## STATE LEVEL POLICE RECRUITMENT BOARD ANDHRA PRADESH

## Rc. No. 244 /R&T/Rect.1/2016

1. State Level Police Recruitment Board, Andhra Pradesh (herein after referred as SLPRB, A.P.) invites application through **ONLINE** mode only in the prescribed proforma to be made available on **WEBSITE** (recruitment.appolice.gov.in) from **01-09-2016** at **1000 hours** to **25-09-2016** at **1700 hours** for the following posts. The number of vacancies indicated is only provisional and is liable for change without giving any notice. SLPRB, A.P., reserves the right to notify the modifications with regard to any aspect of recruitment during the process of recruitment.

The Physical Measurement Test and Physical Efficiency Test is likely to be held in the last week of September/ first week of October, 2016. The Final Written Examination is likely to be held in the first week of November, 2016.

Sl. No.	Post Code No.	Name of the post	No. of vacancies
01	15	Stipendiary Cadet Trainee (SCT) Sub Inspectors of Police	15
		(Communications) (Men & Women)	
02	17	Stipendiary Cadet Trainee Assistant Sub Inspector of Police in	13
		Finger Print Bureau (Men & Women)	

The Candidate will be required to submit (Upload) a copy of photo, signature and community certificate (for BC/SC/ST candidates) while submitting Online Application Form.

## 2. Rules Governing the Posts:-

This recruitment to the posts mentioned in the Police Department (Post Code Nos. <u>15 & 17</u>) is being made as per the provisions of the Andhra Pradesh Police (Stipendiary Cadet Trainee) Rules issued by the Government of Andhra Pradesh in G.O. Ms. No 315 Home (Pol.C) Department, dated 13-10-1999 and its amendments thereon.

**Women Reservation**: 33 1/3 % of vacancies in each category are reserved for Women for the Post code Nos. 15 & 17 under direct recruitment. In the event of non-availability of eligible and suitable women candidates, the vacancies reserved for them shall not be carried forward to the subsequent year and shall be filled up by men candidates of respective category. The reservation will be a **horizontal reservation** following principle of

Date: 24-08-2016

sufficiency i.e., the reservation of women candidates shall be adjusted proportionately in the respective category to which the women candidate belongs, in relaxation of relevant rules relating to Andhra Pradesh State and Subordinate Service Rules- 1996.

**4.** The rule of Special representation (reservation) i.e., BC-A, BC-B, BC-C, BC-D, BC-E, SC, ST <u>and Ex.Servicemen</u> provided in Rule 22 of A.P. State & Subordinate Service Rules, 1996 shall be applicable.

## 5. Reservation for Special Categories:-

The vacancies reserved for Special category i.e., Children of Police Personnel (CPP) for the Post Code No. 15 as per details given in Para-18 below shall be adjusted in horizontal manner on compartmentalized basis i.e., the reservation of Special category candidates shall be adjusted proportionately in respective communal category to which the candidate belongs.

## Pertaining to Backward Classes (paras 6 & 7)

6. Relaxation in upper age limit (as given in para 9 (B) (a) (i)) and / or reservation to 'BC-E group' or 'any category in BC-E group' will be subject to the adjudication of the litigation pending before the Honourable Courts. However relaxation in upper age limit (as given in para 9 (B) (a) (i)) and / or reservation to 'BC-E group' is applicable to <u>first</u> to the fourteen categories of BC-E group as per interim order on 25-03-2010 in Civil Appeal No(s). 2628-2637 of 2010 of Hon'ble Supreme Court of India. The castes mentioned in Sl. No. 15 are treated as 'OC' category.

## 7. CREAMY LAYER:-

Government have issued G.O.Ms.No. 3, Backward Classes Welfare (C2) Department dated 04-04-2006 and G.O.Ms. No. 26 Backward Classes Welfare (C) Dept., dt- 09.12.2013, laying down the criteria to determine Creamy Layer among Backward Classes in order to exclude from the provisions of reservations. Government of Andhra Pradesh has adopted all the criteria to determine the Creamy Layer among Backward Classes as fixed by the Government of India. The Government of Andhra Pradesh have fixed the annual income limit at **Rs. 6,00,000/-.** 

a) The candidates belonging to Backward Classes should submit the Community certificate in the format given in Annexure - II to avail relaxation in age. The

certificate must have been issued by the competent revenue authority in terms of G.O. Ms. No. 58 SW (J) Dept., dated 12-05-1997.

- b) Only those candidates belonging to Backward Classes who do not belong to 'Creamy layer' as defined in G.O.Ms.No. 3, Backward Classes Welfare (C2) Department dated 04-04-2006 and G.O.Ms. No. 26 Backward Classes Welfare (C) Dept., dt- 09.12.2013 will be eligible to avail reservation. They should submit the certificate in the format given in Annexure III regarding their exclusion from the Creamy Layer from the competent authority (Tahasildar) along with the Community certificate in the format given in Annexure II.
- c) Candidates belonging to Backward Classes who belong to 'Creamy layer' are eligible to avail relaxation in age but not the quota for reservation. They should submit the Community certificate in the format given in Annexure II.
- 8. The requisite educational qualification, age, physical standards, procedure to be followed for selection etc are given below. The candidates must read the instructions given in this notification as well as "instructions for filling the application form" carefully in their own interest.

## 9. Eligibility Conditions:

- A. (i) For the post mentioned against Post Code no. 15 Men & Women are eligible.
  - (ii) For the Post mentioned against Post Code no. 17 Men & Women are eligible.

## B. Age Limit:

## For the Post Code Nos. 15 and 17:

Must have attained the age of 21 years and must not have attained the age of 25 years as on 1<sup>st</sup> July, 2016 i.e., must have been born not earlier than 2<sup>nd</sup> July, 1991 and not later than 1<sup>st</sup> July, 1995

- a) The upper age limit prescribed in para (a) above will be relaxable as under;
  - i) upto a maximum of five years if a candidate belongs to a Backward Class or a Scheduled Caste or a Scheduled Tribe.

- ii) Length of regular service limited upto a maximum of five years if a candidate is an employee of A.P. State Government (Employees of APTRANSCO, Discoms, APGENCO, APSRTC, Corporations, Municipalities, Local bodies etc. are not entitled for age relaxation).
- iii) Three years in addition to the length of service rendered in the Army, Naval or Air Force of the Union for the candidates who served in the Army, Naval or Air Force of the Union.
- iv) Three years in addition to the length of service rendered as a whole time Cadet Corps Instructor in NCC provided the candidate rendered a minimum service of 6 months as a whole time Cadet Corps Instructor in NCC and he has been released from NCC.
- v) upto a maximum of three years if a candidate is a retrenched temporary employee in the State Census Department with a minimum service of 6 months during 1991

## Save as provided above, the age limits prescribed can in no case be relaxed.

**NOTE:** - The date of birth accepted by the SLPRB is that entered in the Secondary School Certificate or Matriculation or an equivalent examination certificate. No other document relating to age like horoscopes, affidavits, birth extracts from Municipal Corporation, service records and the like will be accepted.

## 10. Minimum Educational Qualification:

- (a) <u>For Post Code No. 15</u>: The candidate must hold, as on 1<sup>st</sup> July, 2016, a Diploma/B.Tech. in Electronics and Communication Engineering OR Electrical and Electronics Engineering OR Computer Engineering OR Information Technology OR Special Diploma Course in Electronics with specialization in Computer Engineering OR Special Diploma Course in Electronics with specialization in Communication Engineering awarded by the any State Board of Technical Education and Training OR Three years degree in **B.Sc. Electronics (OR)** a qualification approved by the Government of Andhra Pradesh as equivalent to any of the above.
- **(b)** For Post Code No. 17: The candidate must hold, as on 1<sup>st</sup> July, 2016, a degree with Computer Science OR Computer Application OR Information Technology as one of the subjects awarded by any university in India, established or incorporated by or under a Central

Act, Provisional Act of State or of any institution recognized by the University Grants Commission.

**Note:** The candidates who possess higher qualification than the prescribed one will also be considered for selection on par with the candidates who possess the prescribed qualification.

## 11. Physical standards: The candidates should meet the following requirements

## (i) For the Post Code Nos. 15 and 17

## Men:

- (a) Height: Must not be less than 162 centimetres.
- (b) Chest: Must not be less than 84 centimetres round the chest on full inspiration with a minimum expansion of 4 centimetres.

## Women:

- (a) Height: Must not be less than 152.5 centimetres.
- (b) Weight: Must not be less than 40 Kgs.

**NOTE:** However, the candidates belonging to Schedule Tribes and Aboriginal Tribes in the Agency areas of Srikakulam, Vizianagaram, Visakhapatnam, East Godavari and West Godavari Districts should meet the following requirements:

## For the Post Code Nos. 15 & 17

## Men:

- (a) Height: Must not be less than 160 centimetres.
- (b) Chest: Must not be less than 80 centimetres round the chest on full inspiration with a minimum expansion of 3 centimetres.

### Women:

- (a) Height: must not be less than 150 centimetres in height.
- (b) Weight: must not be less than 38 Kgs.

## 12. Medical Standards:

a) Eye Sight: Visual Standards required for the above selection shall be as follows:

i)

	Right Eye	Left Eye
(i) Distant Vision	 6/6	6/6
(ii) Near Vision	 0/5	0/5
	(Snellen)	(Snellen)

- ii) Each eye must have a full field of vision.
- iii) Colour blindness, squint or any morbid condition of the eye or lids of either eye shall be deemed to be a disqualification.
- b) The candidate should possess sound health and be free from any bodily defect or infirmity which will render him unfit for police service.
- c) Candidates who have the following ailments or defects will not be considered for recruitment to any post specified in this rule
  - i) Physically handicapped
  - ii) Knocking-knees, pigeon chest, flat foot, Vericose veins, Hammer toes, fractured limbs, decayed teeth, stammering, hard of hearing and abnormal psychological behaviour

**NOTE**: In order to prevent disappointment, candidates are advised to have themselves examined by a **Civil Surgeon** before applying for the examination to ensure that they meet the prescribed Physical and Medical Standard.

## 13. Fee Structure

**A)** The prescribed fee for candidate belonging OCs/BCs is Rs. **600/-** (Rupees six hundred only), and for Candidates belonging to SCs/STs is Rs. 300/- (Rupees three hundred only) towards Application Processing and Examination.

## **B)** Mode of Payment of Fee:

I Step: The candidate has to visit any of the Mee Seva (e-Seva) / AP Online/ TS Online centres to pay the prescribed Registration Fee by providing his / her Basic personal details like Name, Father's Name, Date of Birth, Mobile Number, Community and SSC Hall Ticket Number or its equivalent. Amount should be credited in favour of Chairman, State Level Police Recruitment Board, Andhra Pradesh, by quoting Notification No. Rc. No. 244/R&T/Rect.1/2016.

II Step: After receiving the Payment Receipt from Mee Seva (e-Seva) / AP Online/ TS Online, the candidate has to visit the website

recruitment.appolice.gov.in to submit the online application form. Even after making payment of fee, if the candidate fails to submit the Online Application Form, such cases shall be rejected without giving any notice and fee once paid will not be refunded in any case.

- 14. Those who intend to apply for more than one category of posts need to submit only one application form.
- 15. Applications submitted after 1700 hrs on 25.09.2016 will not be accepted. Incomplete applications will not be entertained.
- 16. CANDIDATES TO ENSURE THEIR ELIGIBILITY FOR THE EXAMINATION: The candidates applying for the examination should ensure that they fulfil all eligibility conditions for admission to the examination. Their admission at all the stages of the examination will be purely provisional and subject to satisfying the prescribed eligibility conditions.

Mere issue of Admit card/ Hall ticket to the candidate will not imply that his/her candidature has been finally cleared by the Board.

The board will take up verification of eligibility conditions with reference to original documents only after the candidate has finally qualified.

**17.** <u>Selection Procedure/Scheme</u>: - The Selection Procedure/Scheme of the Exam will be as follows:

### **A)** Preliminary Selection Test:

No Preliminary Selection Test will be conducted for the Post Code Nos. 15 and 17. After registration of their Online Application, candidates have to report for verification of certificates and Physical Measurements Test which will be mentioned in the Hall Tickets. This test will be conducted at Vijayawada/ Guntur. The exact place and time will be mentioned in the Hall Ticket which can be downloaded after submitting Online Application Form.

## B) Physical Measurements Test (PMT)

The Physical Standards are mentioned at Para-11above.

#### **C**) **Physical Efficiency Test (PET)**

All candidates declared qualified as above shall be required to attend 1600 Meters run (1 Mile Run) which is qualifying.

Male candidate must complete the run in 10 Minutes or less time.

Women candidate must complete the run in 12 Minutes 30 Seconds or less.

#### Final Written Examination: D)

Candidates who qualify in the above Physical Measurements Test and Physical Efficiency Test shall be required to appear for a final written examination in three papers (each of three hours duration) as given below. The syllabus is given in Annexure I. The date, time and place of Written Examination will be intimated to such candidates

Paper	Subject	Max. Marks
Paper I	English (Descriptive in nature)	100
Paper II	Arithmetic and Test of Reasoning / Mental Ability (Objective in nature) (200 Questions)	100
Paper III	Technical Paper (Objective in nature) (200 Questions)	200

Note: (1) The minimum marks to be secured by the candidates in order to qualify in the final written examination in each paper is 40% for OCs, 35% for BCs, 30% for SCs/STs/Ex-Servicemen.

- (2) Paper I is only qualifying in nature. The cases of the candidates who do not secure the minimum qualifying marks in this Paper will not be considered further in the selection process irrespective of their performance in Papers II and III. The marks secured in this paper i.e., paper I will not be taken into account for final selection.
- (3) Paper I referred above will include questions that are subjective and objective in nature. They have to answer the questions using Blue / Black Ball point pen.
- 4) Questions in Papers II and III will be objective in nature and will be set in English, Telugu and Urdu languages. Candidates have to answer the questions on an OMR answer sheet using Blue / Black Ball Point pen only. For this purpose, candidates should bring Blue / Black Ball Point pens along with them.

# 5) There is a possibility of conducting Examination in Paper-II and Paper-III as computer based examination. The candidate should be prepared for this.

- E) **Selection:** The final selection of the candidates (Men & Women) will be made strictly on relative merit, as obtained by them based on their score in the final written examination (papers II and III) (300 marks) for the candidates who qualified in Physical Efficiency Test. As per the provision of "The Andhra Pradesh Public Employment (Organization of Local cadres and regulation of direct recruitment) Order, 1975", the rule of reservation to local candidates is not applicable for the posts under Post Code No. 15 and Post Code No. 17.
- F) When two or more candidates in a particular category obtain equal **Preference:** marks, preference will be given to the candidate who was born earlier.

## 18. Special Representation for Special Category (for the Post Code- 15):

Special representation for the following Special Category will be applicable only to a person who is local to State of Andhra Pradesh.

- A) Quotas in Special Categories: 2% for Children of Police Personnel (CPP).
- B) Candidates who claim reservation / quota under following special category should satisfy the following condition: -
- **CPP** Children of Police Personnel upto the rank of Inspector of Police in service in A.P. Police Department as well as Children of Police Personnel upto the rank of Inspector of Police, who after serving in the A.P. Police Dept. have, either retired or died, will come under this special category.
  - **Note:** The police personnel who were compulsorily retired or removed or dismissed from service will not be considered for their children for quota under 'Children of Police Personnel' (CPP).

Note: Candidates who claim reservation/quota under CPP should satisfy the above conditions and submit the certificate as per annexure IV. The certificate pertaining to CPP should be obtained on or after the date of notification i.e., 24-08-2016 from the competent authority. The certificate obtained before the date of notification is not valid and will not be entertained.

- 19. Candidates who claim reservation as Ex. Servicemen should satisfy the conditions mentioned in Rule 2 (16) of A.P. State and Subordinate Service Rules and having the necessary certificate from the competent authority.
- **20.** The selection of the candidates will be provisional and subject to verification of the original certificates, antecedents and medical examination.
- **Antecedents verification**: No person shall be eligible for appointment to any service by direct recruitment unless he satisfies the selection authority as well as the appointing authority that his character and antecedents are such as to qualify him for such service.

<u>Disqualification for appointment:</u> The candidates falling under the following categories shall be disqualified for selection/appointment, under the rules.

- (i) Suppression of material facts (either in the application form or in the attestation form).
- (ii) If the candidate himself or through his relatives or friends or any other has canvassed or endeavoured to enlist extraneous support whether from official or non-official sources for his candidature.
- (iii) A person (a) who has entered into or contracted a marriage with a person having a spouse living, or (b) who, having a spouse living, has entered into or contracted a marriage with any other person. Provided that the State Government may, if satisfied that such marriage is permissible under the personal law applicable to such person, exempt any person from the operation of this rule.
- (iv) A person who has been dismissed from the services of a State or Central Government or from the service of any Central or State Government undertaking or local body or other authority.
- (v) A person who has been convicted for any offence in any court of law.
- (vi) A person who is involved in an offence involving moral turpitude.
- 22. In the event of any information being found false or incorrect or ineligibility being detected at any time even after appointment, he / she will be discharged from service forthwith by the appointing authority without giving any notice.

- 23. Suppression of material facts or withholding any factual information in the attestation form (which would be supplied to the candidates who will be provisionally selected) will disqualify the candidate from being considered for appointment. In the event of any information being found false or incorrect or ineligibility being detected at any time even after appointment, he / she will be discharged from service forthwith by the appointing authority without giving any notice.
- **24. Stipend and Allowance**: During the period of institutional training (regular as well as extended) candidates shall be eligible for stipend as fixed by the Government from time to time. On successful completion of training, they will be appointed in the regular time scale of pay as mentioned under para 25 below.
- **25. Scale of pay**: (a) For Post Code No. 15: Rs. 28940-78910/- (b) For Post Code No. 17: Rs. 23100-67990/-

The employees who are appointed on or after 01-09-2004 are covered by the Contributory Pension Scheme. The Pension Scheme as per A.P. Revised Pension Rules, 1980 will not be applicable to them.

- 26. The candidates who are provisionally selected for any one of the post specified in this notification and is an employee of A.P. State Government / any other State Government / Central Government / any Government undertaking can join training only after relief / resignation in the earlier service.
- 27. Time limit for submission of attestation forms (or) other relevant documents (or) attend medical examination (or) join the training: The candidates who are provisionally selected for any one of the post specified in this notification will be asked to submit an attestation form, produce other relevant documents and attend medical examination on a specified date. The candidates who become eligible to be sent for training will be asked to join the training on a specified date. If any candidate fails to respond and fails to submit the necessary form or document or attend the medical examination or join the training on a specified date, his / her provisional selection may be cancelled without prior notice to the candidate.

## 28. Certificates to be brought by candidate at the time of Physical Measurement Test:-

At the time of Physical Measurement Test, the candidates shall bring, IN PERSON, the following documents in original along with one set of Xerox copy duly attested by a Gazetted Officer while coming for attending Physical Measurement (PM) & Physical Efficiency Test (PET) compulsorily. Failure to produce the same will lead to rejection of the candidature.

a) Secondary School/Matriculation certificate or equivalent certificate in support of the date of birth.

## (b Education Qualification:

- (i) <u>For Post Code No. 15:</u> The candidate must hold, as on 1<sup>st</sup> July, 2016, a Diploma/B.Tech. in Electronics and Communication Engineering OR Electrical and Electronics Engineering OR Computer Engineering OR Information Technology OR Special Diploma Course in Electronics with specialization in Computer Engineering OR Special Diploma Course in Electronics with specialization in Communication Engineering awarded by the any State Board of Technical Education and Training OR Three years degree in B.Sc. Electronics (OR) a qualification approved by the Government of Andhra Pradesh as equivalent to any of the above.
- (ii) For Post Code No. 17: The candidate must hold, as on 1<sup>st</sup> July, 2016, a degree with Computer Science OR Computer Application OR Information Technology as one of the subjects awarded by any university in India, established or incorporated by or under a Central Act, Provisional Act of State or of any institution recognized by the University Grants Commission.
- c) BC candidates who wish to claim concession in age and also reservation specified for the Backward Classes should submit the LATEST Community & Date of Birth Certificate and Certificate of their exclusion from the Creamy Layer issued by the competent revenue authority as specified above.
- d) The SC/ST candidates who wish to claim concession in age and also reservation specified for the SC/ST, should submit the LATEST Community & Date of Birth Certificate issued by the competent authority as specified above.

- e) Certificate from the competent authority in respect of State Government employees/those who worked in the Army, Navy or Air Force of the Indian Union/NCC Instructors/ retrenched temporary employees in the State Census Department during 1991 for claiming age concession.
- f) Residence certificate in the agency area from the competent authority in respect of candidates belonging to Scheduled tribes and Aboriginal Tribes in the agency areas who claim relaxation in Physical Measurements or reservation.
- g) Certificate of CPP issued after the date of notification, wherever applicable.
- h) Ex-servicemen certificate etc., wherever applicable.
- 29. The SLPRB, A.P. reserves the right to take decision regarding conduct of examination and selecting candidates as per rules. The decision of the SLPRB, A.P. shall be final in all respects. Further, SLPRB, A.P. may modify and reschedule the Examination/Test due to unforeseen circumstances. All efforts will be made to intimate any such change to the candidates. However, candidates are also requested to regularly visit the web site and see notifications issued through News papers, TV and other media.

(ATUL SINGH, IPS.)
CHAIRMAN
STATE LEVEL POLICE RECRUITMENT BOARD
ANDHRA PRADESH, HYDERABAD

### ANNEXURE - I

### SYLLABUS FOR WRITTEN EXAMINATION

## a) For the Post Code No. 15

## PAPER I: ENGLISH (DESCRIPTIVE TYPE)

The candidate's understanding of the English language, its correct usage and his writing ability would be tested. Questions on short essay, comprehension, précis, letter writing, paragraph writing / report writing, translation from English to Telugu etc. would be included

# PAPER II: ARITHMETIC & TEST OF REASONING / MENTAL ABILITY (OBJECTIVE TYPE) (200 QUESTIONS)

**Arithmetic**: It will include questions on problems relating to number system, simple interest, compound interest, ratio & proportion, average, percentage, profit & loss, time & work, work & wages, time & distance, clocks & calendars, partnership, mensuration etc.

**Test of Reasoning:** It will include questions of both verbal & non-verbal type and include question on analogies, similarities and differences, spatial visualisation, spatial orientation, problem solving, analysis, judgment, decision making, visual memory etc

## PAPER III: TECHNICAL PAPER (OBJECTIVE TYPE) (200 QUESTIONS)

- 1. <u>Materials and Components:</u> Structure of properties of Electronic Engineering, materials, conductors, semiconductors and insulators, magnetic, ferroelectric, piezoelectric, ceramic, optical and superconducting materials. Passive components and characteristics, Resistors, Capacitors and Inductors; Ferrites, Quartz crystal, Ceramic resonators, Electromagnetic and Electromechanical components.
- 2. <u>Physical Electronics, Electron Devices and ICs</u>: Different types of diodes and their characteristics, Bipolar junction transistors, Field transistors, Field effect transistors, power switching devices like SCRs, CTOs, power MOSFETs Basics of ICs-bipolar, MOS and CMOS types, Basics of Opto- Electronics
- 3. <u>Network Theory:</u> Network analysis techniques; Network theorem, transient and steady state sinusoidal response, Transmission criteria: delay and rise time Elmore's and other definition, effect of cascading. Elements of network synthesis.
- 4. <u>Electromagnetic Theory</u>: Transmission lines; basic theory, standing waves, matching applications, microstrip lines; Basics of wave guides and resonators; Elements of antenna theory.
- 5. <u>Electronic Measurements and Instrumentation</u>: Basic concepts, standards and error analysis; Measurements of basic electrical quantities and parameters; Electronic measuring instruments and their principles of working; analog and digital comparition, characteristics, applications. Transducers; Electronic measurements of non-electrical quantities like temperature, pressure, humidity etc. Basics of telemetry for industrial use.

- 6. <u>Power Electronics</u>: Power Semiconductor devices, Thyristor, Power transistor, MOSFETs Characteristics and operation, AC to DC convertors; 1 phase and 3 phase DC to DC convertors, AC regulators, Thyristor controlled reactors, switched capacitor networks, Invertors; Single-phase and 3 phase, Pulse width modulation, Sinusoidal modulation with uniform sampling, Switched mode power supplies.
- 7. <u>Analog Electronic Circuits</u>: Transistor biasing and stabilization, small signal analysis, Power amplifiers, Frequency response, Wide band techniques, Feedback amplifiers, Tuned amplifiers, Oscillators, Rectifiers and Power supplies, Operational Amplifier, other linear integrated circuits and applications, Pulse shaping circuits and waveform generators.
- 8. <u>Digital Electronic Circuits</u>: Transistors as a switching element; Boolean algebra; simplification of Boolean functions; Karnaught Map and applications; IC logic gates and their characteristics; IC logic families; DTL, TTL, ECL, NMOS, PMOS and CMOS gates and their comparison; Combinational logic circuits; Half adder; full adder, Digital Comparator; Multiplexer De-multiplexer; ROM and their applications; Flip-flops, R-S, J-K, D and T flip-flops; Different types of counters and registers; waveform generators; A/D and D/G convertors; Semiconductor memories.
- 9. <u>Communication Systems and antennas:</u> Basic information theory, Modulation and detection in analogue and digital systems, Sampling and data reconstruction, Quantization & Coding, time division and frequency division multiplexing, Equalisation, Optical Communication; in free space & fiber optic; frequency spectrum analysis, Propagation of signals at HF, VHF, UHF and microwave frequency; Satellite communication, and Mobile communications. Antennas, applications, cellular and PCS antennas.
- 10. <u>Microwave Engineering</u>: Microwave tubes and solid state devices, Microwave generation and amplifiers, Wave guides and other Microwave Components and Circuits, Micro-strip circuits, Microwave antennas, Microwave measurements, Masers Lasers Microwave propagation. Microwave Communication Systems- terrestrial and satellite based.
- 11. <u>Computer Engineering</u>: Number Systems; Data representation, Programming; Elements of a high level programming languages, use of basic data structures, Fundamentals of computer architecture processor design, Control unit design, Memory organization, I/O system organization, Personal computer and their typical uses.

Mother board peripherals, accessories, windows operating system, PC assembly and software installation, processor management, storage management, file systems, networking & LAN, basics of WAN, WAN protocols, networking management, system administration, web applications. Data structures using C, data base management concepts of SQL, schema objects, Programming Languages C,C++, Visual basics

12. <u>Microprocessors:</u> Microprocessor Architecture-Instruction set and simple assembly, language programming, Interfacing for memory and I/C, Applications of Microprocessor in Telecommunications and power system.

- 13. <u>Television Engineering</u>: Picture tube construction and working principle. Deflections Camera tubes, Basic T.V. system. Scanning, Synchronization, Composite Video Signals, aspect ratio, resolution, flickering, pictures, sound broad casting in F.M., V.H.F. and U.H.F. Channels, typical response of video I.F. amplifiers, use of wave traps, video amplifiers, nature of video signals. Sync Pulses and blanking pulses in the video signals, differentiating circuit used for pulse separation. Horizontal deflection principle. Principle of video cameras, video cassette recorder. Principle of closed circuit T.V. system. Video Conferencing
- 14. Radars and Landing systems: Principles of operation of Radar, Radar range equation, modification of Radar range equation considering receiver noise and radar frequencies. Working of Pulsed radar, function of duplexer and modulator, Radar beacon. Principle of C.W radar, Doppler frequency shift, FMCW radar, FM altimeter, display systems, Basic principles of MTI radar and Tracking radar. Aircraft landing systems, ILS, GCA, ARSR and SRA.
- 15. <u>Control systems</u>: Transient and steady state response of control systems, effect of feedback on stability and sensitivity, Root locus techniques; Frequency response analysis, concepts of gain and phase margins, Constant-M and Constant-N Nichol's chart, Approximation of transient response from closed loop frequency response, Design of Control Systems, Compensators Industrial controllers.
- 16. <u>Telephone Systems:</u> PSTN telephone network, Local Loops, signals and noise in telephone systems, telephone instruments, FDM, Digital transmission, digital Local loops, EPABX, FAX, internet telephony. GSM and CDMA phone system

<u>Multiplexing and multiple access techniques</u>: digital subscriber line, Frequency Division multiplexing and access, Time division multiplexing and multiple access, spread-spectrum, Code division multiple access. Teleconferencing

<u>Awarding of marks:</u> For each question the candidate will be awarded **full marks**, if he darkened only one bubble corresponds to the correct answer. In case, the candidate has not darkened any bubble, he will be awarded **zero mark** for that question.

## b) For post code no. 17:

### PAPER I: ENGLISH (DESCRIPTIVE TYPE)

The candidate's understanding of the English language, its correct usage and his writing ability would be tested. Questions on short essay, comprehension, précis, letter writing, paragraph writing / report writing, translation from English to Telugu etc. would be included

# PAPER II: ARITHMETIC & TEST OF REASONING / MENTAL ABILITY (OBJECTIVE TYPE) (200 QUESTIONS)

<u>Arithmetic:</u> It will include questions on problems relating to number system, simple interest, compound interest, ratio & proportion, average, percentage, profit & loss, time & work, work & wages, time & distance, clocks & calendars, partnership, mensuration etc.

<u>Test of Reasoning</u>: It will include questions of both verbal & non-verbal type and include question on analogies, similarities and differences, spatial visualisation, spatial orientation, problem solving, analysis, judgment, decision making, visual memory etc

## 1. Computer Hardware:

- i) Computer Architecture: Fundamentals of Computers, PC Assembling, Installation, Trouble Shooting, Viruses.
- ii) The Memory System: Memory Hierarchy, ROM, RAM, DRAM, Storage Devices, Secondary memory and RAID and its Levels; Concepts of high speed memories, CPU, NIC cards.
- iii) Computer Peripherals: Keyboard, Mouse, Video Cards, Monitors, Liquid Crystal Displays (LCD), Digital Camera, Sound Cards, Printers, Modems, Scanners, Power Supply and etc.

## 2. Computer Software:

- i) Operating Systems: Computer fundamentals, DOS Commands, windows accessories & utilities.
- ii) Windows: Windows Generations Installation and maintenance, File management, Creating user accounts and passwords, Administrative tools, Control panels, Services, Settings, Multimedia, printers.
- iii) Data Base Management, basic concepts, RDBMS, Data types, tables, views, transactions, concurrency, reports

## 3. Application Software: (MS-Office)

- i) MS-Office: MS- Word: Basics, file operations, formatting & editing text, tables, inserting objects and page design, macros and mail merge, creating documents and printing.
- ii) MS-Excel: Cell formatting, graphic objects and charts, database, pivot tables, data validation. Maths functions and calculations, templates, file protection and printing
- iii) MS Power Point: Essential elements of presentation, creating and adding slides, format, design, layout, slide show presentations and printing.
- iv) MS Access: Database, Tables, Data sheets, Queries, Forms, Date Entry and Editing. Reports.

## 4. Networking & Security Management:

The Topologies – Types of Networks: Local Area Networks (LAN), Metropolitan Networks (MAN), Wide Area Networks (WAN) – Firewall Policy, Packet filters, Application Gateway, Advanced authentication mechanism. Anti virus concepts, Encryption, VPN, Internet, Intranet

<u>Awarding of marks:</u> For each question the candidate will be awarded **full marks**, if he darkened only one bubble corresponds to the correct answer. In case, the candidate has not darkened any bubble, he will be awarded **zero mark** for that question.

## ANNEXURE – II

## FORM FOR COMMUNITY, NATIVITY AND DATE OF BIRTH CERTIFICATE

Serial	No.			
S,C. S.T. B.C.			District Code: Mandal Code: Village Code:	:
Certifi	cate No:			
	COMMU	NITY, NATIVITY A	ND DATE OF BIRTH CERTI	FICATE
(1)	This is to ce	ertify that Sri/Smt./K	Lum	
Son/D	aughter of Sri	i		of
Villag			Mandal	
		of the State o	f Andhra Pradesh belongs to	)
Comm	nunity which is rec	ognised as S.C./S.T./B	S.C. sub-group	
		n (Scheduled Castes) On (Scheduled Tribes) O		
S.Cs.,			d 25-09-1970 as amended from Cs. and S.Ts. (Amendment) Act,	` ,
(2)	It is certified that	at Sri/Smt./Kum		is a native
of _		Vil	llage/Town	Mandal
		_ District of Andhra Pr	adesh.	
(3)	It is certified th	nat the place of birth	of Sri/Smt./Kum	is
		Village	e/Town	Mandal
		_ District of Andhra Pr	adesh.	
(4)	It is certified that	at the date of birth of S	Sri/Smt./Kum	is day
		month	year	(in words)
			as per the decla	ration given by his/her
father	/ mother / guardia	n and as entered in the	school records where he/she stud	died.
(Seal)				

Explanatory Note: - While mentioning the community, the competent authority must mention the subcaste (in case of Scheduled Castes) and sub-tribe or sub-group (in case of Schedules Tribes) as listed out in the S.Cs. and S.Ts (Amendment) Act, 1976.

## <u>ANNEXURE – III</u>

# APPLICATION CUM CERTIFICATE TO DECIDE THE CREAMY LAYER STATUS OF A PERSON BELONGING TO BC/OBC CATEGORY

1.	Name of the Applicant:
2.	Date of Birth:
3.	Caste and Group: (Certificate issued by the competent authority should be enclosed)
4.	Religion:
5.	Address:
	a) Present Address:
	b) Permanent Address:
6.	Occupation of the Applicant:
7.	Name of the Father:
8.	Date of Birth of Father:
9.	PAN No. / TAN No. of the Father:
10.	Name of the Mother:
11.	Date of Birth of Mother:
12	PAN No. / TAN No. of the Mother:

## OCCUPATION / INCOME / WEALTH STATUS OF PARENTS AND FAMILY

		Father	Mother
A) Cor	nstitutional posts		
i)	Holding / held any Constitutional post		
ii)	If yes, Name of the post holding / held		
B) Gov	vernment Employment	L	
i)	Holding / held any Government Employment		
ii)	If yes, Employment under Central Govt. / State Govt. / Public Sector Undertaking		
iii)	Designation of initial appointment		
iv)	Status of initial appointment (Group-I or II or IV)		
v)	Designation of present post held and status of the post		
vi)	If the initial appointment is of Group II Category and the individual was promoted to Group-I category, date of promotion and age at which promoted to Group-I category		
C) M	ilitary/Paramilitary forces		
i)	Designation of the post holding or held		
ii)	Is the post holding or held Is equivalent to Colonel or above		

## D) Land holdings possessed by the family (Father, Mother and unmarried children)

- i) Extent of double crop irrigated land
- i) Extent of single crop irrigated land
- ii) Extent of unirrigated / dry land
- iii) Nature of Crops / Plantations raised
- iv) If the entire land possessed by the family is irrigated land, does the extent of irrigated land exceed 85% of the Ceiling limit as per Land Ceiling Act:
- v) If the land possessed by the family is both irrigated and unirrigated land and after conversion of unirrigated land into irrigated land on the basis of conversion formula, does the extent of irrigated land so obtained exceed 80% of the Ceiling Limit as per Land Ceiling Act.
- vi) If the plantations like Rubber, Coffee, Tea etc. are raised, the annual income from them during last three years.

# E) Income from other sources - Private employment, Professional Services, Business, Commerce, Rents etc.

•	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	income to t	ha Lamila	7 xx714 h +11	II dotoila a	t course.
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Private employment

**Professional Services** 

**Business** 

Commerce

Rents

Others

ii) The annual income during last three years year wise: (enclose income tax returns)

# F) Wealth Tax for having vacant land and / or building (s) in urban areas and urban agglomeration

- i) Location of property and value
- ii) Details of property
- iii) Use to which it is put
- iv) Whether Wealth Tax is being paid and Tax paid per annum

## DECLARATION BY THE APPLICANT AND PARENTS OF THE APPLICANT

It is certified that the above mentioned particulars are true to the best of our knowledge and belief.

**Signature of Mother** 

Signature of the Father

**Signature of the Applicant** 

## **CERTIFICATE BY THE ISSUING AUTHORITY**

The particulars mentioned above have been verified and found that

- a) The applicant does not come under creamy layer of BCs/OBCs under any of the categories.
- b) The applicant comes under creamy layer of BCs/OBCs under the category of \_\_\_\_\_(A/B/C/D/E/F) mentioned above

**Signature of the Issuing Authority** 

## ANNEXURE – IV

## CHILDREN OF POLICE PERSONNEL (CPP) CERTIFICATE

Village, the son / daughthe service of the se	3.7	
Village, the son / daughthe service of the se	use No,,	street
the son / daughthe service of the se		district/ town/city is
the service of the se		who is / was in
in the rank of	the A.P. Police Department.	
	ndidate's parent was enrolled on	in the A.P. Police Department
	in	unit and is in service
retired / died	in the rank of	in
unit as on 24-0		
3. The car	ndidate's parent does not fall under an	y of the following categories
a)	Compulsorily retired	
b)	removed from service	
c)	dismissed from service	
Date:		Signature and Designation of Unit Officer with seal