

SUMMER VACATION HOMEWORK FOR CLASS XIII

(SCIENCE AND COMMERCE)

SESSION 2021-2022

➤ CHEMISTRY

schedule to learn organic name reactions

don't accelerate learn slowly with writing reaction and asking questions

Day	Reaction	Page no	Chapter name
1	Sandmeyer reaction	287	halo alkanes and haloarenes
2	Finkelstein and Swarts Reaction	289	halo alkanes and haloarenes
3	Finkelstein and Swarts Reaction	289	halo alkanes and haloarenes
4	elimination reaction	300	halo alkanes and haloarenes
5	Wurtz Reaction	302	halo alkanes and haloarenes
6	friedel crafts reaction	306	halo alkanes and haloarenes
7	Revision		halo alkanes and haloarenes
8	Fitting Reaction, Wurtz Fittig Reaction	307	halo alkanes and haloarenes
9	Fitting Reaction, Wurtz Fittig Reaction	307	halo alkanes and haloarenes
10	Hydroboration oxidation	322	alcohols phenols and ethers
11	Kolbe's Reaction	334	alcohols phenols and ethers
12	Reimer tiemann reaction	335	alcohols phenols and ethers
13	Williamson synthesis	337	alcohols phenols and ethers
14	Revision		
15	friedel crafts reaction	342	alcohols phenols and ethers
16	rosenmund reaction	354	aldehydes ketones carboxylic acids
17	Stephen reaction	354	aldehydes ketones carboxylic acids
18	etard reaction	355	aldehydes ketones carboxylic acids
19	gattermann Koch reaction	355	aldehydes ketones carboxylic acids
20	friedel craft acylation	356	aldehydes ketones carboxylic acids
21	Revision		
22	clemmensen reduction, wolf Krishna reduction	361	aldehydes ketones carboxylic acids
23	Haloform reaction	362	aldehydes ketones carboxylic acids
24	aldol and cross aldol condensation	364	aldehydes ketones carboxylic acids
25	aldol and cross aldol condensation	364	aldehydes ketones carboxylic acids
26	Cannizaro reaction	364	aldehydes ketones carboxylic acids
27	Hell Volhard zelinsky reaction	375	aldehydes ketones carboxylic acids
28	Gabriel phthalimide synthesis	386	Amines
29	Hoffmann bromamide reaction	386	Amines
30	Carbylamine Reaction	393	Amines
31	Gattermann reaction	397	Amines
32	Coupling reaction	398	Amines

➤ PHYSICS

1. Write all the formulas in a notebook from chapter one and chapter two of text book and memorize them
2. Derive each of the following thrice in homework copy.
 - (i) Electric field due to an electric dipole at a point on the axis of the electric dipole
 - (ii) Electric field due to an electric dipole at a point on the equatorial plane of the electric dipole
 - (iii) Torque acting on the electric dipole placed in an electric field
 - (iv) Electric potential due to an electric dipole at a point
 - (v) Potential energy of an electric dipole placed in an external electric field
3. Solve all the questions given in exercises and additional exercises related to the topics taught in chapter one and chapter two of text book .
4. Solve all the examples given in chapter one and chapter two of text book

➤ BIOLOGY

- Q.1 What is life span? Write life span of any 3 plants
- Q.2. Draw a labeled diagram of any two asexual reproductive structure.
- Q.3. What is sporulation?
- Q.4. Define Asexual reproduction?
- Q.5. Explain Budding in yeast with neat & labeled diagram.
- Q.6. What is binary fission in amoeba? Draw a labeled diagram.
- Q.7. Draw a labeled diagram of....
 - a) Offset of water hyacinth
 - b) Leaf buds of bryophyllum
- Q.8. Define phase of sexual reproduction.....
 - a. Juvenile phase
 - b. Reproductive phase
 - c. Senescent phase
- Q.9. What is isogametes with diagram?
- Q.10. Define gametogenesis & Embryogenesis.
- Q.11. Explain heterogamete . Draw a labeled diagram of heterogamete of Human beings
- Q.12. Draw a labeled diagram of bisexual flower with examples & explain its various parts
- Q.13. What is stamen
- Q.14 What is anther? Draw T.S. of anther.
- Q.15 Explain tapetum & its function
- Q.16. What is pistil (carpel)? Explain parts of pistil with labeled diagram
- Q.17. How many types of cells are present in pollen grains?
- Q.18. Explain & draw stages that represent microspore maturing into a pollen grain
- Q.19. What is parthenogenesis with examples
- Q.20. What is monoecious & dioecious organism

**SUB-MATHS CLASS-XIIIA SUBJECT TEACHER-TAPASWINI PANIGRAHI CHAPTER-
RELATIONS AND FUNCTIONS AND INVERSE TRIGONOMETRIC FUNCTIONS**

1. For set $A = \{1,2,3\}$, define a relation R on the set A as follows:
 $R = \{(1,2),(2,2),(3,3),(1,3)\}$.
 Write the ordered pairs to be added to make it the smallest equivalence relation.
2. Let R be the equivalence relation in the set Z of integers given by $R = \{(a,b) : 2 \text{ divides } a-b\}$. Write the equivalence class of $\{0\}$.
3. Set A has 3 elements and set B has 4 elements. What is the number of injective mappings that can be defined from A to B ?
4. What is the number of all one-one functions from the set $a = \{1,2,3\}$ to itself?
5. If $f = \{(5,2),(6,3)\}$ and $g = \{(2,5),(3,6)\}$ then find $f \circ g$.
6. Check the surjectivity of the function $f:Z \rightarrow Z$ given by $f(x) = x^4$.
7. If $f(x) = \frac{4x+3}{6x-4}$, $x \neq \frac{2}{3}$, find $f \circ f(x)$.
8. Let $f:R \rightarrow R$ be defined by $f(x) = x^2 + 1$. Find preimage of 17.
9. Find gof and fog , if $f:R \rightarrow R$ and $g:R \rightarrow R$ are given by $f(x) = 5x+6$ and $g(x) = 5x^5-5$.
10. Let $f:R \rightarrow R$ be defined by $f(x) = \frac{3x-2}{5}$. Find $f^{-1}(x)$.
11. Let $A = R - \{3\}$ and $B = R - \{1\}$ and $f: A \rightarrow B$ be defined by $f(x) = x^{x-3}$ for all $x \in A$. Show that f is bijective.
12. Show that $f:N \rightarrow N$, given by

$$f(x) = \begin{cases} x + 1, & \text{if } x \text{ is odd} \\ x - 1, & \text{if } x \text{ is even} \end{cases}$$
 is both one-one and on-to.
13. Check whether the relation R in the set Z of integers defined as $R = \{(a,b) : a+b \text{ is divisible by } 2\}$ is reflexive, symmetric or transitive.
14. Consider $f:R_+ \rightarrow [15, \infty)$ given by $f(x) = 4x^2 + 20x + 15$. Show that f is invertible, also find inverse of f .
15. Show that the relation R defined by $(a,b)R(c,d) \Rightarrow a+d = b+c$ on the set $N \times N$ is an equivalence relation.
16. Write the principal value of $\cos^{-1}(\cos \frac{4\pi}{3})$.
17. Write the principal value of $\cos^{-1}(\cos \frac{43\pi}{5})$.
18. Find the value of $\cot(\sin^{-1} x)$.
19. Find the value of $\tan^{-1}(\tan \frac{5\pi}{6}) + \cos^{-1}(\cos \frac{13\pi}{6})$.
20. Evaluate: $\sec^2(\tan^{-1} 2)$
21. Evaluate: $\cos(\tan^{-1} \frac{5}{12})$
22. Prove that $\tan^{-1}(\frac{\sqrt{1+x^2} - \sqrt{1-x^2}}{\sqrt{1+x^2} + \sqrt{1-x^2}}) = \frac{\pi}{4} - \frac{1}{2} \cos^{-1} x^2$, $-\frac{1}{\sqrt{2}} \leq x \leq 1$
23. Prove that $\tan^{-1} \frac{63}{16} = \sin^{-1} \frac{5}{13} + \cos^{-1} \frac{3}{5}$.

24. Find the principal value of $\tan^{-1} \left[2 \cos \left(2 \sin^{-1} \frac{1}{2} \right) \right]$.

25. Solve: $\sin^{-1}(1 - x) - 2 \sin^{-1} x = \frac{\pi}{2}$.

26. COMPLETE TWO ACTIVITIES EQUIVALENCE RELATION AND GRAPH OF $\sin^{-1} x$ in activity copy.(sent in google classroom).

➤ विषय-हिंदी

ग्रीष्मकालीन अवकाश के दौरान विद्यार्थियों को निम्न कार्य पूर्ण करना है-

1. पूर्ण कि ए गए पाठों के गृह कार्य को पूर्ण करना, साथ ही कक्षा कार्य पूर्ण करना।
2. पूर्ण कि ए गए पाठों के प्रश्न-उत्तर याद करना, पाठ को लिखनेका उद्देश्य एवं उसके मूल्य को समझना।
3. काव्य में हि त भाव-सौंदर्य एवं शिल्प-सौंदर्य का पनुर अभ्यास करना।
4. निम्न प्रश्नों के उत्तर अपने गृह कार्य कॉपी में लिखें-
 क. भक्ति रेखाचित्र के आधार पर भक्ति न के चरित्र की कौन-कौन सी विशेषताएं उभरती हैं?
 ख. आलोचक की नायिका बेबी हालदार और भक्ति न के व्यक्तित्व में आप क्या समानता देखते हैं? लिखिए।
 ग. बाजार-दर्शन पाठ के आलोक में स्पष्ट कीजिए कि बाजार की जादुई ताकत कैसे हमें अपना गलाम बना लेती है?
 घ. 'बच्चन जी' के गीत के आधार पर उन स्थितियों के स्पष्ट कीजिए जिनके कारण पथिक जल्दी चलता है?
 5. कि सी प्रमुख समाचार-पत्र के संपादक को पत्र लिखकर गांव में कि त्सा सविधाओंके अभाव का उल्लेख कीजिए और कुछ गांव के बीच विशेष कि त्सा सविधाओंवाले अस्पताल खुलनेका सद्भाव

➤ COMPUTER SCIENCE

Q1. Differentiate between the round() and floor() functions with the help of suitable example.

2. Which string method is used to implement the following:

- a. To count the number of characters in the string
- b. To change the first character of the string in capital letter
- c. To change lowercase to uppercase letter
- d. To check whether the given character is letter or a number

Q3. What is the difference between actual and formal parameters?

Q4. . What is the difference between built-in functions and modules?

Q5. What will be the output of the following expression:

```
print(24//6%3, 24//4//2, 20%3%2)
```

```
print(4+2*5**2//4-2)
```

```
print(75>56 and 14)
```

Q6. Which of the following can be used as valid variable identifier(s) in Python? Justify reason for it being a valid name?

(i) 4thSum (ii) Total (iii) Number# (iv) _Dat

Q7. How would you write xy-4x9 in python?

Q8. Rewrite the following code in python after removing all syntax error(s). Underline each correction done in the code.

```
25=Val
```

```
for I in the range(0,Val)
```

```
    if I%2==0:
```

```
        print( I+1):
```

```
    Else:
```

```
        print [I-1]
```

Q9. Rewrite the following code in python after removing all syntax error(s). Underline

each correction done in the code.

```
Num=int(rawinput("Number:"))
sum=0
for i in range(10,Num,3)
Sum+=1
if i%2=0:
    print(i*2)
Else:
    print(i*3 print Sum)
```

Q10. Find out the output of the Following –

```
x=20
x=x+5
x=x-10
print (x)
x, y=x-1,50
print (x, y)
```

Q11. Find output generated by the following code:

```
string="aabbcc"
count=3
while True:
    if string[0]=='a':
        string=string[2:]
    elif string[-1]=='b':
        string=string[:2]
    else:
        count+=1
        break
print(string)
print(count)
```

Q 12. Find and write the output of the following python code:

```
Text1="AISSCE 2018"
Text2=""
I=0
while I<len(Text1):
    if Text1[I]>="0" and Text1[I]<="9":
        Val = int(Text1[I])
        Val = Val + 1
        Text2=Text2 + str(Val)
    elif Text1[I]>="A" and Text1[I] <="Z":
        Text2=Text2 + (Text1[I+1])
    else:
        Text2=Text2 + "*"
    I=I+1
print (Text2)
```

Q13. What possible outputs(s) are expected to be displayed on screen at the time of execution of the program from the following code? Also specify the maximum values that can be assigned to each of the variables FROM and TO.

```
import random AR=[20,30,40,50,60,70]
FROM=random.randint(1,3)
TO=random.randint(2,4)
for K in range(FROM,TO):
    print (AR[K],end="#"")
```

- (i)10#40#70#
- (ii)30#40#50#
- (iii)50#60#70#
- (iv)40#50#70#13.

Q14 Determine whether a number is a perfect number, an armstrong number or a palindrome using function.
Q15. Input a number and check if the number is a prime or composite number using function.

➤ **SUBJECT: ACCOUNTING**

Class: XII-B

Topic: Accounting For Non-Profit-Organizations

1. **What do you mean by Non-Profit-Organizations?**
2. **What are the examples of NPOs?**
3. **What is the main motive of NPOs?**
4. **How are NPOs managed?**
5. **What are the main sources of income of NPOs?**
6. **What financial statements are prepared by NPOs?**
7. **What financial statements are prepared by NPOs?**
8. **What is Receipt and Payment Account?**
9. **What are the Salient Features of receipt and payment account?**
10. **Give a specimen of Receipt and Payment Account.**
11. **Write a short note on the following:**
 - a. **Subscriptions**
 - b. **Donations**
 - c. **Legacies**
 - d. **Life Membership Fees**
 - e. **Entrance Fees**
 - f. **Sale of old asset**
 - g. **Sale of periodicals**
 - h. **Sale of sports material**
 - i. **Payment of honorarium**
 - j. **Endowment Fund**
 - k. **Government grant**
 - l. **Fund Based Accounting System**
12. **What are the steps in the Preparation of Income and Expenditure Account?**
13. **Give specimen of Income and Expenditure Account.**
14. **What are the steps in calculation of Subscription amount to be shown in Income and Expenditure Account?**
15. **What are the steps in calculation of consumables used during the year?**
16. **How is treatment of Specific funds done?**

➤ **SUBJECT: BUSINESS STUDIES**

Class: XII-B

Topic: Nature and Significance of Management

Case Studies

Q. 1. Dheeraj is working as ‘Operations Manager’ in Tifco Ltd. Name the managerial level at which he is working. State any four functions he will perform as ‘Operations Manager’ in this company. (5 marks)

Q. 2. Volvo Ltd’s target is to produce 10000 shirts per month at a cost of Rs. 100/- per shirt. The Production Manager achieved this target at a cost of Rs. 90/- per shirt. Do you think the ‘Production Manager’ is effective? Give one reason in support of your answer. (1 mark)

Q. 3. Yash Ltd. is facing a lot of problems these days. It manufactures electronic goods like washing machines, microwave ovens, refrigerators and air-conditioners. The company’s margins are under pressure and marketing department blames production department for producing goods, which are not of good quality to meet customers’ expectations. The finance department blames both production and marketing departments for declining return on investment and bad marketing.

- 1. What quality of management do you think the company is lacking? Justify your answer.**
- 2. State the importance of the concept identified in (a). (5 marks)**

Q. 4. Aman, Ahmad and Ally are partners in a firm engaged in the distribution of dairy products in Maharashtra state. Aman is a holder of Senior Secondary School Certificate from Central Board of Secondary Education with Business Studies as one of his elective subjects. Ahmad had done his post graduation in History and Ally in dairy farming. One day there was a serious discussion between Ahmad and Ally regarding the nature of management. Ahmad argued that management was a profession whereas Ally argued against it saying that the legal and medical professions are the only professions because they fulfill all the conditions of profession.

Aman on the basis of his knowledge of business studies explained the nature of management as a profession to Ahmad and Ally. Explain, how Aman would have satisfied both Ahmad and Ally. (6 marks)

Q. 5. To meet the objectives of the firm, the management of Bhavya Ltd. offers employment to physically challenged persons. Identify the organizational objective it is trying to achieve. Give reason in support of your answer. (1 mark)

Q. 6. B Ltd. wants to modify its existing product, CD players in the market due to decreasing sales. What decisions/steps should each level of management take to give effect to this decision? (6 marks)

Q. 7. Sonali is the manager of a large company manufacturing garments for kids. She plans her winter collection in the month of August itself. Then, she ensures that there is adequate workforce. She continuously monitors whether production is proceeding according to plans. She asks the marketing department to prepare their promotional and advertising campaigns also.

- 1. Identify and explain the concept of management explained in the above para.**
- 2. What characteristic feature does the above para highlight? State. (5 marks)**

Q. 8. H. Tech Ltd. is a company producing IT services. The company’s profits are enough for the survival and growth. The management of the company believes that a satisfied employee creates a satisfied customer, who in turn creates profits that lead to satisfied shareholders. So, it pays

competitive salaries and perks to its all employees. All the employees are happy working in the organization because of personal growth and development.

The company has a strong sense of social responsibility. It has set up an engineering college in which one-third of the students are girls to whom the company gives 50% scholarship.

Is the management of H. Tech Ltd. fulfilling its objectives? Justify your answer by giving reasons. (6 marks)

Q. 9. Govinda Ltd. is a highly reputed company. Different functions are performed by different individuals in this company, who are bound together in a hierarchy of relationships. Every individual in the hierarchy is responsible for successful completion of a particular task. Mr. Gauranga is responsible for the welfare and survival of the organization. He formulates overall organizational goals and strategies for their achievement. MR. Nityanand ensures that quality of output is maintained, wastage of materials is minimized and safety standards are maintained. Mr. Sanatan assigns necessary duties and responsibilities to the personnel and motivates them to achieve desired objectives

At what levels of management are MR. Gauranga, Mr. Nityanand and Mr. Sanatan working in Govinda Ltd.? justify your answer. (3 marks)

Q. 10. The management of Vrinda Ltd. strongly believes that the members of an organization should work towards fulfilling the common organizational goals. This requires team work and integration of efforts of all individuals, departments and specialists. This is because all the individuals and departments depend on each other for information and resources to perform their respective activities. Managers need to reconcile differences in approach, timing, effort or interest. At the same time it should enable all its members to grow and develop. Thus, there is a need to harmonize individual goals and organizational goals.

1. Identify the concept of management discussed above.
2. State any three features of the concept identified in (a).
3. Identify and explain the characteristic of management which is reflected from the above para. (6 marks)

Q. 11. Sanjana is the branch manager of ABC Handicrafts Pvt. The company's objective is to promote the sales of Indian handloom and handicraft products. Its sells fabrics, furnishings, ready-mades and household items are made out of traditional Indian fabrics. Sanjana decides quantities, variety, colour and texture of all the above items and then allocates resources for their purchase form different suppliers. She appoints a team of designers and crafts people in the company, who developed some prints for bed covers in bright colour on silk. Although they looked very impressive, they were more expensive than they had planned to sell. Average customer could not afford to buy it. Praising their effort, Sanjaja suggested that they should keep the silk bed covers for special occasions like Diwali and Christmas and offer the cotton bed covers on a regular basis to keep costs under control.

Identify the functions of management which Sanjaja performs by quoting the lines the above para. (5 marks)

Q. 12. XYZ Power Ltd. set up a factory for manufacturing solar lanterns in a remote village as there was no reliable supply of electricity in rural areas. The revenue earned by the company was sufficient to cover the costs and the risks. The demand of lanterns was increasing day by day, so the company decided to increase production to generate higher sales. For this they decided to employ people from the nearby villages as very few job opportunities were available in that area. The company also decided to open schools and crèches for the children of its employees.

1. Identify and explain the objectives of management discussed above.
2. The company is fulfilling the organizational and social objectives of management. (4 marks)

Q. 13. Nishtha is the marketing manager of a company selling laptops. She plans the target sale of 2000 laptops per month. She allocates necessary resources to carry out the plan. She has six salesmen working under her. She works with them, guiding and motivating them to achieve the target sales. At the end of the month, after comparison of actual sales with the target sales she

found that actual sales exceeded the target sales. She rewards the efficient employees to motivate them.

1. How does Nishtha prove the importance of management? Explain.
2. Also state any two values which she wants to communicate to the society by her behavior. (5 marks)

Q. 14. Sooraj works as a salesman in a company selling pet accessories and food. He has been given a target of selling 1200 units of the food packets in a month by offering a maximum of 10% discount to his customers. In order to meet his monthly sales target, on the last two days of the months, he offers 15% discount to his customers.

In the context of the above case:

Is Sooraj effective in his work? Explain by giving a suitable reason in support of your answer.

Q. 15. Sujata works as a designer in an export house. As per the terms of an order received by the export house, she has to get 100 units of denim jackets made in 15 days @ Rs. 2000 per jacket. She is able to complete her target production in 20 days because in order to complete the order in 15 days she would have made the workers work over time. As a result, the cost of production per jacket may have increased by Rs. 100.

In the context of the above case:

Is Sujata efficient in her work? Explain by giving a suitable reason in support of your answer.

Q. 16. Anju and Manju are good friends. Considering the fact that the activities involved in managing an enterprise are common to all organizations, after completing their masters in business management, both of them take up a job at managerial level in different organizations as per their individual areas of interest. Anju takes up a marketing job in a retail company and strives to increase sales whereas Manju joins an NGO and works diligently to realize its objective related to providing employment to specially abled persons. Both of them have to perform a series of continuous, composite, but separate functions. On some days, Anju may spend more time in planning a future display layout and on another day, she may spend time in sorting out an employee's problem. Both Anju and Manju make conscious efforts to build a feeling of team spirit and coordination among diverse individuals with different needs who work under them. The effect of their management is noticeable in their respective departments as the targets are met according to plans, employees are happy and satisfied, and there is orderliness in its functioning rather than chaos.

In context of the above case:

Identify the various features of management highlighted in the above paragraph by quoting lines from it.

Q. 17. Real Alliance Ltd. is a well-known cement company in India. It is able to earn adequate revenues to cover costs. Its capital base, number of employees and production turnover has increased manifold over the years. The rate of profitability of the business is also creditable. The employees of the company are happy and satisfied with their remuneration, working conditions, promotion policy etc. as a part of its moral obligation, the company has taken many initiatives for providing employment to specially abled persons and promoting literacy in the villages adopted by it.

In the context of the above case:

1. Identify and explain the various types of objectives of management being fulfilled by Real Alliance Ltd by quoting lines from the paragraph.
2. List any two values that Real Alliance Ltd. wants to communicate to the society.

Q. 18. Esha works as the cost and risk management head of a company in power sector. As a result of her excellent managerial competence, the company is able to reduce costs and increase productivity. The company belongs to infrastructure sector, where regular amendments are made in the government regulations and policies. She holds regular meetings to ensure that people in her department are not only aware of the related changes but are also able to adapt to these changes effectively. This helps the company to maintain its competitive edge. She motivates and

leads her team in such a manner that individual members are able to achieve personal goals while contributing to the overall organizational objective. In the process of fulfilling her duties for the growth of the organization, she helps in providing competitive services, adopting new technology, creating more employment opportunities etc. for the greater good of the people at large.

In context of the above case:

Identify the various reasons that have made management so important by quoting lines from the paragraph.

Q. 19. Ramarjuna joins an IT firm as a system analyst after completing his masters in Computer Science. As the nature of his work demands he has to work in very close coordination with all the departmental heads in the firm, very soon Ramarjuna realizes that each departmental head has own individual style of working. They differ greatly in their day-to-day approach to work. They tend to deal with a given situation, an issue or a problem through a combination of their own experience, creativity, imagination, initiative and innovation.

In the context of the above case:

Identify and explain the nature of management highlighted in the above case.

Q. 20. Dharam is a well-known businessman in the field of publishing. He owes the success of his business to his own education in business management and his team of certified management consultants. Therefore, he decides to send both his children Danush and Damini abroad to acquire a degree in business management in their individual area of expertise. He feels that all over the world there is marked growth in management as a discipline, but still it is not considered to be a full-fledged profession for certain reasons.

In the context of the above case:

1. Explain the reasons because of which Dharam considers management as a discipline.
2. Critically examine the various reasons because of which management is not considered to be a full-fledged profession.

Q. 21. Kartik joins a garment factory as a plant supervisor in Lucknow. He observes that the output of some workers is very low as compared to the standards set for their performance. On analyzing the reasons for the same, he finds out that a lot of time of the workers is wasted in getting the requisite materials issued from the store. Whereas on asking, the store keeper complains that there is no harmony in the working of the production department as a whole. Every day the workers approach him at the least minute to procure different kinds of threads, laces, mirrors, buttons etc. if it is not available in the store then he has to place an order with the purchase officer. As a result, a lot of time of the workers is wasted. So, in order to integrate the various production activities, henceforth, Kartik ensures that the store keeper is informed well three days in advance about the requisite materials. Consequently, the store keeper is able to keep the materials ready for the workers every morning in accordance with their requirements.

In context of the above case:

1. Identify and explain the quality of management that Kartik has introduced in the working of the production department as a corrective measure to control the output of the workers.
2. State briefly and two points highlighting the importance of quality of management identified in part (a).

Q. 22. Sridhar's father is working as a section in-charge in a government office. Identify the level of management at which he is working? State any five functions that he has to perform at this level.

Q. 23. Geetika is working in a private sector bank. One of her key function relates to the formulation of the overall organizational goals and strategies of the bank. Identify the level of management at which she is working? State any three other functions that she has to perform at this level.

Q. 24. Arundhati has been promoted to the post of Marketing Division Head of a soft drink company. Identify the level of management at which she will be working henceforth. State any four functions that she will have to perform at this level.

Q. 25. Bhuvan argues that management is required in all kinds of organizations where as Piyush feels that management is not required in non-business organizations such as school, club, hospitals, etc. who is correct?

Q. 26. Mohan has retired from the post of a foreman in a factory. At what level of management is he working?

Q. 27. 'Sonu Nigam' the famous playback singer always spends time for practice and adds his creativity in his singing.

Like Sonu Nigam, Mr. Rajiv, manager of Headlines Ltd. uses his creativity and practice management principles under different situations to manage the business. The employees are happy and satisfied as he every day reward employees for their punctuality and efficiency.

- 1. Identify the nature of management highlighted above.**
- 2. Name other two aspects of nature of management.**
- 3. Identify the values followed by Mr. Rajiv.**

Q. 28. Bhuvan Ltd., a garment manufacturing Company set the target production of 100 garments per month at the estimated cost of Rs. 200 per garment. Mohan, a worker worked double shift and manufactured around 150 garments but at the estimated cost of Rs. 230 per garment. On the other hand, Ravi another worker focus on cost and handled resources very carefully so the manufactured 90 garments but at the estimated cost of Rs. 190 per garment. Third worker maintained the balance and achieved target of 100 garment at the estimated cost of Rs. 200 per garment.

- 1. Identify the quality possessed by Ravi, Mohan and what they are lacking.**
- 2. What quality is possessed by third worker?**
- 3. Which worker is preferred by management?**

Q. 29. Management of Alpha Ltd. has installed a special recycling plant to recycle the waste instead of dumping the waste in ground. It is also providing employment opportunities to local residents. Company started a school nearby for the children of their employees.

- 1. Identify the objectives company is fulfilling.**
- 2. (ii) Quote the lines from above para which indicate those objective.**

Q. 30. Directors of Bhuvan Ltd. assigned the task of implementing the plans and policies framed by the board to all the departmental heads. Departmental head appointed supervisors, superintendent, executives, etc. so that work can be assigned to workers as per the plan supervisors kept a check on workers as per the plan.

- 1. Identify the feature of management highlighted in above para.**
- 2. Explain that feature.**

Q. 31. Alpha Ltd. is a Company that manufacturers mobile phones and accessories. Its profits are declining nowadays. The sales department blames production department for low quality, the production department blames purchase department for not supplying good quality parts.

- 1. What quality of management is lacking in the above case?**
- 2. Explain the nature of the concept.**

Q. 32. A group of people believes that management is a systematic body of knowledge that explain certain general truth and is based on logical observation.

- Identify and explain the nature of management discussed in above case.**

Q. 33. Unique enterprises is able to achieve the target production of 5,000 units within the prescribed time; however to achieve this target they hired extra workers on adhoc and spent around is 40,000 extra to pay the adhoc workers sot that target production can be achieved on time.

- 1. Do you think unique enterprise is effective or efficient?**
- 2. Was their decision to hire adhoc workers to achieve the target was correct?**
- 3. Explain the concept of management highlighted above.**

Q. 34. In an organization sales department wants to increase the sale by 20% so sales department planned to offer extra discounts to customers. Finance department raised objection on it as they sat it will result in loss of revenue and company may face liquidity problem.

- 1. Name the importance of coordination referred here.**
- 2. State other two importance of coordination.**

Q. 35. Mr. Rajiv and Arun are responsible for welfare of the whole organization. Their job is very complex they have to develop long term objectives, policies and review the work of different heads at different level. Mr. John and Mr. Singh are responsible for the working of department they are heading, they formulate short term departmental objectives in accordance with organizational objectives.

Mr. Philip, Mrs. Archana, Mrs. Kamlesh and Mrs. Kavita are in direct contact with the workforce consisting of various employees and workers. They are responsible for quality of work and providing good working conditions to workers.

- 1. State the three level of management.**
- 2. Name the persons who are involved in different level from the above para.**

Q. 36. The manager of Alpha Ltd. is very efficient and effective and makes sure all the employees and workers in his team perform the task on time with minimum cost. His main focus is on cost cutting so he never listens to the demand of workers for increasing wages. He even gives no opportunity to worker for promotion. As a result workers started becoming frustrated and disheartened all the time.

- 1. Which objective of management could not be achieved by the manager.**
- 2. State other two objectives of management.**
- 3. State any one value ignored by the manager.**

Q. 37. The management of Amaira Ltd. strongly believes that the members of the organization should work toward fulfilled the common organizational goals. This requires team work and integration of efforts of all individuals departments and specialists. This is because all the individuals and departments depend on each other for information and resources to perform their respective activities. Manager needs to reconcile differences in approach, timing, efforts and interest. At the same time it should enable all its members to grow and develop. Thus, there is a need to harmonize individual goals and organizational goals.

- 1. Stat the concept of management discussed above.**
- 2. State any three features of the concept identified in above para.**
- 3. State value referred in above para.**

Q. 38. Mega Ltd. manufactured water-heaters. In the first year of its operations, the revenue earned by the company was just sufficient to meet its cost. To increase the revenue, the company analysed the reasons behind the less revenues. After analysis, the company decided:

- To reduce the labour cost by shifting the manufacturing unit to a backward area where labour was available at a very low rate.**
- To start manufacturing solar water-heaters and reduce the production of electric water-heaters slowly.**

This will not only help in covering the risks but also help in meeting other objectives.

1. Identify and explain the objectives of management discussed above.
2. State any two values which the company wanted to communicate to society.

Q. 39. Ritu is the manager of the northern division of a large corporate house. At what level does she work in the organization? What are her basic functions?

Q. 40. Mr. Nitin Singhania's father has a good business of iron and steel. He wants to go to the USA for his MBA but his father thinks that he should join the business. On the basis of emerging trends, do you think that Mr. Singhania should send his son to the USA? Give any three reasons in support of your answer.

41. Jayant is working as Head Relationship Manager in the wealth management division of a private sector bank. He has created an internal environment which is conducive to an effective and efficient performance of his team of ten relationship management executives. A typical day at work in Jayant's life consists of a series of interrelated and continuous functions. He decides the targets for his department which are in line with the objectives of the organization as a whole. The future course of action for his team members is laid out well in advance. The various resources required by the relationship managers like an iPad with GPS system, account opening forms, brochures, details of account holders etc. are made readily available to them. The executives are given sufficient authority to carry out the work assigned to them. Jayant works in close coordination with the human Resource Manager in order to ensure that he is able to create and maintain a satisfactory and satisfied work force in his department. Through constant guidance and motivation, Jayant inspires them to realize their full potential. He offers them various types of incentives from time to time keeping in view their diverse individual needs. Moreover, he keeps a close watch on their individual performances in order to ensure that they are in accordance with the standards set and takes corrective actions whenever needed.

In context of the above case:

1. Identify the concept being referred to in the following line, "He created an internal environment which is conducive to an effective and efficient performance of his team of ten relationship management executives."
2. Identify and describe the various functions of the concept as identified in part (a) of the question by quoting lines from the paragraph.

Q. 42. Ajay and Sanjay are childhood friends. Sanjay had lost his right hand in an accident in childhood. They meet after a long time in a restaurant. On being asked, Sanjay tells Ajay that he feels very discouraged in managing his family business after the death of his father as it doesn't match with his areas of interest. Ajay knows that Sanjay possesses extraordinary skills in management although he hasn't acquired any professional degree in management. Therefore, he asks Sanjay to wind up his business in India and join him in his hotel business in Dubai as an Assistant Manager in Sales and Marketing Division.

In context of the above case:

1. Can Sanjay be deployed at the post of Assistant Manager in Sales and Marketing Division though he hasn't acquired any professional degree in management? Explain by giving suitable justifications in support of your answer.
2. List any two values that are reflected in this act of Ajay.

(MACRO ECONOMICS) UNIT-2 MONEY & BANKING {Marks: 6}**ANSWER THE FOLLOWING QUESTIONS:-****Short Answer Questions: 1 mark**

1. Define Money.
2. What is barter system?
3. What do you mean by double coincidence of wants?
4. What is the monetary system in India?
5. Define money supply.
6. What is credit money?
7. Define a commercial bank.
8. What is bank rate?
9. What is CRR?
10. What is fiat money?

Short Answer Questions: 3/4 marks

1. Explain any two functions of Commercial banks.
2. Give any four major functions of Central bank.
3. How does a central bank control the availability of credit by open market operations?
4. How does a central bank perform the function of controller of credit?
5. State the four functions of money. Describe any one of these.
6. Explain any two demerits of barter system.
7. What are the various measures of money supply in India?
8. Explain the 'medium of exchange' function of money.
9. Explain the 'Store of value' function of money.
10. How are demand deposits different from Term deposits?

Long Answer Questions: 6 marks

1. Define a commercial bank. Explain its functions.
2. Explain how the bank rate policy controls the flow of credit in the economy.
3. Explain any four functions of money.
4. Explain any four limitations of barter system.
5. Explain any four main functions of central bank.
6. Distinguish between a Commercial bank & Central bank.

UNIT-4 GOVERNMENT BUDGET AND THE ECONOMY {Marks: 6}**SHORT ANSWER TYPE QUESTIONS (1 MARK):**

1. Define government budget.
2. Define deficit budget.
3. Give two examples of direct tax.
4. Define capital budget.
5. Define capital receipts.
6. Give two examples of capital expenditures.
7. Give two examples of revenue expenditures.
8. Define plan expenditure.
9. Give two example of development expenditure.
10. What is meant by non-development expenditure?
11. Why tax is not a capital receipt?
12. Why borrowing is treated as capital receipts?
13. Why is payment of interest revenue expenditure?
14. Define fiscal deficit.

INDIAN ECONOMIC DEVELOPMENT

1. Students should read each chapter three (03) times from NCERT TEXT BOOK :-
 - a) Indian Economy on the Eve of Independence
 - b) Indian Economy (1950 -1990)
 - c) Liberalisation, Privatisation and Globalisation
 2. Write 30 short questions from each chapter.
 3. Write all the NCERT Text book questions and answer of the above chapter as Home work.
- } **{Marks:12 as per CBSE}**

NOTE:- HOME WORK NOTE BOOK TO BE SUBMITTED AFTER SUMMER BREAK.

➤ **INFORMATICS PRACTICES**

- Q.1 List two key features of Pandas.
Q.2 What are the benefits of Pandas ?
Q.3 What is series ? Explain with an example.
Q.4 Consider the following Series : Subject

INDEX	MARK
ENGLISH	75
HINDI	78
MATHS	82
SCIENCE	86

Write a program in Python Pandas to create a Series.

- Q5. Consider the following Series object, “company” and its profit in Crores

TCS	350
Reliance	200
L&T	800
Wipro	150

- (i) Write the command which will display the name of the company having profit>250.
- (ii) Write the command to name the series as Profit.

- Q.6 Given the following Series S1 and S2:

S1	S2
A 10	A 5
B 20	B 4
C 30	C 6
D 40	D 8

Write the command to find the multiplication of series S1 and S2

- Q.7 Give the output of the following program:

```
import numpy as np
arr=np.array([21,22,23,24,25,26,27,28,29,30])
print(arr[4:9])
```

- a. [25 26 27 28 29] b. [25 29] c. 25 26 29] d. None of these

Q.8 _____ is a two dimensional structure storing heterogeneous mutable data.

Q.9 Mention the different types of data structure in Pandas.

Q.10 Write a program to create dataframe of your class using

1. dictionary
2. nested list
3. Dictionary with series
4. List with dictionary

Q.11 Define add() function in Series

Q.12 Write the output of the following code

```
import pandas as pd
data = [['Alex',10], ['Bob',12], ['Clarke',13]]
```

```
df = pd.DataFrame(data, columns = ['Name', 'Age'])
```

```
print(df)
```

Q.13 Write a Python code to create a dataframe with appropriate headings from the list given below :

```
['S101', 'Amy', 70]
```

```
['S102', 'Bandhi', 69]
```

```
['S103', 'Cathy', 75]
```

```
['S104', 'Gundoho', 82]
```

Q.14 Give the output of the following code:

```
import numpy as np
```

```
import pandas as pd
```

```
dict={'Name':pd.Series(['Anu','Abhishek','Rajeev','Ritu'],'Age':pd.Series([26,25,24,31]),
```

```
'Score':pd.Series([87,67,89,55])}
```

```
df=pd.DataFrame(dict)
```

```
print("Dataframe contents are")
```

```
print(df)
```

```
print(df.count())
```

Q.15 Suppose a data frame contains information about student having columns rollno, name, class and section.

Write the code for the following:

(i) Add one more column as fee

(ii) Write syntax to display name ,class and section data only using loc statement.

(iii) Write python code to delete column fee of data frame.

(iv) Write the code to append df2 with df1

(v) Display data of 1st to 3rd rows

➤ विषय -हिंदी

ग्रीष्मकालीन अवकाश के दौरान विद्यार्थि यर्थि ों को निम्न कार्य पूर्ण करना है-

1. पूर्ण कि ए गए पाठों के गृह कार्य को पूर्ण करना, साथ ही कक्षा कार्य पूर्ण करना ।

2. पूर्ण कि ए गए पाठों के प्रश्न -उत्तर याद करना, पाठ को लिखनेका उद्देश्य एवं उसके मूल्य को समझना ।

3. काव्य में निहित भाव-सौंदर्य एवं शिल्प -सौंदर्य का पनुर अभ्यास करना ।

4. निम्न प्रश्नों के उत्तर अपने गृह कार्य कॉपी में लिखें-

क. भक्ति रेखाचित्र के आधार पर भक्ति न के चरित्र की कौन-कौन सी विशेषताएं उभरती हैं?

ख. आलोचक आरि की नायिका बेबी हालदार और भक्ति न के व्यक्तित्व में आप क्या समानता देखते हैं? लिखिए ।

ग. बाजार- दर्शन पाठ के आलोक में स्पष्ट कीजिए कि बाजार की जादुई ताकत कैसे हमें अपना गलाम बना लेती है?

घ. 'बच्चन जी' के गीत के आधार पर उन स्थितियों के स्पष्ट कीजिए जिन्हें कारण पथिक जल्दी चलता है?

5. कि सी प्रमुख समाचार- पत्र के संपादक को पत्र लिखकर गांव में कि त्सा सविधाओं के अभाव का उल्लेख कीजिए और कुछ गांव के बीच विशेष कि त्सा सविधाओं वाले अस्पताल खुलने का सञ्चाल

➤ ENGLISH (SCI AND COMMERCE)

