

Government of Pakistan
National Vocational and Technical Training Commission

Prime Minister's Hunarmand Pakistan Program

"Skills for All"



Course Contents/ Lesson Plan

Course Title: Offset Printing Machine Operator

Duration: 6 Months

Course Details / Description & Preliminaries

Course Title	Offset Printing Machine Operator
Objectives and Expectations	<p><u>Employable skills through an intensive course on Offset Printing Machine Operator</u></p> <p>This is a special course designed to address unemployment in the youth. The course aims to achieve the above objective through hands on practical training delivery by a team of dedicated professionals having rich market/work experience. This course is therefore not just for developing a theoretical understanding/back ground of the trainees. Contrary to that it is primarily aimed at equipping the trainees to perform commercially in a market space in independent capacity or as a member of a team.</p> <p>The course therefore is designed to impart not only technical skills but also soft skills (i.e. interpersonal/communication skills; personal grooming of the trainees etc.) as well as entrepreneurial skills (i.e. marketing skills; free lancing etc.). The course also seeks to inculcate work ethics to foster better citizenship in general and improve the image of Pakistani work force in particular.</p> <p>Main Expectations:</p> <p>In short, the course under reference should be delivered by professional instructors in such a robust hands- on manner that the trainees are comfortably able to employ their skills for earning money (through wage/self-employment) at its conclusion.</p> <p>This course thus clearly goes beyond the domain of the traditional training practices in vogue and underscores an expectation that a market centric approach will be adopted as the main driving force while delivering it. The instructors should therefore be experienced enough to be able to identify the training needs for the possible market roles available out there. Moreover, they should also know the strengths and</p>

<p>Key Features of Training & Special Modules</p>	<p>weaknesses of each individual trainee to prepare them for such market roles during/after the training.</p> <ol style="list-style-type: none"> i. Specially designed practical tasks to be performed by the trainees have been included in the Annexure-I to this document. The record of all tasks performed individually or in groups must be preserved by the management of the training Institute clearly labeling name, trade, session etc so that these are ready to be physically inspected/verified through monitoring visits from time to time. The weekly distribution of tasks has also been indicated in the weekly lesson plan given in this document. ii. In order to materialize the main expectations, a special module on Job Search & Entrepreneurial Skills has been included in the later part of this course (5th & 6th month) through which, the trainees will be made aware of the Job search techniques in the local as well as international job markets (Gulf countries). Awareness around the visa process and immigration laws of the most favored labor destination countries also forms a part of this module. Moreover, the trainees would also be encouraged to venture into self-employment and exposed to the main requirements in this regard. It is also expected that a sense of civic duties/roles and responsibilities will also be inculcated in the trainees to make them responsible citizens of the country. iii. A module on Work Place Ethics has also been included to highlight the importance of good and positive behavior at work place in the line with the best practices elsewhere in the world. An outline of such qualities has been given in the Appendix to this document. Its importance should be conveyed in a format that is attractive and interesting for the trainees such as through PPT slides +short video
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<p>Training Tools/ Methodology</p>	<p>documentaries. Needless to say that if the training provider puts his heart and soul into these otherwise non-technical components, the image of Pakistani workforce would undergo a positive transformation in the local as well as international job markets.</p> <p>In order to maintain interest and motivation of the trainees throughout the course, modern techniques such as:</p> <ul style="list-style-type: none"> • Motivational lectures • Success stories • Case studies <p>These techniques would be employed as an additional training tool wherever possible (these are explained in the subsequent section on Training Methodology).</p> <p>Lastly, evaluation of the competencies acquired by the trainees will be done objectively at various stages of the training and proper record of the same will be maintained. Suffice to say that for such evaluations, practical tasks would be designed by the training providers to gauge the problem solving abilities of the trainees.</p> <p>(i) Motivational Lectures</p> <p>The proposed methodology for the training under reference employs motivation as a tool. Hence besides the purely technical content, a trainer is required to include elements of motivation in his/her lecture to inspire the trainees to utilize the training opportunity to the full and strive towards professional excellence. Motivational lectures may also include general topics such as the importance of moral values and civic role & responsibilities as a Pakistani. A motivational lecture should be delivered with enough zeal to produce a deep impact on the trainees. It may comprise of the following:</p> <ul style="list-style-type: none"> • Clear Purpose to convey message to trainees effectively. • Personal Story to quote as an example to follow.
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- Trainees fit so that the situation is actionable by trainees and not represent a just idealism.
- Ending Points to persuade the trainees on changing themselves.

A good motivational lecture should help drive creativity, curiosity and spark the desire needed for trainees to want to learn more.

Impact of a successful motivational strategy is amongst others commonly visible in increased class participation ratios. It increases the trainees' willingness to be engaged on the practical tasks for longer time without boredom and loss of interest because they can clearly see in their mind's eye where their hard work would take them in short (1-3 years); medium (3 -10 years) and long term (more than 10 years).

As this tool is expected that the training providers would make arrangements for regular well planned motivational lectures as part of a coordinated strategy interspersed throughout the training period as suggested in the weekly lesson plans in this document.

(ii) Success Stories

Another effective way of motivating the trainees is by means of Success Stories. Its inclusion in the weekly lesson plan at regular intervals has been recommended till the end of the training.

A success story may be disseminated orally, through a presentation or by means of a video/documentary of someone that has risen to fortune, acclaim, or brilliant achievement. A success story shows how a person achieved his goal through hard work, dedication and devotion. An inspiring success story contains compelling and significant facts articulated clearly and easily comprehensible words. Moreover, it is helpful if it is assumed that the reader/listener knows nothing of what is being revealed. Optimum impact is created when the story is revealed in the form of:-

- Directly in person (At least 2-3 cases must be arranged by the training institute)
- Through an audio/ videotaped message (2-3 high quality videos

must be arranged by the training institute)

It is expected that the training provider would collect relevant high quality success stories for inclusion in the training as suggested in the weekly lesson plan given in this document.

Suggestive structure and sequence of a sample success story and its various shapes can be seen at annexure III.

(iii) Case Studies

Where a situation allows, case studies can also be presented to the trainees to widen their understanding of the real life specific problem/situation and to explore the solutions.

In simple terms, the case study method of teaching uses a real life case example/a typical case to demonstrate a phenomenon in action and explain theoretical as well as practical aspects of the knowledge related to the same. It is an effective way to help the trainees comprehend in depth both the theoretical and practical aspects of the complex phenomenon in depth with ease. Case teaching can also stimulate the trainees to participate in discussions and thereby boost their confidence. It also makes class room atmosphere interesting thus maintaining the trainee interest in training till the end of the course.

Depending on suitability to the trade, the weekly lesson plan in this document may suggest case studies to be presented to the trainees.

The trainer may adopt a power point presentation or video format for such case studies whichever is deemed suitable but it's important that only those cases are selected that are relevant and of a learning value.

The Trainees should be required and supervised to carefully analyze the cases.

For the purpose they must be encouraged to inquire and collect specific information / data, actively participate in the discussions and intended solutions of the problem / situation.

Case studies can be implemented in the following ways:-

- i. A good quality trade specific documentary (At least 2-3

	<p>documentaries must be arranged by the training institute)</p> <p>ii. Health & Safety case studies (2 cases regarding safety and domestic accidents must be arranged by the training institute)</p> <p>iii. Field visits (At least one visit to a trade specific major industry/ site must be arranged by the training institute)</p>
Learning Outcome of the Course	<p>By the end of the course the trainees will be able to have following competencies and skills.</p> <ul style="list-style-type: none"> • Adhere to Safety Standards and Regulations • Perform pre-run maintenance. • Interpret printing instructions on docket. • Make ready print. • Perform Print run • Perform Postproduction activities • Complete Documentation Requirements
Course Execution Plan	<p>Total duration of course: 6 months (26 Weeks)</p> <p>Class hours: 4 hours per day</p> <p>Theory: 20%</p> <p>Practical: 80%</p> <p>Weekly hours: 20 hours per week</p> <p>Total contact hours: 520hours</p>
Companies Offering Jobs in the respective trade	Public/Private Printing Press
Job Opportunities	<ul style="list-style-type: none"> • Printing press operator • Offset Machine Operator
No of Students	25
Learning Place	Classroom / Lab / Workshop

Instructional Resources	
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WEEKLY SCHEDULE OF TRAINING

Scheduled Week	Module Title	Learning Units	Remarks
Week 1	Safety Standards and Regulations	<p>Motivational Lecture (<i>For further detail please see Page No: 3& 4</i>)</p> <p>Identification of hazards in printing press environment</p> <ul style="list-style-type: none"> state health and safety precautions of the printing industry list techniques and methods to control risks of identified hazards in the workplace, define procedure of dealing with hazards to reduce chances or avoid accident or injury. state safety reporting procedures. <p>Complying with Occupational Health and Safety (OHS) precautions</p> <ul style="list-style-type: none"> state organizational health and safety procedures, list health and safety risks that can arise because of accidents, list types of hazards that are most likely to cause harm to health and safety. 	<p>Task-1 Task-2 Task-3 Task-4 Task-5 Task-6 Task-7 Task-8 Task-9</p> <p>(Details may be seen at Annexure-I)</p>
Week 2		<p>Success stories (<i>For further detail please see Page No: 3& 4</i>)</p> <p>Use of Personal Protective Equipment(PPE)</p> <ul style="list-style-type: none"> give importance of using Personal Protective Equipment (PPE) list Types of PPEs required in printing press. <p>Practice of safe work habits to ensure safety in the printing & publishing environment</p> <ul style="list-style-type: none"> explain importance of safety at work and its implications, state work safety procedures and 	<p>Task-10 Task-11 Task-12 Task-13 Task-14 Task-15 Task-16 Task-17 Task-18 Task-19 Task-20 Task-21</p>

		<p>guidelines,</p> <ul style="list-style-type: none"> list specific company procedures regarding workplace safety, recommended procedure for cleaning and storing of tools and equipment. <p>Demonstration of firefighting skills</p> <ul style="list-style-type: none"> identify causes of Fire, list types of fire, list fire fighting equipment, define fire fighting method 	(Details may be seen at Annexure-I)
Week 3	pre-run maintenance	<p>Motivational Lecture (For further detail please see Page No: 3& 4)</p> <p>Cleaning in press room</p> <ul style="list-style-type: none"> state history and types of printing, enlist main parts of offset printing machine, describe the importance of tidiness in press room, describe method of cleaning in press, list work place cleaning equipment, list work place cleaning consumable. 	<p>Task-22 Task-23 Task-24 Task-25</p> <p>(Details may be seen at Annexure-I)</p> <p>Home Assignment-1 (Details may be seen at Annexure-II)</p>
Week 4		<p>Success stories (For further detail please see Page No: 3& 4)</p> <p>Maintaining oil level</p> <ul style="list-style-type: none"> define viscosity, give disadvantage of using low quality oil in machine, determine capacity of oil tank in printing machine, define oil grading system in printing machine, list reasons to maintain oil level in machines. 	<p>Task-26 Task-27</p> <p>(Details may be seen at Annexure-I)</p> <p>Monthly Test 1</p>
Week 5		<p>Motivational Lecture (For further detail please see Page No: 3& 4)</p> <p>Inch printing machine</p> <ul style="list-style-type: none"> define inching, describe importance of inching, list effects of avoiding inching, 	<p>Task-28 Task-29</p> <p>(Details may be seen at</p>

		<ul style="list-style-type: none"> describe inking procedure on offset printing machine. 	Annexure-I)
Week 6		<p>Success stories (<i>For further detail please see Page No: 3& 4</i>)</p> <p>Record of humidity in press room</p> <ul style="list-style-type: none"> define humidity, describe importance of manage humidity in press room environment, enlist method of humidity management in press room. 	<p>Task-30 Task-31</p> <p>(Details may be seen at Annexure-I)</p>
Week 7	Interpret printing instructions on docket	<p>Motivational Lecture (<i>For further detail please see Page No: 3& 4</i>)</p> <p>Determining job order details</p> <ul style="list-style-type: none"> describe importance of docket/job card, define docket/job card, enlist information available on docket/job card, define shade card, state importance of colour sequencing, define applications of coatings, list types of coatings used in offset printing. 	<p>Task-32 Task-33 Task-34 Task-35</p> <p>(Details may be seen at Annexure-I)</p> <p>Home Assignment-2 (Details may be seen at Annexure-II)</p>
Week 8		<p>Success stories (<i>For further detail please see Page No: 3& 4</i>)</p> <p>Verification of plates as per job requirement</p> <ul style="list-style-type: none"> define traceability marks, define printing plate, list types of printing plates, define dot percentage, state precautions to be taken in printing plates handling. 	<p>Task-36 Task-37 Task-38 Task-39 Task-40 Task-41</p> <p>(Details may be seen at Annexure-I)</p>

			Monthly Test 2
Week 9		<p>Motivational Lecture (For further detail please see Page No: 3& 4)</p> <p>Verification of material quality</p> <ul style="list-style-type: none"> • describe substrate for offset printing, • define GSM values, • describe effects of variation in GSM values, • define grain of substrate, • state determination method of substrate grain, • define L*A*B* values, • describe method of L*A*B* values management/control, • state importance of maintaining viscosity of coatings. 	<p>Task-42 Task-43 Task-44 Task-45 Task-46 Task-47 Task-48</p> <p>(Details may be seen at Annexure-I)</p>
Week 10		<p>Success stories (For further detail please see Page No: 3& 4)</p> <p>Verification of substrate sizing</p> <ul style="list-style-type: none"> • state method of checking substrate sizes, • describe effect of size variation on substrate, • state substrate trimming procedure. <p>Verification of artwork</p> <ul style="list-style-type: none"> • define artwork in printing industry. 	<p>Task-49 Task-50 Task-51 Task-52</p> <p>(Details may be seen at Annexure-I)</p>
Week 11	Make ready print	<p>Motivational Lecture (For further detail please see Page No: 3& 4)</p> <p>Performing machine feed</p> <ul style="list-style-type: none"> • Identify printing side as given specimen, • describe the steps of loading paper on the feeder section. <p>Mounting of printing plates on plate cylinder</p> <ul style="list-style-type: none"> • describe purpose of plate punching machine, • describe position of plate's endlay to ensure proper bending, • describe steps of plate mounting 	<p>Task-53 Task-54 Task-55 Task-56 Task-57</p> <p>(Details may be seen at Annexure-I)</p>

		procedure.	
Week 12		Success stories (<i>For further detail please see Page No: 3& 4</i>) Adjustment of machine side lay <ul style="list-style-type: none"> • give purpose of side lay in printing machine, • describe the steps involve for the side lay adjustment, • describe the steps involve for colour registration, • describe the position of side lay for perfect registration. 	Task-58 Task-59 Task-60 (Details may be seen at Annexure-I)
	Build your CV	Download professional CV template from any good site (https://www.coolfreecv.com or relevant) <ul style="list-style-type: none"> • Add Personal Information • Add Educational details • Add Experience/Portfolio • Add contact details/profile links 	
Week 13	Overview of the previous weeks & Mid Term Examination		
Week 14		Motivational Lecture (<i>For further detail please see Page No: 3& 4</i>) Adjustment of machine head-lay <ul style="list-style-type: none"> • give purpose of head lay in printing machine, • give importance of head lay adjustment, • describe the procedure of head lay adjustment. 	Task-61 Task-62 (Details may be seen at Annexure-I)
Week 15		Success stories (<i>For further detail please see Page No: 3& 4</i>) Adjustment of machine feeder	Task-63

		<ul style="list-style-type: none"> describe effects of wrong feeder adjustment, describe feeder adjustment procedure, describe handling and care of printed and unprinted paper 	Task-64 Task-65 Task-66 (Details may be seen at Annexure-I) Home Assignment-3 (Details may be seen at Annexure-II)
	Create an account profile on Fiverr (at least two gigs) and Upwork	Create an account by following these steps: Step 1: Personal Info Step 2: Professional Info Step 3: Linked Accounts Step 4: Account Security	
Week 16		Motivational Lecture (For further detail please see Page No: 3& 4) Adjustment of cylinders impression <ul style="list-style-type: none"> describe type of packing sheets, describe blanket packing according to SOPs, define printing on substrate with correct setting of impression cylinder. 	Task-67 Task-68 Task-69 (Details may be seen at Annexure-I) Monthly Test 3
Week 17		Success stories (For further detail please see Page No: 3& 4) Performing of paper run <ul style="list-style-type: none"> define registration verification, describe importance of registration. 	Task-70 Task-71 (Details may be seen at Annexure-I)
Week 18	Print run	Motivational Lecture (For further detail please see Page No: 3& 4) Maintaining balance between ink and water. <ul style="list-style-type: none"> enlist the checking parameters, 	Task-72 Task-73 Task-74

		<ul style="list-style-type: none"> define pH, define conductivity, define fountain solution and its usage, define IPA and its usage, explain dampening setting, define ink density and its importance. 	Task-75 Task-76 Task-77 Task-78 Task-79 (Details may be seen at Annexure-I)
Week 19		Success stories (<i>For further detail please see Page No: 3& 4</i>) Managing of dot gain <ul style="list-style-type: none"> define dot gain, define effects of dot gain on printing, define factors responsible for dot gain. 	Task-80 Task-81 (Details may be seen at Annexure-I) <div> Home Assignment-4 (Details may be seen at Annexure-II) </div>
Week 20		Motivational Lecture (<i>For further detail please see Page No: 3& 4</i>) Maintaining of registration <ul style="list-style-type: none"> define registration, state purpose of headlay and sidelay marks, State necessity of magnifying glass in registration process 	Task-82 Task-83 Task-84 (Details may be seen at Annexure-I) <div> Monthly Test 4 </div>
Week 21		Success stories (<i>For further detail please see Page No: 3& 4</i>) Controlling of Delta E values / variation <ul style="list-style-type: none"> Describe ΔE, Define $L^*A^*B^*$ values, 	Task-85 Task-86 Task-87 Task-88 (Details may

		<ul style="list-style-type: none"> State importance of maintaining L*A*B values during production. 	be seen at Annexure-I)
Week 22	Post production activities	<p>Motivational Lecture (For further detail please see Page No: 3& 4)</p> <p>Performing of ink rollers cleaning</p> <ul style="list-style-type: none"> define the importance of roller cleaning, state method of optimizing life span of machine rollers, define methods of riskless cleaning. <p>Washing of printing plates</p> <ul style="list-style-type: none"> define importance of plate cleaning process, state application of CTP plate chemicals, state method of washing ink from conventional plates 	<p>Task-89 Task-90 Task-91 Task-92 Task-93</p> <p>(Details may be seen at Annexure-I)</p>
	How to search and apply for jobs in at least two labor marketplace countries (KSA, UAE, etc.)	<ul style="list-style-type: none"> Browse the following website and create an account on each website <ul style="list-style-type: none"> Bayt.com – The Middle East Leading Job Site Monster Gulf – The International Job Portal Gulf Talent – Jobs in Dubai and the Middle East Find the handy ‘search’ option at the top of your homepage to search for the jobs that best suit your skills. Select the job type from the first ‘Job Type’ drop-down menu, next, select the location from the second drop-down menu. Enter any keywords you want to use to find suitable job vacancies. On the results page you can search for part-time jobs only, full-time jobs only, employers only, or agencies only. Tick 	

		<p>the boxes as appropriate to your search.</p> <ul style="list-style-type: none"> Search for jobs by: <ul style="list-style-type: none"> Company Category Location All jobs Agency <p>Industry</p>	
Week 23		<p>Success stories (<i>For further detail please see Page No: 3& 4</i>)</p> <p>Washing of printing Blanket</p> <ul style="list-style-type: none"> define purpose of blanket in printing machine, describe the importance of blanket wash, state procedure of blanket washing. Clean impression cylinder define the importance of cylinder cleaning, state procedure of impression cylinder cleaning. <p>Cleaning of impression cylinder</p> <ul style="list-style-type: none"> define the importance of cylinder cleaning, state procedure of impression cylinder cleaning. 	<p>Task-94 Task-95 Task-96 Task-97</p> <p>(Details may be seen at Annexure-I)</p>
Week24		<p>Motivational Lecture (<i>For further detail please see Page No: 3& 4</i>)</p> <p>Washing of dampening rollers</p> <ul style="list-style-type: none"> State purpose of dampening rollers in printing machine, give purpose of dampening tube, state procedure of dampening roller wash, state procedure of dampening tube change. <p>Performing of ink knives cleaning</p> <ul style="list-style-type: none"> describe the important of ink knife cleaning, define the life of knives' rubber 	<p>Task-98 Task-99 Task-100 Task-101</p> <p>(Details may be seen at Annexure-I)</p>

Week25	Documentation Requirements	<p>Success stories (<i>For further detail please see Page No: 3& 4</i>)</p> <p>Documentation of work time</p> <ul style="list-style-type: none"> • give necessity of work time record keeping. <p>Documentation of information</p> <ul style="list-style-type: none"> • describe consumable and non-consumable material, • define customer's feedback and its importance. <p>Maintaining of machine log</p> <ul style="list-style-type: none"> • give necessity of work time record keeping, • describe consumable and non-consumable material, • define customer's feedback and its importance. 	<p>Task-102 Task-103 Task-104 Task-105 Task-106 Task-107 Task-108 Task-109 Task-110 Task-111 Task-112</p> <p>(Details may be seen at Annexure-I)</p>
Week 26	Entrepreneurship and Final Assessment in project	<p>Motivational Lecture (<i>For further detail please see Page No: 3& 4</i>)</p> <ul style="list-style-type: none"> • Job Market Searching • Self-employment • Introduction • Fundamentals of Business Development • Entrepreneurship • Startup Funding • Business Incubation and Acceleration • Business Value Statement • Business Model Canvas • Sales and Marketing Strategies • How to Reach Customers and Engage CxOs • Stakeholders Power Grid • RACI Model, SWOT Analysis, PEST Analysis • SMART Objectives • OKRs • Cost Management (OPEX, CAPEX, ROCE etc.) 	

	control,	
8.	report safety issues which are out of assistant machine operator's control,	
9.	adopt dress code as per printing press SOP	
10.	select personal protective equipment in terms of type and quantity according to work orders,	Week-2
11.	verify personal protective equipment to ensure optimum protection in compliance with press room procedures,	
12.	ensure personal protective equipment hygiene in compliance with press room procedures.	
13.	apply dress code in accordance with press room procedures,	
14.	follow rules to ensure personal safety as well as safety of others as per press room procedures,	
15.	demonstrate housekeeping in the workplace by cleaning up spills or leaks,	
16.	keep work area clear from obstructions as per safety policies,	
17.	ensure tools or equipment in place prescribed as per company procedures.	
18.	make decision in the process of fighting a fire as per SOPs,	
19.	stop fire by applying fire-fighting policies,	
20.	apply safety precautions when fighting a fire,	
21.	apply the procedures after a fire has been put out as per SOPs.	
22.	as per press room SOPs.	Week-3
23.	perform cleaning of the machine as per OEM manual.	
24.	perform cleaning of associated tools as per press room SOPs.	
25.	perform periodic cleaning as per duty chart.	
26.	compare quality of oil in machine with quality recommended in machine manual.	Week-4
27.	maintain oil level as per machine specifications.	
28.	perform inching procedure on printing machine as per SOPs.	Week-5
29.	verify inching through test print.	
30.	verify humidity of press room as per press room SOPs.	Week-6
31.	apply humidity management techniques in press	
32.	determine job title from docket/job card.	Week-7
33.	verify availability of reference specimen in docket/job card.	
34.	determine colour sequencing of job as per docket/job card requisition.	
35.	determine coating applications on from docket/job card	
36.	verify conditions of plates for any physical damage.	Week-8
37.	determine dot percentage on printing plates.	
38.	verify colour plates as per given reference specimen.	

39.	determine plate size for designated machine from docket/job card.	
40.	determine traceability marks on printing plate as per printing requirement.	
41.	verify plate characteristics as per dot strip	
42.	determine substrate type as per docket/job card requisition,	Week-9
43.	determine grain of substrate as per docket/job card requisition,	
44.	determine Gram per Square Meter(GSM) value of substrate as per docket/job card requisition,	
45.	manage inks as per docket/job card requisition,	
46.	determine L*A*B* values of substrate as per docket/job card requisition,	
47.	maintain L*A*B* values of ink as per docket/job card requisition,	
48.	maintain viscosity for coating used as per Technical Data Sheet (TDS) of coating.	
49.	verify size of substrate as per docket/job card.	Week-10
50.	verify trimming of substrate for alternate size of job as per requirement.	
51.	verify artwork as per specimen.	
52.	verify artwork from plates.	
53.	prepare substrate according to docket/job order.	Week-11
54.	feed substrate into feeder section in order.	
55.	punch plate from head lay according to marking.	
56.	bend plate from end lay side by measuring it on the machine.	
57.	mount plate on plate cylinder as per procedure.	
58.	adjust side lay according to job requirements.	Week-12
59.	adjust side lay for errorless registration.	
60.	adjust edge of the papers according to side lay mark.	
61.	adjust head lay according to substrate size.	Week-14
62.	adjust head-lay as per job requirement	
63.	adjust measure bar.	Week-15
64.	adjust air vacuum pressure of feeder.	
65.	set vacuum pressure setting according to substrate type.	
66.	set feeder according to substrate type.	
67.	verify plate cylinder packing according to SOPs,	Week-16
68.	verify blanket cylinder packing according to SOPs,	
69.	verify impression cylinder according to substrate.	
70.	verify smooth travelling of substrate from feeder till delivery section,	Week-17
71.	verify registration of job as per SOPs.	

72.	verify print quality on sheet within given intervals,	Week-18
73.	monitor ink duct with in recommended intervals to keep the print quality sustain,	
74.	maintain water level as per machine standard,	
75.	verify water temperature of chiller as per standard,	
76.	maintain pH value of water as per SOPs,	
77.	maintain conductivity value of water as per SOPs,	
78.	maintain IPA percentage of water as per SOPs,	
79.	verify dampening rollers for normal operations.	Week-19
80.	perform blanket adjustment as per machine requirement.	
81.	control water volume during print run for normal printing	Week-20
82.	maintain registration of printed sheets with in recommended intervals,	
83.	maintain sidelay marks with in recommended intervals,	
84.	maintain headlay marks with in recommended intervals	Week-21
85.	record L*A*B values in Log Book,	
86.	match L*A*B values with in recommended intervals as per specimen,	
87.	maintain L*A*B values as per specimen,	
88.	Maintain ink density as per job requirements.	Week-22
89.	remove ink residual from machine rollers as per SOP,	
90.	wash machine rollers as per SOPs.	
91.	remove printing plates from machine as per SOP,	
92.	clean all printing plate with proper plate cleaner,	
93.	perform printing plate delicate cleaning as per SOPs.	
94.	perform blanket wash as per SOP,	Week-23
95.	Verify printing blankets for any damage as per SOP.	
96.	Verify impression cylinder for residual ink,	
97.	perform impression cylinder wash as per SOP.	
98.	perform dampening roller wash as per SOPs,	Week-24
99.	replace damping tube from dampening roller as per SOP.	
100.	perform cleaning with proper knives cleaner,	
101.	replace knives rubber as per SOPs	
102.	record activity span of workday on operation/worksheet,	Week-25
103.	record irregular work hours on operation/worksheet,	
104.	maintain over time record as per printing press SOPs.	
105.	verify consumables availability through inventory and maintain check sheet,	

106.	verify availability of desired tools through stock inventory,	
107.	report stocks consumption according to job,	
108.	request for material on prescribed indent format,	
109.	carryout consumed items disposal record in consumable register,	
110.	record information about customer's feedback as per SOPs.	
111.	keep machine log updated as per SOPs,	
112.	keep production log updated as per SOPs.	

Home Assignment

Designing Effective Homework

To achieve a positive impact on student learning, homework assignments must be well-designed and carefully constructed. Some specific research findings include:

- ▶ Homework is most effective when it covers material already taught.
- ▶ Homework is most effective when it is used to reinforce skills learned in previous weeks or months.
- ▶ Homework is less effective if it is used to teach complex skills.

Characteristics of Good Assignments

When teachers plan homework, they should consider the characteristics listed below:

- ▶ Provide clear instructions for students;
- ▶ Can be completed successfully;
- ▶ Are not too long;
- ▶ Can be completed within a flexible time frame;
- ▶ Use information and materials that are readily available;
- ▶ Reinforce and allow practice of previously taught skills;
- ▶ Must not be unfinished class work;
- ▶ Are interesting to students and lead to further exploration and study;
- ▶ Stimulate creativity and imagination in the application of skills;
- ▶ Stimulate home and class discussion

Homework Don'ts

Do not assign homework that:

- ▶ Is unfamiliar, boring or impossible to do
- ▶ Requires complex skills or requires unreasonable time frames
- ▶ Is a “time filler” to keep students busy or a punishment for not doing class work
- ▶ Do not wait until the last minute to organize and assign the *homework (You may give useless or impossible tasks and/or giving inadequate directions)*
- ▶ Do not assume that all homes have equal resources, that all parents have equal skills and talents to support their children as learners
- ▶ Do not collect any homework you do not intend to check, review or grade.
- ▶ Do not assign homework that is so difficult and unfamiliar to students that their parents are tempted to:
 - Do the work for them;
 - Accuse their children of being inattentive in class; or
 - Accuse their children of failing.

Offset Printing Machine Operator

What is freelancing and how you can make money online - BBCURDU

<https://www.youtube.com/watch?v=9jCJN3Ff0kA>

What Is the Role of Good Manners in the Workplace? By Qasim Ali Shah | In Urdu

<https://www.youtube.com/watch?v=Qi6Xn7yKIIQ>

Hisham Sarwar Motivational Story | Pakistani Freelancer

https://www.youtube.com/watch?v=CHm_BH7xAXk

21 Yr Old Pakistani Fiverr Millionaire | 25-35 Lakhs a Month Income | Interview

<https://www.youtube.com/watch?v=9WrmYYhr7S0>

Failure to Millionaire - How to Make Money Online | Fiverr Superhero Aaliyaan Success Story

<https://www.youtube.com/watch?v=d1hocXWSpus>

Workplace/Institute Ethics Guide

Work ethic is a standard of conduct and values for job performance. The modern definition of what constitutes good work ethics often varies. Different businesses have different expectations. Work ethic is a belief that hard work and diligence have a moral benefit and an inherent ability, virtue or value to strengthen character and individual abilities. It is a set of values centered on importance of work and manifested by determination or desire to work hard.

The following ten work ethics are defined as essential for employee's success:

1. Attendance:

Be at work every day possible, plan your absences don't abuse leave time. Be punctual every day.

2. Character:

Honesty is the single most important factor having a direct bearing on the final success of an individual, corporation, or product. Complete assigned tasks correctly and promptly. Look to improve your skills.

3. Team Work:

The ability to get along with others including those you don't necessarily like. The ability to carry your own weight and help others who are struggling. Recognize when to speak up with an ideas and when to compromise by blend ideas together.

4. Appearance:

Dress for success, set your best foot forward, personal hygiene, good manner, remember that the first impression of who you are, can last a life time

5. Attitude:

Listen to suggestions and be positive, accept responsibility. If you make a mistake, admit it. Values workplace safety rules and precautions for personal and co-worker safety. Avoids unnecessary risks. Willing to learn new processes, systems and procedures in light of changing responsibilities.

6. Productivity:

Do the work correctly, quality and timelines are prized. Get along with fellows, cooperation is the key to productivity. Help out whenever asked, do extra without being asked. Take pride in your

work, do things the best you know how. Eagerly focuses energy on accomplishing tasks, also referred to as demonstrating ownership. Takes pride in work.

7. Organizational Skills:

Make an effort to improve, learn ways to better yourself. Time management; utilize time and resources to get the most out of both. Takes an appropriate approach to social interactions at work. Maintains focus on work responsibilities.

8. Communication:

Written communication, being able to correctly write reports and memos.

Verbal communications, being able to communicate one on one or to a group.

9. Cooperation:

Follow institute rules and regulations, learn and follow expectations. Get along with fellows, cooperation is the key to productivity. Able to welcome and adapt to changing workplace situations and the application of new or different skills.

10. Respect:

Work hard, work to the best of your ability. Carry out orders, do what's asked the first time. Show respect, accept and acknowledge an individual's talents and knowledge. Respects diversity in the workplace, including showing due respect for different perspectives, opinions and suggestions.

Suggestive Format and Sequence Order of Success Story

S. No	Key Information	Detail/Description
1.	Self & Family background	<ul style="list-style-type: none"> • Self-introduction • Family background and socio economic status, • Education level and activities involved in • Financial hardships etc
2.	How he came on board NAVTTC Training/ or got trained through any other source	<ul style="list-style-type: none"> • Information about course, apply and selection • Course duration, trade selection • Attendance, active participation, monthly tests, interest in lab work
3.	Post training activities	<ul style="list-style-type: none"> • How job / business (self-employment) was set up • How capital was managed (loan (if any) etc). • Detail of work to share i.e. where is job or business being done; how many people employed (in case of self-employment/ business) • Monthly income or earnings and support to family • Earning a happy life than before
4.	Message to others (under training)	<ul style="list-style-type: none"> • Take the training opportunity seriously • Impose self-discipline and ensure regularity • Make Hard work pays in the end so be always ready for the same.

Note: Success story is a source of motivation for the trainees and can be presented in a number of ways/forms in a NAVTTC skill development course as under: -

1. To call a passed out successful person of institute. He/she will narrate his/her success story to the trainees in his/her own words and meet trainees as well.
2. To see and listen to a recorded video/clip (5 to 7 minutes) showing a successful person Audio video recording that has to cover the above mentioned points.
3. The teacher displays the picture of a successful trainee (name, trade, institute, organization, job, earning per month etc) and narrates his/her story in teacher's own motivational words.