1. CANDIDATES TO ENSURE THEIR ELIGIBILITY FOR THE EXAMINATION:
Candidates applying for the examination should ensure that they fulfill all eligibility conditions for admission to the Examination. Their admission at all the stages of the examination will be purely provisional subject to satisfying the prescribed eligibility conditions.

Mere issue of e-Admission Certificate to the will not imply that his/her candidature has been finally cleared by the Commission.
Verification of eligibility conditions with reference to original documents is taken up only after the candidate has qualified for Interview/Personality Test.

2. HOW TO APPLY:
Candidates are required to apply online only by using the website www.upsconline.nic.in Brief instructions for filling up the online Application Form have been given in Appendix-II. Detailed instructions are available on the above mentioned website.

3. LAST DATE FOR SUBMISSION OF APPLICATIONS:
The Online Applications can be filled up to 16th April, 2018 till 18.00 Hours.

4. The eligible candidates shall be issued an e-Admission Certificate three weeks before the commencement of the examination. The e-Admission Certificate will be made available in the UPSC website [www.upsc.gov.in] for downloading by candidates. No Admission Certificate will be sent by post. All the applicants are required to provide valid and active E-Mail I.D. while filling up Online Application Form as the Commission may use electronic mode for contacting them.

5. SPECIAL INSTRUCTIONS
Candidates are advised to read carefully “Special Instructions to the Candidates for Conventional Type Tests” (Appendix-III) and “Special Instructions for Objective Type Tests” (Appendix-IV).

6. INSTRUCTIONS FOR FILLING UP OMR SHEETS:
   a) For both writing and marking answers in the OMR Sheets (Answer Sheet) candidates must use black ball point pen only. Pens with any other colours are prohibited. Do not use Pencil or Ink pen.
   b) Candidates should note that any omission/mistake/discrepancy in encoding/filling in details in the OMR answer sheet; especially with regard to Roll Number and Test Booklet Series Code, will render the answer sheet liable for rejection.

7. PENALTY FOR WRONG ANSWERS (In Objective Type Question Paper):
Candidates should note that there will be penalty (Negative Marking) for wrong answers marked by a candidate in the Objective Type Question Paper.

8. FACILITATION COUNTER FOR GUIDANCE OF CANDIDATES:
In case of any guidance/information/clarification regarding their applications, candidature etc. candidates can contact UPSC’s Facilitation Counter near ‘C’ Gate of its campus in person or over Telephone No.011-23385271/011-23381125/011-23098543 on working days between 10.00 Hrs. and 17.00 Hrs.

9. Mobile Phones Banned:
   (a) Mobile phones, bluetooth or any other communication devices are not allowed inside the premises where the examination is being conducted. Any infringement of these instructions shall entail disciplinary action including ban from future examinations.
   (b) Candidates are advised in their own interest not to bring any of the banned items including mobile phones/bluetooth or any valuable/costly items to the venue of the examination, as arrangement for safe-keeping cannot be assured. Commission will not be responsible for any loss in this regard.

CANDIDATES ARE REQUIRED TO APPLY ONLINE AT WWW.UPSCONLINE.NIC.IN ONLY.
NO OTHER MODE IS ALLOWED FOR SUBMISSION OF APPLICATION
No.12/3/2017-E.I(B) : A combined competitive examination for recruitment to Junior Time Scale of the Services mentioned in Para 2 below will be held by the Union Public Service Commission commencing from **29th June, 2018** in accordance with the Rules published by the Ministry of Statistics & Programme Implementation in the Gazette of India dated the **21st March, 2018**. The examination will be held at the following centres:

- AHMEDABAD
- ALLAHABAD
- BANGALORE
- BHOPAL
- CHANDIGARH
- CHENNAI
- CUTTAK
- DELHI
- DISPUR
- HYDERABAD
- JAIPUR
- JAMMU
- KOLKATA
- LUCKNOW
- MUMBAI
- PATNA
- SHILLONG
- SHIMLA
- THIRUVANANTHAPURAM

The centres and the date of holding the examination as mentioned above are liable to be changed at the discretion of the Commission. Applicants should note that there will be a ceiling on the number of candidates allotted to each of the Centres, except Chennai, Delhi, Dispur, Kolkata and Ahmedabad. Allotment of Centres will be on the “first-apply-first allot” basis, and once the capacity of a particular Centre is attained, the same will be frozen. Applicants, who cannot get a Centre of their choice due to ceiling, will be required to choose a Centre from the remaining ones. Applicants are, thus, advised that they may apply early so that they could get a Centre of their choice.

**NB : Notwithstanding the aforesaid provision, Commission reserve the right to change the Centres at their discretion if the situation demands.**

Candidates admitted to the examination will be informed of the time table and place or places of examination. The candidates should note that no request for change of centre will be entertained.

2.(a) The Services to which recruitment is to be made on the results of this examination and the approximate number of vacancies in Junior Time Scale of the Services are given below:

(i) Indian Economic Service - 14
(ii) Indian Statistical Service - 32

**NOTE :** 1 vacancy has been kept reserved for PwBD (Deaf and Hard of Hearing) for Indian Statistical Service and 1 vacancy has been kept reserved for PwBD (Deaf and Hard of Hearing) for the Indian Economic Service by the Government through IES/ISS Exam, 2018.

The number of vacancies mentioned above is liable to alteration. Reservation will be given effect to as per policy of the Govt.

(b) A candidate may compete for any one of the Services only viz. the Indian Economic Service or the Indian Statistical Service, for which he/she is eligible in terms of the rules. A candidate will be eligible to get the benefit of community reservation only in case the particular caste to which the candidate belongs is included in the list of reserved communities issued by the Central Government. If a candidate indicates in his/her Application Form for Indian Economic Service Examination/Indian Statistical Service Examination that he/she belongs to General Category but subsequently write to the Commission to change his/her category, to a reserved one, such request shall not be entertained by the Commission.

While the above principle will be followed in general, there may be a few cases where there was a gap not more than 3 months between the issuance of a Government Notification enlisting a particular community in the list of any of the reserved communities and the date of submission of the application by the candidate. In such cases the request of change of community from general to reserved may be considered by the Commission on merit. In case of a candidate unfortunately becoming person with benchmark disability during the course of the examination process, the candidate should produce valid documents showing him/her acquiring a disability to the extent of 40% or more as defined under the Rights of Persons with Disabilities Act, 2016 to enable him/her to get the benefits of reservation earmarked for persons with benchmark disability provided he/she otherwise remains eligible for the Indian Economic Service/Indian Statistical Service as per Rule 19 of the Rules of the Indian Economic Service/Indian Statistical Service Examination, 2018.

Candidates seeking reservation/relaxation benefits available for SC/ST/OBC/PwBD/Ex-servicemen must ensure that they are entitled to such reservation/relaxation as per eligibility prescribed in the Rules/Notice. They should also be in possession of all the requisite certificates.
in the prescribed format in support of their claim as stipulated in the Rules/ Notice for such benefits, and these certificates should be dated earlier than the due date (closing date) of the application.

As per the decision taken by the Government for increasing the access of unemployed to job opportunities, the Commission will publically disclose the scores of the candidates (obtained in the Written Examination and Interview/Personality Test) through the public portals. The disclosure will be made in respect of only those candidates who will appear in the Interview/Personality Test for the Indian Economic Service/Indian Statistical Service Examination and are not finally recommended for appointment. The information shared through this disclosure scheme about the non-recommended candidates may be used by other public and private recruitment agencies to appoint suitable candidates from the information made available in the public portal.

Candidates will be required to give their options at the time of Interview/Personality Test, while acknowledging the e-summon letter mailed to them for interview. A candidate may opt out of the scheme also and in that case his/her details will not be published by the Commission.

Besides sharing of the information of the non-recommended candidates for the examinations conducted by the Commission, the Commission will not assume any responsibility of liability for the method and manner in which information related to candidates who appear at the Commission’s Examinations/Selections is utilized by other private of public organizations.

3. ELIGIBILITY CONDITIONS :
(I) Nationality
A candidate must be either:—
(a) a citizen of India; or
(b) a subject of Nepal; or
(c) a subject of Bhutan; or
(d) a Tibetan refugee who came over to India, before the 1st January, 1962, with the intention of permanently settling in India; or
(e) a person of Indian origin who has migrated from Pakistan, Burma, Sri Lanka, East African countries of Kenya, Uganda, the United Republic of Tanzania, Zambia, Malawi, Zaire and Ethiopia or Vietnam with the intention of permanently settling in India:

Provided that a candidate belonging to categories (b), (c), (d) & (e) above shall be a person in whose favour a certificate of eligibility has been issued by the Government of India.

A candidate in whose case a certificate of eligibility is necessary may be admitted to the examination but the offer of appointment may be given only after the necessary eligibility certificate has been issued to him/her by the Government of India.

(II) Age Limits:
(a) A candidate must have attained the age of 21 years and must not have attained the age of 30 years on 1st August, 2018 i.e he/she must have been born not earlier than 2nd August, 1988 and not later than 1st August, 1997.
(b) The upper age-limit prescribed above will be relaxable as follows:—
(i) up to a maximum of five years if a candidate belong to a Scheduled Caste or a Scheduled Tribe;
(ii) up to a maximum of three years in the case of candidate belonging to Other Backward Classes who are eligible to avail of reservation applicable to such candidates;
(iii) up to a maximum of five years if a candidate has ordinarily been domiciled in the State of Jammu and Kashmir during the period from the 1st January, 1980 to the 31st December, 1989;
(iv) up to a maximum of three years in the case of Defence Services Personnel disabled in operations during hostilities with any foreign country or in a disturbed area, and released as a consequence thereof;
(v) up to a maximum of five years in the case of ex-servicemen including Commissioned Officers and ECOs/SSCOs who have rendered at least five years Military Service as on 1st August, 2018 and have been released: (i) on completion of assignment (including those whose assignment is due to be completed within one year from 1st August, 2018 otherwise than by way of dismissal or discharge on
account or misconduct or inefficiency; or (ii) on account of Physical disability attributable to Military Service; or (iii) on invalidment;

(vi) up to a maximum of five years in the case of ECOs/SSCOs who have completed an initial period of assignment of five years of Military Service as on 1st August, 2018 and whose assignment has been extended beyond five years and in whose case the Ministry of Defence issues a certificate that they can apply for Civil employment and that they will be released on three months’ notice on selection from the date of receipt of offer of appointment;

(vii) up to a maximum of 10 years in the case of (a) blindness and low vision; (b) deaf and hard of hearing; (c) locomotor disability including cerebral palsy, leprosy cured, dwarfism, acid attack victims and muscular dystrophy; (d) autism, intellectual disability, specific learning disability and mental illness; (e) multiple disabilities from amongst person under clauses (a) to (d) including deaf blindness.”

NOTE I.- Candidates belonging to the Scheduled Castes and the Scheduled Tribes and the Other Backward Classes who are also covered under any other clauses of para 3(II)(b) above, viz. those coming under the category of Ex-servicemen, persons domiciled in the State of J & K and (a) blindness and low vision; (b) deaf and hard of hearing; (c) locomotor disability including cerebral palsy, leprosy cured, dwarfism, acid attack victims and muscular dystrophy; (d) autism, intellectual disability, specific learning disability and mental illness; (e) multiple disabilities from amongst person under clauses (a) to (d) including deaf blindness will be eligible for grant of cumulative age-relaxation under both the categories.

NOTE II.- The term ex-servicemen will apply to the persons who are defined as Ex-servicemen in the Ex-servicemen (Re-employment in Civil Services and Posts) Rules, 1979, as amended from time to time.

NOTE III.- The age concession under para 3(II)(b)(v) and (vi) will not be admissible to Ex-servicemen and Commissioned Officers including ECOs/SSCOs, who are released on their own request.

NOTE IV.- Notwithstanding the provisions of age relaxation under para 3(II)(b)(vii) above, a person with Benchmark Disability will be considered to be eligible for appointment only if he/she (after such physical examination as the Government or appointing authority as the case may be, may prescribed) if found to satisfy the requirement of physical and medical standard for the concerned Services/Posts to be allocated to the persons with Benchmark Disability by the Government.

SAVE AS PROVIDED ABOVE THE AGE LIMITS PRESCRIBED CAN IN NO CASE BE RELAXED

The date of birth, accepted by the Commission is that entered in the Matriculation or Secondary School Leaving Certificate or in a certificate recognised by an Indian University as equivalent to Matriculation or in an extract from a Register of Matriculates maintained by a University, which extract must be certified by the proper authority of the University or in the Higher Secondary or an equivalent examination certificate.

These certificates are required to be submitted only after the declaration of the result of the written part of the examination.

No other document relating to age like horoscopes, affidavits, birth extracts from Municipal Corporation, Service Records and the like will be accepted.

The expression Matriculation/Higher Secondary Examination Certificate in this part of the instruction includes the alternative certificates mentioned above.

NOTE 1.- Candidate should note that only the Date of Birth as recorded in the Matriculation/Higher Secondary Examination Certificate or an equivalent certificate as on the date of submission of applications will be accepted by the Commission, and no subsequent request for its change will be considered or granted.

NOTE 2.- Candidates should also note that once Date of Birth has been claimed by them and entered in records of the Commission for the purpose of admission to an Examination, no change will be allowed subsequently (or at any other Examination of the Commission) on any grounds whatsoever.

NOTE 3.- The candidate should exercise due care while entering their date of birth in respective column of the Online Application Form for the Examination. If on verification at any subsequent stage, any variation is found in their date of birth
from the one entered in their matriculation or equivalent Examination certificate, disciplinary action will be taken against them by the Commission under the Rules.

(III) Minimum Educational Qualifications:

(a) A candidate for the Indian Economic Service must have obtained a Post-Graduate Degree in Economics/Applied Economics/Business Economics/Econometrics from a University incorporated by or an Act of the Central or State Legislature in India or other Educational Institutes established by an Act Parliament or declared to be deemed as University under Section 3 of the University Grants Commission Act, 1956 or a Foreign University approved by the Central Government from time to time.

(b) A candidate for the Indian Statistical Service must have obtained a Bachelor’s Degree with Statistics/Mathematical Statistics/Applied Statistics as one of the subject or a Master’s degree in Statistics/Mathematical Statistics/Applied Statistics from a University incorporated by an Act of the Central or State Legislature in India or other Educational Institutes established by an Act of Parliament or declared to be deemed as University under Section 3 of the University Grants Commission Act, 1956 or a Foreign University approved by the Central Government from time to time.

NOTE 1.- A candidate who has appeared at an examination the passing of which would render them eligible to appear at this examination, but has not been informed of the result, may apply for admission to the examination. A candidate who intends to appear at such a qualifying examination may also apply. Such a candidate will be admitted to the examination, if otherwise eligible, but his/her admission would be deemed to be provisional and subject to cancellation, if his/her does not produce the proof of having passed the requisite qualifying examination along with the Detailed Application Form which will be required to be submitted by the candidate who qualify on the results of the written part of the examination.

NOTE 2.- In exceptional cases, the Union Public Service Commission may treat a candidate, who has none of the foregoing qualification, as a qualified candidate provided that he/she has passed examinations conducted by other institutions the standard of which in the opinion of the Commission, justifies his/her admission to the examination.

NOTE 3.- A candidate who is otherwise qualified but who has taken a degree from a Foreign University may also apply to the Commission and may be admitted to the examination at the discretion of the Commission.

(IV) Physical Standards:

4. FEE:
Candidates (excepting Female/SC/ST/PwBD candidates who are exempted from payment of fee) are required to pay a fee of Rs.200/- (Rupees Two Hundred only) either by depositing the money in any Branch of SBI by cash, or by using net banking facility of State Bank of India or by using Visa/Master/RuPay Credit/Debit Card.

Note-1: Applicants who opt for “Pay by cash” mode should print the system generated Pay-in-Slip during Part-II registration and deposit the fee at the counter of SBI Branch on the next working day only. “Pay by Cash” Mode option will be deactivated at 23.59 hours of 15.04.2018 i.e. one day before the closing date; however, applicants who have generated their Pay-in-Slip before it is de-activated may pay at the counter of SBI Branch during baking hours on the closing date. Such applicants who are unable to pay by cash on the closing date i.e. during banking hours at SBI Branch, for reason whatsoever, even if holding a valid Pay-in-Slip, will have no other offline or Internet Banking Payment mode on the closing date i.e. till 18.00 hours of 16.04.2018.

Note-2: Candidates should note that payment of examination fee can be made only through the modes prescribed above. Payment of fee through any other mode is neither valid nor acceptable. Applications submitted without the prescribed fee/mode (unless remission of fee is claimed) shall be summarily rejected.

Note-3: Fee once paid shall not be refunded under any circumstances nor can the fee be held in reserve for any other examination or selection.

Note-4: For the applicants in whose case payments detailed have not been received from the bank, they will be treated as fictitious payment cases and their applications will be rejected in the first instance. A list of all such applicants shall be made available on the Commission’s
Website within two weeks after the last day of submission of online application. The applicants shall be required to submit the proof of their fee payment within 10 days from the date of such communication either by hand or by Speed Post to the Commission. On receipt of documentary proof, genuine fee payment cases will be considered and their applications will be revived, if they are otherwise eligible.

**ALL FEMALE CANDIDATES AND CANDIDATES BELONGING TO SCHEDULED CASES/ SCHEDULED TRIBES AND PERSONS WITH BENCHMARK DISABILITY ARE NOT REQUIRED TO PAY ANY FEE. NO FEE EXEMPTION IS, HOWEVER, AVAILABLE TO OBC CANDIDATES AND THEY ARE REQUIRED TO PAY THE FULL PRESCRIBED FE.**

Persons with Benchmark Disability are exempted from the payment of fee provided they are otherwise eligible for appointment to the Services to be filled on the results of this examination on the basis of the standards of medical fitness for these Services (including any concessions specifically extended to the Persons with Benchmark Disability). A person with Benchmark Disability claiming age relaxation/fee concession will be required by the Commission to submit along with their Detailed Application Form, a certified copy of the certificate from a Government Hospital/Medical Board in support of his/her claim for being person with Benchmark Disability.

**NOTE :** Notwithstanding the aforesaid provision for age relaxation/fee exemption, a person with Benchmark Disability will be considered to be eligible for appointment for appointment only if he/she (after such physical examination as the Government or the appointing authority, as the case may be, may prescribe) is found to satisfy the requirements of physical and medical standards for the concerned Services to be allocated to persons with Benchmark Disability by the Government.

**Note-I :** Applications without prescribed Fee (Unless remission of Fee is claimed shall be summarily rejected.

**Note-II :** Fee once paid shall not be refunded under any circumstances not can the fee be held in reserve for any other examination or selection.

**Note-III :** If any candidate who took the Indian Economic Service/Indian Statistical Service Examination held in 2017 wishes to apply for admission to this examination, he/she must apply online by the prescribed date without waiting for the results or any offer of appointment.

5. **HOW TO APPLY :**

(a) Candidates are required to apply Online using the [www.upsconline.nic.in](http://www.upsconline.nic.in) Detailed instructions for filling up Online Applications are available on the above-mentioned website.

(b) The applicants are advised to submit only single application. However, if due to any unavoidable situation, he/she submits another/multiple applications, then he/she must ensure that application with the higher RID is complete in all respects like applicants details, examination centre, photograph, signature, fee etc. The applicants who are submitting multiple applications should note that only the applications with higher RID (Registration ID) shall be entertained by the Commission and fee paid against one RID shall not be adjusted against any other RID.

(c) All candidates, whether already in Government Service, or in Government owned industrial undertakings or other similar organizations or in private employment should submit their applications direct to the Commission. Persons already in Government service, whether in a permanent or temporary capacity or as workcharged employees other than casual or daily rated employees or those serving under Public Enterprises are however, required to inform in writing their Head of Office/ Department that they have applied for the Examination. Candidates should note that in case a communication is received from their employer by the Commission withholding permission to the candidates applying for/ appearing at the examination, their applications will be liable to be rejected/ candidature will be liable to be cancelled.

**NOTE-I :** While filling in his/her application form, the candidate should carefully decide about his/her choice for the centre for the Examination.

If any candidate appears at a centre other than the one indicated by the Commission in his/her e-Admission Certificate, the papers of such a candidate will not be evaluated and his/her candidature will be liable to cancellation.

**NOTE-II :** Incomplete or defective applications shall be summarily rejected. No representation or correspondence regarding such rejection shall be entertained under any circumstances.

(d) Candidates are not required to submit hard copy of their application to the Commission at this stage.

The candidates applying for the examination should ensure that they fulfill all the eligibility conditions for admission to the Examination. Their admission at all the stages of examination
for which they are admitted by the Commission, viz. Written Examination and Interview Test will be purely provisional, subject to their satisfying the prescribed eligibility conditions. If on verification, at any time, before or after the written examination or Interview Test, it is found that they do not fulfill any of the eligibility conditions; their candidature for the examination will be cancelled by the Commission.

Candidates are requested to keep ready the attested copies of the following documents for submission to the Commission soon after the declaration of the result of the written part of the examination which is likely to be declared in the month of August, 2018.

1. Certificate of Age.
2. Certificate of Educational Qualification indicating the Subjects.
3. Certificate in support of claim to belong to Schedule Caste, Scheduled Tribe and Other Backward Classes, where applicable.
4. Certificate in support of claim for age/fee concession, where applicable.
5. Certificate in support of being persons with Benchmark Disability (where applicable).

Immediately after declaration of result of the written part of the examination, successful candidates may be intimated by the Commission electronically and they shall be asked to submit Detailed Application Form (DAF) online. The successful candidates have to send the printout of this DAF with each page duly signed along with the attested copies of the above mentioned certificates to the Commission at that time. Originals will have to be produced at the time of interview. The interview letter to the candidates may also be issued electronically. If any of their claims is found to be incorrect, they may render themselves liable to disciplinary action by the Commission in terms of Rule 12 of the Rules for the Indian Economic Service/Indian Statistical Service Examination, 2018 notified in the Gazette of India dated 21st March, 2018 and also reproduced below:

A candidate who is or has been declared by Commission to be guilty of:

i) obtaining support for his/her candidature by any means, or
ii) impersonating, or
iii) procuring impersonation by any person, or
iv) submitting fabricated documents or documents which have been tampered with, or
v) making statements which are incorrect or false, or suppressing material information, or
vi) resorting to any other irregular or improper means in connection with his/her candidature for the Examination, or
vii) using unfair means during the examination, or
viii) writing irrelevant matter including, obscene language or pornographic matter, in the script(s), or
ix) misbehaving in any other manner in the examination hall, or
x) harassing or doing bodily harm to the staff employed by the Commission for the conduct of their examination, or
xi) being in possession of or using any mobile phone (even in switched off mode), pager or any electronic equipment or programmable device or storage media like pen drive, smart watches etc. or camera or blue tooth devices or any other equipment or related accessories either in working or switched off mode capable of being used as a communication device during the examination; or
xii) violating any of the instructions issued to candidates along with their Admission Certificates permitting them to take the examination, or
xiii) attempting to commit, or as the case may be abetting the commission of all or any of the acts specified in the foregoing clauses;

may in addition to rendering himself/herself liable to criminal prosecution be liable

(a) to be disqualified by the Commission from the examination for which he/she is a candidate: and/or
(b) to be debarred either permanently or for specified period:—
   (i) by the Commission from any examination or selection held by them;
   (ii) by the Central Government from any employment under them; and
(c) if he/she is already in service under Government to disciplinary action under the appropriate rules:

Provided that no penalty under this rule shall be imposed except after:
giving the candidate an opportunity of making such representation in
writing as he/she may wish to make in that behalf; and
(ii) taking the representation, if any, submitted by the candidate, within
the period allowed to him/her into consideration.

6. LAST DATE FOR SUBMISSION OF APPLICATION:
The Online Applications can be filled upto 16th April, 2018 till 18.00 Hours.

7. CORRESPONDENCE WITH THE COMMISSION:
The Commission will not enter into any correspondence with the candidates about their
candidature except in the following cases:
(i) The eligible candidates shall be issued an e-Admission Certificate three weeks before the
commencement of the examination. The e-Admission Certificate will be made available on the
UPSC Web-site [www.upsc.gov.in] for downloading by candidates. No Admission Certificate will
be sent by post. For downloading the e-Admission Certificate/e-Admit Card the candidate must
have his/her vital parameters like RID and Date of Birth or Roll No. (if received) & date of birth or
name, father’s name & Date of Birth available with him/her. If a candidate does not receive
his/her admission certificate or any other communication regarding his/her candidature for
the examination three weeks before the commencement of the examination, he/she should at
once contact the Commission. Information in this regard can also be obtained from the
Facilitation Counter located in the Commission’s Office either in person or over phone Nos.011-
23381125/011-23385271/011-23098543. In case no communication is received in the
Commission’s office from the candidate regarding non-receipt of his/her e-Admission
Certificate at least three weeks before the examination, he/she himself/herself will be solely
responsible for non-receipt of his/her e-Admission Certificate.
No candidate will ordinarily be allowed to take the examination unless he/she holds an e-
admission certificate for the examination. On receipt of e-Admission Certificate, check it
carefully and bring discrepancies/errors, if any, to the notice of UPSC immediately.
The candidates should note that their admission to the examination will be purely provisional
based on the information given by them in the Application Form. This will be subject to
verification of all the eligibility conditions by the UPSC.
The mere fact that an e-admission certificate to the Examination has been issued to a
candidate will not imply that the Commission has finally cleared his/her candidature or that
the Commission has accepted entries made by the candidate in his/her application for the
Examination as true and correct. Candidates may note that the Commission will take up the
verification of eligibility conditions of a candidate, with reference to original documents, only
after the candidate has qualified the Indian Economic Service/Indian Statistical Service
(Written) Examination. Unless the Commission formally confirms candidature, it continues to
be provisional.
The decision of the Commission as to the eligibility or otherwise of a candidate for admission to
the Examination shall be final.
The candidates should note that the name in the e-Admission Certificate in some cases may be
abbreviated due to technical reasons.
(ii) The candidates must ensure that their E-Mail IDs given in their Online Applications are valid
and active as the Commission may use electronic mode of communication while contacting
them at different stages of examination processes.
(iii) A candidate must see that communications sent to him/her at the address stated in his/her
application are redirected, if necessary. Change in address should be communicated to the
Commission at the earliest opportunity. Although the Commission make every effort to take
account of such changes, they cannot accept any responsibility in the matter.
(iv) Candidates may note that they will not be allowed to take the examination on the strength
of an e-Admission Certificate issued in respect of another candidate.

IMPORTANT: ALL COMMUNICATIONS TO THE COMMISSION SHOULD INvariably CONTAIN THE
FOLLOWING PARTICULARS:
1. NAME AND YEAR OF THE EXAMINATION
2. REGISTRATION I.D. (RID)
3. ROLL NUMBER (IF RECEIVED)
4. NAME OF CANDIDATE (IN FULL AND IN BLOCK LETTERS)
5. COMPLETE POSTAL ADDRESS AS GIVEN IN THE APPLICATION.
6. VALID AND ACTIVE E-MAIL ID.
N.B.I: Communications not containing the above particulars may not be attended to.
N.B.II : If a letter/communication is received from a candidate after an examination has been held and it does not give his/her full name and Roll number, it will be ignored and no action will be taken thereon.

Candidates are strongly advised to keep a printout or soft copy of their online application for future references.

8. The eligibility for availing reservation against the vacancies reserved for the Persons with Benchmark Disability shall be the same as prescribed in “Rights of Persons with Benchmark Disabilities, 2016”.

Provided further that the persons with Benchmark Disability shall also be required to meet special eligibility criteria in terms of physical requirements/functional classification (abilities/disabilities) consistent with requirements of the identified Service/Post as may be prescribed by its Cadre Controlling Authority.

The physical requirement and functional classification can for example be one or more of the following :-

<table>
<thead>
<tr>
<th>Sl.</th>
<th>Functional Classification</th>
<th>Physical Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Blindness (B)</td>
<td>H, SP, S, ST, W, MF, RW, C (in Braille/software)</td>
</tr>
<tr>
<td>b</td>
<td>Deaf (D)</td>
<td>SP, S, ST, W, MF, RW, SE, C</td>
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<tr>
<td>c</td>
<td>OA (One Arm affected), OLA (One arm and one leg affected), BL (Both leg affected), DW (Dwarfism), LC (Leprosy Cured), AAV (Acid Attack Victims) and CP (Cerebral Palsy)</td>
<td>H, SP, S, ST, W, MF, RW, SE, C</td>
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<td>d</td>
<td>SLD (except dyscalculia)</td>
<td>H, SP, S, ST, W, MF, RW, SE, N</td>
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<tr>
<td>e</td>
<td>Multiple Disability (MD) involve the following:-</td>
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<td>- Locomotor Disability (excluding muscular dystrophy) with low vision or blindness i.e. OA with LV/B, OL with LV/B, OLA with LV/B, BL with LV/B, DW with LV/B, AAV with LV/B, LC with LV/B.</td>
<td>H, SP, S, ST, W, MF, RW (for Blindness in Braille/software), SE (for LV only)</td>
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<tr>
<td></td>
<td>- Locomotor Disability (excluding muscular dystrophy) with Def (D) or Hard of Hearing (HH) i.e. OA with D/HH, OL with D/HH, OLA with D/HH, BL with D/HH, DW with D/HH, AAV with D/HH, LC with D/HH.</td>
<td>SP, S, ST, W, MF, RW, SE, H (for HH only)</td>
</tr>
<tr>
<td></td>
<td>- LV with HH</td>
<td>H (with appropriate aids), SP, S, ST, W, MF, RW, SE (with appropriate aids)</td>
</tr>
<tr>
<td></td>
<td>- Locomotor disability (excluding muscular dystrophy) with SLD i.e. OA with SLD, OL with SLD, OAL with SLD, BL with SLD, AAV with SLD, DW with SLD</td>
<td>H, SP, S, ST, W, MF, RW, SE, N</td>
</tr>
<tr>
<td></td>
<td>- SLD with LV</td>
<td>H, SP, S, ST, W, MF, RW, SE (with appropriate aids), N</td>
</tr>
<tr>
<td></td>
<td>- SLD with HH</td>
<td>H (with appropriate aids), SP, S, ST, W, MF, RW, SE, N</td>
</tr>
<tr>
<td></td>
<td>- Locomotor Disability (excluding muscular dystrophy) with HH</td>
<td>H, SP, S, ST, W, MF, RW (for Blindness in Braille/software), SE (for LV only)</td>
</tr>
</tbody>
</table>

affected, OLA - One Leg One Arm affected, N- Numerical calculation ability, C - Communication and BL - Both legs affected.

9. No request for withdrawal of candidature received from a candidate after he/she has submitted his/her application will be entertained under any circumstances.

10. Details about the scheme of examination, standard and syllabi of the subjects etc. may be seen in Appendix-I of this Notice.

(OM PRAKASH)
Under Secretary
Union Public Service Commission

APPENDIX-I

SCHEME OF EXAMINATION

SECTION-I

The examination shall be conducted according to the following plan—

Part I: Written examination carrying a maximum of 1000 marks in the subjects as shown below.

Part II: Viva voce of such candidates as may be called by the Commission carrying a maximum of 200 marks.

PART-I

The subjects of the written examination under Part-I, the maximum marks allotted to each subject/paper and the time allowed shall be as follows:

A. Indian Economic Service

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Subject</th>
<th>Maximum Marks</th>
<th>Time Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>General English</td>
<td>100</td>
<td>3 hrs.</td>
</tr>
<tr>
<td>2.</td>
<td>General Studies</td>
<td>100</td>
<td>3 hrs.</td>
</tr>
<tr>
<td>5.</td>
<td>General Economics-III</td>
<td>200</td>
<td>3 hrs.</td>
</tr>
<tr>
<td>6.</td>
<td>Indian Economics</td>
<td>200</td>
<td>3 hrs.</td>
</tr>
</tbody>
</table>

B. Indian Statistical Service

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Subject</th>
<th>Maximum Marks</th>
<th>Time Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>General English</td>
<td>100</td>
<td>3 hrs.</td>
</tr>
<tr>
<td>2.</td>
<td>General Studies</td>
<td>100</td>
<td>3 hrs.</td>
</tr>
<tr>
<td>4.</td>
<td>Statistics-II (Objective)</td>
<td>200</td>
<td>2 hrs.</td>
</tr>
<tr>
<td>5.</td>
<td>Statistics-III (Descriptive)</td>
<td>200</td>
<td>3 hrs.</td>
</tr>
</tbody>
</table>

Note-1: Statistics I & II will be of Objective Type Questions (80 questions with maximum marks of 200 in each paper) to be attempted in 120 minutes.

Note-2: Statistics III & IV will be of Descriptive Type having Short Answer/Small Problems Questions (50%) and Long Answer and Comprehension problem questions (50%). At least one Short Answer and One Long Answer Question from each section is compulsory. In Statistics-IV, equal number of questions i.e. 50% weightage from all the sub-sections below and candidates have to choose any two sub-sections and answer.

Note 3: The papers on General English and General Studies, common to both Indian Economic Service and Indian Statistical Service will be of subjective type.

Note 4: All other papers of Indian Economic Service will be of subjective type.

Note-5: The details of standard and syllabi for the examination are given in Section-II below.

2. The question papers in all subjects in Indian Economic Service Examination and in Indian Statistical Service Examination will be of Conventional (essay) type except in Statistics Paper I and Statistics Paper II which are Objective Type Papers.

3. ALL QUESTION PAPERS MUST BE ANSWERED IN ENGLISH; QUESTION PAPERS WILL BE SET IN ENGLISH ONLY.

4. Candidates must write the papers in their own hand. In no circumstances will they be allowed the help of a scribe to write the answers for them. However, blind candidates and candidates with Locomotor Disability and Cerebral Palsy where dominant (writing) extremity is affected to the extent of slowing the performance of function (minimum of 40% impairment) will be allowed to write the examination with the help of a scribe.

Compensatory time of 20 minutes per hour for each paper will also be allowed to a blind candidate and the candidates with locomotor disability and cerebral palsy where dominant (writing) extremity is affected to the extent of slowing the performance of function (minimum of 40% impairment).
Note (1): The eligibility conditions of a scribe, his/her conduct inside the examination hall and the manner in which an extent to which he/she can help the blind candidate in writing the Indian Economic Service/Indian Statistical Service Examination shall be governed by the instructions issued by the UPSC in this regard. Violation of all or any of the said instructions shall entail the cancellation of the candidature of the blind candidate in addition to any other action that the UPSC may take against the scribe.

Note (2): For purpose of these rules the candidate shall be deemed to be a blind candidate if the percentage of visual impairment is forty per cent (40 %) or more. However, the extent of visual impairment should have to be corroborated by a certificate in the prescribed proforma from a Medical Board constituted by the Central/State Government along with their Detailed Application Form.

Note (3): The concession admissible to blind candidates shall not be admissible to those suffering from Myopia.

5. The Commission have the discretion to fix qualifying marks in any or all the subjects of the examination.

6. If a candidate’s handwriting is not easily legible, a deduction will be made on this account, from the total marks otherwise accruing to him/her.

7. Marks will not be allotted for mere superficial knowledge.

8. Credit will be given for orderly effective and exact expression combined with due economy of words.

9. In the question papers, wherever required, SI Units will be used.

10. Candidates will be allowed the use of Scientific (Non-Programmable type) Calculators in Descriptive Type Papers at the examination. Programmable type calculators will, however, not be allowed and the use of such calculators shall tantamount to resorting to unfair means by the candidates. Loaning or interchanging of calculators in the Examination Hall is not permitted. However, no calculator will be allowed in the Objective Type Papers at the examination.

11. Candidates should use only International Form of Indian numerals (e.g., 1, 2, 3, 4, 5, 6 etc.) while answering question papers.

PART - II

Viva voce—The candidate will be interviewed by a Board of competent and unbiased observers who will have before them a record of his/her career. The object of the interview is to assess his/her suitability for the service for which he/she has competed. The interview is intended to supplement the written examination for testing the general and specialised knowledge and abilities for the candidate. The candidate will be expected to have taken an intelligent interest not only in his/her subjects of academic study but also in events which are happening around him/her both within and outside his/her own State or Country as well as in modern currents of thought and in new discoveries which should rouse the curiosity of well educated youth.

The technique of the interview is not that of a strict cross-examination, but of a natural, through directed and purposive conversation intended to reveal the candidate's mental qualities and his/her grasp of problems. The Board will pay special attention to assess the intellectual curiosity, critical powers of assimilation, balance of judgment and alertness of mind, the ability for social cohesion, integrity of character initiative and capacity for leadership.

SECTION-II

STANDARD AND SYLLABI

The standard of papers in General English and General Studies will be such as may be expected of a graduate of an Indian University.

The standard of papers in the other subjects will be that of the Master's degree examination of an Indian University in the relevant disciplines. The candidates will be expected to illustrate theory by facts, and to analyse problems with the help of theory. They will be expected to be particularly conversant with Indian problems in the field(s) of Economics/Statistics.

GENERAL ENGLISH

Candidates will be required to write an essay in English. Other questions will be designed to test their understanding of English and workman like use of words. Passages will usually be set for summary or precis.

GENERAL STUDIES

General knowledge including knowledge of current events and of such matters of everyday observation and experience in their scientific aspects as may be expected of an educated person who has not made a special study of any scientific subject. The paper will also include questions
on Indian Polity including the political system and the Constitution of India, History of India and Geography of a nature which a candidate should be able to answer without special study.

GENERAL ECONOMICS – I

PART A:
1. Theory of Consumer’s Demand—Cardinal utility Analysis: Marginal utility and demand, Consumer’s surplus, Indifference curve, Analysis and utility function, Price income and substitution effects, Slutsky theorem and derivation of demand curve, Revealed preference theory. Duality and indirect utility function and expenditure function, Choice under risk and uncertainty. Simple games of complete information, Concept of Nash equilibrium.

PART B: Quantitative Methods in Economics

GENERAL ECONOMICS – II

1. Economic Thought: Mercantilism Physiocrats, Classical, Marxist, Neo-classical, Keynesian and Monetarist schools of thought.
5. Economic Growth and Development: concepts of Economic Growth and Development and their measurement: characteristics of less developed countries and obstacles to their development – growth, poverty and income distribution. Theories of growth: Classical Approach: Adam Smith, Marx and Schumpeter- Neo classical approach; Robinson, Solow, Kaldor and Harrod Domar. Theories of Economic Development, Rostow, Rosenstein-Roden, Nurkske, Hirschman, Leibenstien and Arthur Lewis, Amin and Frank (Dependency scool) respective role of
8. Global Institutions: UN agencies dealing with economic aspects, role of Multilateral Development Bodies (MDBs), such as World Bank, IMF and WTO, Multinational Corporations. G-20.  

GENERAL ECONOMICS – III  
3. Industrial Economics—Market structure, conduct and performance of firms, product differentiation and market concentration, monopolistic price theory and oligopolistic interdependence and pricing, entry preventing pricing, micro level investment decisions and the behaviour of firms, research and development and innovation, market structure and profitability, public policy and development of firms.  

INDIAN ECONOMICS  
3. Budgeting and Fiscal Policy—Tax, expenditure, budgetary deficits, pension and fiscal reforms, Public debt management and reforms, Fiscal Responsibility and Budget Management (FRBM) Act, Black money and Parallel economy in India—definition, estimates, genesis, consequences and remedies.  
4. Poverty, Unemployment and Human Development—Estimates of inequality and poverty measures for India, appraisal of Government measures, India’s human development record in global perspective. India’s population policy and development.  
5. Agriculture and Rural Development Strategies— Technologies and institutions, land relations and land reforms, rural credit, modern farm inputs and marketing— price policy and subsidies; commercialisation and diversification. Rural development programmes including poverty alleviation programmes, development of economic and social infrastructure and New Rural Employment Guarantee Scheme.  
6. India’s experience with Urbanisation and Migration—Different types of migratory flows and their impact on the economies of their origin and destination, the process of growth of urban settlements; urban development strategies.
7. Industry: Strategy of industrial development— Industrial Policy Reform; Reservation Policy relating to small scale industries. Competition policy, Sources of industrial finances. Bank, share market, insurance companies, pension funds, non-banking sources and foreign direct investment, role of foreign capital for direct investment and portfolio investment, Public sector reform, privatisation and disinvestment.


9. Foreign trade—Salient features of India’s foreign trade, composition, direction and organisation of trade, recent changes in trade, balance of payments, tariff policy, exchange rate, India and WTO requirements. Bilateral Trade Agreements and their implications.


STATISTICS-I (OBJECTIVE TYPE)

(i) Probability:
Classical and axiomatic definitions of Probability and consequences. Law of total probability, Conditional probability, Bayes’ theorem and applications. Discrete and continuous random variables. Distribution functions and their properties.

(ii) Statistical Methods:

(iii) Numerical Analysis:
Finite differences of different orders: \( \Delta, E \) and D operators, factorial representation of a polynomial, separation of symbols, sub-division of intervals, differences of zero.

Conject of interpolation and extrapolation: Newton Gregory's forward and backward interpolation formulae for equal intervals, divided differences and their properties, Newton's formula for divided difference, Lagrange's formula for unequal intervals, central difference formula due to Gauss, Sterling and Bessel, concept of error terms in interpolation formula.

Inverse interpolation: Different methods of inverse interpolation.

Numerical differentiation: Trapezoidal, Simpson’s one-third and three-eight rule and Waddles rule.

Summation of Series: Whose general term (i) is the first difference of a function (ii) is in geometric progression.

(iv) Computer application and Data Processing:
Basics of Computer: Operations of a computer, Different units of a computer system like central processing unit, memory unit, arithmetic and logical unit, input unit, output unit etc., Hardware including different types of input, output and peripheral devices, Software, system and application software, number systems, Operating systems, packages and utilities, Low and High level languages, Compiler, Assembler, Memory – RAM, ROM, unit of computer memory (bits, bytes etc.), Network – LAN, WAN, internet, intranet, basics of computer security, virus, antivirus, firewall, spyware, malware etc.

Basics of Programming: Algorithm, Flowchart, Data, Information, Database, overview of different programming languages, frontend and backend of a project, variables, control structures, arrays and their usages, functions, modules, loops, conditional statements, exceptions, debugging and related concepts.

STATISTICS- II (OBJECTIVE TYPE)

(i) Linear Models:
Theory of linear estimation, Gauss-Markov linear models, estimable functions, error and estimation space, normal equations and least square estimators, estimation of error variance, estimation with correlated observations, properties of least square estimators, generalized inverse of a matrix and solution of normal equations, variances and covariances of least square estimators.

One way and two-way classifications, fixed, random and mixed effects models. Analysis of variance (two-way classification only), multiple comparison tests due to Tukey, Scheffe and Student-Newmann-Keul-Duncan.

(ii) Statistical Inference and Hypothesis Testing:


(iii) Official Statistics:
National and International official statistical system
Official Statistics: (a) Need, Uses, Users, Reliability, Relevance, Limitations, Transparency, its visibility (b) Compilation, Collection, Processing, Analysis and Dissemination, Agencies Involved, Methods
National Statistical Organization: Vision and Mission, NSSO and CSO; roles and responsibilities; Important activities, Publications etc.
Index Numbers: Different Types, Need, Data Collection Mechanism, Periodicity, Agencies Involved, Uses
National Accounts: Definition, Basic Concepts; issues; the Strategy, Collection of Data and Release.
Population Census: Need, Data Collected, Periodicity, Methods of data collection, dissemination, Agencies involved.
Misc: Socio Economic Indicators, Gender Awareness/Statistics, Important Surveys and Censuses.

STATISTICS- III (DESCRIPTIVE TYPE)

(i) Sampling Techniques:
Concept of population and sample, need for sampling, complete enumeration versus sampling, basic concepts in sampling, sampling and Non-sampling error, Methodologies in sample surveys (questionnaires, sampling design and methods followed in field investigation) by NSSO.

Subjective or purposive sampling, probability sampling or random sampling, simple random sampling with and without replacement, estimation of population mean, population proportions and their standard errors. Stratified random sampling, proportional and optimum allocation,
comparison with simple random sampling for fixed sample size. Covariance and Variance Function.

Ratio, product and regression methods of estimation, estimation of population mean, evaluation of Bias and Variance to the first order of approximation, comparison with simple random sampling.

Systematic sampling (when population size (N) is an integer multiple of sampling size (n)). Estimation of population mean and standard error of this estimate, comparison with simple random sampling.

Sampling with probability proportional to size (with and without replacement method), Des Raj and Das estimators for n=2, Horvitz-Thomson’s estimator

Equal size cluster sampling: estimators of population mean and total and their standard errors, comparison of cluster sampling with SRS in terms of intra-class correlation coefficient.

Concept of multistage sampling and its application, two-stage sampling with equal number of second stage units, estimation of population mean and total. Double sampling in ratio and regression methods of estimation.

Concept of Interpenetrating sub-sampling.

(ii) Econometrics:

Nature of econometrics, the general linear model (GLM) and its extensions, ordinary least squares (OLS) estimation and prediction, generalized least squares (GLS) estimation and prediction, heteroscedastic disturbances, pure and mixed estimation.

Auto correlation, its consequences and tests. Theil BLUS procedure, estimation and prediction, multi-collinearity problem, its implications and tools for handling the problem, ridge regression.

Linear regression and stochastic regression, instrumental variable estimation, errors in variables, autoregressive linear regression, lagged variables, distributed lag models, estimation of lags by OLS method, Koyck’s geometric lag model.

Simultaneous linear equations model and its generalization, identification problem, restrictions on structural parameters, rank and order conditions.

Estimation in simultaneous equations model, recursive systems, 2 SLS estimators, limited information estimators, k-class estimators, 3 SLS estimator, full information maximum likelihood method, prediction and simultaneous confidence intervals.

(iii) Applied Statistics:

Index Numbers: Price relatives and quantity or volume relatives, Link and chain relatives composition of index numbers; Laspeyre’s, Paasches’, Marshal Edgeworth and Fisher index numbers; chain base index number, tests for index number, Construction of index numbers of wholesale and consumer prices, Income distribution-Pareto and Engel curves, Concentration curve, Methods of estimating national income, Inter-sectoral flows, Inter-industry table, Role of CSO. Demand Analysis

Time Series Analysis: Economic time series, different components, illustration, additive and multiplicative models, determination of trend, seasonal and cyclical fluctuations.

Time-series as discrete parameter stochastic process, auto covariance and autocorrelation functions and their properties.

Exploratory time Series analysis, tests for trend and seasonality, exponential and moving average smoothing. Holt and Winters smoothing, forecasting based on smoothing.

Detailed study of the stationary processes: (1) moving average (MA), (2) auto regressive (AR), (3) ARMA and (4) AR integrated MA (ARIMA) models. Box-Jenkins models, choice of AR and MA periods.

Discussion (without proof) of estimation of mean, auto covariance and autocorrelation functions under large sample theory, estimation of ARIMA model parameters.

Spectral analysis of weakly stationary process, periodogram and correlogram analyses, computations based on Fourier transform.

STATISTICS-IV (DESCRIPTIVE TYPE)

(Equal number of questions i.e. 50% weightage from all the subsections below and candidates have to choose any two subsections and answer)

(i) Operations Research and Reliability:

Definition and Scope of Operations Research: phases in Operation Research, models and their solutions, decision-making under uncertainty and risk, use of different criteria, sensitivity analysis.

Transportation and assignment problems. Bellman’s principle of optimality, general formulation, computational methods and application of dynamic programming to LPP.
Decision-making in the face of competition, two-person games, pure and mixed strategies, existence of solution and uniqueness of value in zero-sum games, finding solutions in 2x2, 2xm and mxn games.

Analytical structure of inventory problems, EOQ formula of Harris, its sensitivity analysis and extensions allowing quantity discounts and shortages. Multi-item inventory subject to constraints. Models with random demand, the static risk model. P and Q- systems with constant and random lead times.

Queuing models – specification and effectiveness measures. Steady-state solutions of M/M/1 and M/M/c models with associated distributions of queue-length and waiting time. M/G/1 queue and Pollaczek-Khinchine result.

Sequencing and scheduling problems. 2-machine n-job and 3-machine n-job problems with identical machine sequence for all jobs
Branch and Bound method for solving travelling salesman problem.

Replacement problems – Block and age replacement policies.

PERT and CPM – basic concepts. Probability of project completion.

Reliability concepts and measures, components and systems, coherent systems, reliability of coherent systems.

Life-distributions, reliability function, hazard rate, common univariate life distributions – exponential, weibull, gamma, etc. Bivariate exponential distributions. Estimation of parameters and tests in these models.

Notions of aging – IFR, IFRA, NBU, DMRL and NBUE classes and their duals. Loss of memory property of the exponential distribution.

Reliability estimation based on failure times in variously censored life-tests and in tests with replacement of failed items. Stress-strength reliability and its estimation.

(ii) Demography and Vital Statistics:
Sources of demographic data, census, registration, ad-hoc surveys, Hospital records. Demographic profiles of the Indian Census.


Measurement of Mortality: Crude death rate, Standardized death rates, Age-specific death rates, Infant Mortality rate, Death rate by cause.

Internal migration and its measurement, migration models, concept of international migration. Net migration. International and postcensal estimates. Projection method including logistic curve fitting. Decennial population census in India.

(iii) Survival Analysis and Clinical Trial:
Concept of time, order and random censoring, likelihood in the distributions – exponential, gamma, Weibull, lognormal, Pareto, Linear failure rate, inference for these distribution. Life tables, failure rate, mean residual life and their elementary classes and their properties.

Estimation of survival function – actuarial estimator, Kaplan – Meier estimator, estimation under the assumption of IFR/DFR, tests of exponentiality against non-parametric classes, total time on test.

Two sample problem – Gehan test, log rank test.

Semi-parametric regression for failure rate – Cox’s proportional hazards model with one and several covariates, rank test for the regression coefficient.

Competing risk model, parametric and non-parametric inference for this model.

Introduction to clinical trials: the need and ethics of clinical trials, bias and random error in clinical studies, conduct of clinical trials, overview of Phase I – IV trials, multicenter trials.

Data management: data definitions, case report forms, database design, data collection systems for good clinical practice.

Design of clinical trials: parallel vs. cross-over designs, cross-sectional vs. longitudinal designs, review of factorial designs, objectives and endpoints of clinical trials, design of Phase I trials, design of single-stage and multi-stage Phase II trials, design and monitoring of phase III trials with sequential stopping.

Reporting and analysis: analysis of categorical outcomes from Phase I – III trials, analysis of survival data from clinical trials.

(iv) Quality Control:
Statistical process and product control: Quality of a product, need for quality control, basic concept of process control, process capability and product control, general theory of control
charts, causes of variation in quality, control limits, sub grouping summary of out of control criteria, charts for attributes p chart, np chart, c-chart, V chart, charts for variables: R, $\bar{X}$, (R), charts for variables: R, $\bar{X}$, (R), (\bar{X},o) charts.

Basic concepts of process monitoring and control; process capability and process optimization. General theory and review of control charts for attribute and variable data; O.C. and A.R.L. of control charts; control by gauging; moving average and exponentially weighted moving average charts; Cu-Sum charts using V-masks and decision intervals; Economic design of X-bar chart. Acceptance sampling plans for attributes inspection; single and double sampling plans and their properties; plans for inspection by variables for one-sided and two sided specification.

(v) Multivariate Analysis:
Multivariate normal distribution and its properties. Random sampling from multivariate normal distribution. Maximum likelihood estimators of parameters, distribution of sample mean vector.

Wishart matrix – its distribution and properties, distribution of sample generalized variance, null and non-null distribution of multiple correlation coefficients.

Hotelling's $T^2$ and its sampling distribution, application in test on mean vector for one and more multivariate normal population and also on equality of components of a mean vector in multivariate normal population.

Classification problem: Standards of good classification, procedure of classification based on multivariate normal distributions.

Principal components, dimension reduction, canonical variates and canonical correlation — definition, use, estimation and computation.

(vi) Design and Analysis of Experiments:
Analysis of variance for one way and two way classifications, Need for design of experiments, basic principle of experimental design (randomization, replication and local control), complete analysis and layout of completely randomized design, randomized block design and Latin square design, Missing plot technique. Split Plot Design and Strip Plot Design.

Factorial experiments and confounding in $2^a$ and $3^b$ experiments. Analysis of covariance. Analysis of non-orthogonal data. Analysis of missing data.

(vii) Computing with C and R :
Basics of C: Components of C language, structure of a C program, Data type, basic data types, Enumerated data types, Derived data types, variable declaration, Local, Global, Parametric variables, Assignment of Variables, Numeric, Character, Real and String constants, Arithmetic, Relation and Logical operators, Assignment operators, Increment and decrement operators, conditional operators, Bitwise operators, Type modifiers and expressions, writing and interpreting expressions, using expressions in statements. Basic input/output.

Control statements: conditional statements, if - else, nesting of if - else, else if ladder, switch statements, loops in C, for, while, do - while loops, break, continue, exit ( ), goto and label declarations, One dimensional two dimensional and multidimensional arrays. Storage classes: Automatic variables, External variables, Static variables, Scope and lifetime of declarations.

Functions: classification of functions, functions definition and declaration, assessing a function, return statement, parameter passing in functions. Pointers (concept only).

Structure: Definition and declaration; structure (initialization) comparison of structure variable; Array of structures : array within structures, structures within structures, passing structures to functions; Unions accessing a union member, union of structure, initialization of a union variable, uses of union. Introduction to linked list, linear linked list, insertion of a node in list, removal of a node from list.

Files in C: Defining and opening a file, input – output operation on a file, creating a file, reading a file.

Statistics Methods and techniques in R.

APPENDIX-II
INSTRUCTIONS TO THE CANDIDATES FOR FILLING ONLINE APPLICATIONS
Candidates are required to apply Online using the website www.upsconline.nic.in
• Salient features of the system of Online Application Form are given hereunder :
• Detailed instructions for filling up Online applications are available on the above mentioned website.
• Candidates will be required to complete the Online Application Form containing two stages viz. Part-I and Part-II as per the instructions available in the above mentioned website through drop down menus.
• The candidates are required to pay a fee of Rs.200/- (Rupees Two Hundred only) [excluding SC/ST/Female/Persons with Benchmark Disability who are exempted from payment of fee] either by depositing the money in any branch of State Bank of India by cash, or by using net banking facility of State Bank of India or by using any Visa/Master/RuPay Credit/Debit Card.

• Before start filling up of Online Application, a candidate must have his/her photograph and signature duly scanned in the .jpg format in such a manner that each file should not exceed 40 KB and must not less that 3 KB in size for the photograph and 1 KB for the signature.

• The Online applications (Part I and II) can be filled from 21st March, 2018 to 16th April, 2018 till 18.00 Hours.

• Applicants should avoid submitting multiple applications. However, if due to any unavoidable circumstances, any applicant submits multiple applications then he/she must ensure that the applications with higher RID is complete in all respects.

• In case of multiple applications, the applications with higher RID shall be entertained by the Commission and fee paid against one RID shall not be adjusted against any other RID.

• The applicants must ensure that while filling their Application Form, they are providing their valid and active E-Mail IDs as the Commission may use electronic mode of communication while contacting them at different stages of examination process.

• The applicants are advised to check their emails at regular intervals and ensure that the e-mail address ending with @nic.in are directed to their inbox folder and not to the SPAM folder or any other folder.

• Candidates are strongly advised to apply online well in time without waiting for the last date for submission of Online Applications.

APPENDIX III

Special instructions to Candidates for Conventional Type papers

1. Articles permitted inside Examination Hall

Battery-operated pocket calculators of “non-programmable” type only, mathematical/engineering/drawing instruments, including a flat rule divided on the edges in inches and tens of an inch and into centimeters and millimeters, a slide rule, set squares, a protractors and a pair of compasses, pencils, coloured pencils, mapping pens, eraser, T-square and drawing board for use wherever necessary. Candidates are not allowed to bring with them any “Tables or Charts” for use in the Examination Hall.

Mobile phones, Bluetooth or any other communication devices are not allowed inside the premises where the examination is being conducted. Any infringement of these instructions shall entail disciplinary action including ban from future examinations. Candidates are advised in their own interest not to bring any of the banned items including mobile phones/Bluetooth to the venue of the examination, as arrangements for safekeeping cannot be assured.

2. Tables to be supplied by UPSC

If it is considered necessary for answering the questions set in any paper, the Commission may supply any of the following for reference purpose only:

(i) Mathematical/Physical, Chemical and Engineering Tables (including Logarithmic Tables);
(ii) Steam Table (including Mollier Diagrams for Temperature up to 800°C and Pressure up to 500 Kgf/Cm);
(iii) National Building Code of India 1970 or 1983 Group 2 Part VI;
(iv) Any other special articles as may be necessary for the candidates to answer the questions set in the question paper.

After conclusion of the examination, return the above items to the invigilator.

3. Answers to be written in own hand

Write the answers in your own hand in ink. Pencil may be used for maps, mathematical drawings or rough work.

4. Check Answer Book

The candidate must write his/her roll number (and not his/her name) only in the space provided for the purpose on every answer book used by him/her. Before writing in the answer book, please see that it is complete. In case there are any missing pages, it should be got replaced.

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Do not tear out any pages from the Answer Book. If you use more than one Answer Book, indicate on the cover of first Answer Book the total number of Answer Books used. Do not leave any blank, unused spaces between answers. If such spaces are left, score them out.

5. **Answers in excess of prescribed number will be ignored**

The candidate must attempt questions strictly in accordance with the directions given on each question paper. If questions are attempted in excess of the prescribed number shall be valued and the remaining answers will be ignored.

6. Questions relating to graph/précis should be attempted only on graph/précis sheets to be supplied on demand by the invigilators. All loose sheets such as précis sheet, drawing papers, graph sheets etc. whether used or not, should be placed inside the answer books and fastened along with the additional answer book(s), if any. Candidates who fail to observe this instruction will be penalised. Do not write your roll number on these sheets.

7. **Unfair means strictly prohibited**

Do not copy from the papers of any other candidates nor allow your papers to be copied nor give nor attempt to give nor obtain nor attempt to obtain irregular assistance of any description. It will be responsibility of every candidate to ensure that his/her answers are not copied by another candidate. Failure to do so will invite penalty, as may be awarded by the Commission for adoption of unfair means.

8. **Conduct in Examination Hall**

Do not misbehave in any manner or create disorderly scene in the examination hall or harass or bodily harm the staff deployed for the conduct of examination. You will be severely penalized if you attempt to do so.

9. Please read carefully and abide by the instructions printed on the Question Paper and on the Answer Book supplied in the Examination Hall.

**APPENDIX-IV**

Special Instruction to candidates for objective type tests

1. **Articles permitted inside Examination Hall**

   - Clip board or hard board (on which nothing is written), a good quality black ball pen for making responses on the Answer Sheet. Answer Sheet and sheet for rough work will be supplied by the invigilator.

2. **Articles not permitted inside Examination Hall**

   - Do not bring into the Examination Hall any article other than those specified above e.g. books, notes, loose sheets, electronic or any other type of calculators, mathematical and drawing instruments, Log Tables, stencils of maps, slide rules, Test Booklets, rough sheets pertaining to earlier session(s), etc.

   Mobile phones, bluetooth or any other communication devices are not allowed inside the premises where the examination is being conducted. Any infringement of these instructions shall entail disciplinary action including ban from future examinations. Candidates are advised in their own interest not to bring any of the banned items including mobile phones to the venue of the examination, as arrangements for safekeeping cannot be assured.

   Candidates are advised in their own interest not to bring any of the banned items including mobile phones/Bluetooth to the venue of the examination, as arrangements for safekeeping cannot be assured.

3. **Penalty for wrong Answers (in Objective Type Papers)**

   **THERE WILL BE PENALTY (NEGATIVE MARKING) FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS.**

   (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, one third (0.33) of the marks assigned to that question will be deducted as penalty.

   (ii) If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answers happens to be correct and there will be same penalty as above for that question.

   (iii) If a question is left blank i.e. no answer is given by the candidate, there will be no penalty for that question.

4. **Unfair means strictly prohibited**

   No candidates shall copy from the papers of any other candidate nor permit his papers to be copied nor give nor attempt to give not obtain nor attempt to obtain irregular assistance of any description.

5. **Conduct in Examination Hall**
No candidates should misbehave in any manner or create disorderly scene in the Examination Hall or harass the staff employed by the Commission for the conduct of the examination. Any such misconduct will be severely penalised.

6. **Answer Sheet Particulars**

   (i) Write in black ball pen your Centre and subject followed by Test Booklet series (in bracket), subject code and roll number at the appropriate space provided on the Answer Sheet at the top. Also encode your booklet series (A, B, C or D as the case may be) subject code and roll number with black ball pen in the circles provided for the purpose in the Answer Sheet. The guidelines for writing the above particulars and encoding the above particulars are given in Annexure. In case the booklet series is not printed on the Test Booklet or Answer Sheet is unnumbered, please report immediately to the invigilator and get the Test Booklet/Answer Sheet replaced.

   (ii) Candidates should note that any omission/mistake/discrepancy in encoding/filling of details in the OMR answer sheet, especially with regard to Roll Number and Test Booklet Series Code, will render the answer sheet liable for rejection.

   (iii) Immediately after commencement of the examination please check that the Test Booklet supplied to you does not have any unprinted or torn or missing pages or items etc. If so, get it replaced by a complete Test Booklet of the same series and subject.

5. Do not write your name or anything other than the specific items of information asked for, on the Answer Sheet/Test Booklet/sheet for rough work.

8. Do not fold or mutilate or damage or put any extraneous marking in the Answer Sheet.

9. Since the Answer Sheets will be evaluated on computerised machines, candidates should exercise due care in handling and filling up the Answer Sheets. **They should use black ball pen only to darken the circles. For writing in boxes, they should use black ball pen. Since the entries made by the candidates by darkening the circles will be taken into account while evaluating the Answer Sheet on computerised machines, they should make these entries very carefully and accurately. The candidate must mark responses in the Answer Sheet with good quality black ball pen.**

10. **Method of marking answers**

    In the "OBJECTIVE TYPE" of examination you do not write the answers. For each question (hereinafter referred to as "Item") several suggested answers (hereinafter referred to as "Responses") are given. You have to choose one response to each item. The question paper will be in the Form of TEST BOOKLET. The booklet will contain item bearing numbers 1, 2, 3 etc. Under each item, Responses marked (a), (b), (c), (d) will be given. Your task will be to choose the correct response. If you think there is more than one correct response, then choose what you consider the best response.

    In any case, for each item you are to select only one response. If you select more than one response, your response will be considered wrong. In the Answer Sheet, Serial Nos. from 1 to 160 are printed. Against each numbers, there are circles marked (a), (b), (c) and (d). After you have read each item in the Test Booklet and decided which one of the given responses is correct or the best, you have to mark your response by completely blackening to indicate your response.

    Ink pen or pencil should not be used for blackening the circle on the Answer Sheet. For example, if the correct answer to item 1 is (b), then the circle containing the letter (b) is to be completely blackened with black ball pen as shown below :-

    **Example : (a) • (c) (d)**

   11. **Entries in Scannable Attendance List**

    Candidates are required to fill in the relevant particulars with black ball pen only against their columns in the Scannable Attendance List as given below :-

    i) Blacken the circle (P) under the column (Present/Absent)

    ii) Blacken the relevant circle for Test Booklet Series

    iii) Write Test Booklet Serial No.

    iv) Write the Answer Sheet serial No. and also blacken the corresponding circles below

    v) Append signature in the relevant column

12. Please read and abide by the instructions on the cover of Test Booklet. If any candidate indulges in disorderly or improper conduct, he will render himself liable for disciplinary action and/or imposition of a penalty as the Commission may deem fit.
13. The candidates are not allowed to leave the Examination Hall before the expiry of prescribed time period of the examination.

Annexure

How to fill in the Answer Sheet of objective type tests in the Examination Hall

Please follow these instructions very carefully. You may note that since the Answer Sheets are to be evaluated on machine, any violation of these instructions may result in reduction of your score for which you would yourself be responsible.

Before you mark your responses on the Answer Sheet, you will have to fill in various particulars in it.

As soon as the candidate receives the Answer Sheet, he/she should check that it is numbered at the bottom. If it is found unnumbered he/she should at once get it replaced by a numbered one.

You will see from the Answer Sheet that you will have to fill in the top line, which reads thus:

<table>
<thead>
<tr>
<th>केंद्र</th>
<th>विषय</th>
<th>विषय कोड</th>
<th>अनक्रमांक</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre</td>
<td>Subject</td>
<td>S. Code</td>
<td>Roll Number</td>
</tr>
</tbody>
</table>

If you are, say, appearing for the examination in Delhi Centre for the General Studies Paper and your Roll No. is 081276 and your Test Booklet series is ‘A’, you should fill in thus, using ball pen.

* This is just illustrative and may not be relevant to the Examination concerned.

You should write with black ball pen the name of the centre and subject in English or Hindi. The test Booklet Series is indicated by Alphabets A, B, C or D at the top right hand corner of the Booklet.

Write your Roll Numbers exactly as it is in your e-Admit Card in the boxes provided for this purpose. Do not omit black pen. The name of the Centre need not be encoded.

The next step is to find out the appropriate subject code from the Time Table. Now encode the Test Booklet Series, Subject Code and the Roll Number in the circles provided for this purpose. Do the encoding of Test Booklet Series is to be done after receiving the Test Booklet and confirming the Booklet Series from the same.

For General Ability subject paper of ‘A’ Test Booklet Series you have to encode the subject code, which is 99. Do it thus.

<table>
<thead>
<tr>
<th>पुस्तिका क्रम</th>
<th>विषय कोड</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booklet Series (A)</td>
<td>Subject Code 9 9</td>
</tr>
</tbody>
</table>

All that is required is to blacken completely the circle marked ‘A’ below the Booklet Series and below the subject code blacken completely the Circles for ‘9’ (in the first vertical column) and ‘9’ (in the second vertical column). You should then encode the Roll No. 081276. Do it thus similarly.
Important: Please ensure that you have carefully encoded your subject, Test Booklet Series and Roll Number.

* This is just illustrative and may not be relevant to your Examination.