



**HOLIDAY HOMEWORK  
2018-19  
CLASS XII- COMMERCE**

**ACCOUNTANCY**

1. Prepare a project file including following projects:-
  - a) Comprehensive project  
Obtain the details of a partnership firm for the first year of their establishment; prepare journal/ sub journals, ledgers, trail balance and financial statements of its first year of workings. Also analyse the results using analytical tools of financial statement analysis.
  - b) Specific Project – 1  
Obtain segment wise data of a listed company from newspaper / magazine / internet and analyse that using the techniques discussed in class.
2. Do the Set A and Set B question paper of Unit Test 1 in proper format in your Assignment register which is to be submitted on 27<sup>th</sup> June 2018.
3. Prepare for the Mid Term Exam (Syllabus :- Accounting for Partnership Firms Ch. 1 to 6)

**BUSINESS STUDIES**

- A. Visit any departmental store, an industrial unit, a fast food outlet or any other organisation and observe the application of the general principles of management advocated by Henry Fayol, using worksheets, questionnaire, interviews and organizational chart, etc. as per the analysis we did while Educational Trip to Mather Dairy on 18<sup>th</sup> May 2018.  
Compile your observations and Prepare a project report.
- B. Select any product, like breakfast cereal, washing machine, coffee, furniture, bike, jewellery, butter, shaving cream, etc. and plan how will you marketed your product and prepare a project report including all 4 P's of Marketing Management
- C. Do the Set A and Set B question paper of Unit Test 1 in proper format in your Assignment register which is to be submitted on 26<sup>th</sup> June 2018.
- D. Prepare for the Mid Term Exam (Syllabus :- Unit 1,2,3,4,11,12)

**ENTREPRENEURSHIP**

- Prepare a Project on BUSINESS PLAN keeping in mind the following-
  1. Why have you selected this plan or the project?
  2. Format of Business Plan
  3. General introductory profile
  4. Competitors
  5. Production Process
  6. Packaging

7. Promotional and marketing strategies
  8. Physical and human resources required
  9. Financial Projections and budgets
  10. Distribution process
  11. USP
  12. Selling price of products
  13. Bibliography
- Take any organization and prepare a survey report on that
  - Revise for your Mid Term Exam.

## **ENGLISH**

### **WRITING SECTION-**

#### **Do the following questions in your English registers:**

1. You are Shagun/ Satvik, the HR Manager of Springdales School, Noida. Draft an advertisement to be published in a local daily specifying your requirements for a librarian, giving all relevant details.
2. Draft a matrimonial advertisement for a well-settled Cardiologist boy, inventing all relevant details in about 50 words. Do not exceed the word limit.
3. You are working for an advertising agency. Draft an attractive display advertisement for the Sony Company which is launching its latest model of LED television.
4. You are Shagun/ Saatvik, the Administrative Officer of Greenfields Public School, Delhi. During the summer vacation your school is planning to organize a tour to Goa. Write a letter to the National Travel Agency, Delhi enquiring about the charges, facilities for students and all the other necessary details.
5. Incidents of quacks (untrained Doctors), untrained truck & bus drivers are on the rise, risking the lives of innocent citizens. Write a letter to the editor suggesting ways like deterrent punishments, heavy fines and imprisonment to curb this menace.
6. You are Vaibhav/Veena, staying at 47-B, Pratap Nagar, New Delhi. You have seen an advertisement in 'The Times of India' for recruitment of Sales Manager by Flipkart. Apply in response to this advertisement, giving your detailed bio-data. Invent all necessary details.
7. From the time we get up till we go to bed we use gadgets to make our life more comfortable and leisurely. It has been rightly said that the Science has given eyes to the blind, ears to the deaf and limbs to the cripple. You are Sangeeta / Sandeep of Roop Nagar, Delhi: Write an article in (150-200) words- "Life Style without the Modern gadgets".

8. Himani/Hemant a student of class XI, Vishal Bharti School, Paschim Vihar, and Delhi feels depressed at the pollution caused by vehicular traffic noise, flowing of industrial effluents into Yamuna River, frequent and unending traffic jams, crackers, polythene bags etc. She/he decides to write an article as 'Pollution Control Drive'.

**Make poster on any one topic on A3 sheet:**

1. You are an active member of United Nations Volunteers Association [UNVA]. Design an attractive poster asking the educated youth to volunteer to teach the under privileged children for two hours under the project 'Each One, Teach One'.
2. You are the Secretary of the Creative Arts of your school. Your club is organizing an 'On the Spot Painting Competition' at the school campus on the coming Sunday. Prepare a graceful poster for the occasion.
3. Make a poster on 'SAVE THE EARTH' on behalf of the Pollution Board, Rajasthan State.
4. You are the Secretary, Red Cross, and New Delhi. Design a suitable poster prompting the citizens to volunteer themselves for 'BLOOD DONATION' at various camps organized by the Red Cross in the city.
5. Design a poster for the 'Anti – tobacco Day' creating awareness among the general masses about the harms of smoking.
6. You are Rajeev Nanda, Secretary Welfare Association, and Faridabad. Design a suitable poster highlighting the Importance of Yoga.

**Literature Section: to be done in registers-**

**A. Practice Questions-**

1. How can the life of the children of the slums change?
2. Why is the poet against 'total inactivity'?
3. How does M. Hamel pay tribute to the French language?
4. What handicap did William Douglas encounter after his experience in the YMCA pool?
5. Why does M Hamel want the people to safeguard French?
6. Why did the Dewan decide to take the tiger from People's Park to be killed by the Tiger King?
7. How did the instructor help Douglas to get rid of his fear of water?
8. What does the poet mean by saying 'let their tongues run naked into books'?
9. How does the author satirize the upbringing of the crown prince?
10. What is destined cannot be changed? Do you agree or not? Give reasons.
11. Why was the poet sad while going to the airport?
12. Contrast the real world with the world of children sitting in the slum classroom.
13. Describe the changes that came over each time William Douglas went down the YMCA pool?
14. What steps can be taken to curb bullying in schools?
15. According to you, who will be happier in life- Saheb or Mukesh?

**B. Write a Book Review of 'The Invisible Man'. Make a file. Include the following details-**

- Plot**
- Summary**
- Important characters**
- Your favorite incident**
- Climax/ anti-climax**
- How do you rate it on a scale of 5 stars?**

**QUESTIONS FOR NOTE MAKING- in registers-**

**1. Read the passage and prepare notes, summary, abbreviations and give a title-**

Anything printed and bound in book size can be called a book, but the quality or mind distinguishes the value of it. What is a book? This is how Anatole France describes it: "A series of little printed signs-essentially only that. It is for the reader to supply himself the forms and colors and sentiments to which these signs correspond. It will depend on him whether the book be dull or brilliant, hot with passion or cold as ice. Or if you prefer to put it otherwise, each word in a book is a magic finger that sets a fiber of our brain vibrating like a harp string and so evokes a note from the sounding board of our soul. No matter how skillful, how inspired' the artist's hand, the sound it makes depends on the quality of the strings within ourselves."

Until recently books were the preserve of a small section-the urban upper classes. Some, even today, make it a point to call themselves *intellectuals*. It would be a pity if books were meant only for intellectuals and not for housewives, farmers, factory workers, artisans and, so on.

In India there are first-generation learners, whose parents might have been illiterate. This poses special challenges to our authors and to those who are entrusted with the task of disseminating knowledge. We need much more research in the use of language and the development of techniques by which knowledge can be transferred to these people without transmission loss.

Publishers should initiate campaigns to persuade people that a good book makes a beautiful present and that reading a good book can be the most relaxing as well as absorbing of pastimes. We should aim at books of quality no less than at quantitative expansion in production and sale. Unless one is constantly exposed to the best, one cannot develop a taste for the good.

**2. Read the passage and prepare notes, summary, abbreviations and give a title-**

Swimming pools were once considered a luxury limited only to the rich. Today, thanks to plastics and plenty, they number in the millions. Few, of course are of Olympic size where a swimmer can

quickly do his laps and stay in shape. Most are above-ground, round mini-pools, line for a cool-off and a' frolic. But, health experts have come to realize that exercises created especially for such swimming pools can tone the muscles, strengthen the heart and pacify the spirit of people of all ages and conditions. And these exercises aren't restricted to small pools alone. Any type of pool, even a crowded municipal one, will do.

Designer of the principal popular exercises is C. Carson Conrad, executive director of the California Bureau of Health. Physicians approve of Conrad's exercises for three reasons. First, since water pressure, even on a nonmoving body, stimulates the heart to pump blood throughout the body, exercise in the water promotes thorough circulation still more effectively. Second, water exercise is rhythmic. And continuous, rhythmic exercises, authorities agree, are one of the best defenses against circulatory ailments which might cause atherosclerosis, often the precursor of coronary attacks and strokes. Third, water exercise can be enjoyed with benefit by both young and old, healthy and infirm, swimmers, and in shallow water, non swimmers.

Dr. Ira H. Wilson and Fred W. Kasch, a physician-and-physiologist team, assert that even persons with paraplegia, rheumatic heart, asthma, and emphysema, victims of polio or strokes, or amputation can exercise in water and enjoy weightless movement. Arthritics move easily under water. Some physicians use hydro calisthenics for their cardiac patients.

At the University of Illinois Prof. Richard H. Pohndori studied the effect of water exercise on a "typical" couple. He chose as subjects a man-and-wife team of physicians, 43 and 41 years old respectively, who had been sedentary for years. His program was simple: "Swim from one end of the pool to the other until you can swim 1000 yards a day. Swim every day for ten weeks." Before they started, the couple took 151 physical tests. At the end of ten weeks, they were tested again: their pulse rate had dropped, their rate of breathing had dropped, their blood pressure had come down to normal, and the cholesterol level in their blood had dropped 20 percent. Further, more than half of the broken blood vessels disfiguring the woman's thighs had vanished, her husband had improved in all his physical-fitness tests; he reduced the size of his heart, making it more efficient. Both felt younger and more vigorous.

### **3. Read the passage and prepare notes, summary, abbreviations and give a title-**

What is a classical dance? A dance which is created or choreographed and performed according to the tenets of the Natya Shastra is called a classical dance. The two broad aspects of classical dancing are the *tandava* and the *lasya*. Power and force are typical of the *tandava*; grace and delicacy, of the *lasya*. *Tandava* is associated with Shiva, and *lasya* with Parvati. Dance which is pure movement is called *nritta*, and dance which is interpretative in nature is called *nritya*.

The four main schools of classical dancing in India are: *Bharata Natyam*, *Kathakali*, *Manipuri*, and *Kathak*. Bharata Natyam is the oldest and most popular dance-form of India. Earlier, it was known by various names. Some called it *Bharatam*, some *Natyam* some *Desi Attam* and some *Sadir*. The districts of Tanjore and Kanchipuram of Tamil Nadu were the focal points in the

development of *Bharata Natyam*. It was danced as a solo performance by devadasis (temple dancers) on all auspicious occasions. Later, kings and rich people lent their patronage to it and it started shedding its purely sacred character. The dancer is directed by the *natuvanar*, who is a musician and, invariably, a teacher. Another musician plays the cymbals. The music for *Bharata Natyam* is the Carnatic School of music. The mridangam (a drum), played on both sides with the hands, provides the rhythm.

The home of *Kathakali* is Kerala. *Kathakali* literally means 'story-play'. It combines music, dance, poetry, drama and mime. Its present form has evolved out of older forms such as *Ramanattam* and *Krishnanattam*. *Kathakali* dance-dramas last from dusk to dawn. The artistes use elaborate costumes; mask-like make-up and towering head-dresses. The dancers are all males - female roles are usually played by boys. There is no stage - a few mats are spread on the ground for the audience to sit on. The only 'stage-lighting' is a brass lamp fed with coconut oil. Two singers provide the vocal music. The *chenda*, a large drum, which is beaten on one side with two slender curved sticks, is an integral part of the *Kathakali* performance. A metal gong, a pair of cymbals and another drum complete the orchestra. Besides providing the beat, they are also the means by which all the sound-effects are created.

Manipur, in the north-east is the home of *Manipuri*. It has evolved out of the folk dances of the land, which are religious in nature. *Lai Haroba* is the oldest dance-drama of Manipur and is based on folk-lore and mythology. But *Ras Leela* is the most popular one. It tells of the legendary love of Radha and Krishna. In the *Manipuri* style of dancing, the accent is on grace and softness. The women's costumes are extremely picturesque. Besides the singers, the *khol*, the *manjira* and the flute also accompany the dancers.

Kathak has its home in north India. '*Kathak*' means 'story-teller'. In ancient times, the story-teller used gestures and movements while narrating the great epics. In course of time it became an elaborate art, rich in beautiful movements and facial expressions. Later, under the Persian influence, the original dance form underwent many changes, gradually losing its religious and moral character. It became a court dance. Both men and women danced. With the passing of years, the *Kathak* performance was reduced to being an evening's entertainment, and the girls, who danced, were no more than pretty entertainers. *Kathak*, however, was revived under the patronage of the rulers of Lucknow and Jaipur, and this gave rise to two styles known as the Lucknow *gharana* and the Jaipur *gharana*. *Gharana* means 'house' or 'school'. In *Kathak*, the accent is on footwork. A dancer wears anklets with several rows of bells and skillfully regulates their sound, sometimes sounding just one bell out of the many on his feet. The singer who accompanies the *Kathak* dancer not only sings, but reproduces the drum syllables also. The sarangi, a string instrument, provides the music at a *Kathak* performance. **Swarn Khandpur**

#### **4. Read the passage and prepare notes, summary, abbreviations and give a title-**

We have entered a new world. The fall of the Berlin wall put an end to the bipolar world and gave birth to hope for freedom and prosperity; there were States that gained their independence. Most adopted the democratic model, which corresponds to our shared political values. Globalization further enhances these changes. It offers extra-ordinary opportunities to individuals who are in a position to seize them; easier access to information, speedier communications and unimpeded travels. But it also develops new forms of vulnerabilities; a financial crisis can run from Thailand to Russia via Latin America. Epidemics spread faster and further, be it mad cow's disease or bird flu.

Therefore, our destiny is no longer shaped within safe frontiers but on an international scale. Given the extent of these changes, we must define our world's new principles of organization. In this endeavor for a new order, India has a major role to play. First because it is an example of dynamism and energy. Your country is one of youth; 33 per cent of the population is under the age of 15. You are aware of the tremendous asset and the immense responsibility that this represents. A young population is a guarantee of imagination, renewal, awakening and hope. But it is also a challenge in terms of education, health and training.

India has been able to make the most of globalization and has gained a pivotal role. It provides the example of an economy which has allied dynamism and equilibrium. The past year offers the two-fold satisfaction of a spectacular 7.5 per cent growth rate and inflation under control. Thanks to the size and dynamism of its domestic market, it can project itself into the future with confidence. India is now the biggest international service provider in information technologies, and this at a time when the Western countries are experiencing a real shortage of manpower in this very field. A scientific power, India, today, is also a key player in space research. Thanks to the excellence of the Indian Space Research Organization, it is the forefront of technologies for launchers and the construction of satellites.

This economic vitality has developed on the basis of a strong concern for social justice. In the face of inequalities that still remain and could be increasing, India has given priority, to poverty reduction, job creation and support of the agricultural sector. Your country has shown that economic growth and concern for the greater good are not incompatible. India, however, does not only offer an economic model. It stands as an example for nations that show due respect for cultural identities. This represents a major challenge as globalization has inherent in it two-fold risk. First of all, there is the risk of domination of certain forms of thinking, of certain ways of life and expression. The diversity of cultures, religions, traditions and memories is an essential component of the richness of our world. If we are not careful, it could die one day. Then there is the risk of confrontation of identities. Lack of respect for what people stand for can nurture claims of nationalists and fundamentalists. The more an identity feels threatened, the more it tends to be inward looking, rejects diversity and finally gives in to confrontation.

With 18 official languages and over 1652 dialects, India is at the forefront of cultural diversity. It is a proof that openness to the outside world and preservation of its own roots can go hand in hand. The movement of exchange between cultures must not lead to silencing the polyphony of voices and views. In the heart of its democracy, India has been able to define an identity respectful of each and everyone's specificity. It is home to one of the largest Muslim communities of the world, with over 120 million believers. The religious patchwork of India offers to each minority, whether it be the two million Christians, the 16 million Sikhs or the Buddhists, Jains and Parsis, the possibility of keeping alive their own religious beliefs in harmony with the India identity. Thanks to you we know that the size of the population, that the force of history and traditions is not an obstacle. India is a proof that the universality of Human Rights is a realistic emotion. It shows us that State secularism can be reconciled with the vigor of identities and beliefs. **Dominique de Villepin**

### **5. Read the passage and prepare notes, summary, abbreviations and give a title-**

India has stood for freedom: Even before Independence we viewed our own struggle and difficulties on the larger canvas of global problems. If democracy is basically tolerance for others' opinions, the concept of co-existence is democracy on the international plane, for it embodies tolerance of other nations and systems. Similarly, non-alignment gives depth to our independence and self-reliance for it enables us to retain our freedom of judgment and action on international issues in the light of our national interests. We avoid involvement in the conflicts and disputes of others and this helps to blunt conflict between power blocs. I should like to think that it has also helped world stability.

A country is an extended family. When income and resources are limited, one must budget to ensure that waste is avoided, resources husbanded, priorities established, education and other social needs catered to, special provision made for those who are weaker or smaller. Industry has to be balanced with agriculture; technology with culture; state ventures with private initiative; economic growth with social justice; the large with the small. Every section of society must be stimulated to creative activity.

That is our planning. In no way it is totalitarian or coercive. Industrializing, modernizing and transforming an ancient society of immense size, population and diversity is a daunting venture and inevitably, a gradual one. Otherwise there will be resentment. Transformation should not cause too much dislocation or suffering for the people nor should it jettison the basic spiritual and cultural values of our civilization.

India's planning experience sums up the successes and problems of our democratic development. The magnitude and significance of democracy's operation in India are not well understood, for it is often treated as an *adventitious* or borrowed growth. Why has democracy worked in India? Our national leadership was dedicated to it and we wanted it to work, but, also, because in our society there were elements and traditions which supported the growth of democracy.



In our democratic system, there may be differences in many spheres but we rise above them. To achieve the objective of keeping the country united, we have to transcend political and party-based differences, which create *dissensions*. If we cannot remain united and the country does not remain strong, with whom shall we have differences? Against whom shall we fight? With whom shall we be friends? Brothers and sisters, if the country falls, nobody survives. When we were fighting for the freedom of our country, it did not mean only political freedom. It also meant social justice, equality and economic justice. Only one phase is over and another one is under way. We have to cover a long and difficult path. Whereas the enemies were visible during those days; now they are in disguise. Some of them are openly our enemies, but many become unintentional pawns of others.

## ECONOMICS

### UNIT VI – National Income and Related Aggregates (1)

#### Numerical:-

Q.1. From the following data, calculate value added by firm X and by firm Y:

	(₹ in crores)
(i) Closing stock of Firm X	20
(ii) Closing stock of Firm Y	15
(iii) Opening stock of Firm Y	10
(iv) Opening stock of Firm X	5
(v) Sales by firm X	300
(vi) Purchases by firm X from firm Y	100
(vii) Purchases by firm Y from firm X	80
(viii) Sales by firm Y	250
(ix) Import of raw materials by firm X	50
(x) Exports by firm Y	30

Q.2. Calculate value added by firm P and Q from the following data:

	(₹ in crores)
(i) Sales by firm P	80
(ii) Sales by firm Q to firm P	40
(iii) Sales by firm Q to households	60
(iv) Imports by firm P	20
(v) Exports by firm Q	30
(vi) Opening stock of firm P	25
(vii) Closing stock of firm P	15
(viii) Opening stock of firm Q	35
(ix) Closing stock of firm Q	50
(x) Purchases by firm Q	100

Q.3. An economy has only two firms A and B. On the basis of the following information about these firms, find out :

- (a) Value added by firms A and B.
- (b) Gross domestic product at market price.

	(₹ in crores)
(i) Exports by firm A	20

(ii)	Imports by firm A	50
(iii)	Sales to households by firm A	90
(iv)	Sales to firm B by firm A	40
(v)	Sales to firm A by firm B	30
(vi)	Sales to households by firm B	60

Q.4. On the basis of the following data about an economy which constitutes of only two firms, find out:

- (a) Value added by firms A and B  
 (b) Gross domestic product at factor cost.

		(` in crores)
(i)	Sales by firm A	300
(ii)	Purchases from firm B by firm A	120
(iii)	Purchases from firm A by firm B	180
(iv)	Sales by firm B	600
(v)	Closing stock of firm A	60
(vi)	Closing stock of firm B	105
(vii)	Opening stock of firm A	75
(viii)	Opening stock of firm B	135
(ix)	Indirect taxes by both firms	90

Q.5. From the following data relating to a firm (a) estimate the net value added at market prices.

(b) Show that the net value added at factor cost is equal to the sum of the factor incomes:

		(` in crores)
(i)	Salaries and wages	120
(ii)	Interest payments	90
(iii)	Dividend	30
(iv)	Undistributed profits	20
(v)	Rent payments	15
(vi)	Increase in stocks	40
(vii)	Imports of raw materials	20
(viii)	Indirect taxes	10
(ix)	Depreciation of fixed capital	15
(x)	Domestic sales	360
(xi)	Exports	40
(xii)	Purchases of raw materials and other inputs	120

Q.6. Calculate Gross Value Added at Market price from the following:

		(` in crores)
(i)	Intermediate cost	8
(ii)	Closing stock	5
(iii)	Sales	30
(iv)	Net indirect tax	6
(v)	Subsidy	1
(vi)	Depreciation	3
(vii)	Opening Stock	4

Q.7. Calculate Net Value Added at Market Price from the following

	(` in crores)
(i) Opening stock	10
(ii) Net indirect tax	7
(iii) Subsidy	2
(iv) Intermediate cost	12
(v) Closing stock	8
(vi) Depreciation	5
(vii) Sales	40

Q.8. From the following data about a firm X, calculate its gross value added at factor cost:

	(` in crores)
(i) Sales	500
(ii) Opening stock	30
(iii) Closing stock	20
(iv) Purchase of intermediate products	300
(v) Purchase of machinery	150
(vi) Subsidy	40

Q.9. Calculate Net Value Added at Market Price from the following data.

	(` in crores)
(i) Exports	10
(ii) Depreciation	20
(iii) Value of output	400
(iv) Intermediate cost	200
(v) Net Indirect taxes	25
(vi) Change in stock	50

Q.10. From the following data, calculate 'gross value added at factor cost':

	(` in crores)
(i) Sales	180
(ii) Rent	5
(iii) Subsidies	10
(iv) Change in stock	15
(v) Purchase of raw materials	100
(vi) Profits	25

Q.11. From the following data, calculate:

(a) Personal Disposable Income and (b) National Income

	(` in crores)
(i) Private income	3,000
(ii) Compensation of employees	800
(iii) Mixed income of self employed	900
(iv) Net factor income from abroad	(-)50

(v)	Net retained earnings of private enterprises	600
(vi)	Rent	350
(vii)	Profit	600
(viii)	Consumption of fixed capital	200
(ix)	Direct taxes paid by households	300
(x)	Corporation tax	350
(xi)	Net indirect taxes	250
(xii)	Net exports	( - )70
(xiii)	Interest	450

Q.12. From the following data, calculate: (a) National Income and (b) Personal Disposable Income

	(` in crores)	
(i)	Government final consumption expenditure	1,500
(ii)	Change in stock	60
(iii)	Gross domestic capital formation	800
(iv)	Private income	4,000
(v)	Net exports	( - )70
(vi)	Corporation tax	500
(vii)	Net indirect taxes	250
(viii)	Private final consumption expenditure	2,800
(ix)	Net factor income from abroad	( - )50
(x)	Consumption of fixed capital	200
(xi)	Net retained earnings of private enterprises	50
(xii)	Direct taxes paid by households	300

Q.13. Calculate (i) Net Domestic Product at Factor Cost and (ii) Personal Income from the following data:

	(` in crores)	
(i)	Private final consumption expenditure	700
(ii)	Savings of non – departmental enterprises	20
(iii)	Net domestic fixed capital formation	100
(iv)	Undistributed profits	5
(v)	Change in stock	10
(vi)	Corporation tax	35
(vii)	Net exports	40
(viii)	Income from property and entrepreneurship accruing to the government administrative departments	30
(ix)	National debt interest	40
(x)	Government final consumption expenditure	150
(xi)	Current transfers from governments	25
(xii)	Net factor income from abroad	( - )10
(xiii)	Net current transfers from the rest of the world	10
(xiv)	Net indirect taxes	60
(xv)	Personal taxes	35

Q.14. Calculate (a) Net National Disposable Income and (b) Private Income from the following data :

	(` in crores)
(i) Net indirect tax	90
(ii) Compensation of employees	400
(iii) Personal taxes	100
(iv) Operating surplus	200
(v) Corporate profit tax	80
(vi) Mixed income of the self – employed	500
(vii) National debt interest	70
(viii) Savings of non – departmental enterprises	40
(ix) Current transfers from government	60
(x) Income from property and entrepreneurship accruing to the government administrative departments.	30
(xi) Net current transfers to the rest of the world	20
(xii) Net factor income from abroad	(-50)

### **INFORMATICS PRACTICES**

Attempt the following questions:

1. What is DBMS?
2. What is SQL? What is the distinctive feature of MySQL?
3. What do you understand Degree and Cardinality of a Table?
4. What do you mean by Referential Integrity? How is it enforced in DBMS?
5. What is Data Model? Name various Data Models.
6. Differentiate between DDL and DML.
7. Compare CHAR and VARCHAR datatypes.
8. What are the differences between DELETE and DROP command?
9. What is MySQL Server and MySQL Client?
10. What is a Key? Define the following terms in relevance to keys:
  - a. Primary Key
  - b. Candidate Key
  - c. Alternate Key
  - d. Foreign Key
11. What do you mean by Data Dictionary? What does it comprise of?
12. Which function is used to substitute Null values in a query result?
13. Write command to print the day of the week of your birthday in the year 1999.
14. What is the difference between SYSDATE() and NOW() function?
15. What is the role of UNIQUE constraint? How is PRIMARY KEY constraint different from UNIQUE constraint?
16. How would you view the structure of table Dept?

17. What is meant by “Data independence”? Explain difference between Logical and Physical data independence.

18. Which comparison operator is used for comparing?

(i) Patterns      (ii) character value      (iii) null values      (iv) ranges      (v) list of values

19. Differentiate between:

a. DROP TABLE & DROP DATABASE

b. DROP TABLE & DROP clause of ALTER TABLE.

20. Write My SQL command to create a table STUDENT with under mentioned structure by using SQL Statement:

StdID	Number	Primary Key
StdName	Character (30)	NOT NULL
Gender	Character(6)	Male or Female
Percentage	Number	
SClass	Number	
Sec	Character	
Stream	Character(10)	Science or Commerce
DOB	Date Date of Birth	

21. Write MySQL commands to open school database.

22. Write MySQL command to select student table.

23. Answer the following questions :

a. Write the difference between Primary Key and Unique Key?

b. You have the following table CUSTOMER. Identify the required data types for each attributes :

Cust_ID	Customer Identification Number
Cust_Name	Customer Name
Cust_Add	Customer Address
Bill_No	Customer bill Number

24. Find the Output of following :

a. SELECT ROUND (1.298,1);

b. SELECT POW(3,4);

c. SELECT LOWER(‘MYSQL QUERY LANGUAGE’);

d. SELECT SUBSTR(‘MYSQL LANGUAGE’, 7,8);

e. SELECT LENGTH(‘INFORMATION’);

25. What is a Transaction?

26. Define the following

a. Atomicity

b. Consistency

c. Isolation

d. Durability

27. What are two way in which multiple transactions can be executed?

28. What is Savepoint? What is the role of Savepoint in the Transaction?
29. Describe the following command
- COMMIT
  - ROLLBACK
  - SAVEPOINT

### MATHS

#### SECTION – A

- If  $P(A) = 0.4$  and  $P(A \cup B) = 0.7$ , find  $P(B)$  if A and B are independent.
- If  $\vec{a} = \hat{i} + \hat{j} + \hat{k}$ ;  $\vec{b} = 2\hat{i} - \hat{j} + 3\hat{k}$  and  $\vec{c} = \hat{i} - 2\hat{j} + \hat{k}$ , find a unit vector parallel to the vector  $2\vec{a} - \vec{b} + 3\vec{c}$ .
- Find the value of  $k$  for which the lines  $\frac{x-1}{-3} = \frac{y-2}{2k} = \frac{z-3}{2}$  and  $\frac{x-1}{3k} = \frac{y-1}{1} = \frac{6-z}{5}$  are perpendicular.
- If  $|\vec{a}| = 2$ ;  $|\vec{b}| = 7$  and  $\vec{a} \times \vec{b} = 3\hat{i} + 2\hat{j} + 6\hat{k}$ , find the angle between  $\vec{a}$  and  $\vec{b}$ .

#### SECTION – B

- Let  $\vec{a} = 4\hat{i} + 5\hat{j} - \hat{k}$ ,  $\vec{b} = \hat{i} - 4\hat{j} + 5\hat{k}$ ,  $\vec{c} = 3\hat{i} + \hat{j} - \hat{k}$ . Find a vector  $\vec{d}$  which is perpendicular to both  $\vec{a}$  and  $\vec{b}$ , and is such that  $\vec{d} \cdot \vec{c} = 21$ .
- Two fair coins where the faces are marked 3 and 5 are tossed. Let X be the total value of the numbers. Find probability distribution table, the mean and the variance.
- Find the shortest distance between the skew lines  $\frac{x-8}{3} = \frac{y+9}{-16} = \frac{z-10}{7}$  and  $\frac{x-15}{3} = \frac{y-29}{8} = \frac{z-5}{-5}$
- If with reference to the right handed system of mutually perpendicular unit vectors  $\hat{i}, \hat{j}$  and  $\hat{k}$ ,  $\vec{\alpha} = 3\hat{i} - \hat{j}$ ,  $\vec{\beta} = 2\hat{i} + \hat{j} - 3\hat{k}$  then express  $\vec{\beta}$  in the form of  $\vec{\beta} = \vec{\beta}_1 + \vec{\beta}_2$ , where  $\vec{\beta}_1$  is parallel to  $\vec{\alpha}$  and  $\vec{\beta}_2$  is perpendicular to  $\vec{\alpha}$ .
- Find the image of the point (1, 2, 3) in the plane  $x + 2y + 4z = 38$ . Also find the perpendicular distance from point to the plane.
- Find the distance of the point  $(-1, -5, -10)$  from the point of intersection of the lines  $\vec{r} = 2\hat{i} - \hat{j} + 2\hat{k} + \lambda(3\hat{i} + 4\hat{j} + 2\hat{k})$  and the plane  $\vec{r} \cdot (\hat{i} - \hat{j} + \hat{k}) = 5$ .
- Let X denote the number of hours you study on a Sunday. Also it is known that

$$P(X = x) = \begin{cases} 0.1, & \text{if } x = 0 \\ kx, & \text{if } x = 1 \text{ or } 2 \\ k(5 - x), & \text{if } x = 3 \text{ or } 4 \\ 0, & \text{otherwise} \end{cases} \quad \text{where } k \text{ is a constant.}$$

- (a) Find the value of  $k$ .  
 (b) What is the probability that you study at least two hours? Exactly two hours? At most two hours?

### SECTION C

12. Show that lines  $\frac{x+3}{-3} = \frac{y-1}{1} = \frac{z-5}{5}$  and  $\frac{x+1}{-1} = \frac{y-2}{2} = \frac{z-5}{5}$  are coplanar. Find equation of the plane containing them.
13. Find the distance of the point  $A(-2, 3, -4)$  from the line  $\frac{x+2}{3} = \frac{2y+3}{4} = \frac{3z+4}{5}$  measured parallel to the plane  $4x + 12y - 3z + 1 = 0$ .
14. Find the distance of the point  $P(\mathbf{i} + \mathbf{j} + \mathbf{k})$  from the plane through the points  $A(2\mathbf{i} + \mathbf{j} + \mathbf{k})$ ,  $B(\mathbf{i} + 2\mathbf{j} + \mathbf{k})$  and  $C(\mathbf{i} + \mathbf{j} + 2\mathbf{k})$ . Also find the position vector of the foot of the perpendicular from  $P$  on this plane.
15. A toy company manufactures two types of dolls, A and B. Market tests and available resources have indicated that the combined production level should not exceed 1200 dolls per week and the demand for dolls of type B is at most half of that for dolls of type A. Further, the production level of dolls of type A can exceed three times the production of dolls of other type by at most 600 units. If the company makes profit of Rs 12 and Rs 16 per doll respectively on dolls A and B, how many of each should be produced weekly in order to maximize the profit?
16. A bag contains 4 balls. Two balls are drawn from the bag and are found to be red. Find the probability that remaining balls are red.

### FINE ART

#### Part 1: Natural and object study

(A) Draw and shade **two** object drawing of a group of objects from any drawing book on a drawing paper of half imperial size. Your drawing should be appropriate in realistic manner with proper light, shade and perspective. Natural and geometrical form may be covered in group of objects

Natural-forms-large size foliage and flower, fruits, vegetable, any kitchen object

(B) Draw and colour **one** object drawing of a group and drapery the help of poster colour on a drawing paper of half imperial size.

#### Part 2: Painting composition



(A) Make **two** compositions with two human figure of the following three subject in any medium (poster or water colour) of your choice on a drawing paper of half imperial size either horizontally or vertically. Your composition should be original and effective. The subject of composition are given below-

1. Outdoor study/indoor study
2. Games and sport activity
3. City escape/village escape

(B) Make **one** landscape or nature scene with the help of poster colour on a drawing paper of half imperial size.

(C) Make **one** painting with poster colour which you like most from your course of study.

Mark ditribution:	Total marks 20
1. Compositional arrangement including emphasis on the subject	10
2. Treatment of media (colour mixing)	5
3. Originality, creativity, overall impression	5

### **PHYSICAL EDUCATION**

1. Prepare your board practical files as per the instructions given by Mr. Neeraj.
2. Learn all the chapters done in the class as per the blueprint given to you.
3. Do all the Questions of the chapters 1,2,3, and 4 done in the class.