ST. FRANCIS XAVIER SCHOOL
Academic year – 2022-2023
Class – XII COMMERCE
PRACTICE PAPER

Instructions:

1. Maximum marks for each of the subjects is 40 marks
2. Time allowed for each subject is 1 hr 30 min.
3. Answers should be written in the respective subject test copies.

MATHEMATICS

Q1. a) If $y = \dfrac{\cos\cos x - \sin\sin x}{\cos\cos x + \sin\sin x}$, prove $\dfrac{dy}{dx} = -(1+y^2)$ [2]

b) Find the slope of the normal to the curve $x = a\sin^3 t$, $y = b\cos^3 t$ at $t = \dfrac{\pi}{2}$ [2]

Q2. If $f : [-1,1] \to R$, be a function as $f(x) = \dfrac{x}{x+2}$, is $f(x)$ one-one and onto ? [2]

Q3. If $y = \sin^{-1}x + \sin^{-1}\sqrt{1 - x^2}$, find $\dfrac{dy}{dx}$. [2]

Q4. a) Evaluate : $\displaystyle\int_0^{\frac{\pi}{2}} \log\log \cot\cot x \, dx$ [2]

b) Evaluate : $\displaystyle\int_{\frac{\pi}{5}}^{\frac{3\pi}{10}} \dfrac{dx}{\tan^7 x + 1}$ [2]

Q5. Solve : $(x+y+1)\dfrac{dy}{dx} = 1$ [2]

Q6. Solve for x : $\tan^{-1}(x+1) + \tan^{-1}(x-1) = \tan^{-1}\dfrac{8}{31}$ [4]

Q7. If bag A contains 2 red, 3 white balls, bag B contains 2 white, 3 black balls and another bag C contains 2 black, 3 red balls ; a bag and a ball out of it are selected at random. What is the probability that the selected ball is white, assuming selections of bag A,B,C are equally likely ? [4]

Q8. a) Evaluate : $\int x^2 x \, dx$ [4]

b) Evaluate : $\int_0^{\frac{\pi}{2}} \frac{x \sin \sin x \cos \cos x \, dx}{\sin^4 x + \cos^4 x}$ [4]

Q9. Find the derivative of $\tan^{-1} \frac{\sqrt{1+x^2}-1}{x}$ **with respect to** $\tan^{-1} \frac{2x\sqrt{1-x^2}}{1-2x^2}$ **at x=0.** [4]

Q10. Solve by matrix inversion method (Martin's Rule) :

9x+7y+3z=6, 5x-y+4z=1, 6x+8y+2z=4. [6]

QUESTION 1.   [10]

Keeping in view the continuing hardships faced by banks in terms of social

distancing of staff and consequent strains on reporting requirements, the

Reserve Bank of India has extended the relaxation of the minimum daily
maintenance of CRR of 80% for up to September 25, 2020. Currently, CRR is
3% and SLR is 18.5%.

(a) What is the full form of CRR and SLR?   [1]
(b) What will be the value of money multiplier?   [1]

     i. 33.33

     ii. 5.4

     iii. 4.65

     iv. None of these.

(c) SLR implies   [1]

     i. Certain percentage of the total banks' deposits has to be kept in the

     current account with RBI

     ii. Certain percentage of net total demand and time deposits have to

     be kept by the bank themselves

     iii. Certain percentage of net demand deposits has to be kept by the

     banks with RBI

     iv. None of these.

(d) Decrease in CRR will lead to _____ [1]

    i. fall in aggregate demand in the economy

    ii. rise in aggregate demand in the economy

    iii. no change in aggregate demand in the economy

    iv. fall in the general piece level in the economy.

(e) Cut in Repo Rate by RBI is likely to _____ the aggregate demand in the Indian Economy [1]

    i. increase

    ii. decrease

    iii. double

    iv. not effect

(f) Lowering bank rate is a measure to [1]

    i. encourage foreign investment in the economy

    ii. increase the money supply in the economy

    iii. discourage investment activity in the economy

    iv. increase government expenditure.

g) In order to encourage investment in the economy, the central bank may: [1]

    i. reduce CRR

    ii. increase CRR

    iii. sell government securities in open market

    iv. increase bank rate.

(h) Calculate the value of money multiplier and total deposit created

if initial deposit is of Rs 1,000 crore and LRR is 20%. [3]

QUESTION 2. [10]

(a) In an economy, C = 300 + 0.5Y and I = ₹. 600/- (where C = consumption,

Y = income I= investment). Compute the equilibrium level of income. [2]

(b) Can the average propensity to consume be greater than one? Give the reason

for your answer. [2]

(c) Can the value of APS be negative? If yes, then when? [2]

(d) In an economy, aggregate demand is greater than aggregate supply. What effect

will it have on the economy? Show it diagrammatically. [4]

QUESTION 3.

Net Factor Income from Abroad refers to the difference between factor income

received from the rest of the world and factor income paid to the rest of the world.

NFIA is significant to differentiate between Domestic Income and National Income.

In Practical estimates, domestic income is estimated first and then, National Income

is derived from Domestic Income. [10]

    (a) How is National Income derived from Domestic Income? [1]
    (b) What is meant by Factor income from abroad? [1]
    (c) NFIA is _____ when income earned from abroad is less than income

        paid abroad. [1]

    (d) What is the value of NFIA in a closed economy? [1]

    (e) What is the effect of an indirect tax and a subsidy, on the price of the
        commodity? [1]

(f) Give reason to classify the following into intermediate and final goods. [2]

  i. Machines purchased by a dealer of machine

  ii. A car purchased by a household.

(g) Calculate National Income using Income Method. [3]

Mixed-Income of self-employed person	35
Compensation of employees	250
Imports	20
Exports	10
Rent	75
Consumption of fixed capital	10
NFIA	-5
Interest	25
Profit	100
Net Indirect Taxes	25

4. (a) Explain the meaning of the following features of the Oligopoly Market [6]

  i. Non- price competition

  ii. Few sellers

(c) Explain the law of diminishing marginal utility, with the help of a hypothetical schedule. [4]

1. A, B, C are partners in a firm sharing profits and losses in the ratio of 3:2:1. The Balance Sheet as 31ˢᵗ March, 2022 was as follows:

Liabilities	₹	Assets	₹
Creditors	8,000	Cash at Bank	6,000
Profit and Loss A/c	6,000	Debtors	8,000
Capitals		Furniture	10,000
A 10,000		Machinery	14,000
B 8,000			
C 6,000	24,000		
	38,000		38,000

B retired on that date and in this connection, it was decided to make the following adjustments:
   (a) To appreciate furniture and machinery by 5% and 10%.
   (b) To provide for doubtful debts at 5% on debtors.
   (c) Salary outstanding was ₹300.
   (d) Goodwill was valued at ₹15,000.
   (e) A and C decided to share future profits and losses in the ratio 3:2.
   (f) Not to show goodwill in the books and adjust B's share in the Gaining ratio.
   (g) To re-adjust their capitals in the profit-sharing ratio.
   (h) To bring in sufficient cash to pay off B immediately and to leave a balance of ₹1,000 in bank. B was paid off.

   Prepare Revaluation Account, Partners' Capital Accounts and Balance Sheet.   [10]

2. The Balance Sheet of Ram and Shyam sharing profits and losses in the ratio 3:1, as on 31ˢᵗ March, 2022 is as follows:

Liabilities	₹	Assets		₹
Capitals:		Building		14,000
Ram 10,000		Investment		5,000
Shyam 8,000	18,000	Stock		3,000
General Reserve	2,000	Debtors	6,500	
Employee Provident Fund	3,200	Less: Provision	500	6,000
Creditors	3,800	Cash		2,000
Bills Payable	3,000			
	30,000			30,000

They decided to admit Mohan into the partnership on 1ˢᵗ April, 2022, for 1/5ᵗʰ share on the following terms:
   (a) Mohan shall bring ₹6,000 as his share of premium and ₹7,500 for his capital.
   (b) The market value of investment was ₹4,500.
   (c) Unaccounted accrued income of ₹100 was provided for.
   (d) A debtor whose dues of ₹500 were written off as bad debts paid ₹400 in full settlement.

(e) A portion of the building worth ₹4,000 was destroyed and a claim of ₹3,000 was received from the insurance company.

(f) Revaluation expenses ₹3,000 was paid by Ram.

Prepare Revaluation Account, Partners' Capital Accounts and Balance Sheet on Mohan's admission. [10]

3. (a) M purchased S's business with effect from 1st Jan, 2008. The profits disclosed by S for the last three years were as follows: [4]

2005   ₹40,000 (including an abnormal gain of ₹5,000)

2006   ₹50,000 (after charging an abnormal loss of ₹10,000)

2007   ₹45,000 (excluding ₹5,000 as insurance premium of the firm's property, now to be insured)

Calculate value of firm's goodwill on the basis of 2 year's purchase of the average profits of the last 3 years.

3. (b) Profits of a business for the last 5 years are as follows:

Year	Profit/Loss
2006	10,000 (profit)
2007	8,000 (profit)
2008	5,000 (loss)
2009	3,000 (loss)
2010	20,000 (profit)

Average capital employed of the business is ₹25,000. NRR is 10%. Remuneration to the manager is payable every year ₹2,000 p.a. Assets of the firm (excluding goodwill) ₹30,000 and outside liabilities is ₹18,000.

Calculate the value of goodwill on the basis of:

(a) 2 years purchase of average profit

(b) 2½ years purchase of super profit

(c) Capitalization of super profit

(d) Capitalization of average profit [6]

4 (a) Singh Ltd. took a loan of ₹5,00,000 from State Bank of India. The company issued 5,500, 9% Debentures of ₹100 each as a collateral security for the same. Show how these items will be presented in the Balance Sheet of the company. [2]

4 (b) Petromax Ltd. issued 20,000, 8% Debentures of ` 100 each on 1st April, 2021 redeemable at a premium of 20% on 31st March, 2022. It is decided to write off loss on issue of debentures in the year of issue of debentures. It had a balance of ` 3,00,000 in Securities Premium Reserves on 31st March, 2021.

You are required to pass the necessary Journal entries for issue of debentures and writing off Loss on Issue of Debentures and prepare Loss on Issue of Debentures Account.   [3]

4 (c) On 1st April, 2020, Samsung Finance Ltd. (an unlisted NBFC) issued 5,000, 9% Debentures of ₹100 each to be redeemed at a premium of 10% as follows:

| On 31st March, 2021 | 2,000 Debentures |
| On 31st March, 2022 | 3,000 Debentures |

You are required to pass necessary Journal entries for the issue and redemption of debentures.   [5]

Q1. Write a short paragraph on any one of the following: [5]

1 "Greed for wealth and power is the chief villain of our woes." Argue for or against the proposition.

2.Uneasy lies the head that wears a crown.' Narrate a personal experience, which brings out the truth of the saying.

Q2.) Rewrite as directed: [5]

1. Sunita confessed that she had been very stupid.
Begin: Sunita said, "..........................."

2. The stranger inquired of me if I knew their way.
Begin: He said to me," ....

3. He bade good-bye to his friends.
Begin: He said," ....

4. Jeetesh said, "The traffic prevented me from coming to this place."
Begin: Jeetesh said that ....

5. The teacher said to the students, "I shall prove now that the earth moves round the sun. "
Begin: The teacher told the boys ....

Q3. Fill in with the correct phrasal verbs: [5]
1. The truth finally _____ me. (dawned on/dawned about)
2. He _____ as if nothing had happened. (carried on, carried through)
3. He _____ all struggle. (gave up / gave out)
4. _____ the light, please. (Switch on, switch for)
5. She _____ her mother. (takes in, takes after)

Q4. In B. Wordsworth by V. S. Naipaul we have the theme of admiration, identity, curiosity, friendship, control, freedom, uncertainty and coming of age. Give examples from the story bringing out these themes. [5]

Q5. Why was the Masque scene arranged ? How did Prospero warn Fedinand just before the Masque scene ?   [5]

Q6   [5]
Where will Ceres descend and according to Iris what will Ceres leave before descending ?

Q7.   [5]
State how Thomas Hardy brings out the image of 'death' through the description of landscape in the poem ' The Darkling Thrush'.

Q8.   [5]
Describe the 'thrush' in the poem' The Darkling Thrush' . What were the feelings of the poet on hearing the song of the 'thrush'?