

MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI

1	Name of Syllabus	Certificate course in off set machine Operator (406110)																																								
2	Max. Nos of Student	25 Students																																								
3	Duration	6 Month																																								
4	Type	Part Time																																								
5	Nos Of Days / Week	6 days																																								
6	Nos Of Hours /Days	4 hrs.																																								
7	Space Required	1) Workshop = 200 sqfeet 2) Class Room = 200 sqfeet TOTAL = 200 sqfeet																																								
8	Entry Qualification	10 th Passed																																								
9	Objective Of Syllabus/ introduction	The operator will be able to operate the Off-set Machine for printing both single, multicolour , dry machines jobs operate the Off-set Web perfector multi colour Machine for printing multicolour , dry machines (Flexography/nylography) jobs.																																								
10	Employment Opportunity	Self Employment / May get job in Establishment																																								
11	Teacher’s Qualification	Diploma/Certificate in Printing or ITINCVT Printing																																								
12	Training System	<div>Training System Per Week</div> <table><tr><td>Theory</td><td>Practical</td><td>Total</td></tr><tr><td>6 hrs</td><td>18hrs</td><td>24hrs</td></tr></table>						Theory	Practical	Total	6 hrs	18hrs	24hrs																													
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13	Exam. System	<table><tr><th>Sr. No.</th><th>Paper Code</th><th>Name of Subject</th><th>TH/PR</th><th>Hours</th><th>Max. Marks</th><th>Mini. Marks</th></tr><tr><td>1</td><td>40611011</td><td>off set machine Operator Theory</td><td>TH-I</td><td>3 Hrs</td><td>100</td><td>35</td></tr><tr><td>2</td><td>40611021</td><td>Sheet fed</td><td>PR-I</td><td>3 Hrs</td><td>100</td><td>50</td></tr><tr><td>3</td><td>40611022</td><td>Off-set Web perfector</td><td>PR-2</td><td>6 Hrs</td><td>200</td><td>100</td></tr><tr><td></td><td></td><td>TOTAL</td><td></td><td></td><td>400</td><td>185</td></tr></table>						Sr. No.	Paper Code	Name of Subject	TH/PR	Hours	Max. Marks	Mini. Marks	1	40611011	off set machine Operator Theory	TH-I	3 Hrs	100	35	2	40611021	Sheet fed	PR-I	3 Hrs	100	50	3	40611022	Off-set Web perfector	PR-2	6 Hrs	200	100			TOTAL			400	185
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Theory (off set machine Operator)

Equipment and material used for making various Off-set plates, photo-chemical process for plate making for use in Off-set Machines. Lithographic plates, its various types, handling and care Rollers-kinds, setting, cleaning, preparation, treatment, handling and storage Various types of Off-set Printing Machines- both single and multi colour. General care and maintenance of plate-making and litho offset printing machine and equipment. Dry (Flexography printing on various kinds of material) Types of offset printing Dry & Wet, Running defects: causes and remedies. Lithographic plates, its various types, handling and care. Rollers-kinds, setting, cleaning, preparation, treatment, handling and storage Various types of Off-set Web perfecter multi colour Machine Setting of electronic, computerized machine controls : Electronic eye, for colour registration, Web detector, numbering, folding, trimming etc General care and maintenance of platemaking and Off-set Web perfecter multi colour Machine and equipments. Dry (Flexography printing on various types on different kinds of material) Registration device. Types of offset printing Dry & Wet. Running defects: causes and remedies. Safety practices: Preventive measures.

Practical No-1(Sheet fed)

Familiarization with the tools and equipment and machinery used in offset printing process, Cleaning, lubrication & general maintenance of machinery & equipments Classification of various components of the Offset Machines Sheet fed Offset printing machines – single and multi colour – basic configuration, handling and care, preparation for printing, fixing the plate, lays setting , setting of inking and dampening system, - initial and actual setting, setting of feeders. Handling, care and fixing of blanket. Rollers-kinds, setting, cleaning, preparation, treatment, handling and storage. Dry offset printing / Flexography)on various kinds of material. Registration device. Handling and care of Off-set Printing Machine, preparing the machine for printing by fixing the plate, set right the inking and dampening system, setting of manual/ automatic feeder. Running defects Setting and adjustment of plate for line and half tone work. Defective plates- causes and remedies, running problems

Practical No-2 (Off-set Web perfector)

Familiarization with the tools and equipment and machinery used in Off-set Web perfector multi colour

Machine printing process. Cleaning, lubrication & general maintenance of Off-set Web perfector multi colour Machine machinery & equipments. Classification of various components of the Off-set Web perfector multi colour Machine Off-set Web perfector multi colour Machine – basic configuration, handling and care, preparation for printing, fixing the plate, lays setting, setting of inking and dampening system, - initial and actual setting,

setting of feeders. Handling, care and fixing of blanket. Setting of electronic, computerized machine controls :

Electronic eye, for colour registration, Web detector, numbering, folding, trimming etc. Rollers-kinds, setting, cleaning, preparation, treatment, handling and storage. Alignment of cylinders. Dry offset printing / Flexography) on various kinds of material. Registration device. Handling and care of Off-set Printing Machine, preparing the machine for printing by fixing the plate, set right the inking and dampening system, setting of manual/ automatic feeder. Running defects Setting and adjustment of plates for line and half tone work. Defective plates- causes and remedies, running problems. Safety practices: Preventive measures.

List of Tools and Equipment for

Sl.No.	Description of item
1	Single colour offset printing machine with automatic feeder and accessories.
2	Multi colour offset printing machine with automatic feeder and accessories
3	Machines Tools. (Standard set).
4	Roller cleaning machines, cleaning liquids.
5	Roller racks
6	Ink slab and pallet knives.
7	Gloves
8	Primary inks, cyan, magenta, yellow, white, black
9	Reducer, drier, extender,
10	Lubricating oils. Oil cane.
11	Fountain solution, sponges, linen cloth,
12	Image remover
13	Magnifying glass (+8)
14	PH tester - Electronics
15	Work bench and table standard size.
16	Off-set Web perfector multi colour Machine and accessories .
17	Machines Tools. (Standard set).

Raw material

- 1 Various types of Papers, cards
- 2 Other printing material
- 3 Chemicals used on machines and rollers.
- 4 PH Strips.
