Government of India
Ministry of Home Affairs
Directorate General Border Security Force
(Pers Directorate: Recruitment Section)

/// ADVERTISEMENT ///

1. IMPORTANT INSTRUCTIONS TO CANDIDATES

1.	Border Security Force will be holding an All India Examination for direct recruitment to the posts of **CONSTABLE (GENERATOR OPERATOR), CONSTABLE (GENERATOR MECHANIC) & CONSTABLE (LINEMAN)**, Group-'C' Non-Gazetted, Non Ministerial (Combatised) in BSF Engineering (Electrical) Set up for the year 2018.
2.	Candidates are advised to go through the requirement of educational/technical qualification, age, physical standards, physical efficiency test etc and satisfy themselves that they are eligible for the post, before applying. BSF reserves the right to cancel the candidature of any candidate at any stage of the selection process, if he is found not qualifying any of the prescribed eligibility criteria.
3.	Candidates seeking reservation benefits for SC/ST/OBC/Govt. Servant/ Ex-Servicemen must ensure that they are entitled to such reservation as per eligibility prescribed in the notice. They should also be in possession of the certificates in the format prescribed by Government of India in support of their claim at the time of application.
4.	Central Government Employees/Servants claiming age relaxation should be in possession of a certificate in the prescribed format from their office, in respect of the length of continuous service which should not be less than three years in the immediate period preceding the closing date for receipt of application.
5.	**Fee**: Rs. 100/- (Rupees one hundred) only payable as examination fee through **Demand Draft/IPO** in favour of the addressee where the application form is being submitted by the candidate. However, fee is exempted for all Female candidates and candidates belonging to Scheduled Caste, Scheduled Tribe, BSF Candidates & Ex-Servicemen. **Fee once paid will not be refunded under any circumstances.**
6.	**Closing Date**: Application duly filled up in the given format should reach to the respective center within **30 days** from the date of publication of advertisement in Employment News i.e. **by 01st Oct 2018**. The last date of receipt of application in respect of candidates belonging to areas of North Eastern State, Sikkim, Ladakh Division of Jammu & Kashmir State, Lahaul & Spiti Districts and Pangi Sub Division of Chamba District of Himachal Pradesh, the Union Territory of Andaman and Nicobar Islands or the Union territory of Lakshadweep is within **45 days** from the date of publication of advertisement in Employment News i.e. **upto 15th Oct 2018.**
7.	The Application form(**Annexure-'A'**) & Admit Cards (**Annexure-'B' & 'B-1'**) must be filled by the candidate in his/her own handwriting/typewritten. Correction, if any, should be legible and attested by the candidate.
8.	Applications, which are not on prescribed format or not accompanied by the required enclosures or incomplete or defective shall be summarily rejected. No representation or correspondence regarding such rejection shall be entertained under any circumstances.

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9.	The envelope containing the application must be superscribed in bold letters as **"APPLICATION FOR RECRUITMENT OF CONSTABLE (GENERATOR OPERATOR), CONSTABLE (GENERATOR MECHANIC) & CONSTABLE (LINEMAN) (GROUP 'C' COMBATISED POSTS) IN BSF ENGG SET UP (ELECTRICAL) - 2018".**
10.	Candidate serving in Government/ Semi Government/ Public Sector undertakings should apply through proper channel. No objection certificate (NOC) from their employer will be required to be submitted with application form.
11.	Candidates are not required to submit any original certificate in support to their claims with application form. They should ensure they fulfill all the eligibility conditions for admission to the tests. **If on verification at a later stage, it is found that they do not fulfill any of the eligibility conditions, their candidature will be cancelled by the Selection Board.**
12.	All eligible candidates whose application received at BSF recruitment centre in response to this advertisement up to the closing date will be assigned Registration/Roll Numbers. They will be communicated through Call letters/Admit Cards for appearing in the First Phase of the selection process i.e. Written Examination.
13.	Candidates are informed that the Written Examination will be followed by Documentation, Physical Standard Test, Physical Efficiency Test, Practical Test & Medical Examination. Final merit list as per the advertised vacancies will be prepared in respect of candidates who have qualified all the stages/events. Failure at any stage/event will lead to disqualification and candidate will not be allowed to appear in next stage/event.
14.	The recruitment board shall not be liable for any claim arising out of any injury etc suffered during the tests. The decision of the recruitment board shall be final in all matters connected with this recruitment.
15.	Candidates belonging to the Physically Handicapped category are **not eligible** to apply for this examination.
16.	An employee serving in the same rank and pay grade will not be entitled to apply for said post.
17.	Correspondence will only be made on the present address given by candidate in his application form. BSF will not be responsible for any postal delay or wrong delivery.
18.	The appointment will be subject to the conditions that the candidates are medically as well as physically fit. The selected candidates will have to undergo Basic Training at any of the Training Institutions of BSF. The services of those candidates who fail to complete the training successfully are liable to be terminated.
19.	Mobiles and other Electronic Gadgets are banned within the premises of the Examination Centers.
20.	The selected candidate are liable to be posted anywhere in the Country as per the transfer policy of the Force.
21.	The recruitment will be done on All India Basis.
22.	Selected candidate will be governed by BSF Act and Rules.
23.	On appointment they shall be entitled for pension benefits as per the **"New Restructured Defined Contributory Pension Scheme"** applicable for the new entrants to the Central Government services w.e.f. 1st January, 2004.

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NOTE: *Final scrutiny of eligibility criteria with regards to age, educational qualification, caste, physical standard will be undertaken at the time of final selection/medical examination. Therefore, candidature will be accepted only provisionally till final selection. At the time of final selection when scrutiny is undertaken and if any claim made in application is not found in order then the candidature will be cancelled and the decision of BSF in this regard shall be final.*

2. Applications are invited from male and female Indian citizens for appointment of following Group 'C' non-combatised, non-ministerial Post for Engineering (Electrical) Set up in the Border Security Force, Ministry of Home Affairs, Government of India. The post are temporary but likely to become permanent. Vacancies are as under :-

Name of post	Category				Total	10 % for ex-servicemen	Pay Scale
	UR	**OBC**	**SC**	**ST**			
Constable (Generator Mechanic)	16	08	04	02	**30**	03	Pay Matrix level-3 (Rs.21700-69100/-)
Constable (Linemen)	08	03	01	-	**12**	01	
Constable (Generator Operator)	04	11	05	03	**23**	02	

NOTE-I :- Vacancies are subject to change (may increase or decrease). BSF reserves the right to make changes or cancel or postpone the recruitment without assigning any reasons.

NOTE-II:- Any amendment will only be published on BSF Website. Candidates in their own interest are requested to regularly log on to BSF website i.e. ***www.bsf.nic.in*** *for updates.*

3. **ESSENTIAL REQUISITE EDUCATIONAL QUALIFICATION :-**

1.	Constable (Generator Operator)	Matriculation or equivalent from a recognized Board with Industrial Training Institute Certificate in the trade **(i.e. Electrician or Wireman or Diesel /Motor Mechanic)** from a recognized institute and three years experience in the respective trade **(i.e. Electrician or Wireman or Diesel/Motor Mechanic)** from a firm recognized by the Central or the State Government.
2.	Constable (Generator Mechanic)	Matriculation or equivalent from recognized Board with Industrial Training Institute Certificate in **Diesel/Motor Mechanic** from a recognized institute and three years experience in the respective trade **(i.e. Diesel/Motor Mechanic)** from a firm recognized by the Central or the State Government.
3.	Constable (Lineman)	Matriculation or equivalent from recognized Board with Industrial Training Institute Certificate from a recognized institute in the trade of **Electrical wireman or Lineman** and three years experience in the respective trade (i.e. **Electrical wireman or Lineman)** from a firm recognized by the Central or the State Government.

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4. a) **AGE LIMIT :-**

Between 18 to 25 years (Upper age limit is relaxable in accordance with the instructions or orders issued by the Central Government from time to time).

b) **RELAXATION ARE AS UNDER**:-

Srl No	Category	Age Relaxation permissible beyond the Upper age limit
1.	SC/ST	05 years
2.	OBC	03 years
3.	Ex-Servicemen (Unreserved)	Period of Military service plus 03 years.
4.	Ex-Servicemen (OBC)	Period of Military service plus 06 years (3 years + 3 years)
5.	Ex-Servicemen (SC/ST)	Period of Military service plus 08 years (3 years + 5 years).
6.	**Government Servants (UR)** who have rendered not less than 3 years regular and continue service as on closing date.	05 years
7.	**Government Servants (OBC)** who have rendered not less than 3 years regular and continue service as on closing date of application .	08 (5+3) years
8.	**Government Servants (SC/ST)** who have rendered not less than 3 years regular and continue service as on closing date of application.	10 (5+5) years
9.	Widows, divorced women and women judicially separated from their husbands and who are not re-married **(UR)**	Maximum age limit upto 35 years
10.	Widows, divorced women and women judicially separated from their husbands and who are not re-married **(OBC)**	Maximum age limit upto 38 (35+3) years
11.	Widows, divorced women and women judicially separated from their husbands and who are not re-married **(SC/ST)**	Maximum age limit upto 40 (35+5) years
12.	Candidate who had ordinarily been domiciled in the State of **Jammu & Kashmir (UR)** during the period 01/01/1980 to 31/12/1989	5 years
13.	Candidate who had ordinarily been domiciled in the State of **Jammu & Kashmir (OBC)** during the period 01/01/1980 to 31/12/1989	8 (5 + 3) years
14.	Candidate who had ordinarily been domiciled in the State of **Jammu & Kashmir (SC/ST)** during the period 01/01/1980 to 31/12/1989	10 (5 + 5) years
15.	Children and dependent family of those killed in the **communal riots of the year 1984 and Gujarat riots of the year 2002 (UR)**	05 years
16.	Children and dependent family of those killed in the **communal riots of the year 1984 and Gujarat riots of the year 2002 (OBC)**	08 (5 + 3) years

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17.	Children and dependent family of those killed in the **communal riots of the year 1984 and Gujarat riots of the year 2002 (SC/ST)**	10 (5 + 5) years

NOTE-I: *The Crucial date for age-limit is reckoned with reference to the closing date for receipt of applications of normal area of India i.e.* ***01 Oct 2018****.*

NOTE-II: *Candidates should note that the Date of Birth as recorded in the Matriculation/Secondary Examination Certificate or an equivalent certificate available on the closing date of submission of application of normal area will be accepted for determining the age eligibility and no subsequent request for its change will be considered or granted.*

NOTE-III : Prescribed format of certificate for age relaxation are attached for SC/ST as **Annexure-'C'** and for OBC candidates as **Annexure-'D'&'D-1'**. However, ST candidates for the post of Constable (Lineman) will be treated as unreserved candidates as no vacancies are notified for ST candidates.

c) **PROCESS OF CERTIFICATION AND FORMAT OF CERTIFICATES :**

Candidates who wish to be considered against vacancies reserved/or seek age-relaxation must submit requisite certificate issued by the Competent Authority in the prescribed format when such certificate are sought by the concerned selection board at the time of documentation. Otherwise, their claim for SC/ST/OBC/Ex-Servicemen status will not be entertained and their candidature/applications will be considered under unreserved category. The formats of the certificates are annexed. Certificates obtained in any other format will not be accepted. Candidates claiming OBC status may note that certificate on **Creamy Layer Status** should have been obtained within three years before the closing date in the prescribed format only **i.e. on or after 01 Oct 2015.**

NOTE-I : Candidates are warned that they will be permanently debarred from the examination conducted by the BSF in case they fraudulently claim SC, ST, OBC and Ex-Serviceman Status.

NOTE-II : If any documents either of education or experience or both found fake at any stage of examination or after examination or after declaration of result during verification, the candidature of such candidate will be cancelled and legal action will be initiated.

NOTE-III: Candidates should note that the date of Birth as recorded in the Matriculation/Secondary Examination Certificate or an equivalent certificate available on the closing date of submission of application will be accepted for determining the age and no subsequent request for its change will be considered or granted.

5. **PHYSICAL STANDARDS TEST (PST)**

The minimum requirement for the candidates are as follows :-

Particular	Men	Women
Height	**165** centimeters *Note: The minimum standard so far as it relates to height may be relaxed to*	**157** centimeters *Note: The minimum standard so far as it relates to height may be*

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	***162.5 cms** in respect of persons belonging to the races namely Garhwalis, Kumaonese, Gorkhas, Dogras, Marathas, Sikkimies, persons hailing from Leh and Ladakh, Kashmir valley, North Eastern States and the state of Himachal Pradesh. Also relaxable to **160 cms** in respect of Scheduled Tribes and Adivasi including Mizos and Nagas.*	*relaxed to **155 cms** in respect of persons belonging to the races namely Garhwalis, Kumaonese, Gorkhas, Dogras, Marathas, Sikkimies, persons hailing from Leh and Ladakh, Kashmir valley, North Eastern States and the state of Himachal Pradesh. Also relaxable to **150 cms** in respect of Scheduled Tribes and Adivasi including Mizos and Nagas.*
Chest	76 centimeters and 81 centimeters after expansion (Relaxable by 02 Cms for candidates below 20 years of age).	Not Applicable
Weight	Corresponding to height and age as per medical standard.	Corresponding to height but not less than 46 Kgs.

Note: Relaxation in height for persons belonging to the races, Scheduled tribes and adivasis including Mizos and Nagas candidates as mentioned above will be permissible only on production of certificate in the proforma as prescribed by District Authority where they ordinarily reside(s). Performa is enclosed as **annexed-'E'**

6. **MEDICAL STANDARDS**

The Candidates should having following medical standards :-

(a) Eye Sight

Visual Acuity unaided (Near Vision)		Uncorrected Visual acuity (Distant Vision)		Refraction	Remarks
Better eye	Worse eye	Better eye	Worse eye		
N6	N9	6/6	6/9	Visual correction of any kind is not permitted even by the glasses	In right handed person, the right eye is better eye and vice versa. Binocular vision is required

(b) The candidates must not have knock knee, flat foot, varicose vein or squint in eyes and they should possess CP III BY ISIHARA Vision.

(c) They must be in good mental and bodily health and free from any physical defect likely to interfere with the efficient performances of the duties.

(d) The medical examination will be conducted as per revised uniform guidelines of medical examination for recruitment of GOs and NGOs in the CAPFs & AR as circulated by MHA vide their Office memorandum No. A-VI-1/2014-Rectt (SSB) dtd 20th May 2015 and subsequent amendment from time to time thereof.

(a) Tattoo: - The following criteria will be used to determine permissibility of tattoo:-

(i) Content:- Tattoos depicting religious symbol or figures and the name, as followed in Indian Army are to be permitted.

(ii) Location:- Tattoos marked on traditional sites of the body like inner aspect of forearm but only left forearm, being non saluting limb or dorsum of the hands are to be allowed.

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(iii) Size :- Size must be less than ¼ of the particular part (Elbow or Hand) of the body.

Note :- Amendment if any in the tattoos policy will be applicable for this recruitment if the same is made before the date of detailed medical examination.

7. DISQUALIFICATION

(a)	No person	
	(i)	who has entered into or contracted a marriage with a person having spouse living, or
	(ii)	who is having a spouse living, has entered into or contracted a marriage with another person,
	shall be eligible for appointment to the Force, provided that the Central Government may, if satisfied that such marriage is permissible under the personal law applicable to such person and the other party to the marriage and there are other grounds for so to do, exempt any person from the operation of this rule.	
(b)	Conviction by any Court of Law.	
(c)	Dismissal from Government Service.	
(d)	Termination from BSF during probation.	

8. SELECTION PROCEDURE

The selection procedure will be as under:-

8.1 FIRST PHASE

(a) WRITTEN EXAMINATION

The Written Examination will be conducted at the Examination Centre allocated to the candidate. There will be one composite paper for two hours duration. Question paper will be Objective Type with multiple choices on OMR based answer sheet and shall be consisting of the following subjects :-

	Subjects	Nos of Questions	Marks	Duration
Part-A	General intelligence & Reasoning	20 Questions	20 Marks	02 Hrs
Part-B	General awareness	20 Questions	20 Marks	
Part-D	Technical Subjects	60 Questions	60 Marks	
	Total	100 Questions	100 Marks	

Note :- The standards of technical subject shall be of "Industrial Training Institute (ITI) certificate level of the respective trade". However the postwise syllabus of technical subjects for written examination is enclosed as **Annexure-'F'.**

(b) QUALIFYING MARKS OF WRITTEN EXAMINATION :-

(i) For General/OBC Category Candidate - 45%
(ii) For SC/ST Category Candidate - 40%

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Note-1 *:- However, number of candidates qualified in written examination will be restricted maximum ten times of number of vacancies or qualified candidates whichever is less for appearing in 2nd phase examination. There will be no re-evaluation of OMR answer sheet.*

Note-2*:- ST candidates for the post of Constable (Lineman) will be treated as unreserved candidates as no vacancy has been notified for ST candidates.*

Note-3*:- Candidates are not permitted to use Mobile Phone, Calculator or any other electronic/electrical device for answering any paper (Test Booklets). Candidates must not therefore, bring Mobile Phone, Calculator or any other electronic electrical device inside the Examination premises. Possession of these items, whether in use or not, will be considered as "use of unfair means" in the Examination and appropriate action will be taken by the department against such candidates, as per extant policy of the department.*

Note-4*:- The written examination will be conducted on OMR based answer sheet. If the candidate did not shade/wrongly shaded/did not fill/wrongly filled his/her mandatory data ovals i.e. Roll number, question booklet series code and category etc in the OMR Answer, the OMR answer sheet will be rejected at the initial stage and the OMR answer sheet will not be further evaluated for which candidates himself will be responsible for such rejection. A sample of OMR Answer sheet is enclosed with this advertisement as* ***Annexure-G*** *for information and practice of candidates.*

8.2 **SECOND PHASE EXAMINATION**

Successful candidates in the Written Examination as mentioned in above para-8.1 (b) note-I will appear before the selection board of Second Phase Examination **i.e. Documentation, Physical Standards Test, Physical Efficiency Test, Practical test & Medical Examination** on due date at the Centre which will be communicated to them through call letters. They will be put through subsequent stages of test. Candidates have to qualify all the stages of the Second phase examination one by one. Any candidate not qualifying in any of the events of the examination, will be eliminated from the process of recruitment.

(a) **DOCUMENTATION**

The documentation will be carried out at the Centre on the date and time fixed by the Competent Authority which will be communicated to the candidates. All candidates are advised to bring original documents in claim of their eligibility conditions at the time of documentation. Non production of original documents at the time of documentation will lead to disqualification and such candidate will not be allowed to appear in next stage/phase of examination.

(b) **PHYSICAL STANDARDS TEST (PST)**

Candidates qualified in the Documentation will be put through the Physical Standards Test. PST will be carried out by the selection board to assess Height, Chest and Weight of the candidates according to the **Physical Standards mentioned at para 5 above.**

NOTE-I :- *Candidates declared disqualified in PST (i.e. Height and Chest), may prefer an appeal immediately at the venue of the PST itself,*

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if they so desire, to the appellate authority detailed for the purpose. The appellate authority will re-measure the Physical Standards of such candidate and the decision arrived at by him will be final and no further appeal or representation in this regard shall be entertained. Weight will not be criteria for rejection at the time of PST, but PST board will categorically mention the actual weight of the candidates and deviation from normal permissible limits in the body weight of the candidates on either side will also be recorded as "Underweight/Overweight". But final decision on body weight will be decided by medical authority during Detailed Medical Examination (DME).

(c) **PHYSICAL EFFICIENCY TEST (PET)**

Those candidates found fit in Physical Standard Test (PST) will be put through for Physical Efficiency Test (PET) which will be qualifying in nature independently as under and failing in any event will be disqualification:-

Events	Male	Female
Run	1.6 Km in 6.5 minutes	800 Mtrs in 04 minutes
Long Jump	11 Feet (03 chances to be given)	09 Feet (03 chances to be given)
High Jump	3½ Feet (03 chances to be given)	03 Feet (03 chances to be given)

NOTE-I: *Pregnancy at the time of PET for female candidate will be a disqualification.*

NOTE-II *: Ex-Servicemen are not required to undergo PET. But PST and detailed medical examination will be conducted.*

(d) **Practical Test**

Candidates declared qualified in Documentation, PST & PET will be eligible to appear for Practical Test. The practical test will be of qualifying in nature.

(e) **Medical Examination**

Candidates who qualify all the above stages i.e. Written Examination, Documentation, PST, PET & Practical Test will undergo detailed Medical Examination, which will be carried out by a detailed Medical Officer to assess their Medical fitness. If found Unfit in the Medical Examination, they may prefer an appeal for Review Medical Examination within the prescribed time limit of 15 days. The provision for appeal for Review Medical Examination is only against an **error of judgment** of the Medical Examination Board. On acceptance of the appeal, Review Medical Examination will be conducted and the decision of Review Medical Board will be final and no appeal/representation against the decision of the Review Medical Board will be entertained.

9. **MODE OF PAYMENT**

Each application should be accompanied by a Demand Draft/Postal Order for Rs. 100/- (Rupees one hundred only) as examination fee in favour of the following addressee to whom the application is addressed. However, fee is exempted for all

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Women candidates and candidates belonging to Scheduled Caste, Scheduled Tribe, BSF Candidates & Ex-Servicemen:-

Srl No	Centre	IPO/DD to be prepared in favour of	Payable at SBI & Code No. for Demand Draft	Payable at Post Office for IPO
01	Guwahati	IG BSF Guwahati	SBI Airport Guwahati Code No. – 03776	GPO Guwahati
02	Kolkata	IG BSF South Bengal	SBI Chowringhee, Kolkata Code No.-001054	GPO Kolkata
03	Hazaribagh	IG TC&S BSF Hazaribagh	SBI Meru Camp Code No.-2922	GPO Hazaribagh
04	Delhi	Commandant 95 BN BSF	SBI- Badshahpur Code No.02300	PO-Bhondsi (Haryana)
05	Bangalore	IG STC BSF Bangalore	SBI AFS Yelahanka Code No.-2187	Yelahanka (Bangalore)
06	Jodhpur	IG BSF Rajasthan	SBI Rai Ka Bagh Jodhpur Code No.- 7451	Jodhpur
07	Jalandhar	IG BSF Punjab	SBI BSF Campus Jalandhar Code No.-6596	BSF Camp Jalandhar
08	Gujarat	IG BSF Gujarat	SBI GC CRPF, Gandhinagar Code No 6825	BSF Campus Chiloda Road Gandhinagar
09	Indore	IG BSF CSWT Indore	SBI CSWT BSF Campus, Bijasan Road Airport Road, Indore (MP) Code No 4518	CSWT BSF Campus, Bijasan Road Airport Road, Indore
10	Jammu	IG BSF Jammu	SBI Jammu, Code No 0657	BSF Camp Paloura , Jammu

NOTE-I: *Fee once paid will not be refunded under any circumstances.*

NOTE-II: *Fee paid by modes other than DD/IPO, as stated above, will not be accepted and the applications of such candidates will be rejected forthright and the payment made shall stand forfeited.*

10. PREPARATION OF MERIT AND RESOLUTION OF TIE CASES

Merit of candidates who will qualify in the all events/stages of examination will be prepared on the basis of marks obtained in Written Examination. In case where more than one candidate secure the equal aggregates marks, tie will be resolved by applying the following methods one after another till the tie is resolved:-

(a) Date of Birth, with older candidate placed higher.

(b) Alphabetical order in which the first names of the candidates appear.

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11. **SUBMISSION OF APPLICATION**
HOW TO APPLY:

(a) Application duly filled up in the given format may be sent to any one of the following addresses nearest to the candidate within 30 days from the date of publication of advertisement in the Employment News and that of candidates belonging to far flung areas as specified in para 1 (6) should reach within 45 days from the date of publication of advertisement in the Employment News :-

S/No.	Centre	Location/Venue
1.	Guwahati	The Inspector General, Frontier Headquarter BSF, Post – Azara, District – Kamrup, Guwahati (Assam) – 781017
2.	Kolkata	The Inspector General, Frontier Headquarter BSF, South Bengal, Kolkata 2-B, Lord Sinha Road, Kolkata (West Bengal) - 700071
3.	Hazaribagh	The Inspector General, BSF TC&S Hazaribagh, Meru Camp, Hazaribagh (Jharkhand) – 825317
4.	Delhi	The Commandant, 95 BN BSF, Bhondsi Campus, Near Sohna Road, Distt-Gurgaon, Haryana– 110071
5.	Bangalore	The Inspector General, STC BSF, Yelahanka, Bangalore (Karnataka) – 560064
6.	Jodhpur	The Inspector General, Frontier Headquarter BSF, BSF Campus, Mandore Road, District- Jodhpur (Rajasthan) – 342026
7.	Jalandhar	The Inspector General, Frontier Headquarter BSF, BSF Campus, Jalandhar Cantt (Punjab) – 144006
8.	Gujarat	The Inspector General, Frontier Headquarter BSF, BSF Campus Ghandinagar, Chiloda Road Distt- Gandhinagar (Gujarat) 382042
9.	Indore	The Inspector General CSWT Indore, Bijasan Road, BSF Campus, Indore (MP) – 452005
10.	Jammu	The Inspector General, Frontier Headquarter BSF, Paloura Campus Jammu (J&K) – 181124

NOTE : *Centre for conduct of the first and second phase exam may change, if required due to administrative reasons or availability of number of eligible candidates.*

(b) One recent passport size photographs should be affixed each on the application form and admit cards. Two self-addressed envelopes of size of 25 x 12 cms with postal stamp worth Rs. 41/- each should also be attached with the application form. The envelope containing application must be super scribed in bold letters as **"APPLICATION FOR RECRUITMENT OF GROUP-'C' POSTS (COMBATISED) CONSTABLE (GENERATOR OPERATOR) or CONSTABLE (GENERATOR MECHANIC) or CONSTABLE (LINEMEN) IN BSF ENGG SET UP (ELECTRICAL) –2018.**

NOTE-I : The candidates applying for the examination should **ensure that they fulfill all the eligibility criteria** for admission to the Selection Test. Their admission at all the stages of examination will be **purely provisional**, subject to their satisfying the prescribed eligibility conditions. If, on verification, at any time before or after the Selection Test, it is found that they do not fulfill any of the eligibility conditions, **their candidature for the examination will be cancelled by the Department.**

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12. **CHECK LISTS**

Before sending application, the candidates must ensure that the following documents are enclosed:-

(a) Application form as per **Annexure-'A'** and Admit Cards as per **Annexure-'B' & 'B-1'** are duly filled up and signed by the candidate concerned.

(b) Latest identical passport size photographs one each on application and Admit Cards is affixed at the specified place.

(c) Examination fee Rs. 100/- in the shape of Demand Draft or IPO in the case of male General/OBC candidates in favour of centre incharge as mentioned in para-9 above.

(d) Self attested copy of Matriculation/School Leaving certificate or equivalent certificate as proof of age is attached.

(e) Self attested copies of essential technical educational qualifications i.e. ITI qualification certificates in respective trade is attached.

(f) Self attested copy of 03 years' experience certificates in respective trade from a firm recognized by the Central or the State Government is attached.

(g) Self attested copy of documents for Identity proof like Aadhaar Card or other Identity card as filled up by candidates in application form is attached.

(h) Self attested copy of Caste Certificate in the case of SC/ST candidates as per prescribed format attached as Annexure-'C' with this advertisement is attached.

(i) Self attested Copy of Caste Certificate in the case OBC candidates as per prescribed format attached as Annexure-'D' & 'D-1' with this advertisement is attached.

(j) Self attested copy of certificate in the case of seeking relaxation in height for persons belonging to the races (areas as mentioned in para 5) and scheduled tribes and adivasis including Mizos and Nagas candidates as per prescribed format attached in annexure-'E' with this advertisement is attached.

(k) Self attested copy of certificate in the case of seeking relaxation in age is attached.

(l) Self attested copy of discharge certificate should be enclosed by Ex-Serviceman is attached.

(m) NOC cum service certificate and disciplinary/vigilance clearance for central/State Government employees issued by the employer is attached.

(n) Two self-addressed envelopes stamped worth Rs. 41/- each size about 25/12 cms are attached.

(o) self attested Age relaxation certificate candidates belonging to J & K during the period from 01 Jan 1980 to 31 Dec 1989 is attached.

(p) Self attested age relaxation certificate children and dependent family members of those who were killed in the communal riots of the year 1984 at Punjab and 2002 at Gujarat riots is attahced

(q) All photocopies of certificate should be Self-attested by candidates.

13. Any further information/notification in respect to this recruitment will be made on the BSF website only. Hence, candidates are advised to log in to the BSF website i.e. **www.bsf.nic.in** from time to time.

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(Bhanu Pratap Singh)
Commandant (Rectt)
31 Aug' 2018

Annexure -'A'

APPLICATION FOR THE POST OF CONSTABLE (GENERATOR OPERTOR), CONSTABLE (GENERATOR MECHANIC) AND CONSTABLE (LINEMAN) IN BSF ENGINEERING SET UP (ELECTRICAL)- 2018

(This form should be filled in by the candidate in his own handwriting and should be completed in all respects along with certified copies of testimonials. A copy of recent passport size photograph should be pasted on the application at the space provided for the purpose. Incomplete application will not be entertained and will be summarily rejected. Answer must be given in words and not by dashes and dots).

Registration No._____ (To be filled by office) Roll No._____

(To be filled by Candidate)

Paste here a copy of your recent passport size photograph duly self attested (Approx 3.5 x4.5 Cms.)

Applied for the post : _____

Name of Centre : _____

1. Full Name
   (In Capital letters as recorded in Matriculation Or equivalent certificate) : _____

Signature of applicant

2. Aadhar Card/ID card Number : _____
   (If the candidate has Aadhaar number, then it is mandatory to provide the Aadhaar number. If he/she does not have the Aadhaar number, then other option e.g. number of PAN card, Driving licence, Voter ID, University ID etc will be required to be provided. Copy of Aadhaar Card or other Identity Card number as mentioned above may be enclosed with this application form). (Candidate should bring same original card with him at the time of recruitment exams)
3. Father's/Husband's Name : _____
4. Correspondence Address
   : _____
   (With PIN Code _____
   Mobile Number& : _____
   E-mail ID : _____
5. Permanent Address : _____
   (With PIN Code) _____
   Mobile Number : _____
6. Nationality : _____
7. Religion : _____
8. Category
   (i.e. Gen/OBC/SC/ST) : _____
9. Sex (Male/Female) : _____
10. Marital Status : _____

11. Visible Identification Marks i) _____

    ii) _____

12. Date of Birth : In words_____
    (According to Christian Era as recorded in the Matriculation or Equivalent certificate) : In Figures_____

13. Educational Qualification :_____

14. Technical qualification in which applied (having ITI trade certificate) :_____

Examination	Name of recognized University/ Board of Examinations	Years	% of marks obtained
10th			
ITI			

15. Three years' experience details in the respective trade of ITI from a firm recognized by the Central or the State Government :-

Name of Firm	Firm recognized by Central Govt or State Govt with Registration number	Duration		Nature of job experienced	Certificate should be attached
		From	To		

16. Particulars of present employment If any, with post and personal number/ Department, Nature of job etc. :_____

17. Whether Ex-Serviceman **Yes / No (Tick)** : _____
If yes, mention following details (Attach copy of discharge certificate) :-

Date of enrolment	Date of retirement/ discharge	Total length of service	Medical Category	Reasons for release/ discharge

18. Whether any criminal case(s) is registered against you or arrested/ detained by police in any criminal case, details be furnished. : _____

19. Demand Draft/IPO No., date of issue& amount : _____

20. Declaration :-

I hereby declare and confirm that entries made in this application form as above are true and correct to the best of my knowledge and belief. In the event of any information being found false or incorrect or ineligibility being detected before or after medical examination my candidature will stand cancelled and all my claims for the recruitment forfeited. I also understand that if at any stage I have violated any of the Rules/Regulation governing the conduct of selection process, my candidature can be cancelled or be declared to have failed by the selection board at its sole discretion.

2. I do hereby also opt/opt out of the disclosure scheme for making available above information filled in the application and total marks with ranking in the merit if I stand in the final result of this examination for publication in the web page of the department.

Thump impression of applicant	Signature of applicant

Date :.....

Place :.....

i) The candidate shall produce the original certificates at the time of documentation. Non production of certificates shall render rejection of candidature.

ii) Candidate in service must submit their application through proper channel with the certificate duly signed by their employer stating their willingness to release them from service in BSF in case they are selected.

Annexure 'B'

Government of India
Ministry of Home Affairs
(Directorate General Border Security Force)

ADMIT CARD FOR THE POST OF CONSTABLE (GENERATOR OPERTOR), CONSTABLE (GENERATOR MECHANIC) AND CONSTABLE (LINEMAN) IN BSF ENGINEERING SET UP (ELECTRICAL)- 2018

Registration No. _____ Roll No. _____

ADMIT CARD FOR WRITTEN EXAMINATION

(To be filled by Candidate)

Paste here a copy of your recent passport size photograph (Approx 3.5 x4.5 Cms)

1. Full Name
(In Capital letters as recorded in Matriculation Or equivalent certificate) : _____

2. Aadhar Card/ID card Number : _____
(If the candidate has Aadhaar number, then it is mandatory to provide the Aadhaar number. If he/she does not have the Aadhaar number, then other option e.g. number of PAN card, Driver licence, Voter ID, University ID etc will be required to be provided. Copy of Aadhaar Card or ID number mentioned above may be enclosed with this application form). (Candidate may bring the same original card with him at the time of recruitment exams.)

3. Father's/Husband's Name : _____

4. Date of Birth : _____

5. Correspondence Address (With PIN Code) : _____

_____

Mobile Number : _____

6 Category (Gen/OBC/SC/ST) : _____

7. Personal mark of Identification: i)_____

ii)_____

8. Applied for the post : _____

Thump impression of candidate	Signature of candidate

(For Office use only)

1. Centre of Examination : _____

2. Date of Examination : _____

Enclosure :- Instructions

Part of Annexure-B

INSTRUCTIONS FOR CANDIDATES REGARDING WRITTEN EXAMINATION

i. You should be present in the examination hall before 15 minutes alongwith with writing material and clip board etc. Candidate reporting after 15 minutes of the commencement of the written examination will not be allowed.

ii. The roll Number allotted to you should invariably be quoted in all communication and answer book etc.

iii. No TA/DA will be given for journey under taken for this test.

iv. The department will not be responsible for any injury or health hazard etc. caused during to and fro journey and during the halt at examination Centre.

v. This letter alongwith admit card enclosed with this letter may be brought when you appear for the test.

vi. No aid or including Mobile phones& calculator should be allowed. During written examination only writing material like clipboard, pen, pencil, sharpener, eraser etc allowed. No candidates be allowed to leave the examination hall/place during the first half hour after start of examination. Candidates found copying or using any unfair means should be disqualified and debarred from further tests. An endorsement be made in his dossier by the board.

vii. General instructions on how to attempt the questions will be explained in test booklet (question papers) itself. you may adhered to the instructions strictly.

viii. The call letter to appear in the written test is purely PROVISIONAL. If it is found later on that you do not fulfil any of the eligibility conditions your candidature is liable to be cancelled and no appeal against such cancellation will be entertained.

Sig with seal of exam centre

Annexure 'B-1'

Government of India
Ministry of Home Affairs
(Directorate General Border Security Force)

ADMIT CARD FOR THE POST OF CONSTABLE (GENERATOR OPERTOR), CONSTABLE (GENERATOR MECHANIC) AND CONSTABLE (LINEMAN) IN BSF ENGINEERING SET UP (ELECTRICAL)- 2018

Registration No. _____ Roll No. _____

ADMIT CARD FOR SECOND PHASE EXAMINATION
(Documentation, PST,PET, Practical/Trade Test, Medical Examination)
(To be filled by Candidate)

Paste here a copy of your recent passport size photograph (Approx 3.5 x4.5 Cms)

1. Full Name
(In Capital letters : _____
as recorded in Matriculation
Or equivalent certificate)

2. Aadhaar Card/ID card Number : _____
(If the candidate has Aadhaar number, then it is mandatory to provide the Aadhaar number. If he/she does not have the Aadhaar number, then other option e.g. number of PAN card, Driver licence, Voter ID, University ID etc will be required to be provided. Copy of Aadhaar Card or ID number mentioned above may be enclosed with this application form). (Candidate may bring the same original card with him at the time of recruitment exams.)

3. Father's/Husband's Name : _____

4. Date of Birth : _____

5. Correspondence Address : _____
(With PIN Code)

_____

Mobile Number : _____

6 Category (Gen/OBC/SC/ST) : _____

7. Personal mark of Identification: i)_____

ii)_____

8. Applied for the post : _____

Thump impression of candidate	Signature of candidate

(For Office use only)

1. Centre of Examination : _____

2. Date of Examination : _____

Enclosure :- Instructions

Part of Annexure-B-1

INSTRUCTIONS FOR CANDIDATE REGARDING SECOND PHASE EXAMINATION

It is to inform you that, you have qualified the first phase test i.e. written examination held on _____. Hence you are hereby called upon to appear for second phase tests i.e. Documentation, Physical slandered test & Physical Efficiency test as per schedule mentioned below:-

Srl	Event	Date & Time	Place of Venue
1.	Documentation	_____ Reporting time at ____ hrs	95 Bn BSF____
2.	Physical standard test		
3.	Physical efficiency test		
4.	Practical/Trade test		
5	Medical Examination		

(a) Candidate should bring original copies as well as certified true copies of all the certificates duly self attested and testimonials i.e Educational qualification certificates, Trade certificate, Experience Certificate, Admit Card, Cast Certificate, Aadhaar Card/ID Card & Passport size photographs at the time of documentation. Non production of original document shall lead to disqualification for which candidate will be responsible.

(b) Candidate should be present at the examination centre well in time as per schedule.

(c) BSF will not be responsible for any injury etc. caused during to and fro journey and during the duration of halt at recruitment centre for test.

(d) No TA/DA is admissible for journey and stay for recruitment tests.

(e) Canvassing in any form or bringing outside influence will disqualify the candidate from appearing recruitment tests.

(f) This admit card to appear for the above test is purely PROVISIONAL. If it is found at a later stage that candidate do not fulfil any of the eligibility conditions, candidature of such candidate is liable to be cancelled and no appeal against such cancellation will be entertained.

(g) Selection will be made strictly on merit at par with available vacancies. If any candidate who has qualified all tests but could not come in merit list will not be considered for selection to the applied post in BSF.

(h) Candidate has to come prepared for stay for 4-5 days at his own expenses to appear in Second Phase of Examination.

Sig with seal of exam centre

Annexure-'C'

FORM OF CASTE CERTIFICATE FOR SC/ST

This is to certify that Shri*/Shrimati/Kumari_____Son/Daughter of _____Village/Town_____/District/Division*_____of the _____ State/Union Territory belongs to the _____ Caste*/Tribe which is recognized as a Schedule Caste/Tribe under:-

* The Constitution Schedule Caste Order, 1950.
* The Constitution Schedule Tribe Order, 1950.
* The Constitution (Schedule Caste) (Union Territories) (Part C States) Order, 1951;
* The Constitution (Schedule Tribes) (Union Territories) (Part C States) Order, 1951;
  [As amended by the Schedule Castes and Scheduled Tribes List (Modification Order, 1956, the Bombay Reorganization Act, 1960, the Punjab Reorganization Act, 1966, the State of Himachal Pradesh Act, 1970, the North Eastern Areas (Reorganization) Act, 1971 and the Schedule Castes and Scheduled Tribes Order (Amendment) Act, 1976.]
* The Constitution (Jammu and Kashmir)* Scheduled Caste Orders, 1956.
* The Constitution (Andaman and Nicobar Islands)* Scheduled Tribes Order, 1959, as amended by the Scheduled Castes and Scheduled Tribes Orders (Amendment) Act, 1976.
* The Constitution (Dadra and Nagar Haveli)* Scheduled Castes Order, 1962.
* The Constitution (Dadra and Nagar Haveli)* Scheduled Tribes Order, 1962.
* The Constitution (Pondicherry) Scheduled Castes Order, 1964.
* The Constitution (Uttar Pradesh) Scheduled Tribes Order, 1967.
* The Constitution (Goa, Daman and Diu) Scheduled Castes Order, 1968.
* The Constitution (Goa, Daman and Diu) Scheduled Tribes Order, 1968.
* The Constitution (Nagaland) Scheduled Tribes Order, 1970.
* The Constitution (Sikkim) Scheduled Caste Order, 1978.
* The Constitution (Sikkim) Scheduled Tribes Order, 1978.
* The Constitution (Jammu and Kashmir) Scheduled Tribes Order, 1989.
* The Constitution (SC) Orders (Amendment) Act, 1990.
* The Constitution (ST) Orders (Amendment) Ordinance Act, 1991.
* The Constitution (ST) Orders (Amendment) Ordinance Act, 1996.
* The Constitution (Scheduled Castes) Orders (Amendment) Act, 2002.
* The Constitution (Scheduled Castes) Orders (Second Amendment) Act, 2002.
* The Scheduled Castes and Scheduled Tribes Orders (Amendment) Act, 2002.

2. Applicable in the case of Scheduled Castes/Scheduled Tribes persons who have migrated from one State/Union Territory Administration.

This certificate is issued on the basis of the Scheduled Castes/Scheduled Tribes Certificate issued to Shri /Shrimati*_____ father/mother*_____ of Shri/Shrimati/Kumari _____ of Village/Town* _____ in District/Division* _____ of the State/Union Territory* _____who belongs to the _____Caste*/Tribe which is recognized as a Scheduled Caste/Scheduled Tribe in the State/Union Territory* issued by the _____ dated _____.

3. Shri/Shrimati/Kumari* and / or* his/her* family ordinarily reside(s) in Village/Town* _____ District/Division* of the State/Union Territory* of _____.

Place _____
Date _____

Signature _____
Designation _____
(with seal of Office)
State/Union Territory_____

* Please delete the words, which are not applicable.
@ Please quote specific Presidential Order.
% Delete the Paragraph, which is not applicable.

Note : (a) The term 'ordinarily reside'(s) used here will have the same meaning as in Section 20 of the Representation of the People Act, 1950.

The following Officers are authorized to issue caste certificate :-

1. District Magistrate/Additional District Magistrate/Collector/Deputy Commissioner/Additional Deputy Commissioner/Deputy Collector/1* Class Stipendiary Magistrate/Sub Divisional Magistrate/Taluka Magistrate/ Executive Magistrate/ Extra Assistant Commissioner.
2. Chief Presidency Magistrate /Additional Chief Presidency Magistrate/ Presidency Magistrate.
3. Revenue Officer not below the rank of Tehsildar.
4. Sub-Divisional Officer of the area where the candidate and / or his family normally resides.
5. Certificate issued by Gazetted Officers of the Central or of a State Government countersigned by the District Magistrate concerned.
6. Administrators /Secretary to Administrator (Laccadive, Minicoy and Amindivi Island)

Annexure-'D'

FORM OF CERTIFICATE TO BE PRODUCED BY OTHER BACKWARD CLASSES APPLYING FOR APPOINTMENT TO POSTS UNDER THE GOVERNMENT OF INDIA

This is to certify that Shri/Smt/Kumari _____ Son/Daughter of Shri/Smt _____ of village/Town _____ District/ Division _____ in the _____ State belongs to the _____ Community which is recognized as a backward class under the Government of India, Ministry of Social Justice and Employment's Resolution No. _____ dated _____*.

Shri/Smt/Kumari _____ and/or his her family ordinarily reside(s) in the _____ District/Division of the _____ State/Union Territory.

This is also to certify that he/she does not belong to the persons/sections (Creamy Layer) mentioned in Column 3 of the Schedule to the Government of India, Department of Personnel & Training O.M No 36012/22/93 – Estt.(SCT) dated 8.9.1993 **

Dated: _____

District Magistrate/
Deputy Commissioner etc

(Seal)

---

* The authority issuing the certificate may have to mention the details of Resolution of Government of India, in which the caste of the candidate is mentioned as OBC.

** As mended from time to time.

Note:- The term " Ordinarily" used here will have the same meaning as in Section 20 of the Representation of the People Act. 1950.

Annexure-'D-1'

DECLARATION BY OBC CANDIDATE REGARDING NON-CREAMY LAYER STATUS

I,_____Son/Daughter of Shri_____resident of village/town/city_____district_____State_____ hereby declare that I belong to_____ community which is recognized as a backward class by the Government of India for the purpose of reservation in services as per orders contained in DOP&T OM No. 36012/22/93-Estt.(SCT) dated 08.09.93. It is also declared that I do not belong to persons/ sections (**Creamy Layer)** mentioned in column 3 of the Schedule to the above referred Office Memorandum dated 08.09.93.*

Signature of the applicant (OBC Candidate)
Name_____
Father Name_____
Permanent Address _____

***As amended from time to time.**

Annexure- 'E'

FORM OF CERTIFICATE TO BE SUBMITTED BY THE PERSONS BELONGING TO THE RACES NAMELY GARHWALIS, KUMAONESE, GORKHAS, DOGRAS, MARATHAS, SIKKIMIES, PERSONS HAILING FROM LEH AND LADAKH, KASHMIR VALLEY, NORTH EASTERN STATES AND THE STATE OF HIMACHAL PRADESH AND IN RESPECT OF SCHEDULED TRIBES AND ADIVASI INCLUDING MIZOS AND NAGAS **CANDIDATE WHO INTEND TO AVAIL RELAXATION IN HEIGHT MEASUREMENT**

Certified that Shri _____ S/o Shri _____ is a permanent resident of Village _____ Post _____ Tehsil/Taluka _____ District _____ of _____ State.

2. It is further certified that:-

* Residents of entire area mentioned above are considered as **Hill tribes and Adhivasis** for relaxation in height measurement for recruitment in the CAPF of the Union of India.

* He belongs to *the races namely (Garhwalis, Kumaonese, Gorkhas, Dogras, Marathas, Sikkimies, persons hailing from Leh and Ladakh, Kashmir valley, North Eastern States and the state of Himachal Pradesh, as the case may be)* _____ Community which is considered for relaxation in height measurement for recruitment in the CAPF of the Union of India.

* He belongs to _____ Hill Tribes and Adhivasis Community which is considered for relaxation in height measurement for recruitment in the CAPF of the Union of India.

* Delete whichever is not applicable.

District Magistrate/
Sub Divisional Magistrate/Tehsildar
(With seal of office)

Dated : _____
Place : _____

---

*Note :- The minimum standard so far as it relates to height may be relaxed to **162.5 cms** in respect of persons belonging to the races namely Garhwalis, Kumaonese, Gorkhas, Dogras, Marathas, Sikkimies, persons hailing from Leh and Ladakh, Kashmir valley, North Eastern States and the state of Himachal Pradesh. Also relaxable to **160 cms** in respect of Scheduled Tribes and Adivasi including Mizos and Nagas.*

Annexure-'F'

SYLLABUS FOR THE POST OF CT(LINEMAN)

WRITTEN EXAM: (Objective type questions with multiple choice answers to be answered on an OMR answer sheet) Time- 02 Hour

a)	General Intelligence & reasoning	-	20 Questions -	20 Marks
b)	General awareness	-	20 Questions -	20 Marks
c)	General Engineering(Electric)	-	60 Questions -	60 Marks

Standard and syllabus for technical written exam:

a) **General engineering (Elect) ITI Level:** Basic safety introduction, Personal protection, Basic injury prevention, Basic first aid, Hazard identification and avoidance, safety signs for Danger, Warning, caution & personal safety message, Use of Fire extinguishers, Visit & observation of sections, Various safety measures involved in the Industry, Elementary first Aid, Concept of Standard Fundamental of electricity, Electron theory- free electron, Fundamental terms, definitions, units & effects of electric Current, Ohm's Law -Simple electrical circuits and problems, Resistors -Law of Resistance, Series and parallel circuits.

Kirchoff's Laws and applications, Explanation of switches lamp holders, plugs and sockets. Developments of domestic circuits, Alarm & switches, with individual switches, Two way switch .Security surveillance, Fire alarm, MCB, ELCB, MCCB, Capacitor Resistance-Different Types of resistors used in electrical circuits. Specification of resistance and tolerance, Effect of variation of temperature on resistance, Different methods of measuring value of resistance, D.C. Machines - General concept of Electrical Machines.

Principle of D.C. generator. Use of Armature, Field Coil, Yoke, and Commutator, slip ring Brushes, Laminated core. Brief description of series, shunt and compound generators. Electric wirings, I.E. rules. Types of wirings both domestic & industrial Specifications for wiring. –Grading of cables and current ratings. Principle of laying out in domestic wiring-testing by Meggar. Voltage drop concept, Wiring system - P.V.C., concealed system. Maintenance & Repairing data sheet preparation, Specifications, standards for conduits & accessories- Power Wiring- Control Wiring- Information Communication Entertainment Wiring Basic principle of energy audit. Earthing - Principle of different methods of earthing. Importance of Earthing, Earth Leakage Relay.Alternating Current -Comparison D.C& A.C. , Advantages of A.C. Alternating current & related terms frequency, Instantaneous value, R.M.S. value Average value, Peak factor , form factor. Generation of sine wave, phase and phase difference, Inductive & Capacitive reactance XL & Xc, Impedance (Z), power factor (p.f) ; Vector diagram. Active and Reactive power, Simple problems on A.C. circuits, single phase & three-phase system etc. Problems on A.C. circuits. Both series & parallel power consumption P.F. etc. Concept three-phase Star & Delta connection Line voltage & phase voltage, current & power in a 3 ph circuits, with balanced and unbalanced load. Harmonics: causes & effects Working principle of Transformer, classification C.T., P.T. Instrument Single phase and Poly phase. E.M.F. equation, parallel operation of transformer, their connections. Regulation and efficiency, Cooling of transformer, protective devices. Specifications, simple problems on e.m.f. Equation, turn ratio, regulations and efficiency. Special transformers. Transformer - construction cores winding shielding, auxiliary parts breather, conservator buckholtz relay, other protective devices cooling of transformer Electrical Measuring Instruments –Multimeter - Wattmeter- P.F. meter-Intergrading type, Digital Energy meter– megger-Energy meter-Frequency meter-Phase Sequence indicator -Multimeter –Analog and Digital

Induction motor – Working principle, Squirrel Cage Induction motor , Slip-ring induction motor- Construction and characteristics, starting and speed control. D.O.L Starter, Star /Delta starter, Autotransformer starter.

SYLLABUS FOR THE POST OF CT (GENERATOR MECHANIC)

WRITTEN EXAM: (Objective type questions with multiple choice answers to be answered on an OMR answer sheet) Time- 02 Hour

a) General Intelligence & reasoning- 20 Questions- 20 Marks
b) General awareness - 20 Questions- 20 Marks
c) General Engineering(Electric) - 60 Questions- 60 Marks

Standard and syllabus for technical written exam:

a) **General engineering ITI Level:** Basic safety introduction, Personal protection, Basic injury prevention, Basic first aid, Importance of Safety and general Precautions to be observed in the shop. safety signs - for Danger, Warning, caution & personal safety message. Safe handling of Fuel Spillage, Fire extinguishers used for different types of fire. Safe disposal of toxic dust, safe handling and Periodic testing of lifting equipment, Authorization of Moving & road testing vehicles. Energy conservation-Definition, Energy Conservation Opportunities (ECOs)-Minor ECos and Medium ECOs, Major ECOs), Safety disposal of Used engine oil, Electrical safety tips. Hand & Power Tools:- Marking scheme, Marking material-chalk, Prussian blue. Cleaning tools- Scraper, wire brush, Emery paper, Description, care and use of Surface plates, steel rule, measuring tape, try square. Calipers-inside and outside. Dividers, surface gauges, scriber, punches-prick punch, center punch, pin punch, hollow punch, number and letter punch. Chisel-flat, cross-cut. Hammer-ball pein, lump, mallet. Screw drivers-blade screwdriver, Phillips screw driver, Ratchet screwdriver. Allen key, bench vice & C-clamps, Spanners- ring spanner, open end spanner & the combination spanner, universal adjustable open end spanner. Sockets & accessories, Pliers - Combination pliers, multi grip, long nose, flat-nose, Nippers or pincer pliers, Side cutters, Tin snips, Circlip pliers, external circlips pliers. Air impact wrench, air ratchet, wrenches- Torque wrenches, pipe wrenches, car jet washers Pipe flaring & cutting tool, pullers-Gear and bearing. Systems of measurement, Description, care & use of - Micrometers- Outside and depth mirometer, Micrometer adjustments, Vernier calipers, Telescope gauges, Dial bore gauges, Dial indicators, straightedge, feeler gauge, thread pitch gauge, vacuum gauge, tire pressure gauge. Fasteners- Study of different types of screws, nuts, studs & bolts, locking devices, Such as lock nuts, cotter, split pins, keys, circlips, lock rings, lock washers and locating where they are used. Washers & chemical compounds can be used to help secure these fasteners. Function of Gaskets, Selection of materials for gaskets and packing, oil seals. Cutting tools :- Study of different type of cutting tools like Hacksaw, File- Definition, parts of a file, specification, Grade, shape, different type of cut and uses., OFF-hand grinding with sander, bench and pedestal grinders, safety precautions while grinding.

Limits, Fits & Tolerances:-Definition of limits, fits & tolerances with examples used in auto components Basic electricity, Electricity principles, Ground connections, Ohm's law, Voltage, Current, Resistance, Power, Energy. Voltmeter, ammeter, Ohmmeter Mulitmeter, Conductors & insulators, Wires, Shielding, Description of internal & external combustion engines, Classification of IC engines, Principle & working of 2&4-stroke diesel engine (Compression ignition Engine (C.I)), Principle of Spark Ignition Engine(SI), differentiate between 2-stroke and 4 stroke, C.I engine and S.I Engine, Direct injection and Indirect injection, Technical terms used in engine, Engine specification. Study of various gauges/instrument on a dash board of a vehicle- Speedometer, Tachometer, Odometer and Fuel gauge, and Indicators such as gearshift position, Seat belt warning light, Parking-brake-engagement

warning light and an Engine-malfunction light. Different type of starting and stopping method of Diesel Engine Procedure for dismantling of diesel engine from a vehicle.. Diesel Engine Components: Description and Constructional feature of Cylinder head, Importance of Cylinder head design, Type of Diesel combustion chambers, Effect on size of Intake & exhaust passages, Head gaskets. Importance of Turbulence Valves & Valve Trains- Description and Function of Engine Valves, different types, materials, Type of valve operating mechanism, Importance of Valve seats, Valve seats inserts in cylinder heads, importance of Valve rotation, Valve stem oil seals, size of Intake valves, Valve trains, Valve- timing diagram, concept of Variable valve timing. Description of Camshafts & drives , Description of Overhead camshaft, importance of Cam lobes, Timing belts & chains, Timing belts & tensioners. Description & functions of different types of pistons, piston rings and piston pins and materials. Used recommended clearances for the rings and its necessity precautions while fitting rings, common troubles and remedy. Compression ratio. Description & function of connecting rod, importance of big- end split obliquely, Materials used for connecting rods big end & main bearings. Shells piston pins and locking methods of piston pins. Overhauling of Description and function of Crank shaft, camshaft, Engine bearings- classification and location – materials used & composition of bearing materials- Shell bearing and their advantages- special bearings material for diesel engine application bearing failure & its causes-care & maintenance. Crank-shaft balancing, Firing order of the engine. Description and function of the fly wheel and vibration damper. Crank case & oil pump, gears timing mark, Chain sprockets, chain tensioner etc. Function of clutch & coupling units attached to flywheel. Description of Cylinder block, Cylinder block construction, and Different type of Cylinder sleeves (liner). Engine assembly procedure with aid of special tools and gauges used for engine assembling. Introduction to Gas Turbine, Comparison of single and two stage turbine engine, Different between gas turbine and Diesel Engine. Intake & exhaust systems Intake system components Exhaust system components Diesel Fuel Systems Electronic Diesel control Marine & Stationary Engine, Emission Control:- Vehicle emissions, Standards- Euro and Bhart II, III, IV, V Sources of emission, Combustion, Combustion chamber design. Types of emissions.

SYLLABUS FOR THE POST OF CT (GENERATOR OPERATOR)

WRITTEN EXAM: (Objective type questions with multiple choice answers to be answered on an OMR answer sheet) Time- 02 Hour

a) General Intelligence & reasoning- 20 Questions- 20 Marks
b) General awareness - 20 Questions- 20 Marks
c) General Engineering(Electric) - 60 Questions- 60 Marks

Standard and syllabus for technical written exam:

a) **General engineering ITI Level:** Basic safety introduction, Personal protection, Basic injury prevention, Basic first aid, Importance of Safety and general Precautions to be observed in the shop. safety signs - for Danger, Warning, caution & personal safety message. Safe handling of Fuel Spillage, Fire extinguishers used for different types of fire. Safe disposal of toxic dust, safe handling and Periodic testing of lifting equipment, Authorization of Moving & road testing vehicles. Energy conservation-Definition, Energy Conservation Opportunities (ECOs)-Minor ECos and Medium ECOs, Major ECOs), Safety disposal of Used engine oil, Electrical safety tips. Hand & Power Tools:- Marking scheme, Marking material-chalk, Prussian blue. Cleaning tools- Scraper, wire brush, Emery paper, Description, care and use of Surface plates, steel rule, measuring tape, try square. Calipers-inside and outside. Dividers, surface gauges, scriber, punches-prick punch, center punch, pin punch, hollow punch, number and letter punch. Chisel-flat, cross-cut. Hammer-ball pein, lump, mallet. Screw drivers-blade screwdriver, Phillips screw driver, Ratchet screwdriver. Allen key, bench vice & C-clamps, Spanners- ring spanner,

open end spanner & the combination spanner, universal adjustable open end spanner. Sockets & accessories, Pliers - Combination pliers, multi grip, long nose, flat-nose, Nippers or pincer pliers, Side cutters, Tin snips, Circlip pliers, external circlips pliers. Air impact wrench, air ratchet, wrenches- Torque wrenches, pipe wrenches, car jet washers Pipe flaring & cutting tool, pullers-Gear and bearing. Systems of measurement, Description, care & use of - Micrometers- Outside and depth mirometer, Micrometer adjustments, Vernier calipers, Telescope gauges, Dial bore gauges, Dial indicators, straightedge, feeler gauge, thread pitch gauge, vacuum gauge, tire pressure gauge. Fasteners- Study of different types of screws, nuts, studs & bolts, locking devices, Such as lock nuts, cotter, split pins, keys, circlips, lock rings, lock washers and locating where they are used. Washers & chemical compounds can be used to help secure these fasteners. Function of Gaskets, Selection of materials for gaskets and packing, oil seals. Cutting tools :- Study of different type of cutting tools like Hacksaw, File- Definition, parts of a file, specification, Grade, shape, different type of cut and uses., OFF-hand grinding with sander, bench and pedestal grinders, safety precautions while grinding.

Limits, Fits & Tolerances:-Definition of limits, fits & tolerances with examples used in auto components Basic electricity, Electricity principles, Ground connections, Ohm's law, Voltage, Current, Resistance, Power, Energy. Voltmeter, ammeter, Ohmmeter Mulitmeter, Conductors & insulators, Wires, Shielding, Length vs. resistance, Resistor ratings Fuses & circuit breakers, Ballast resistor, Stripping wire insulation, cable colour codes and sizes, Resistors in Series circuits , Parallel circuits and Series-parallel circuits, Electrostatic effects, Capacitors and its applications, Capacitors in series and parallel. Introduction to welding and Heat Treatment , Welding processes – Principles of Arc welding, brief description, classification and applications. Manual Metal Arc welding -principles, power sources, electrodes, welding parameters, edge preparation & fit up and welding techniques; Oxy – Acetylene welding - principles, equipment, welding parameters, edge preparation & fit up and welding techniques; Heat Treatment Process– Introduction, Definition of heat treatment, Definition of Annealing, Normalizing, Hardening and tempering. Case hardening, Nitriding, Induction hardening and Flame Hardening process used in auto components with examples. Description of internal & external combustion engines, Classification of IC engines, Principle & working of 2&4-stroke diesel engine (Compression ignition Engine (C.I)), Principle of Spark Ignition Engine(SI), differentiate between 2-stroke and 4 stroke, C.I engine and S.I Engine, Direct injection and Indirect injection, Technical terms used in engine, Engine specification.

Annexure - G'

(निर्देश :कृपया परीक्षा होने के पश्चात कटलाइन से मोड़े उसके बाद फाड़े)

(INSTRUCTIONS : PLEASE FOLD AT PERFORATION AND THEN TEAR AFTER EXAMINATION IS OVER)

OMR ANSWER SHEET-2018

USE BLUE OR BLACK BALL POINT PEN ONLY

ANSWER SHEET NO.

नीचे लिखे प्रमाण के वाक्य को अपने हाथ से लिखकर हस्ताक्षर करें ।

Write the certification statement below in your running handwriitng and put your Signature.

मै प्रमाणित करता हूँ कि मै वही व्यक्ति हूँ जिसका नाम एवं अनुक्रमांक इस उत्तर पत्रिका पर लिखा है और मैने तौसरी कॉपी के पीछे मे लिखे हुए निदेशों को अच्छी तरह पढ़ लिया और समझ लिया है ।

"I certify that I am the person whose Name and Roll number appear on this Answer Sheet and I have read and understood the instructions mentioned on the back page of third copy."

परीक्षार्थी के हस्ताक्षर / Signature of the Applicant	Thumb Impression of the Candidate	पर्यवेक्षक के हस्ताक्षर / Signature of the Invigilator

अनुक्रमांक/ ROLL NUMBER

प्रश्न पुस्तिका कोड QUESTION BOOKLET SERIES CODE

A ○ B ○ C ○ D ○

वर्ग CATEGORY

GEN ○ OBC ○ SC ○ ST ○

आवेदक का नाम / NAME OF APPLICANT

जन्म तिथी / DATE OF BIRTH ___ / ___ / _____

प्रश्न पुस्तिका संख्या / QUES. BOOKLET NO.

पद का नाम / NAME OF POST

1	A	B	C	D	26	A	B	C	D	51	A	B	C	D	76	A	B	C	D
2	A	B	C	D	27	A	B	C	D	52	A	B	C	D	77	A	B	C	D
3	A	B	C	D	28	A	B	C	D	53	A	B	C	D	78	A	B	C	D
4	A	B	C	D	29	A	B	C	D	54	A	B	C	D	79	A	B	C	D
5	A	B	C	D	30	A	B	C	D	55	A	B	C	D	80	A	B	C	D
6	A	B	C	D	31	A	B	C	D	56	A	B	C	D	81	A	B	C	D
7	A	B	C	D	32	A	B	C	D	57	A	B	C	D	82	A	B	C	D
8	A	B	C	D	33	A	B	C	D	58	A	B	C	D	83	A	B	C	D
9	A	B	C	D	34	A	B	C	D	59	A	B	C	D	84	A	B	C	D
10	A	B	C	D	35	A	B	C	D	60	A	B	C	D	85	A	B	C	D
11	A	B	C	D	36	A	B	C	D	61	A	B	C	D	86	A	B	C	D
12	A	B	C	D	37	A	B	C	D	62	A	B	C	D	87	A	B	C	D
13	A	B	C	D	38	A	B	C	D	63	A	B	C	D	88	A	B	C	D
14	A	B	C	D	39	A	B	C	D	64	A	B	C	D	89	A	B	C	D
15	A	B	C	D	40	A	B	C	D	65	A	B	C	D	90	A	B	C	D
16	A	B	C	D	41	A	B	C	D	66	A	B	C	D	91	A	B	C	D
17	A	B	C	D	42	A	B	C	D	67	A	B	C	D	92	A	B	C	D
18	A	B	C	D	43	A	B	C	D	68	A	B	C	D	93	A	B	C	D
19	A	B	C	D	44	A	B	C	D	69	A	B	C	D	94	A	B	C	D
20	A	B	C	D	45	A	B	C	D	70	A	B	C	D	95	A	B	C	D
21	A	B	C	D	46	A	B	C	D	71	A	B	C	D	96	A	B	C	D
22	A	B	C	D	47	A	B	C	D	72	A	B	C	D	97	A	B	C	D
23	A	B	C	D	48	A	B	C	D	73	A	B	C	D	98	A	B	C	D
24	A	B	C	D	49	A	B	C	D	74	A	B	C	D	99	A	B	C	D
25	A	B	C	D	50	A	B	C	D	75	A	B	C	D	100	A	B	C	D

SAMPLE

dCS 1000052

उत्तर भरने के निर्देश
INSTRUCTIONS FOR MARKING ANSWERS

1. केवल नीले / काले बॉल प्वाइंट पेन का ही प्रयोग करें ।

   Use BLUE or BLACK Ball Point Pen Only.

2. अपना अनुक्रमांक,वर्ग तथा प्रश्न पुस्तिका कोड, को सही ढंग से लिखे और काला करें क्योंकि मूल्यांकन के लिए यह आवश्यक है । अगर उम्मीदवार अनुक्रमांक तथा प्रश्न पुस्तिका कोड के गोले को छायांकित नही करता है या गलत तरीके से भरता है, तो उस उम्मीदवार के ओ एम आर पत्रक को आरंभिक स्तर पर खारिज कर दिया जाएगा और उसका मूल्यांकन नही किया जाएगा जिसके लिए परीक्षार्थी स्वयं जिम्मेदार होगा ।

   You have to fill and shade your Roll Number, Category and Question Booklet Series Code correctly because these informations are essential for evaluation of the Answer Sheet. If candidate did not shade/wrongly shaded/did not fill / wrongly filled the mandatory data ovals of Roll Number and Question Booklet Series Code in the OMR Answer Sheet, it will be rejected at initial stage and his/her OMR answer Sheet will not be evaluated for which candidate himself/herself will be responsible.

3. गोले को पूरी तरह काला करें ताकि अन्दर लिखा अक्षर दिखाई न दे ।

   Completely Darken the ovals so that the number inside the ovals is not visible.

4. जैसा कि नीचे उदाहरण में दिया है केवल एक ही गोले को काला करें। अंकन गाढ़ा और पूरे गोले में होना चाहिए जैसा कि नीचे उदाहरण में दिया है।

   Darken only one circle for each question as shown in the example below. Marking should be dark and the circle is to be filled in completely as shown in the example below.

सही / CORRECT	गलत / WRONG	गलत / WRONG	गलत / WRONG
Ⓐ ● Ⓒ Ⓓ	Ⓐ Ⓑ Ⓒ Ⓓ	Ⓐ Ⓑ Ⓒ Ⓓ	Ⓐ ◒ Ⓒ Ⓓ

5. उत्तर में कोई परीवर्तन नहीं किया जा सकता । करेक्शन फ्लूड का इस्तेमाल मना है । इसलिए सावधानी से गोले भरें ।

   No change / cutting / overwriting is permitted. Correction fluid should not be used. Hence the ovals should be filled carefully.

6. केवल दिए गए स्थान में ही अपना उत्तर अंकित करें। इस पत्रिका में कहीं और छुट पुट निशान न लगाएं।

   Mark your answer only in the space provided. Please do not make any stray marks on this Answer Sheet.

7. प्रत्येक प्रश्न एक अंक का होगा और गलत उत्तर के लिए कोई अंक नहीं काटा जाएगा।

   Each question carry one mark and no mark will be deducted for wrong answer.

8. कच्चा काम इस उत्तर पत्रिका में कदापि न करें। कच्चा काम करने के लिए प्रश्न पुस्तिका के अन्त में दिए गए पृष्ठों का प्रयोग करें।

   Rough work must not be done on this Answer Sheet. Use Rough Sheets provided at the end of the Question Booklet for Rough Work.