

Government Institute of Printing Technology, Mumbai

Odd term and theory examination December 2024

Course: Communication Skills

Code: K101

Duration: 03.00 Hours

Marks:70

Instructions to Candidates:

1. Attempt all questions and illustrate your answer with neat sketches wherever necessary.
2. Figures to the right indicate full marks.
3. Assume suitable data if necessary

Q1. Do as directed Solve any 10 (1 marks each)

10

- 1) Write the similar word of: Trust
- 2) Write the similar word of: Begin
- 3) Rewrite using 'both ... and': She is talented. She is hardworking.
- 4) Combine using 'although': He tried hard. He couldn't win the game.
- 5) Write the opposite word of: Teach
- 6) Write the opposite word of: Begin
- 7) Write the similar word of: Begin
- 8) Use 'so...that': The box was heavy. He couldn't lift it.
- 9) Make Negative: He can play the guitar.
- 10) Use 'too...to': She is very tired. She cannot continue working.
- 11) Add a question tag: She is a doctor, _____?
- 12) Use 'as soon as': She finished her homework. She went out to play.
- 13) Change to exclamatory: It is a beautiful view.
- 14) Add a question tag: They are cricket players. _____?

Q2 Answer the following questions. (Any 3)

12

- a. Write 10 sentences on 'IPL Cricket'.
- b. Explain the importance of determination in achieving a goal.
- c. Write four problems related to mobile phones.
- d. Explain the importance of good behaviour.

Q3 Answer the following questions. (Any 3)

12

- a. Write technical description of laptop.
- b. Write a technical description of offset printing.
- c. Write a paragraph on "Printing Processes".
- d. Describe the role of the body language in delivering presentation.

Q4 Answer the following questions. (Any 3)

12

- a. Make two sentences using i) our, hour ii) son, sun.
- b. Make sentence using following collocations i) Get a ticket ii) Make a decision
iii) Take a look iv) Make an attempt.
- c. Make a sentence of your own using i) at home II) show off
- d. Change the voice
 - i. Some one has picked my pocket.
 - ii. He gave her the remaining money.
 - iii. He never took it seriously.
 - iv. I decided the offer.

Q5 Use following nouns / pronouns / verbs in your own sentences. Solve any twelve. (1 marks each) 12

- 1) Apple
- 2) City
- 3) Happiness
- 4) Run
- 5) Dog
- 6) Teacher
- 7) Sing
- 8) He
- 9) They
- 10) It
- 11) Build
- 12) We
- 13) You
- 14) Write

Q6 Read the following passage and answer the questions given below.

08

In every country people imagine that they are the best and the cleverest and others are not so good as they are. The Englishman thinks that he and his country is the best, the Frenchman, Germans and Italians think no less of their countries and many Indians think no less of their countries and many Indians imagine that India is in many ways the greatest country in the world. This is wrong. Everybody wants to think well of himself and his country. But really there is no person who has not got some good and some bad activities.

In the same way, there is no country which is not partly good and partly bad we must take. The good wherever it may be India. Unfortunately it is bad today most of our people are poor and unhappy. They have no joy in their lives we have to find out how we can make them happier we have to see what is good in our ways and customs and try to keep it and whatever is bad, we have to throw away.

Questions :-

- I. Mention the common tendency the passage highlights regarding people's view of their own countries.
- II. Explain the wrong thinking argued in the passage.
- III. Describe the current situation of India.
- IV. State the approach need for improving the conditions of India. And its people.

B) Attempt any two of the following .

04

- I. Write about 10 sentences on non-print or digital communication.
- II. Write names of 4 social media websites / applications.
- III. Explain the terms kinesics.

Government Institute of Printing Technology, Mumbai

Odd term and theory examination December 2024

Course: Printing Processes

Code: K104

Duration: 03.00 Hours

Marks:70

Instructions to Candidates:

1. Attempt all questions and illustrate your answer with neat sketches wherever necessary.
2. Figures to the right indicate full marks.
3. Assume suitable data if necessary

Q1. Answer the following questions. (Any 5)**10**

- a. State two applications of print media.
- b. Write names of any two communication media.
- c. Write names of two operation performed in prepress.
- d. Write definition of image carrier.
- e. Write names of any four units in offset printing.
- f. Write names of two digital camera manufacturing companies.
- g. Write names of two graphic software.

Q2 Answer the following questions. (Any 3)**12.**

- a. Write two advantages and two limitations of print media.
- b. Write names of any four equipment used in prepress operation.
- c. Write four characteristics of image carrier.
- d. Describe working principle of offset process.
- e. Related to paper, state the meaning of GSM and Whiteness.

Q3 Answer the following questions. (Any 3).**12**

- a. Describe additive colour theory.
- b. Describe any two types of original (artwork).
- c. Explain the classification of image carrier.
- d. Explain the working principle of flexography.
- e. Write names of four substrates used for printing.

Q4 Answer the following questions. (Any 3)**12**

- a. Describe the meaning of I) Color separation II) Resolution.
- b. State names of four stages in offset plate making.
- c. Draw schematic diagram of blanket to blanket configuration of printing machine.
- d. Write names of four raw materials used in binding.

Q5 Answer the following questions. (Any 3)**12**

- a. Write names of four printing companies.
- b. State the function of I) CtP II) Image-setter.
- c. Write names of two equipment and two consumables used in screen printing.
- d. Write difference between sheetfed and webfed process upto four points.

Q6 Answer the following questions. (Any 3)**12**

- a. Explain classification of printing processes.
 - b. Describe I) Layout II) Imposition
 - c. Write process to prepare screen by any one method.
 - d. Explain working principle of gravure process.
 - e. Write two ISO paper sizes.
-

Instructions to Candidates:

1. Attempt all questions and illustrate your answer with neat sketches wherever necessary.
2. Figures to the right indicate full marks.
3. Assume suitable data if necessary
4. Use of non-programmable calculator is permitted.

Q1. Answer the following questions. (Any 5)**10**

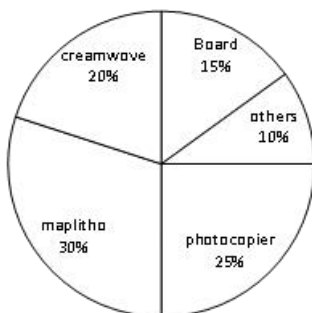
- a. Define direct proportion and state its one example.
- b. State formula e used to calculate simple and compound interest.
- c. Define indirect proportion and state its one example.
- d. Amar takes a loan of Rs 10000/- from a bank for 1 year. The rate of interest per annum is 10%. Find the interest amount he has to pay at the end of a year.
- e. State Simpson's one third rule.
- f. State, with one application, any three types of graphs used in data interpretation.
- g. Differentiate up-to 2 points - Cylinder and Cone.

Q2 Answer the following questions. (Any 3)**12.**

- a. A car is travelling at the average speed of 50 km/hr. How much distance would it travel in 12 minutes.
- b. Find the total surface area of a cone having diameter of 10 cm and height of 12 cm.
- c. Akshay bought on AC for Rs 32000/- and paid Rs 500/- for transportation. Then he sold it for Rs 32830/- Find his profit percentage.
- d. Define statistics and state three measures of the central tendency of the dataset.
- e. Find mean, mode and median for dataset : 12,13,11,16,13,15,18,17,9,12,13,11,14,12,16,11

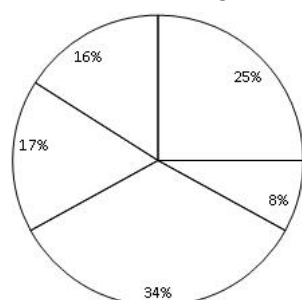
Q3 Answer the following questions. (Any 3).**12**

- a. 10 men, 7 women both working for 6 hrs/day complete one work in 12 days. In how many days 7 men and 10 women working 12 hrs/day complete the same work.
- b. What is depreciation? state different types of the depreciation.
- c. Find the compound interest on Rs 8000/- at 15 % per annum for 2 years 4 months compounded annually.



- d. The given pie chart shows the scale of different papers in a day for a paper shop. Answer the following question based on it.
 - I. If a total 1200 kg of papers were sold in a day, calculate the amount of maplitho paper sold in kg.
 - II. Find the difference, in kg, between sales of the maplitho and creamwove papers.
 - III. Calculate the amount of other papers sold in a day

- e. In the following pie-chart find the angles formed by each sector % with the center.



Q4 Answer the following questions. (Any 3)**12**

- An amount of Rs 12800/- was invested by Mr. Johny in two different investment schemes, A and B at a simple interest rate 11% and 14% respectively. What was the amount in plan B if the amount of interest earned in 2 years was Rs 3508/- ?
- A solid metal cuboid measuring 8 cm, 9 cm & 10 cm is melted and a cube is made from it. Find the side of a newly formed cube.
- Calculate the book value of a computer at the end of 5th year using straight line method. The purchase price of computer is Rs 12300/- and rate of depreciation is 60%.

d.

	170cm and above	160cm and above	150cm and above	140cm and above
Boys	10	25	35	42
Girls	7	17	28	38

Observe the table given above, regarding the height of students in a school and answer the questions that follows.

- How many boys and girls have height greater than or equal to 150 cm but below 160 cm?
- If no one is below 140 cm of height then how many boys & girls are there in the school?

Q5 Answer the following questions. (Any 3)**12**

- Identify following example as direct / indirect
 - When printer needs more paper he will pay more
 - If we increase a speed of vehicle the time needed to cover the distance goes down.
 - The more people sharing a pizza the smaller the slice each person gets.
 - The more hours you work, the more money you earn.
- Find the volume and surface area of a sphere of radius 21cm.
- What is a residual value of an asset ? Describe its importance in calculating depreciation.
- Draw line graph of monthly humidity values recorded.

Month	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept
Humidity(%)	19.6	33.2	34.2	26.4	27.0	21.5	25.6	34.1	26.5

Q6 Answer the following questions. (Any 3)**12**

- Plot bar chart of minimum and maximum temperature of 5 cities as tabulated below.

City	Min.Temp °C	Max. Temp °C
Mumbai	30	38
Pune	25	35
Nashik	20	32
Kolhapur	20	30
Nanded	28	36

- Calculate range, mean, mode of following dataset.
4, 3, 2, 6, 7, 6, 8, 7, 9, 10, 11, 5, 6, 7
 - Calculate total surface area and volume of cylinder having 14 cm diameter and 56 cm height.
 - Find the simple and compound interest on a loan of Rs.50000 taken at 15% per annum for 5 years.
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Government Institute of Printing Technology, Mumbai

Odd term end theory examination Oct. - Dec. 2024

Course: Basic Science

Code: K201

Duration: 03.00 Hours

Marks:70

Instructions to Candidates:

1. Attempt all questions and illustrate your answer with neat sketches wherever necessary.
2. Figures to the right indicate full marks.
3. Assume suitable data if necessary

Q1. Answer the following questions. (Any 5)

10

- a. State two systems of units.
- b. Define SI Units of Linear motion. Write one example of it.
- c. Define Error. State two types of error.
- d. Define LASER. State two properties of LASER.
- e. Write 2 applications of LASER in printing.
- f. Distinguish between Atom and Ion (upto 2 points)
- g. Define Electrolysis.

Q2 Answer the following questions. (Any 3)

12.

- a. Distinguish between Accuracy and Precision?
- b. State and explain Newtons 2nd law of motion ($F = ma$).
- c. Define polarization and diffraction with suitable example.
- d. Explain Arrhenius Concepts of Acid and bases.
- e. Explain Arrhenius theory of Ionization. (Electrolytic dissociation)

Q3 Answer the following questions. (Any 3).

12

- a. State any four requirements of standard unit.
- b. Define energy. State laws of conservation of energy.
- c. Distinguish between reflection and refraction.
- d. Define pH and pOH .
- e. State and explain Faraday's first law of electrolysis with suitable diagram.

Q4 Answer the following questions. (Any 3)

12

- a. Define fundamental quantities and derived Quantities with suitable example
- b. Distinguish between centripetal and centrifugal force. (up to 4 points).
- c. Define reflection of LASER with example.
- d. State and explain Stoke's law of viscosity .
- e. Explain electrolysis of solution of sodium chloride (NaCl) by using platinum electrode with labelled diagram and schematic representation.

Q5 Answer the following questions. (Any 3)

12

- a. Write the need of measurement in science & engineering.
- b. Distinguish between speed and velocity.
- c. Define Angle of contact and explain with suitable diagram.
- d. Describe silver plating process with suitable diagram & schematic representation.

Q6 Answer the following questions. (Any 3)

12

- a. Write the list of formulas of estimation of error.
 - b. State and explain Snell's law of refraction.
 - c. Define i) Viscosity ii) Surface tension iii) Cohesive force iv) Adhesive force.
 - d. Explain weak electrolyte and strong electrolyte with example.
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Government Institute of Printing Technology, Mumbai

Odd term end theory examination Oct.- Dec. 2024

Course: Prepress Essentials

Code: K202

Duration: 03.00 Hours

Marks:70

Instructions to Candidates:

1. Attempt all questions and illustrate your answer with neat sketches wherever necessary.
2. Figures to the right indicate full marks.
3. Assume suitable data if necessary

Q1. Answer the following questions. (Any 5)

10

- a. Differentiate up to 2 points - Line & tone originals.
- b. State two attributes of colors with one example each.
- c. Write working principle of colour scanner.
- d. Why is RGB image converted to CMYK Form?
- e. State the meaning of a and b in CIE Lab color model.
- f. State working principle of colorimeter.
- g. Write two applications of spectrophotometer.

Q2 Answer the following questions. (Any 3)

12

- a. Define temperature. State its unit.
- b. State 4 advantages of FM screening.
- c. Write 4 features of postscript format.
- d. Define color gamut. Compare RGB and CMYK color gamuts.
- e. Define ink trapping & state its formula.

Q3 Answer the following questions. (Any 3).

12

- a. Differentiate upto 4 points - Color & light.
- b. Write two characteristics each of i) CMOS ii) CCD.
- c. Describe importance of raster image in printing.
- d. State working principle and 2 advantages of Pantone color specification system.
- e. Describe the meaning of Delta E.

Q4 Answer the following questions. (Any 3)

12

- a. State ISO environment for color viewing.
- b. Describe hybrid screening technique.
- c. Describe UCR & GCR .
- d. Describe the meaning of device dependent & device independent colors.
- e. Write 4 technical specifications of spectrophotometer.

Q5 Answer the following questions. (Any 3)

12

- a. State functions of rods and cones in human vision.
- b. Describe construction of flatbed color scanners.
- c. Mention pre flight checks carried out in prepress.
- d. If sample 1 color is denoted as $L_1= 50$, $a_1 = 10$, $b_1 = 11$ and sample 2 color is denoted as $L_2= 51$, $b_2=9$, $c_2 =12$. Calculate the color difference (delta E).

Q6 Answer the following questions. (Any 3)

12

- a. Describe additives color theory.
 - b. Describe any two type dot shapes.
 - c. Whats is the proportionality failure? Describe.
 - d. The printing requirement for halftone image is of 1510 Lpi. Calculate scanning and output resolution if image is to be printed digitally.
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Government Institute of Printing Technology, Mumbai

Odd term end theory examination Oct.- Dec. 2024

Course: Screen Printing Process

Code: K203

Duration: 03.00 Hours

Marks:70

Instructions to Candidates:

1. Attempt all questions and illustrate your answer with neat sketches wherever necessary.
2. Figures to the right indicate full marks.
3. Assume suitable data if necessary

Q1. Answer the following questions. (Any 5)

10

- a. Write any two modern applications of screen printing process.
- b. Write the names of two materials from which squeegees are made.
- c. What is screen LPI & how it is defined?
- d. Name the types of stencil making method.
- e. Name any four screen printing machine manufacturer.
- f. Name any two defect that occur in screen printing process.
- g. Write any four materials used in screen printing.

Q2 Answer the following questions. (Any 3)

12

- a. What is RFID & mention the different applications of RFID.
- b. Write the difference between Sheetfed printing process & Web fed printing process.
- c. Explain the steps in screen preparation briefly.
- d. Why polyester textile cloth is better than conventional silk cloth for making screen?
- e. Write the advantages & limitations of screen printing process. (2 each)

Q3 Answer the following questions. (Any 3)

12

- a. What is the prime difference between the working principle of screen printing & the other conventional printing process?
- b. Write the difference between wooden screen frame & metal screen frame.
- c. What is the application of tension meter & state its importance.
- d. What is moire pattern & how to avoid it?
- e. Write any 4 purposes of packaging in detail.

Q4 Answer the following questions. (Any 3)

12

- a. Write briefly the various applications of graphic.
- b. Why the screen printing process is not used for short run printing jobs?
- c. Write the difference between rubber squeegee & polythene squeegee.
- d. Write the parameter for ideal press room .
- e. Write the types of stencils used for preparing screen.

Q5 Answer the following questions. (Any 3)

12

- a. Write two limitations of screen printing for producing graphics.
- b. Write parameter to choose suitable mesh frame & squeegee for printing fine resolution job.
- c. What is an off contact? Explain with diagram.
- d. Write the difference between screen printing process & offset lithography.

Q6 Answer the following questions. (Any 3)

12

- a. Write the steps to get correctly exposed screen.
 - b. Write briefly about ghosting & how to avoid it.
 - c. Explain the importance of hardness for squeegees in screen printing process.
 - d. What is printed electronics? Write briefly the applications of printed electronics.
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Government Institute of Printing Technology, Mumbai

Odd term end theory examination Oct. - Dec. 2024

Course: Print Material Science

Code: K301

Duration: 03.00 Hours

Marks:70

Instructions to Candidates:

1. Attempt all questions and illustrate your answer with neat sketches wherever necessary.
2. Figures to the right indicate full marks.
3. Assume suitable data if necessary

Q1. Answer the following questions. (Any 5)

10

- a. State any two sources of cellulose fiber.
- b. Define the term "Grammage"
- c. State any two properties of wool fiber.
- d. Define 'Tensile strength' of the paper.
- e. Define Bio-degradable substrates in printing.
- f. Define the term related to the ink " rheology"
- g. State any two properties of food grade ink.

Q2 Answer the following questions. (Any 3)

12.

- a. Explain the calendering process of paper with the help of suitable labelled diagram.
- b. Define the following properties of paper i) Water absorbency ii) Porosity
- c. State any four properties of polyester material.
- d. Explain the waste management of polymeric substrates in printing industries.
- e. Define i) Fluorescent ink ii) Magnetic ink

Q3 Answer the following questions. (Any 3).

12

- a. Explain the working of board manufacturing machine.
- b. State any two effects of each of i) temperature ii) humidity; on printing quality of paper.
- c. Write the significance of synthetic material in textile printing.
- d. Describe the surface treatment method of polymeric film.
- e. Explain the process of screen printing ink in detail.

Q4 Answer the following questions. (Any 3)

12

- a. Define 'pulp'. write the types of pulp.
- b. Write the importance of bursting strength and folding endurance in security paper.
- c. Explain the treatment performed on textiles before printing.
- d. State any four properties of polymeric substrates.
- e. Explain oxidation polymerization process of ink drying method.

Q5 Answer the following questions. (Any 3)

12

- a. Explain the cutting process of paper with the help of suitable labelled diagram.
- b. Define i) wire side ii) felt side.
- c. State the application areas of speciality printing on textile.
- d. Explain the ingredients used in ink manufacturing.

Q6 Answer the following questions. (Any 3)

12

- a. State any two effects of each i) acidity ii) pH; on the printed paper.
 - b. State any two advantages and two disadvantages of combination textile substrates.
 - c. Classify the polymeric substrates with schematic diagram.
 - d. Describe the paste ink formation process in detail.
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Government Institute of Printing Technology, Mumbai

Odd term end theory examination Oct. - Dec. 2024

Course: Offset Printing Process

Code: K302

Duration: 03.00 Hours

Marks:70

Instructions to Candidates:

1. Attempt all questions and illustrate your answer with neat sketches wherever necessary.
2. Figures to the right indicate full marks.
3. Assume suitable data if necessary

Q1. Answer the following questions. (Any 5)

10

- a. State names of two types of imposition schemes.
- b. Write 2 advantages of waterless offset printing process.
- c. State names of two types of feeder on sheet-fed machine.
- d. Describe the function of suckers.
- e. Draw schematic diagram of any 2 reel stand locations.
- f. What is meant by web tension? State its unit.
- g. State one reason & one solution for dot gain problem.

Q2 Answer the following questions. (Any 3)

12

- a. Define imposition. Write names of 2 half-sheet work imposition schemes.
- b. Explain the working principle of planographic sheet-fed offset printing process.
- c. State name and purpose of any 2 parts of feeding unit.
- d. Draw schematic diagram of single colour offset printing machine.
- e. Describe two advantages of preventive maintenance.

Q3 Answer the following questions. (Any 3).

12

- a. Describe constructions & working any one type of ctp plate setter.
- b. Compare planographic offset with screen printing upto 4 points.
- c. Draw schematic diagram of any one type of dampening system.
- d. Explain working of dancer roller with schematic diagram.
- e. Describe construction and working of box tilt.

Q4 Answer the following questions. (Any 3)

12

- a. State two specifications each of violet & thermal ctp plate.
- b. Write 4 characteristics of web-fed offset machine.
- c. Describe the working of offset inking system.
- d. Draw schematic diagram of 2 color inline blanket to blanket web-fed machine.
- e. State 2 problems and 1 solution each for offset printing related troubles.

Q5 Answer the following questions. (Any 3)

12

- a. State two characteristics each of i) work & turn ii) work & tumble imposition schemes.
- b. Define i) Undercut ii) Cylinder gap with schematic diagram.
- c. Write names & purpose of 2 parts of delivery unit.
- d. Explain the meaning of automatic spicing. State its 2 types.

Q6 Answer the following questions. (Any 3)

12

- a. Write 4 names of planographic offset machine manufacturers.
 - b. Describe sustainable materials related to the offset printing.
 - c. Compare planographic offset with flexography up-to 4points.
 - d. Draw schematic diagram of 4 color CIC type webfed printing machine.
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Government Institute of Printing Technology, Mumbai

Odd term end theory examination Oct. - Dec. 2024

Course: Printed Electronic

Code: K303

Duration: 03.00 Hours

Marks:70

Instructions to Candidates:

1. Attempt all questions and illustrate your answer with neat sketches wherever necessary.
2. Figures to the right indicate full marks.
3. Assume suitable data if necessary

Q1. Answer the following questions. (Any 5)

10

- a. Define printed electronics.
- b. Mention 4 print considerations of printed electronic products.
- c. Suggest 2 materials used as sustainable raw material for printed electronic application.
- d. State 2 configurations of gravure printing process.
- e. Mention 2 organic raw materials used in printed electronic.
- f. What is the need of printed electronic?
- g. Mention any 2 future scopes of printed electronics.

Q2 Answer the following questions. (Any 3)

12

- a. State any 4 application areas of printed electronics.
- b. Elaborate on roll to roll printing process. Also state its benefits.
- c. Explain about the various test conducted over inks used for printing electronics.
- d. With a neat diagram explain the process of rotary screen printing.
- e. Define the terms - conductors, insulators and semiconductors.

Q3 Answer the following questions. (Any 3)

12

- a. In your own words explain whether printed electronics is better than traditional electronics.
- b. Explain about 3 trouble shootings during the manufacturing of printed electronics.
- c. Explain 2 advantages & 2 limitations of screen printing with reference to printed electronics.
- d. With appropriate diagram, explain the different types of ink-jet printing process.
- e. What is interactive packaging ? State its advantages and disadvantages.

Q4 Answer the following questions. (Any 3)

12

- a. Differentiate between printed electronics and traditional electronics (up to 4 points).
- b. What are the challenges faced in material selection and handling of printed electronics. (any 4 point)
- c. Explain in details about conductivity test done on printed electronic inks.
- d. State 2 advantages and 2 disadvantages of printing electronic with flexography printing process.
- e. Explain about the printed electronics application of OLED.

Q5 Answer the following questions. (Any 3)

12

- a. Explain the potential level of printed electronics.
- b. State any 2 advantages and 2 disadvantages of traditional electronics.
- c. Explain the process of bursting strength testing.
- d. Mention the print considerations of printed electronics by gravure printing process.

Q6 Answer the following questions. (Any 3)

12

- a. What are the factors influencing the quality of printed electronics.
 - b. State and explain the standards governing the production of printed electronics.
 - c. Which printing process gives you better quality of printed electronic? Support your answer.
 - d. Explain in detail about the direct wire extrusion printing process used for the manufacturing of printed electronics.
-

Government Institute of Printing Technology, Mumbai

Odd term end theory examination Oct. - Dec. 2024

Course: Flexographic Printing Process

Code: K304

Duration: 03.00 Hours

Marks:70

Instructions to Candidates:

1. Attempt all questions and illustrate your answer with neat sketches wherever necessary.
2. Figures to the right indicate full marks.
3. Assume suitable data if necessary

Q1. Answer the following questions. (Any 5)

10

- a. Name two different types of ink used in flexo.
- b. Name two different types of doctor blades.
- c. Name two substrate printed by flexo process.
- d. Name two different types of flexo printing machines.
- e. Name two parts in printing unite of flexo machine.
- f. Name any two post operations in flexo printing process.
- g. Name any two products printed by flexo process.

Q2 Answer the following questions. (Any 3)

12.

- a. Write 2 printing defects, cause and remedy related to flexo.
- b. Draw schematic diagram of flexo labels printing machine with name of the parts.
- c. Explain the inking system used in flexo printing machine.
- d. Explain registration system in inline printing machine.
- e. Draw the different marks or sign used on flexo image carrier.

Q3 Answer the following questions. (Any 3)

12

- a. Write 4 limitations of flexo printing process.
- b. Explain the role of web turner with schematic diagram.
- c. Explain plate mounting process in flexo printing.
- d. Explain any one post operation in flexo process.
- e. State flow chart of flexo photo polymer image carrier making.

Q4 Answer the following questions. (Any 3)

12

- a. Name the different cell structure of anilox roller with schematic diagram.
- b. Compare inline and common impression flexo machine with 4 technical point.
- c. Write computerized plate making chart of flexo photo-polymer plates.
- d. Explain the function of V groove roll with schematic diagram.
- e. Compare label printing machine with rotatory printing machine of flexo.

Q5 Answer the following questions. (Any 3)

12

- a. What is a role of anilox roll explain with its schematic diagram.
- b. Explain the different tests taken of flexo ink (any 2).
- c. Explain hybrid machine related to flexo process.
- d. Explain the web guider's role with schematic diagram.
- e. Draw schematic diagram of types of image carrier plates.

Q6 Answer the following questions. (Any 3)

12

- a. Write the principle of flexographic printing process.
 - b. Draw schematic diagram of image carrier over exposed name the parts and write remedy.
 - c. Name the types of unwinders. Draw schematic diagram of any one with names of parts.
 - d. Draw 4 colour flexo printing machine schematic diagram and name the parts.
 - e. Name the ingredients of ink with their role.
-