<u>**Subject: English**</u>

M.M-25

Q1. Read the following passage carefully.

1. A little boy used to play in the shade of a tree. One day the boy sat leaning against its trunk; he cried and sighed, "I am hungry."

2. "Eat my fruit", said the kind tree. And it bent down one of its branches. The little boy had his fill of the fruit and felt satisfied.

3. Many years passed and the boy grew up. Then, once again, he sat under the tree with a look of dejection and hopelessness. "What is it?", the trees asked. "My wedding day is barely a week away and I have nowhere to live." "Cut down my branches and build yourself a house," said the tree. The young man set to work immediately.

4. Time passed and now the young man was a sailor. And once again he sat under the tree with a look of remorse on his face. The tree asked what the matter was, he pleaded, "My Captain is crude, so to survive I must own a ship."

5. "Cut down my trunk and build a ship," suggested the tree.

6. The sailor grew old but once again he turned to the tree with a laden expression on his face. It was cold and the sailor leant on his stick trembling, "make a fire of me," said the stump of the tree. It soon burnt in the fire softly humming a tune.

Based on the understanding of the passage, answer the questions given below: (1x5=5)

   a) What was the nature of the tree?
   b) What kind of a person was the man?
   c) What is meant by 'set out to work immediately'?
   d) The main qualities of the two characters in the passage are _____.
   e) What does the last line of the passage mean?

Q2. You are the General Manager of an organisation. You need a software engineer for your organisation. Look for an advertisement published in the newspaper under the classified column, cut and paste it in the notebook.   (3)

Q3. Write a letter to the Editor of National Herald, New Delhi about water scarcity in your locality suggesting ways to improve the position of water supply. You are Ramnath/ Reema of Ghaziabad. Word limit: 150-200. (5)

Q4. Answer the given questions briefly in 30-40 words each. (2x3=6)

a) What does M. Hamel say about the importance of language to an 'enslaved' people?

b) Mention the hazards of working in the glass bangles industry.

c) What was Franz tempted to do instead of going to school and being reprimanded?

Q5. Read the extracts given below and answer the questions that follow: (1x6=6)

I. Despite long years of hard labour, first as a tailor, then a bangle maker, he has failed to renovate a house, send his two sons to school. All he has managed to do is teach them what he knows- the art of making bangles.

a) Who has been labouring?

b) Which part of the country is being alluded to in this extract?

c) What does the writer say about the appalling reality of child labour?

II. '…but after the airport's
security check, standing a few yards
away, I looked again at her, wan, pale
as a late winter's moon…'

a) What did the poet observe once again upon reaching the airport?

b) How does the poet describe her mother's pale face?

c) Name the poetic device used in the given extract.

Subject – Mathematics

(Inverse Trigonometric Functions AND Matrices)

Q1. The value of $\sin^{-1}\left(\cos\dfrac{33\pi}{5}\right)$ is

   a. (a) $\dfrac{3\pi}{5}$ (b) $-\dfrac{\pi}{10}$ (c) $\dfrac{\pi}{10}$ (d) $\dfrac{7\pi}{5}$

Q2. The value of $\cos^{-1}\left(\cos\dfrac{5\pi}{3}\right)+\sin^{-1}\left(\sin\dfrac{5\pi}{3}\right)$ is

   a. (a) $\dfrac{\pi}{2}$ (b) $\dfrac{5\pi}{3}$ (c) $\dfrac{10\pi}{3}$ (d) 0

Q3. $\sin\left\{2\cos^{-1}\left(\dfrac{-3}{5}\right)\right\}$ is equal to

   a. (a) $\dfrac{6}{25}$ (b) $\dfrac{24}{25}$ (c) $\dfrac{4}{5}$ (d) $-\dfrac{24}{25}$

Q4. If $\theta = \sin^{-1}\{\sin(-600°)\}$, then one of the possible value of θ is

   a. (a) $\dfrac{\pi}{3}$ (b) $\dfrac{\pi}{2}$ (c) $\dfrac{2\pi}{3}$ (d) $-\dfrac{2\pi}{3}$

Q5. If $3\sin^{-1}\left(\dfrac{2x}{1+x^2}\right)-4\cos^{-1}\left(\dfrac{1-x^2}{1+x^2}\right)+2\tan^{-1}\left(\dfrac{2x}{1-x^2}\right)=\dfrac{\pi}{3}$ then x is equal to

   a. (a) $\dfrac{1}{\sqrt{3}}$ (b) $-\dfrac{1}{\sqrt{3}}$ (c) $\sqrt{3}$ (d) $-\dfrac{\sqrt{3}}{4}$

Q6. If $4\cos^{-1}x + \sin^{-1}x = \pi$, then the value of x is

   a. (a) $\dfrac{3}{2}$ (b) $\dfrac{1}{\sqrt{2}}$ (c) $\dfrac{\sqrt{3}}{2}$ (d) $\dfrac{2}{\sqrt{3}}$

Q7. If $\tan^{-1}\dfrac{x+1}{x-1}+\tan^{-1}\dfrac{x-1}{x}=\tan^{-1}(-7)$,then the value of x is

   a. (a) 0   (b) -2   (c) 1   (d) 2

Q8. If $\sin^{-1}x - \cos^{-1}x = \pi/6$, then x =

   a. (a) $\dfrac{1}{2}$ (b) $\dfrac{\sqrt{3}}{2}$ (c) $-\dfrac{1}{2}$ (d) $-\dfrac{\sqrt{3}}{2}$

Q9. In a $\triangle ABC$, if C is a right angle, then

$$\tan^{-1}\left(\dfrac{a}{b+c}\right)+\tan^{-1}\left(\dfrac{b}{c+a}\right)=$$

   a. (a) $\dfrac{\pi}{3}$ (b) $\dfrac{\pi}{4}$ (c) $\dfrac{5\pi}{2}$ (d) $\dfrac{\pi}{6}$

Q10. The value of $\sin\left(\dfrac{1}{4}\sin^{-1}\dfrac{\sqrt{63}}{8}\right)$ is

   (a) $\dfrac{1}{\sqrt{2}}$ (b) $\dfrac{1}{\sqrt{3}}$ (c) $\dfrac{1}{2\sqrt{2}}$ (d) $\dfrac{1}{3\sqrt{3}}$

Subject – Economics

Q1. Name some modern industries which were in operation in our country at the time

    of independence. (2)

Q2. What was the aim of the policies pursued by the British during colonial rule? (2)

Q3. Write a short note on commercialisation of agriculture during British rule? (2)

Q4. Where was the zamindari system implemented by British in India?
    Discuss its features. (2)

Q5. Discuss the condition of Indian agricultural sector on the eve of independence. (3)

Q6. Discuss the state of industrial sector on the eve of independence. (3)

Q7. Describe the role of public sector during British Rule. (3)

Q8. State the factors responsible for the downfall of indigenous handicraft industries during
    British Rule. (3)

Q9. Discuss the state of Indian foreign trade on the eve of Independence. (5)

Q10.India experienced export surplus during colonial rule, then why was there drain of wealth
    from India during the same period. (5)

Subject – Informatics Practices

Q1   Difference between CHAR and VARCHAR data types with the help of an example.   (2)

Q2   How will you be removing a column in SQL?   (2)

Q3   Write a short note on ALTER TABLE Command.   (2)

Q4   Explain Mathematical functions in SQL.   (2)

Q5   Write any three characteristics of SQL.   (3)

Q6   Describe any three processing capabilities of SQL.   (3)

Q7   Write about various Operators in SQL: (3)

Q8   Write a short note on Constraints.   (3)

Q9   Write SQL commands for (i) to (vi) on the basis of relations given below: BOOKS

```
BOOKS
book_id      Book_name        author_name        Publishers      Price  Type    qty
k0001        Let us C         Sanjay mukharjee   EPB             450    Comp   15
p0001        Genuine         J. Mukhi           FIRST PUBL. 755       Fiction 24
m0001        Mastering c++   Kanetkar           EPB             165    Comp   60
n0002        Vc++ advance    P. Purohit         TDH             250    Comp   45
k0002        Near to heart   Sanjeev            FIRST PUBL. 350       Fiction 30
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ISSUED Book_ID	Qty_Issued
L02	13
L04	5
L05	21

i. To show the books of FIRST PUBL Publishers written by P.Purohit.

ii. To display cost of all the books written for FIRST PUBL.

iii. Depreciate the price of all books of EPB publishers by 5%.

iv. To display the BOOK_NAME,price of the books whose more than 3 copies have been issued.

v. To show total cost of books of each type.

vi. To show the detail of the most costly book.   (5)

Q10 Write SQL commands for (a) to (f) and write output for (g) on the basis of PRODUCTS relation given below:

PRODUCT TABLE

PCODE	PNAME	COMPANY	PRICE	STOCK	MANUFACTURE	WARRANTY
P001	TV	BPL	10000	200	12-JAN-2008	3
P002	TV	SONY	12000	150	23-MAR-2007	4
P003	PC	LENOVO	39000	100	09-APR-2008	2
P004	PC	COMPAQ	38000	120	20-JUN-2009	2
P005	HANDYCAM	SONY	18000	250	23-MAR-2007	3

a) To show details of all PCs with stock more than 110.

b) To list the company which gives warranty for more than 2 years.

c) To find stock value of the BPL company where stock value is sum of the products of price and stock.

d) To show number of products from each company.

e) To count the number of PRODUCTS which shall be out of warranty on 20-NOV-2010.

f) To show the PRODUCT name which are within warranty as on date.

g). Give the output of following statement.

      (i) Select COUNT (distinct company) from PRODUCT.

      (ii) Select MAX (price)from PRODUCT where WARRANTY<=3   (5)

Subject – Business Studies

Q.1   Human resources are an organisation's greatest assets. Despite all developments in technology 'getting work done from people is the major task of a manager'. Identify dimension of management being described above.   (1)
a) Management of work   b) Management of people
c) Management of operations   d) All of the above

Q.2   A company's target production is 5000 units in a year. To achieve this target the manager has to operate on double shifts due to power failure most of the time. The manager is able to produce 5000 units but at a higher production cost. In this case the manager is……..   (1)
a) Efficient   b) Effective
c) Efficient as well as effective   d) Neither efficient nor effective

Q.3   Taylor believed that there was only one best method to maximize efficiency. This method can be developed through study and analysis. Identify the principle of Scientific management being discussed above.   (1)
a) Harmony not discord   b) Science not rule of thumb
c) Development of each and every person to his or her greatest efficiency and prosperity
d) Cooperation not individualism

Q.4   Competition in the market can also upset financial plans, sales targets have to be revised accordingly, cash budget also needed to be modified. Identify the limitation of planning. (1)
a) Planning may not work in dynamic environment   b) Planning leads to rigidity
c) Planning is time consuming   d) Planning involves decision making

Q.5   Texmaco Ltd. aims to manufacture and sell 1,500 locomotives in 2020. To achieve this target the production department ensures timely production and sales department takes all possible steps to generate maximum revenue. Due to combined efforts of all the departments, Texmaco Ltd. is able to achieve its sales target. On the basis of the given information about Texmaco Ltd., answer the following questions:

(a) Which importance of management is highlighted in above situation? Explain any two other points of significance of management.   (3)

Q.6   Identify the level of management in performing the following tasks with reasons:
(a) Introducing a new product line.
(b) Devising a suitable advertising campaign to sell a new product/service a company is launching.
(c) Conducting performance appraisal of supervisors   (3)

Q.7   Bitcoin is a cryptocurrency and worldwide payment system. It is the first decentralized digital currency, as the system works without a central bank or single administrator. The network is peer-to-peer and transactions take place between users directly, without an intermediary. These transactions are verified by network nodes through the use of cryptography and recorded in a public distributed ledger called a blockchain. Bitcoin was invented by an unknown person or group of people under the name Satoshi Nakamoto and released as opensource software in 2009. The money can only be tracked when it is converted into cash. This public way of managing transactions has created the possibility of a huge revolution in the banking sector across the world. Identify and explain any two dimensions of the business environment being referred to in the above case.   (4)

Q.8 Pawan is working as a Production Manager in CFL Ltd. which manufactures CFL bulbs. There is no class-conflict between the management and workers. The working conditions are very good. The company is earning huge profits. As a policy, the management shares the profits earned with the workers because they believe in the prosperity of the employees. State the principle of management described in the above paragraph. (4)

Q.9 In 2015, Naveen left his luxurious life in Mumbai, where he worked as a manager for Blue Birds Ltd. He shifted to Begampur, Chhattisgarh to fulfil his grandmother's dream of converting their 25-acre ancestral land into a fertile farm. For this, he set out specific goals along with the activities to be performed to achieve the goals. Every activity was a challenge since he was clueless about farming. He learnt every activity from filling the land to sowing the seeds. To aid farmers he launched his own company 'Innovative Agriculture Solutions Pvt. Ltd'. It was difficult initially as no one trusted an urban youth telling farmers about farming. But when everything was discussed in detail the farmers started taking interest. He wanted to ensure that future events meet effectively the best interests of the company. Through sales forecasting, he prepared an annual plan for production and sales. He also found that the farmers grew the only paddy, which was an activity of 3-4 months and the land remained idle for the rest 8-9 months of the year. He not only identified but evaluated various alternatives through which the farms could be utilised for the remaining months of the year. Through correct foresight and logical and systematic thinking based on analysis of all facts, all alternatives were examined and evaluated. He presented a plan to the farmers, where after harvesting paddy, vegetables could be grown. The above case highlights the features of one of the functions of management. By quoting lines from the above identify and explain these features.

(6)

Q.10 Neeraj is selected for the post of a software developer in an IT Company. On the first day of his joining Mehul, his project manager tells Neeraj that during the course of his work he will come across many such opportunities which may tempt him to misuse his powers for individual or family's benefit at the cost of the larger general interest of the company. In such situations, he should rather exhibit exemplary behaviour as it will raise his stature in the eyes of the company. Also, for interacting with anyone in the company on official matters, he should adopt the formal chain of authority and communication. In the context of the above case identify and explain the various principles of management that Mehul is advising Neeraj to follow while doing his job.

(6)

Subject – Accountancy

Q.1   The following analysis is based on one year data: (1)

    a) Cash flow statement   b) Dividend analysis

    c) Horizontal analysis   d) Vertical analysis

Q.2   Inter – Firm Analysis is also known as: (1)

    a) Cross- section Analysis   b)Trend analysis

    c) Dividend decision Analysis   d) Debt Analysis

Q.3   Calculate proprietary ratio: if share capital Rs. 5,00,000 , Reserve & surplus Rs. 2,00,000

    and general reserve Rs. 1,00,000 and total assets Rs.21,00,000.   (1)

    a) 0.33:1   b) 0.38:1

    c) 0.48:1   d) 0.50:1

Q.4   Fixed assets of a company are increased from Rs. 3,00,000 to Rs. 4,00,000.What is the percentage change?

    (1)

    a) 25%   b) 33.3%

    c) 20%   d) 40%

Q.5   HP Computers Ltd. has an opening credit balance of Securities Premium Reserve and Surplus, i.e., Balance in Statement of Profit and Loss of 2,00,000 and 1,00,000 respectively. During the year, it incurred a loss of 1,50,000. How will it be shown in Note to Accounts on Reserves and Surplus?

    (3)

Q.6   Differentiate between horizontal analysis and vertical analysis.   (3)

Q.7   What is Financial Analysis? Explain its advantages.   (4)

Q.8   Classify the liabilities given below as Non-current Liabilities and Current Liabilities giving reasons for such classification: (4)

Particulars	Operating Cycle (In Months)	Expected Period of Payment (In Months)
Trade Payables	10	8
Trade Payables	10	12
Trade Payables	10	15
Trade Payables	18	15

Q.9   Premium Stores Ltd. has the following balances in Reserves and Surplus:

	Rs.
Debenture Redemption Reserve	5,00,000
Securities Premium Reserve	6,00,000
Surplus, i.e., Balance in Statement of Profit and Loss	(1,50,000)

During the year ended 31st March, 2020, it earned a profit after tax of 5,00,000. It decided to appropriate 1,00,000 towards Debenture Redemption Reserve, 1,25,000 towards General Reserve and declare a final dividend of 75,000.Show how it will be shown in the Note to Accounts on Reserves and Surplus?   (6)

Q.10   Current Ratio of X Ltd. is 2.5:1. State with reason, which of the following transactions would increase, decrease or not change the ratio: (6)

i) Included in trade payables was a bill payable which was met on maturity.

ii) Redemption of debentures

iii) Purchase of loose tools for Rs.10,000 against cheque.

iv) Bill receivable of Rs.5,000 endorsed to a creditor is dishonoured

v) sale of goods for Rs.2,00,000 (cost Rs.1,50,000)

vi) bills payable accepted for one month.