CST - Technical Drawing and D.C.G

T016

Thursday, 17/11/2016 08:30 - 11:30 WORKFORCE DEVELOPMENT AUTHORITY



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ADVANCED LEVEL NATIONAL EXAMINATIONS, 2016, TECHNICAL AND PROFESSIONAL TRADES

EXAM TITLE:

Technical Drawing and D.C.G

OPTION:

Construction (CST)

DURATION:

3hours

INSTRUCTIONS:

The paper is composed of three (3) main Sections as follows:

Section I: Fourteen (14) compulsory questions.

55 marks

Section II: Attempt **any three (3)** out of five questions.

30 marks

Section III: Attempt **any one (1)** out of three questions.

15 marks

The use of drawing materials is recommended.

Note:

Every candidate is required to carefully comply with the above instructions. Penalty measures will be applied on their strict consideration.

01. What do you understand by the terms below, used in drawing?

		Scale Title bloc	C. Lett D. A le	•	. Reducing scale	5marks		
02						2marks		
00.	Give the standard size of drawing board according to the Indian Standard Institution. 6marks							
04			a where we need		41	6marks		
04.		gs related.	s where we need to	drawings and give	the name of the	41		
OE	,		haracteristics of a	mand days to		4marks		
			2marks					
	What is		2marks					
		_	for dimensioning.			3marks		
		types of letteri	-	*		3marks		
				engineering practic	ces.	6marks		
			encil according to			3marks		
			-	any TWO example	s.	4marks		
			roof construction?			3marks		
	6 Enumerate the types of angles existing in geometrical drawing.							
14.	Choose	and outline SI	X (6) types of poly	gons according to	the number of side	es.		
				•		6marks		
Sect	tion II. (Choose and an	swer any three (3	3) questions.	<i>I</i>	30marks		
		i.		-				
15.	Rewrite from be		e following state	ments with appro	priate answers c	hosen		
			action industry re	lies on sets of	drawings to	construct		
		es and commerc	cial buildings.					
			- Mechanical - Isometric		tural working			
		ext height for reed to a scale of		d be set to	for a drawing t	hat will be		
			(4"; 5	" ; 6" ; 8")				
		The architectural drafter usually begins a set of working drawings by creating theplan first.						
			- Foundation	- Elevation				
		* E	- Floor plan	- Building se	ction			
			-	ouse plans with th		ges to the		

	e)	e) To insure that everyone understands what the electrical symbols recustomary to include a on the electrical sheet. - List - electrical legend - part number - electrical layer	epresent it is			
	f)	wall represents the	tside the exterior			
	g)	- Sidewalk - plumbing drain lines - roof overhang g) The site plan illustrates				
		 the floor plan the roof plan where the house sits on the properties where the garage and driveway 	_			
	h) Generally, the units used on an architectural drawing are set to					
		- Architectural - metric - engineering - civil				
	i)	i) Elevation drawings will include information about				
		roof pitchSidingwindow style				
	j)	· ·				
		 Parallel and Orthographic Parallel and Convergent Perspective and Parallel 				
16.		Name the types of scaling used here below:	10marks			
	A	A. 1) 1:50 2) 1:1 3) 5:1	d d			
	В	B. What do you understand by an arc? Give the process followed to center of an arc.	find the 10marks			
17.	A.	A. Give the styles of freehand lettering. Give also their sub-types.				
		B. Spacing is the distance which is to be left between two adjacent let	ters in lettering.			
		What are the rules for the space between two lines?	10marks			
18.	A.	A. What is the value of the angle between the isometric axes?				
	B.	B. What is a master plan?				
	C.	C. If you are given to draw a classroom, what are the main things that	t you			
		may take into consideration and why?	10marks			
19.	Inc	Industrial objects are manufactured in different materials.				
	Us	Use the conventional lines to indicate the material presented below:	10marks			
	а	a. Steel, Cast iron, Copper d. Glass				

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b. Lead, Zinc, White metal

c. Brass, Bronze, Gun metal

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e. Porcelain Stoneware, marble

- 20. With free hand drawings, show the different types of windows hung.
- 21. Following the information given below, produce a floor plan view.
 - Draw a 12000 x 14000 mm house, with 3 beds rooms, 2 bath room, kitchen, living and dining room.
 - The entrance double door and single door are 1600 x 2400 mm and 1000 x 2400 mm respectively, internal doors are 900 x 2100 mm, big windows are 1500 x 1500 mm and the small ones are 600 x 900 mm.
 - The scale is 1/100 and all the dimensions in mm.
- **22.** Reproduce this floor plan at the scale of 1/50, and if the elevation view shown is E-03

