describe Akbar Nama as an important source of the Mughal history.
- 28 Discuss the positions of the Jotedars at the end of the 18th century.
- 29 What were the causes for the failure of the Revolt of 1857? .
- 30 The drainage system in Harappan civilization indicates town planning." Support the statement with examples.
- 31 Describe the factors that led to the growth of Puranic Hinduism in India during 6th century BCE.
- 32 Mention any two features of gotra as per the Brahminical practice. What evidences do we get from the Satavahanas inscriptions regarding the inheritance of gotra ? Explain.
- 33 "Vijayanagara was characterized by a distinctive building style." Support this statement with the sacred architectural examples of Vijayanagara.
- 34 How were the subsistence and commercial production closely intertwined in an average peasant's holding during the Mughal period in 16th and 17th centuries ? Explain.
- 35 Critically examine the experience of the ryots on the refusal of moneylenders to extend loans to them after 1830.
- 36 "The relationship of the sepoy's with the superior white officers underwent a significant change in the years preceding the uprising of 1857." Support the statement with examples.
- 37.1 "The rebel proclamation of 1857 emphasized the values of coexistence amongst different communities under Mughal Empire." Explain.
- 37.2 Suggest two ways to bring peaceful coexistence and fraternity in the contemporary Indian society.

38 Read the following 'value-based' passage given and answer the questions given below

"Consider, for instance, the work of Khushdeva Singh, a Sikh doctor specialising in the treatment of tuberculosis, posted at Dharampur in present day Himachal Pradesh. Immersing himself in his work day and night, the doctor provided that rare healing touches, food shelter, love and security to numerous migrants, Muslim, Sikh, Hindu alike. The residents of Dharampur developed the kind of faith and confidence in his humanity and generosity that the Delhi Muslims and others had in Gandhiji. One of them, Muhammad Umar, wrote to Khushdeva Singh: "With great humility I beg to state that I do not feel myself safe except under your protection. Therefore in all kindness, be good enough to grant me seat in your hospital."

38.1 Do you think Khushdeva Singh's contribution towards the society during the time of partition was essential?. Justify

38.2 What are the values we learn from this passage?

39 Explain the importance of the "Sacred centre" in Vijayanagar with special emphasis on Gopurams and Mandapas.

40 How was Quit India Movement genuinely a Mass Movement? Explain.

41. The problem of separate electorates was an intricate problem that confronted the Constituent Assembly. Discuss the debate in favour and against held in the Assembly over the issue.

42 Explain three different kinds of sources through which we can know about Gandhiji. Give any two problems faced while interpreting them.

45 Explain the role of zamindars in Mughal India during 16th – 17 th century. OR Explain the chief characteristics of provincial administration of the Mughal Empire. Why has Mughal nobility been considered as an important pillar of the Mughal state ? Explain.

46 Trade between the hill tribes and the plains

This is how Abul Fazl describes the transactions between the hill tribes and the plains in the suba of Awadh (part of present day Uttar Pradesh): From the northern mountains quantities of goods are carried on the backs of men, of stout ponies and of goats, such as gold, copper, lead, musk, tails of the kutas cow (the yak), honey chuk (an acid composed of orange juice and lemon boiled together), pomegranate seed, ginger, long pepper, majith (a plant producing a red dye) root, borax zedoary (a root resembling turmeric) , wax, woollen stuffs, wooden ware, hawks, falcons, black falcons, merlins (a kind of bird), and other articles. In exchange they carry back white and coloured clothes, amber, salt asafoetida, ornaments, glass and earthen ware.

Answer the following Questions

- a) What are modes of transport described in this passage?
- b) Explain what each of these articles brought from the plains to the hills may have been used for.
- c) What do you mean by - (1) Chuk (2) Majith (3) Zedoary

47 . The poor peasant

An excerpt from Bernier's description of the peasantry in the countryside:

Of the vast tracts of country constituting the empire of Hindustan, many are little more than sand, or barren mountains, badly cultivated, and thinly populated. Even a considerable portion of the good land remains untilled for want of labourers; many of whom perish in consequence of the bad treatment they experience from Governors. The poor people, when they become incapable of discharging the demands of their rapacious lords are not only often deprived of the means of subsistence, but are also made to lose their children, who are carried away as slaves. Thus, it happens that the peasantry, driven to despair by so excessive a tyranny, abandon the country. In this instance, Bernier was participating in contemporary debates in Europe concerning the nature of state and society, and intended that his description of Mughal India would serve as a warning to those who did not recognise the "merits" of private property.

Answer the following questions:

- a) What were the problems faced by peasants in the subcontinent?
- b) Why is the land untilled?
- c) Describe the vast tracks of the empire of Hindustan.

48 What the Talugdars thought

The attitude of the Taluqdars was best expressed by Hanwant Singh, the Raja of Kalakankar, near Rae Bareilly. During the mutiny, Hanwant Singh had given shelter to a British officer, and conveyed him to safety, while taking leave of the officer, Hanwant Singh told him : Sahib, your countrymen came into this country and drove out our King. You sent your officers round the districts to examine the titles to the estates. At one blow you took from me lands which from time immemorial had been in my family. I submitted. Suddenly misfortune fell upon you. The people of the land rose against you. You came to me whom you had despoiled. I have saved you. But now- now I march at the head of my retainers to Lucknow to try and drive you from the country.

- a) Explain the reasons for the anger of the people as told by Hanwant Singh?
- b) According to your view why did Hanwant Singh save the life of the British officer?
- c) What was the result of the dispossession of taluqdars?

50 Read the following excerpt carefully and answer the questions that follow :

A Prayer to Agni Here are two verses from the Rigveda invoking Agni, the god of fire, often identified with the sacrificial fire, into which offerings were made so as to reach the other deities Bring, O strong one, this sacrifice of ours to the gods, O wise one, as a liberal giver. Bestow on us, O priest, abundant food. Agni, obtain, by sacrificing, mighty wealth for us. Procure, O Agni, for ever to him who prays to you (the gift of) nourishment, the wonderful cow. May a son be ours, offspring that continues our line ... Verses such as these were composed in a special kind of Sanskrit, known as Vedic Sanskrit. They were taught orally to men belonging to priestly families.

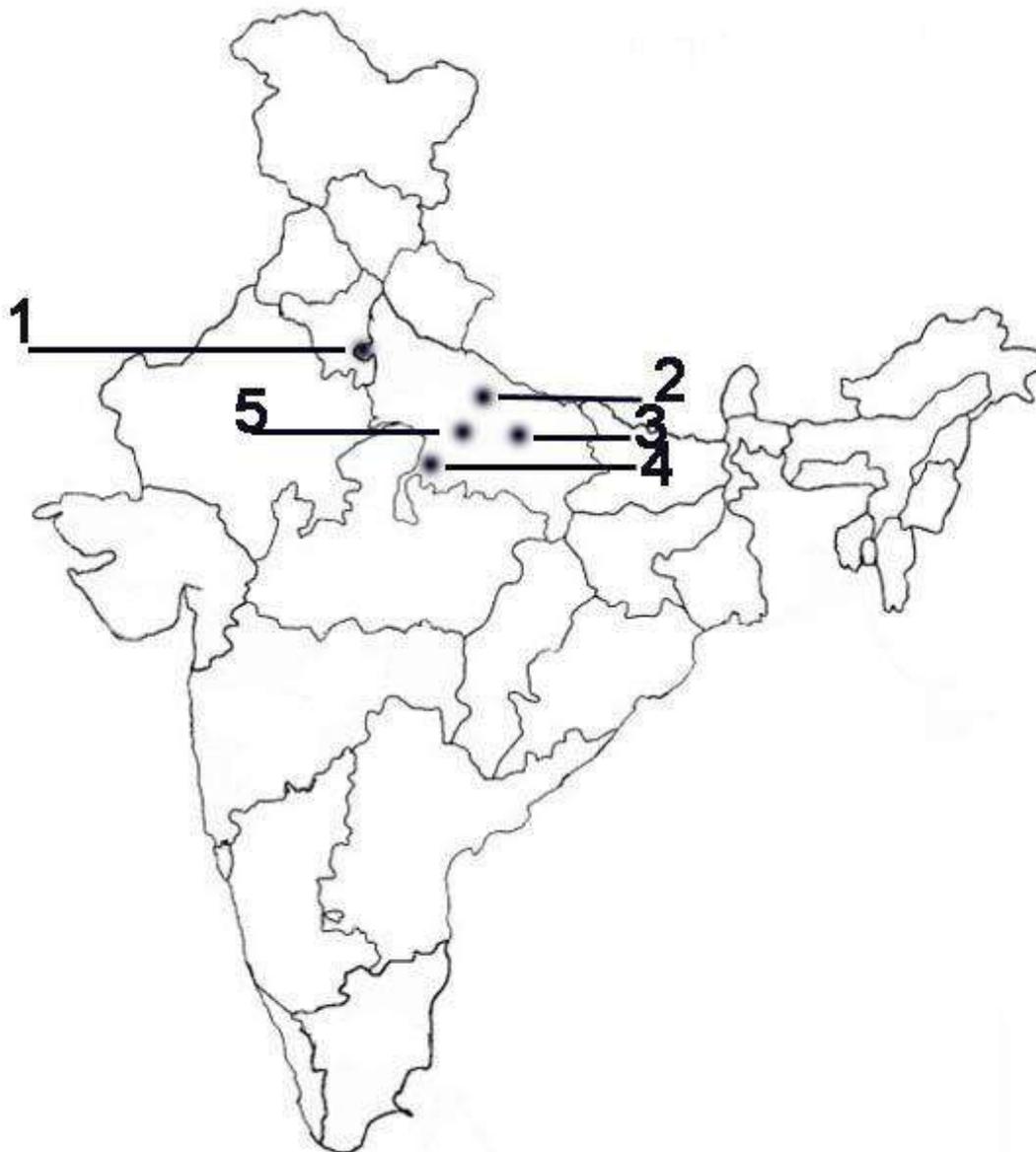
- What is the 'Rigveda' ?
- Outline the objectives of the sacrificial traditions prevailing during vedic age

- “The Rigveda consists of hymns in praise of a variety of deities.” Elaborate.

51 Villagers as rebels An officer reporting from rural Awadh (spelt as Oude in the following account) noted : The Oude people are gradually pressing down on the line of communication from the North ... the Oude people are villagers ... these villagers are nearly intangible to Europeans melting away before them and collecting again. The Civil Authorities report these villagers to amount to a very large number of men, with a number of guns.

- Outline the problems faced by the Britishers in dealing with the rebels.
- Analyse the role of Awadh in the revolt of 1857.
- What measures were taken by the British to suppress the rebellion in Awadh ?

52 On the given political outline map of India five centers of the Revolt of 1857 are marked as 1 to 5 identify them on the line given against each in the following map.



MAP PRACTISE

Book 1

1. P-2. Mature Harappan sites: Harappa, Banawali, Kalibangan, Balakot, Rakhigarhi, Dholavira, Nageshwar, Lothal, Mohenjodaro, Chanhudaro, KotDiji.
2. P-30. Mahajanapada and cities :Vajji, Magadha, Kosala, Kuru, Panchala, Gandhara, Avanti, Rajgir, Ujjain, Taxila, Varanasi.
3. P-33. Distribution of Ashokan inscriptions: (i) Kushanas, Shakas, Satavahanas, Vakatakas, Guptas (ii) Cities/towns: Mathura, Kannauj, Puhar, Braghukachchha (iii) Pillar inscriptions - Sanchi, Topra, Meerut Pillar and Kaushambi. (iv) Kingdom of Cholas, Cheras and Pandyas.
4. P-43. Important kingdoms and towns: (i) Kushanas, Shakas, Satavahanas, Vakatakas, Guptas (ii) Cities/towns: Mathura, Kanauj, Puhar, Braghukachchha, Shravasti, Rajgir, Vaishali, Varanasi, Vidisha
5. P-95. Major Buddhist Sites: Nagarjunakonda, Sanchi, Amaravati, Lumbini, Nasik, Bharhut, BodhGaya, Shravasti, Ajanta.

Book 2

1. P-174. Bidar, Golconda, Bijapur, Vijayanagar, Chandragiri, Kanchipuram, Mysore, Thanjavur, Kolar, Tirunelveli, Quilon
2. P-214. Territories under Babur, Akbar and Aurangzeb: Delhi, Agra, Panipat, Amber, Ajmer, Lahore, Goa. 326



Bal Bharati PUBLIC SCHOOL

Sector – 21, Noida

Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in

Website : <http://bbpsnoida.balbharati.org>

SUMMER HOLIDAY HOMEWORK

SUBJECT: HOME SCIENCE

CLASS - XII (SET A)

M. Marks: 50

Prepared by : Ms. Neha Gupta

General Instructions

- All the questions are compulsory
- Marks for each question are indicated against it
- Read each question carefully and answer to the points
- All parts of the question should be attempted together.
- Use of unfair means during exams is strictly prohibited. A candidate found guilty of using unfair means will be disqualified and debarred from appearing for any of the examination for a year.

-
- | | |
|---|---|
| Q1. What are two main features of MGNREGA? | 1 |
| Q2. What is difference between real income and money income? | 1 |
| Q3. Mention two washing instructions for silken garments. | 1 |
| Q4. What precautions must be taken while applying starch on garments? | 1 |
| Q5. Name the modern technology of water purification which is used by most of the house holders these days. Write its three advantages. | 2 |
| Q6. Sheena has knowledge of Community Development and Extension. How she can use it as Self-employment and wage employment. | 2 |
| Q7. What is the need of saving? | 2 |
| Q8. Mention the standard mark given on woolen garments. What does it depict? | 2 |
| Q9. What four points of workmanship will you consider while purchasing a blazer? | 2 |
| Q10. Now a days, consumers are purchasing on line and sometimes doesn't get worth of paid money. Explain two problems faced by them. Write two ways to get maximum benefit. | 4 |
| Q11. What are two ways of earning money income? Also mention the need of keeping household records. | 4 |

Q12. Rini wants to buy material for her school dress. Guide her all the factors she must consider before purchasing. 4

Q13. Deepika dropped ink on her cotton shirt. Name the nature of stain. Write the solvent used to remove ink stain. Mention two precautions she must keep in mind while removing stain. Also write the suitable method of stain removal. 4

Q14. What is FSSAI. Name two products on which this mark is given. Mention two objectives of FSSAI. What kind of surety it provides to consumers? 5

Q15. Your friend got cheated by a seller by purchasing duplicate products. Can he file a complaint? Guide him the procedure of seeking redressal. 5

Q16. Differentiate between soaps and detergent. 5

Q17. You want to buy a dress for farewell party. What will be the major 5 aspects to be checked before buying it? Explain those by giving appropriate reasons. 5



Bal Bharati PUBLIC SCHOOL

Sector – 21, Noida

Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in

Website : <http://bbpsnoida.balbhharati.org>

SUMMER HOLIDAY HOMEWORK

SUBJECT: HOME SCIENCE

CLASS - XII (SET B)

M. Marks: 50

Prepared by : Ms. Neha Gupta

General Instructions

- All the questions are compulsory
- Marks for each question are indicated against it
- Read each question carefully and answer to the points
- All parts of the question should be attempted together.
- Use of unfair means during exams is strictly prohibited. A candidate found guilty of using unfair means will be disqualified and debarred from appearing for any of the examination for a year.

Q1. Name four skills that you have achieved while doing Home Science course and which will help you in enhancing family income. (1)

Q2. List the obstacles faced by women in rural areas. (1)

Q3. Show Radha the format in which she could record her daily household expenditure. (1)

Q4. State two advantages of putting money in provident fund. (1)

Q5. The oil from the sealed mustard oil tin bought from the market has a peculiar smell. What could be one reason for this? Write three health hazards of consuming such oil. (2)

Q6. Your father spent Rs. One lakh on his mother's medical expenses. Convince him to buy a mediclaim policy for his whole family with its four silent features. (2)

Q7. What is a standard mark? Justify its importance. (2)

Q8. Present one characteristics each of a good seam, placket, hem and pocket that you will check for quality, when you are buying readymade kurta. (2)

Q9. Explain one effect, each of horizontal lines in design and square neck line in clothing, on the figure of a person. (2)

Q10. Name two modern technology of filters used to make the water potable and explain.(4)

Q11. Life insurance is a means of providing safety (insurance) against loss caused by natural or manmade factors. It has various schemes to choose from. List two popular schemes and explain. (4)

Q12. Describe the right to information and right to safety. Write one step taken by the government which ensures that these two rights of consumers are adequately met. (4)

Q13. Which washing step would you adopt while washing your woolen shawls? Give reasons for selecting this method. Which two precautions would you take while drying it? (4)

Q14. Suggest a suitable dress keeping in mind elements of art and principles of design to suit your friend who is tall, heavy and fair. (5)

Q15. A. Name the method you will use to wash a piled towel and why?

B. Rani is using a chemical to remove stain from her silk dress. What precautions should she take to prevent any damage to the fabric? (5)

Q16. A. Writes two qualities, other than being colourless and odourless, of potable water.

b. List two importance of laundering.

c. Write two ways of creating rhythm in a dress.

d. List two advantages of using detergent for washing clothes. (5)

e. Which two important points will you keep in mind while storing drinking water in the house?

Q17. What are some of the malpractices of traders in area of weights and measures? What are your duties as consumer in such case? (5)



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Sector – 21, Noida

Phone : 0120-2534064, 2538533 / E-mail : bbpsnd@yahoo.co.in

Website : <http://bbpsnoida.balbharati.org>

SUMMER HOLIDAY HOMEWORK

SUBJECT: PAINTING

CLASS - XII

HOLIDAY ASSIGNMENT

THEORY

General Instructions:-

- Do the paper neatly.
- Draw margin lines and also draw finishing lines after every question.
- All questions to be answer in about 100 words each.

Q-1. Describe the main characteristics or features of Pahari School of miniature painting. 5

Q-2. Write a note on the compositional arrangement of the Pahari miniature painting. 5

Q.3. Highlights the aesthetic aspect of Radha and Krishna looking into a mirror of Pahari miniature.

5

Q.4. Write a note on any one of the following with reference to the paintings included in your course of study. 5X2=10

a) The tendency of artists to synthesis different shades of primary colours and use delicate and fresher hues in Pahari miniature painting.

(b) The episode of Ramayana has been painted in Islamic(mughal) style in the Pahari Miniature Painting

Q.5. Write a note on any **one** of the following with reference to the paintings included in your course of study. 5X2=10

a) The Trace of European elements in every aspect of the Mughal Miniature Painting.

b) The paintings of birds and animals are painted in more delightful manner in the Mughal Miniature Painting.

Q.6. Identify the title and sub –school of the following with reference to the paintings included in your course of study: 5X2=10

a) The painting based on intonation of Indian Classical Music in the Deccan Miniature Painting.

b) The painting with best combination of the elements of Indian, European and Persian art in Deccan miniature painting.

Q.7. Write in brief, three phases of development of the Deccan School of miniature paintings. 5

PRACTICAL

- **COMPOSITION**

5X5=25

STUDENT NEEDS TO PREPARE **FIVE** SHEETS OF SIZE A2,IN WHICH THEY NEED TO MAKE COMPOSITION ON THE FOLLOWING TOPICS:

- **AT THE PLATFORM**
- **MY MEMORABLE SAFARI**
- **TRAFFIC JAM**
- **SCHOOL DAYS**
- **MY FAVOURITE SPORTS**

MEDIUM-WATER COLOUR/POSTER COLOUR /ACRYLIC COLOUR.

- **LANDSCAPE**

4X5=20

STUDENT NEEDS TO PREPARE **FOUR** SHEETS OF SIZE A2,IN WHICH THEY NEED TO MAKE LANDSCAPE .

MEDIUM-WATER COLOUR/POSTER COLOUR /ACRYLIC COLOUR.

- **ILLUSION ART**

1X5=5

STUDENT NEEDS TO PREPARE **ONE** SHEETS OF SIZE A2,IN WHICH THEY NEED TO MAKE ILLUSION ART .

MEDIUM-WATER COLOUR/POSTER COLOUR /ACRYLIC COLOUR



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SUBJECT : LEGAL STUDIES CLASS - XII (SET A)

Time : 120 minutes

M. Marks:50

Prepared by : Ms. Shriambhra Kashyap

General Instructions

- The guidelines given below should strictly be followed.
- All questions are compulsory.
- Section A- Long Answer Type Questions. Each answered should be of 150-200 words (6Marks each)
- Section B- Short Answer Type Questions. Each answered should be of 50-70 words (3Marks each)
- Section C- One Line Answer Type Questions. Each answer should be of 15-20 words (1 Marks each)
- Please note: The answers should be written in *your own language*. The answers should not be copied from any source like books/internet/newspapers/ magazine etc. The information available should only be used for the personal understanding only.

Section A

1. 'Role of Judiciary as the guardian-protector of the constitution and the fundamental rights of an individual'. How Judicial Independence will guarantee protection of Fundament Rights of an individual?
2. Merits and demerits of NJAC and Collegium. Which system should be adopted for appointing the judges in India? Give your own reasons.
3. What is Intellectual property? Explain the types of Intellectual Property with example.
4. What is an offer and acceptance? Explain it in the light of relevant case law.

Section B

5. Impeachment
6. Explain immovable property in the light of *Shanta Bai vs. State of Bombay*.
7. Short note on consent? What are the elements of consent?
8. What is unlawful agreement?
9. What does discharge by impossibility means?
10. Short note on capacity to contract
11. What is lease under TPA? What are the right and liabilities of the lessor?

Section C

12. JAC is prevalent in India for appointment of judges.
13. Latin phrase *audi alteampartem* means.
14. what was held in *Keshavanada Bharti Vs. State of Kerela*.
15. What is the difference between void and voidable?
16. What does void ad initio stands for:



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SUBJECT : Legal Studies CLASS - XII (SET B)

Time : 120 minutes

M. Marks:50

Prepared by : Ms. Shriambhra Kashyap

General Instructions

- The guidelines given below should strictly be followed.
- All questions are compulsory.
- Section A- Long Answer Type Questions. Each answered should be of 150-200words (6Marks each)
- Section B- Short Answer Type Questions. Each answered should be of 50-70words (3Marks each)
- Section C- One Line Answer Type Questions. Each answer should be of 15-20 words (1 Marks each)
- Please note: The answers should be written in *your own language*. The answers should not be copied from any source like books/internet/newspapers/ magazine etc. The information available should only be used for the personal understanding only.

Section A

17. Individual must exhaust all the Statutory/Legal remedies available to the individual before approaching the Apex Court. Explain all the Statutory/Legal remedies available in ascending order
18. Write an essay on Appointment of Judges in India.
19. What is Intellectual property? Explain the types of Intellectual Property with example.
20. Explain discharge of contract in detail with case laws

Section B

21. Short note on capacity to contract.
22. Short note on consent? What are the elements of consent?
23. Explain Contingent Contract. What is the difference between wager and contingent contract?
24. What is unlawful agreement
25. What does discharge by impossibility means?
26. Difference between damage and damages under law of Contract.
27. What is sale under TPA? What are the right and liabilities of the seller?

Section C

28. JAC is prevalent in India for appointment of judges.
29. Latin phrase *audialteampartem* means.
30. what was held in *Keshavanada Bharti Vs. State of Kerela*.
31. What is the difference between void and voidable?
32. What does void ad initio stands for:

ALL THE BEST